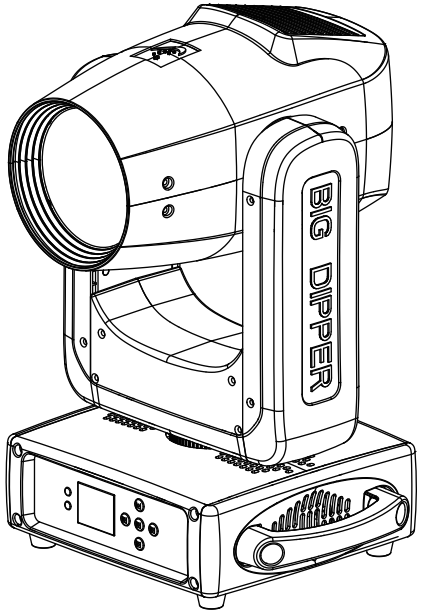
Big Dipper
SINCE 2003

User Manual

Moving-head Beam

CLB260



Please read this manual carefully before using the product

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Safety Instructions ⚠

WARNING！ Please read the instruction carefully and keep it for future reference.

IMPORTANT SAFETY WARNINGS

This device has left the factory in perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

In order to install, operate and maintain the lighting fixture safely and correctly we suggest that the installation and operation be carried out by qualified technicians and these instructions be carefully followed.

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.

	CAUTION! High Voltage. Risk Of Severe Or Fatal Electric Shock.
	CAUTION! Always Disconnect Mains Supply Before Removing Any Fixture Covers.
	CAUTION! Never Look Directly Into The Light Source.sensitive Persons May Suffer An Epileptic Shock.
	CAUTION! Never Touch The Device During Operation.covers May Be Hot
	CAUTION! Indoor Use Only

This product is for indoor use only. Use only in a dry location.

The minimum distance to objects/surface must be more than 5 meters. Hot lamp explosion hazard. DO NOT open the unit within 15 minutes after switching off.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: 0℃. Maximum ambient temperature TA: 40℃.

Do not operate this product at a lower or higher temperature.

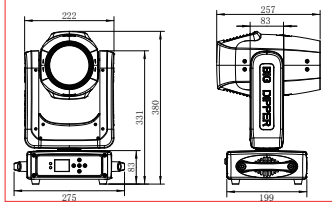
During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes. Keep flammable materials away from the fixture while operating to avoid fire hazard. Unit's surface temperature may reach up to 85℃. DO NOT touch the housing bare-handed during its operation.

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

The fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 10 times the weight of the fixture when installing.

Technical Specifications

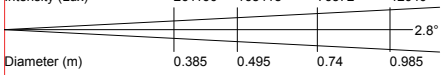
Power Consumption	270W (CLB260)	320W (CLB260-O)
Light Source (Optional)	RUI 230W (CLB260)	OSRAM SIRIUS HRI 251W(CLB260-O)
Power Voltage	AC 100~240V, 50/60Hz	
Color Temperature	7800K	
Beam Angle	2.8 °	
Movement	Pan: 540° / Tilt: 270° Pan/Tilt Resolution: 16 bit	
Dimmer/Shutter	Smooth dimming from 0-100%; strobe effect with variable speed	
Color Wheel	1* color wheel with 11 colors plus open and rainbow effect	
Gobo Wheel	1* static gobo wheel with 13 gobos plus open	
Effect	1* 8-facet prism, rotatation. 1* independent frost. Fixed foucus	
DMX Channel	12 Ch	
Control Mode	DMX512, RDM	
Display	LCD Color display	
Data In/Out	3-pin XLR (5-pin XLR is optional)	
Power In	Power Connector in	
Protection Rating	IP20	
Dimension	275*199*428mm	
Weight	6.3kgs	



Photometric Diagram

CLB260:

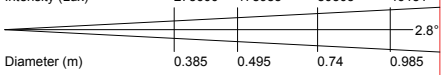
Distance (m)	8	10	15	20
Intensity (Lux)	261160	168418	76372	42040



Diameter (m)	0.385	0.495	0.74	0.985

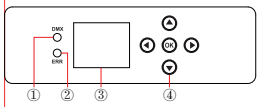
CLB260-O:

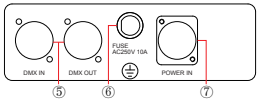
Distance (m)	8	10	15	20
Intensity (Lux)	275600	178985	80303	46131



Diameter (m)	0.385	0.495	0.74	0.985

Control Panel Overview





①Signal indicator：Green color shows DMX signal is connected.

②Error indicator：Red color shows there is ERROR message , check it from the “Information”menu

③LCD Display

④LEFT：To enter the main menu and leave the menu
RIGHT：To go forward to the next level menu
UP：To move upper in the menu
DOWN：To move down in the menu
OK：To perform CONFIRM function

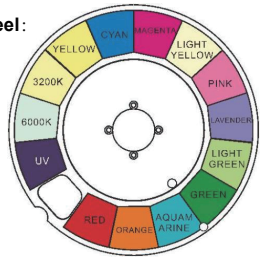
⑤DMX IN & DMX OUT：For DMX512 operation, use 3-pin XLR cable to link the unit and DMX controller (5-pin XLR is optional)

⑥FUSE(T 10A)：Protect the unit from damage of over current or short-circuit

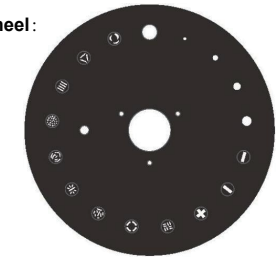
⑦POWER IN：Use to connect to supply power

Effect Wheels and Lamp

Color Wheel:



Static Gobo Wheel:



Osram Sirius Hri 251W

Because of its high internal pressure, there might be a risk that the Discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.
To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.
Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
Make sure the lamp is located in the center of the reflector for the best projection.
The lamp life is 1500 hours; Should check the Lamp Use Hour regularly. When the lamp replacement warning appears, we strongly recommend that you replace the lamp. After replacing the lamp, the use hours of the lamp must be cleared and reset.

To Replace The Lamp

1. Ensure that the fixture is detached from power and has cooled down completely. It is a good idea to allow the fixture to run for 10 minutes after the lamp has been turned off, so that the cooling fans have time to works.
2. Loosen the screws on the head of the fixture and open the fixture head covers.
3. the screw that holds the lamp in place. Unplug the leads of the lamp and lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.
The installing direction of lamp:
Finally reinstall the head cover, fastening it securely before reapplying power.

Lamp Replacement Warning

When the lamp reaches 300 hours before its service time, the display will flash the message “Replace Lamp Soon” for up to 5 minutes. During this period, the fixture will still work normally.
When the lamp reaches its service time, the display will flash the message “Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.
When the lamp is continuously used overtime, the display will flash the message “Lamp Timeout Use, Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.
Attention: Damages caused by the failure to replace the bulb in time are not subject to warranty.

How To Set The Fixture

After resetting the fixture , press the **Left** button into menu mode, and press the **UP/DOWN** button until the required function is shown on the monitor. Select the function by pressing the **UP/DOWN** button.
Use the **Right** button to choose the submenu, press the **Centre** button to store and automatically return to the last menu. Press the **Left** button or let the unit idle 30 seconds to exit menu mode.

The Menus Are Shown Below

Main menu	Submenu	Detail	Remarks
Address	001 - 512	default001	
Run Mode	DMX512	default	
	AUTO		
	SOUND		
M/S Choose	Slave	default	
	Master		
	Auto		
Manual Control	Pan	0-255	
	Pan Fine	0-255	
	Tilt	0-255	
	Tilt Fine	0-255	
	PT Spd	0-255	
	Strobe	0-255	
	Dimmer	0-255	
	Color	0-255	
	Gobo	0-255	
	Prism	0-255	
	Frost	0-255	

Main menu	Submenu	Detail	Remarks
Setting	Pan Invert	Off	default
		On	
	Tilt Invert	Off	default
		On	
	P/T Feedback	Off	
		On	default
	Data hold	Off	default
		On	
	Sound Sens	0-100	
	Lamp Switch	Off	default
		On	
	Lamp state	PowerON	
		Maunal	default
	Motor Calib (Password: press the buttons up-down-up-down in order)	Pan	-127~+127
		Tilt	-127~+127
		Color	-127~+127
		FixGobo	-127~+127
		Storbe	-127~+127
		Frost	-127~+127
		Prism	-127~+127
Display	Language	Chinese	
		English	default
	Screen Saver	Off	default
		MODE1	
	Screen Reverse	Off	default
		On	
Information	motor info		
	Fixture Status		
	Version		
	Lamp time		
	Total time		
Reset	Pan/Tilt		
	effect		
	All		
Factory Setting	Cancel		
	OK		

Control By Universal Dmx Controller

DMX512 connection
At last fixture, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4 W 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 unit.
Every lighting fixture needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
The end of the DMX 512 system should be terminated to reduce signal errors.
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 (+)
5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

Address Setting
Use a universal DMX controller to control the fixtures, the signal indicator of control panel shows GREEN; you can set DMX address from 1 to 512 so that they can receive correct DMX signal.
Press the LEFT button to enter mainmenu, select Address Functions, use the UP/DOWN button to adjust the address from 001 to 512, press the CENTRE button to confirm,
use the UP/DOWN button to select Run Mode, choose the DMX512 submenu press the CENTRE button to store.
Press the LEFT button back to the last menu or let the unit idle 30 seconds to exit menu mode.

DMX Protocol

Channel	Value	Function
CH1	000-255	PAN 0-540°
CH2	000-255	PAN FINE
CH3	000-255	TILT 0-270°
CH4	000-255	TILT FINE
CH5	000-255	PT Speed
CH6	000-255	DIMMER
CH7	STROBE	STROBE
	000-010	close
	011-207	Strobe（Slow to fast）
	208-212	open
	213-251	Random Strobe（Slow to fast）
	252-255	open
CH8	COLOR WHEEL	COLOR WHEEL
	000-010	open
	011-015	COLOR 1
	016-020	COLOR 2
	021-025	COLOR 3
	026-030	COLOR 4
	031-035	COLOR 5
	036-040	COLOR 6
	041-045	COLOR 7
	046-050	COLOR 8
	051-055	COLOR 9
	056-060	COLOR 10
	061-065	COLOR 11
	066-070	open
	071-191	COLOR WHEEL Index
	192-222	Clockwise RAINBOW EFFECT(fast to slow)
	223-224	STOP
	225-255	Counter-Clockwise RAINBOW EFFECT Slow to Fast
CH9	FIXED GOBO	FIXED GOBO
	000-010	WHITE
	011-015	GOBO 1
	016-020	GOBO 2
	021-025	GOBO 3
	026-030	GOBO 4
	031-035	GOBO 5
	036-040	GOBO 6
	041-045	GOBO 7
	046-050	GOBO 8
	051-055	GOBO 9
	056-060	GOBO 10
	061-065	GOBO 11
	066-070	GOBO 12
	071-075	GOBO 13
	076-080	WHITE
	081-087	GOBO 1 Shaking (slow to fast)
	088-094	GOBO 2 Shaking (slow to fast)
	095-101	GOBO 3 Shaking (slow to fast)
	102-108	GOBO 4 Shaking (slow to fast)
	109-115	GOBO 5 Shaking (slow to fast)

Channel	Value	Function
CH9	116-122	GOBO 6 Shaking (slow to fast)
	123-129	GOBO 7 Shaking (slow to fast)
	130-136	GOBO 8 Shaking (slow to fast)
	137-143	GOBO 9 Shaking (slow to fast)
	144-150	GOBO 10 Shaking (slow to fast)
	151-157	GOBO 11 Shaking (slow to fast)
	158-164	GOBO 12 Shaking (slow to fast)
	165-171	GOBO 13 Shaking (slow to fast)
	172-180	WHITE
	181-215	Clockwise Rotation Fast to Slow
	216-220	Stop
	221-255	Counter-Clockwise Rotation Slow to Fast
CH10	PRISM	PRISM
	000-010	CLOSE
	11-127	OPEN
	128-255	PRISM ROTATION (SLOW TO FAST)
CH11	FROST	FROST
	000-127	CLOSE
	128-255	OPEN
CH12	CONTROL	CONTROL
	000-040	NO FUNCTION
	041-070	LAMP OFF
	071-100	LAMP ON
	101-120	NO FUNCTION
	121-130	P/T RESET
	131-140	EFFECT RESET
	141-150	ALL RESET
	151-255	NO FUNCTION

Error Infromation

The RED light of Error indicator are shown when the fixture fails and they will not disappear until the fixture is repaired.

1. CPU-A/B Error
Check whether the 485 (DATA) leads on the PCB board are installed in place or disconnected.
Check whether the related 485 (DATA) signal circuit on the PCB board is damaged.

2. Pan Encode Error
Check whether the encoder on the pan is damaged.
Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

3. Tilt Reset Error
Check whether the position of the tilt where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the tilt operating range.
Check whether the Hall element on the tilt is damaged.
Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.
Check whether the motor on the tilt is damaged.
Check whether the related circuit of the motor drive board on the tilt is damage.

4. Tilt Encode Error
Check whether the encoder on the tilt is damaged.
Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

5. Color Reset Error
Check whether the position of the color wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the color wheel operating range.
Check whether the Hall element on the color wheel is damaged.
Check whether the lead connecting the Hall element on the color wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the color wheel is damaged.
Check whether the related circuit of the motor drive board on the color wheel is damage.

6. Gobo Reset Error
Check whether the position of the gobo wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the gobo wheel operating range.
Check whether the Hall element on the gobo wheel is damaged.
Check whether the lead connecting the Hall element on the gobo wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the gobo wheel is damaged.
Check whether the related circuit of the motor drive board on the gobo wheel is damage.

7. Lamp Fan1 Start Err
Check whether the fan is not running.
Check whether the fan leads are installed in place or disconnected.
Check whether the fan is damaged.
Check whether there are obstacles in the fan operating range.

Trouble-shooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

A. The unit does not work, no light and the fan does not work
1. Check the connected power.
2. Measure the voltage.
3. Check the power indicator to see whether it can be lit up or not.

B. Not responding to the DMX controller
1. Check whether the DMX connectors and the DMX cables are connected correctly.
2. Check whether the DMX address is correctly set.
3. If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
4. Try it with another DMX controller.
5. Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

C. One of the channels is not working well
1. The stepper motor might be damaged or the cable connected to the PCB might be broken.
2. The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently
1. The lamp is not working well. Check whether the voltage is too high or too low.
2. The internal temperature may be too high. Replace the cooling fan if necessary.

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.
A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
Always dry the parts carefully.
Clean the external optical lens at least every 20 days and the internal optical lens every.

Light after-sales service

Please fill in the following content properly and keep it safe forfuture maintenance. Accordingly, for your each purchase of our systems we havearchive Serial number and parameters for future reference.

Product warranty card

Testing : ☐ **Warranty :** ☐ **Non-warranty :** ☐

Mode :

Serial No. :

Distributor :

Address :

Tel :

1. All device products purchased from our company (and authorized agents) are entitled to a one-year warranty service for light sources, machinery, and electronics if they are used correctly; if there is no warranty, the company can also provide paid maintenance services according to the actual situation;

2. The following situations are not covered by the free warranty:
① The product has no serial number;
② The prohibition mark is damaged or there are obvious signs of self-disassembly;
③ The product has no replaceable components or components required by customized products, and unauthorized disassembly or replacement of components without permission leads to problems;
④ Failure or damage caused by improper use or improper maintenance or modification;
⑤ Damage caused by failure to operate in accordance with the instructions or the harsh environment of use;
⑥ Damage caused by impact during installation or handling by the purchaser;
⑦ For repaired or replaced products, the warranty will not be extended, and the power will decay slowly according to the normal life span, which is not within the scope of free warranty;
⑧ Failure and damage caused by fire, earthquake, flood, lightning and other natural disasters or abnormal power supply voltage

3. The company reserves the right of final analysis of the above terms.

If there is a problem with the product, please contact the company (or agent) in time, and we will solve it in the shortest time. At the same time, we sincerely hope that you can provide valuable comments and suggestions on our products, and we will spare no effort to improve our products.