

# **LED 200W Beam Moving Head Light**

Item Number: LL200BM

## **USER MANUAL**



This user manual includes important information for installation and operation. Please read this user manual carefully to install, operate, and maintain the lighting safely and correctly. A verified technician should do the installation and operation.

Please carefully check for any damages caused by transportation.

Before delivery, this device has passed strict quality control and inspection. Please follow the user manual for proper operation. If this fixture is damaged due to operation error or disregard of this manual, the fixture will be out of warranty, and the manufacturer or dealer will not be held responsible.

### **Installation:**

This unit is for indoor use only. Use only in a dry location. To prevent or reduce the risk of electrical shock or fire, do not expose to rain or moisture.

Maximum ambient temperature for operation is 104°F. Do not operate the unit at a higher ambient temperature as the surface temperature of the unit can reach up to 165°F. Do not touch the housing of the unit during operation as this could result in serious injury. Turn off the power and allow 15 minutes for the unit to cool down before handling. Do not open the unit within five minutes after switching off.

Keep the fixture at least 1.5ft. away from any combustible material, as it is not suitable for direct installation on these surfaces. The unit must be installed in a location with adequate ventilation, at least 20 inches from adjacent surfaces. Ensure that no ventilation slots are blocked.

We advise that an electrician confirms the safety of the electrical data prior to installation. Power off the fixture before installation or maintenance. Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

**Rigging:**

Only lift the unit by its base, not the head. The unit should be mounted via its screw holes on the bracket and firmly fixed to avoid vibration and slipping while operating.

The truss used for hanging this fixture must be able to hold 10 times the weight of this fixture without deformation one hour after installation. Always use a safety cable that can hold 12 times the weight of the unit. Do not stand directly under the fixture while installing, uninstalling or adjusting the fixture.

**Product Specification:**

Input power:AC100-240V

Power frequency:50/60Hz

Power consumption: 350W

Prism1: 8-facet rotating

Prism2 :8+16 +24-facet rotating prism

Static Gobo Wheel:15 metal gobos+

2 glass gobos + open

Color: 14 color + open,split color, rainbow. frost

Macro effects.

DMX channels:19CH

DMX connector: 3-Pin XLR input and output

Power connector: PowerCon input/output

Control mode:DMX/Master-Slave/Auto/Sound

Pan: 540°,16bits scanning

Tilt:270°, 16bits scanning

LCD color display with 4 buttons

IP Rating:IP20

Housing color: black

Working ambient temp.: -10°C to 40°C (-14°F to 104°F)

Dimensions: 293 x 240 x 572mm/11.5 x 9.5 x 22.5in

Weight:13.5kg/29.8lb

Main Source: 200W white LED, 9000K

Halo Ring:54 pcs RGB LED

Average lifespan: 50000hours

Color wheel:14 colors + open

Frost+Rainbow effect

Split color

Linear dimming:0-100% Linear Dimmer

Strobe: 1-25Hz

Beam Angle:1.5

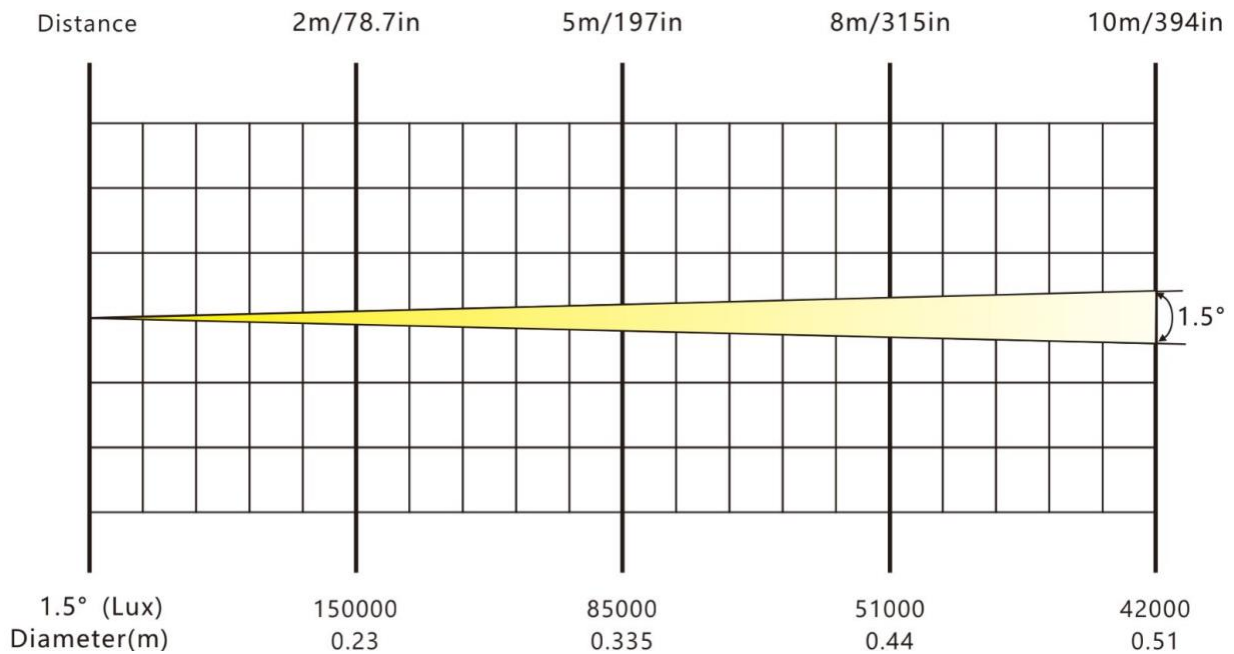
Color Wheel



Static Gobo Wheel



## Photometric Diagram:



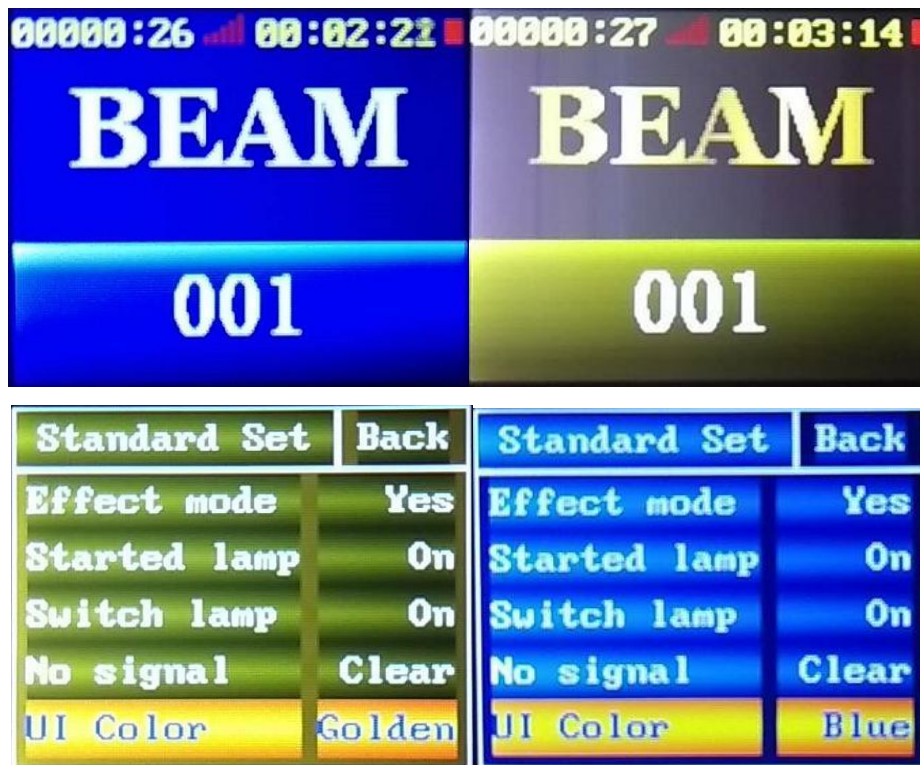
## Startup Menu:

DMX	DMX signal status indicator
Audio	Sound status indicator
Up	Select the previous item or increase the value.
Down	Select the next item or decrease the value.
Menu	Display all the functions,exit or return to the previous menu.
Enter	Confirm button
Time( Left )	System total runtime (can be hidden under Standard Settings)
Time ( Right)	Current power-on duration (can be hidden under Standard Settings)
Square ( Upper Right Corner)	Green: No errors, fixture operating correctly
	Red: Error(click the icon or go to <info/error list/view>to identify the issue.

## System Operation:

Upon power-on, the system enters a reset state. The interface will display as shown in the photo below. During this process, the system automatically checks all functions. If any functions are not working, they will be displayed on the right side of the interface, with the square on the upper right corner turning to red after the reset is complete. You can follow <info/error list/view> to identify the issues. The icon will display green if everything is functioning properly.

After the reset is complete, the interface will display as shown below. You can select different UI color styles to match your preferences. The color settings can be adjusted under <Standard Settings>.



Press any button to access the system menu, as shown in the photo below.



**Advanced:** Key factory debug parameter settings

**Info:** Displays information such as errors and software version **Standard:** Settings for address codes and commonly used functions **Perform:** Automatically run or sound-control built-in programs and user programs

**Reset:** Resets the system to its initial position

**Program:** Manual control or editing of user programs

**Reverse:** Reverses the screen display

**Exit:** Exits to the main interface

Choose the functions you want from the sub-menu.

Standard	Default	Enter?	Restore factory settings
	Address	001-512	Set fixture address
	DMX Mode	Model 1	Select DMX mode
		Model 2	
	Effect Mode	No/Yes	The effect wheels (color wheel and gobo wheel) will automatically find the shortest path to return to “Open” position.

	Started Lamp	Off/On	Choose light "ON" or "OFF" at startup
	Switch Lamp	Off/On	Manually turn on the light
	No Signal	Clear/Hold	Retain or clear DMX values when without signal
	UI Color	Blue	Select menu color
		Golden	
	Show Time	No/Yes	Show runtime on main interface
	Brightness	000-255	Adjust screen brightness
	Effect Sync	Off/Speed1-Speed7	
	Screensaver	Off/On	Turn off screen when inactive
	XY Encoder	No/Yes	Enable/disable XY auto-correction
	X Inversion	No/Yes	Invert X-axis
	Y Inversion	No/Yes	Invert Y-axis
	Focus Inversion	No/Yes	Invert focus
	Zoom Inversion	No/Yes	Invert zoom
Advanced	DO NOT change without authorization!It may damage your fixture.		
Info	Error List	No error/View	Indicates if there are errors or not; click Enter to view error if present.
	Display Ver	xxxxxxxx	Display version info.
	MainboardV	xxxxxxxx	Mainboard version info.
	Serial NO.	xxxxxxxx	Device serial number
	SYS timer	00000.0H	System total runtime (hours)
	Run timer	000:00	Runtime since power-on (hours)



	Lamp timer	00000.0H	Light runtime (hours)
	Permission	NA	(Reserved)
	Equip Temp	NA	(Reserved)
	Head Temp	NA	(Reserved)
	Fan1 Speed	NA	(Reserved)
	Fan2 Speed	NA	(Reserved)
	Pan Coder	NA	(Reserved)
Perform	Run Mode	DMX/Auto/Sound	Run selected program under DMX,auto or sound mode
	Run Speed	0-255	Auto mode speed
	Run Cross	0-255	Set step amplitude for auto or sound mode (Function only if the fixture is equipped with this feature.)
	Built-in 1	Off/On	Test program 1
	Built-in 2	Off/On	Test program 2
	User PRO 1	Off/On	User program 1
	User PRO 2	Off/On	User program 2
	User PRO 3	Off/On	User program 3
	User PRO 4	Off/On	User program 4
	Circle Shape	Off/On	(Reserved)
	Square Shape	Off/On	(Reserved)
	Shape Range	0	(Reserved)
	Sound DB	0	Adjust sound sensitivity
Program	See details in Manual Control Programming		
Reset	Reset to initial position.		

## Manual Control and Programming:

Here are some instructions for manual control and programming functions:

This function allows you to edit up to 4 user programs. These 4 programs can run in tandem under <Testing Running>. They can be activated simultaneously, starting with Program 1, followed by Programs 2, 3, and 4. After completing Program 4, the cycle returns to Program 1 and continues running indefinitely. Single program running is also available.

Program function buttons enable the following operations:



Select program

Read program

Select procedure

Delete procedure

Manual or DMX control → Copy procedure

Paste selected procedure

Clear procedure

Save to selected program space

### ***Manual control programming***

Go to Program and enter and choose MANU for manual control



Using the Up/Down/Enter buttons to highlight the matching channels in red, then press

Up/Down to manually increase/decrease the values.



Select the program you need to store (PRO1-4). Set the channel values manually and press <Save>.

### **Copy procedure**

Press Copy to copy all DMX channel values and store them on the clipboard.

### **Paste procedure**

After copying, you can select any procedure and paste the DMX channel values into the selected procedure's channels.

### **Clear procedure**

Press Zero to remove all the DMX channel values.

### ***DMX control programming***

This fixture supports DMX control programming. Select the mode as CONS as shown in the photo below.



In this mode, all values are controlled by the DMX console. Manual control, paste, and clear functions are disabled. All values will display DMX data. You can either input values via the console or run built-in programs.

To enter programming mode, press DOWN to select the number, then press UP to enter programming.

### Save Program:

After completing programming via manual or console, you can save the program.

Confirm the save under PRO1–PRO4. Ensure the program length is displayed as =0XX and not >0XX. If there are additional programs, delete them first before saving.

### Read and Re-edit Program:

Select PRO1–PRO4, press ENTER, then press <Down> until <End> is displayed. Press <Enter> to read out the program, as shown in the photos below. The displayed data represents the maximum value of the program. If the program is empty, it will display <empty> or <No>.



You can re-edit a read-out program. After finishing the re-edit, press <Save> to overwrite the current program or select a different space (PRO1–PRO4) to save the changes.

### Running Programs:

To run saved programs, return to the <Perform> menu. Select the user program and turn <On> to activate it.



## DMX Chart

### Channel Mode: 19

Channel	Function	Value	Details
CH1	Pan	0-255	0-540°
CH2	Tilt	0-255	0-2.1°
CH3	Pan Fine	0-255	0-270°
CH4		0-255	Tilt fine
CH5	Pan/Tilt Speed	0-255	Fast-slow
CH6	Frost & Rainbow Effect Wheel	0-79	White
		80-159	Frost
		160-255	Rainbow effect
CH7	Strobe	0-3	Lights off
		4-103 207	Strobe from slow to fast
		104-107	Open
		108-207	Pulse strobe from slow to fast
		208-212	Open
		213-251	Random strobe from slow to fast
		252-255	Open
CH8	Dimmer	0-255	Off-on
CH9	Color	0-3	Open
		4-7	Open+Red
		8-11	Red
		12-15	Red+Yellow
		16-19	Yellow
		20-23	Yellow+Blue
		24-27	Blue

		28-31	Blue+Green
		32-35	Green
		36-39	Green+Orange
		40-43	Orange
		44-47	Orange+Turquoise
		48-51	Turquoise
		52-55	Turquoise+Pink
		56-59	Pink
		60-63	Pink + Dark orange
		64-67	Dark orange
		68-71	Dark orange+Light Green
		72-75	Light green
		76-79	Light Green + Baby Blue
		80-83	Baby Blue
		84-87	Baby Blue+Light Orange
		88-91	Light Orange
		92-95	Light Orange + Sky Blue
		96-99	Sky Blue
		100-103	Sky Blue+Light Pink
		104-107	Light Pink
		108-111	Light Pink+Grey
		112-115	Grey
		116-127	Grey+Open
		128-191	Rainbow counterclockwise rotation from slow to fast
		192-255	Rainbow clockwise rotation from slow to fast
CH10	Split Color	0-255	

CH11	Gobo	0-6	White
		7-13	Fixed gobo 1
		14-20	Fixed gobo 2
		21-27	Fixed gobo 3
		28-34	Fixed gobo 4
		35-41	Fixed gobo 5
		42-48	Fixed gobo 6
		49-55	Fixed gobo 7
		56-62	Fixed gobo 8
		63-69	Fixed gobo 9
		70-76	Fixed gobo 10
		77-83	Fixed gobo 11
		84-90	Fixed gobo 12
		91-97	Fixed gobo 13
		98-104	Fixed gobo 14
		105-111	Fixed gobo 15
		112-118	Fixed gobo 16
		119-127	Fixed gobo 17
		128-191	Rotation forward from fast to slow
		192-255	Rotation backward from slow to fast
CH12	Gobo Shake	0-191	Gobo shake from slow to fast
		192-255	No Function
CH13	Focus	0-255	Far-Near
CH14	Prism	0-63	No prism
		64-127	8-facet prism
		128-191	8+16+24-facet prism
		192-255	8 facet prism and 8+16+24 facet prism
CH15	Prism Rotation	0-127	Rotation Angle

		128-170	Rotation counterclockwise from fast to slow
		171-213	Rotation clockwise from slow to fast
		214-255	Rotation counterclockwise and clockwise from slow to fast
CH16		0-249	No Function
		250-255	Reset after secs
CH17		0-9	Light Off
		10-49	Light on
		50-89	Strobe from slow to fast
		90-129	Pulse strobe from slow to fast
		130-209	Pulse strobe from slow to fast
		210-249	Random strobe from slow to fast
		250-255	Lights on
CH18	Halo Ring Macro Effects	0-4	No function
		5-9	Effect 1
		10-14	Effect 2
		15-19	Effect 3
		20-24	Effect 4
		25-28	Effect 5
		29-33	Effect 6
		34-38	Effect 7
		39-43	Effect 8
		44-48	No Effect
		49-53	Effect 9
		54-57	Effect 10
		58-62	Effect 11
		63-67	Effect 12



68-72	Effect 13
73-77	Effect 14
78-82	Effect 15
83-86	Effect 16
87-91	Effect 17
92-96	Effect 18
97-101	Effect 19
102-106	Effect 20
107-111	Effect 21
112-115	Effect 22
116-120	Effect 23
121-125	Effect 24
126-130	Effect 25
131-135	Effect 26
136-140	Effect 27
141-144	Effect 28
145-149	Effect 29
150-154	Effect 30
155-159	Effect 31
160-164	Effect 32
165-169	Effect 33
170-173	Effect 34
174-178	Effect 35
179-183	Effect 36
184-185	Effect 37
189-193	Effect 38
194-198	Effect 39
199-202	Effect 40

		203-205	Effect 41
		208-212	Effect 42
		213-217	Effect 43
		218-222	Effect 44
		223-227	Effect 45
		228-231	Effect 46
		232-236	Effect 47
		237-241	Effect 48
		242-246	Effect 49
		247-251	Effect 50
		252-255	Effect 51
CH19	Halo Ring Effects Speed	0-127	Effect Speed clockwise from slow to fast
		128-255	Effect Speed counterclockwise from slow to fast

**Symbol Instruction on Fixture:**



CE certificate



RoHS certificate