



**YELLOWRIVER**  
MAKE YOUR STAGE TO BE MORE EXCELLENT

## 250W Moving Head Beam

Model: YR-250B



**User Manual**

*Please read these instructions carefully before use*

## Notes:

Any damage caused by disregard of this manual does not belong to the scope of warranty, and the manufacturer shall not bear any responsibility for all consequences and problems arising therefrom. Please note that the damage caused by violation of operating procedures does not belong to the scope of warranty.

## SPECIFICATION

Rated voltage: AC110V-AC240V, 50Hz~60Hz

Power consumption: 400w

LED source: 250w

Strobe: 1-13 t/s, random strobe ,standard strobe pulse strobe

Color Temperature: 7800k

Color: 14color + white open + semi-color effect

6 colors wheel: 1pcs, multi-color effect with prism

Gobo: 13+white

Frost: 1 frost glass

Scanning angle: X axis 540°, Y axis 260°, photoelectric reset and correction

Prism: 1pcs three- layers honeycomb prism & 1pcs 16-facet prism

Scanning: use three-phased motor, Pan 540°/1.9 seconds, tilt 270° /1.0 seconds, with electronic correction

Beam angle: 1.3°linear focus

Control mode: DMX-512, automatic, master & slave, RDM

Control channel: 16CH/20CH

Display function: touch screen.display content can be inverted, Chinese and English switchable, automatic screen off/long lasting screen on , display the lighting time, fault inspection, the software version information, can restore factory Settings.

Lamp opening mode: automatic/manual/DMX

Safety protection: automatically cut off the power when the body overheats or the system fails

Net weight: 13.5 KG

Size:290\*235\*495mm



**YELLOW RIVER**  
We bring excellence to your stage

# Certificate

Product Name: \_\_\_\_\_

Product Model: \_\_\_\_\_

Inspector: \_\_\_\_\_

Inspection Date: \_\_\_\_\_

Execution Standard: GB7000-217-2008

This product has been inspected and qualified for shipment.



Guangdong Yellow River Lighting Technology Limited  
National Service Helpline: 400-618-4388

## Product Warranty Card

**Dear Customer:**  
Thank you very much for purchasing our product. In the future use, you will enjoy the one-year after-sales service warranty provided by us.

**Warranty Terms:**  
This product, from the date of purchase, under normal operation and without repair, if confirmed by the warranty personnel to be a product quality issue, will enjoy the warranty service within one year, and maintenance will be provided under any normal circumstances.  
The warranty card should be filled out at the time of purchase, and the warranty card is invalid without the warranty seal of our company. Please bring the warranty card when the product is maintained.

**Customer Information**

Customer Name: \_\_\_\_\_ Buyer: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_ Product Model: \_\_\_\_\_

**Warranty Record**

Repair Date	Fault and Solution	Repair Date	Repair Technician

**Guangdong Yellow River Lighting Technology Limited**  
After-sales Service Address: C 10# Building, No.41 Dawang Avenue  
Wanyang Zhongqiang centre,Zhongqiang High-tech Zone,Zhongqiang City, Guangdong, China

## 5. Installation requirements

1. this product in the use environment, can not have corrosive steam and gas, no inflammable and explosive goods
2. The luminaire shall be at least 5 meters away from the subject,
3. The optical lenses, lenses in use process there can be no outside force bump, if the lens is damaged, need to find relevant professionals to replace the same specifications of the lens;
4. When the power cord damage, must find relevant professional personnel to replace the same specifications before use;
5. When hanging installation, the hanger's loading bear must be at least 3 times greater than the product weight, and strapping on insurance rope, the insurance rope' loading bear must be at least 3 times greater than the product weight.
6. The lens and the light bulb must be used together, when any parts damaged, must find relevant professional personnel change before you can continue to use
7. In the use of environment, must limit the current voltage in the scope of this specification requirements, and have grounding
8. The lamp must be used under the indicated lifespan, after reaching the lifespan, please change the lamp, otherwise the lamp will be easy to deformation or explode and cause dangerous situation.
9. When replacing the lamp, power dump firstly, open the head's plastic cover, and open the fan shelf in the lamp area, then replace with a same specification lamp.

Note: Any damage caused by ignoring this manual is not covered by the warranty. The manufacturer shall not be liable for all consequences and problems arising therefrom. Please note that any damage caused by violation of the operating procedures is not covered by the warranty.

**The company reserves the right to amend this product manual without prior notice**

## 1. LCD DISPLAY



## 2. MENU

### 2.1 Setting

Option	Description	
Operation mode	DMX	Slave state: receive DMX signal from console or master unit
	Auto 1	Master status: auto runs and send DMX signal to slave
	Auto 2	
	Auto 3	
	Auto 4	
	Run like 8 shape	
	Run like 0 shape	
	Run like vertical 8 shape	
	Run like sleeping 8	
	Stochastic auto	
Sound active		

DMX address	1~512	Press ok to enter the edit state. At this point is to select the 001, press the "up" "down" key to change the address code.Press ok again to select the 01.Press ok again to select the ones bit edit.Press again to exit the edit state
The channel model	Standard 16 ch	Standard 16 ch, Channels 17th~20th are not valid.
	Extended 20 ch	Extended 20 ch, speed controlled by channels 17th~20th (pls check the channel chart)
Pan inversion	close	
	open	
Tilt inversion	close	
	open	
Pan and Tilt exchange	close	
	open	Swapping pan and tilt channel (including fine tuning)
Pan and Tilt encoder	open	Use an encoder (optocoupler) to determine the out-of-step and automatically correct the position
	close	Correct the position without using encoder (optocoupler)
No DMX signal	keep	Continue running in its original state
	reset	Motor reset, stop operation
The screen saver	open	Turn off the backlight after 30 seconds
	close	Backlight are always on
light bulb on after turning on the fixture	close	Reset directly after power on, without bulb on ( bulb shall be manually lit by menu or console)
	open	After automatically power on light bulb, and reset after light bulb is on

#### 4.Instructions and remarks



Warning. Electric shock

- 1.Check whether the power supply and voltage are normal before use. If the voltage fluctuates greatly, it is recommended to use voltage stabilizer or voltage regulator.
- 2.This equipment belongs to the first class protection lighting, therefore must put the yellow, the green lines grounding, and by the professional nursing.
  1. Do not touch the shell by hand when the equipment is working.
  2. Due to the equipment use of gas discharge lamp,when the use process is interrupted. The equipment needs to cool naturally for 20 minutes before starting the power again
5. The internal components of the equipment must be purchased from the manufacturer
6. Product power cord must be well grounded.
- 7.use the console, control to avoid the left and right neighbors, without interference source. (example: Wireless intercom, high frequency source, etc.)
- 8.when using this product, only 20 products can be controlled within 20 meters of the same signal line, beyond this range, the signal shall be amplified by signal amplifier, and a terminal lighting shall be welded a resistance of 120 ohm 1/4 w between pin 2 and pin 3 at the DMX output end.

Expansion Channel	17	XY speed	000-255	Speed from fast to slow
	18	The speed of color wheel		
	19	Speed of Dimmer/Prism/frost		
	20	The speed of gobo wheel		

The color wheel varies linearly	open	The color wheel varies linearly
	close	Color wheel is not linearly change, but half color change
Restore default Settings		Press ok to see the confirmation dialog box. Press ok again to restore the default Settings

## 2.2 Manual control

This interface is used to control the current fixture and automatically enter the master state (DMX signal is not received, and send DMX signal to slave units).

The manual menu displays 16 channels or 20 channels according to the standard 16-channel or extended 20-channel mode set in the settings menu.

Options	Description	
1 ch. Color color	0~255	Press ok to enter the edit state. At this point, press "up" and "down" to change the channel value from 001. Press ok again to change values in the ten edits (01). Press ok again to change values in the ones bit (1). Press again to exit the edit state
...	0~255	
15 ch. Atomization	0~255	
16 CH. Reset		Press "ok" to see the confirmation dialog box. Press "ok" again to enter the reset interface and reset all motors
16 CH. Bulb control	Open	
	Close	
17 CH. Keep	0~255	Display when channel mode is "expand CH20"
18CH. Color wheel speed	0~255	Display when channel mode is "expand CH20"
19 CH. Dimming - prism - atomization speed	0~255	Display when channel mode is "expand CH20"
20CH. Gobo wheel speed	0~255	Display when channel mode is "expand CH20"

## 2.3 System

Options	Description	
DIS		Present software version
MT		Motor software version
DMX Channel Monitoring	Enter the sub-interface from here, and display the channel value in number and percentage for viewing	
System Error detecting	If the red ERR indicator is on, it means that the operation of the luminaire went wrong, and you can enter the sub-interface for details. After checking, you can press "Clear" to clear the error record.	
Total operation time	Cumulative operation time (accurate to minutes)	
Single operation time	Present operation time (accurate to minutes)	
Total bulb working time	Cumulative bulb working time (accurate to minutes)	
Single bulb working time	Present single bulb working time (accurate to minutes)	

Error Info	Description
MT board connection failed	The motor board did not work. There is a problem with wire connecting the display board and the motor board, or there is a problem with the motor board.
Pan reset failed	Problem may occur on pan photoelectric switch, or pan motor or motor board
Tilt reset failed	Problem may occur on tilt photoelectric switch, or tilt motor or motor board
Pan hall error	Pan hall has error
Tilt hall error	Tilt hall has error
Color wheel reset failed	color wheel hall or color wheel motor has error

		135- 139 140- 200 201- 255	Fixed gobo 13 shake (from slow to fast) Positive flow effect(from fast to slow) Reverse flow effect(from slow to fast)
5	Prism 1	000-127 128-255	Prism 1 fade Prism 1 slide
6	Prism 1 rotation	000-127 128-190 191-192 193-255	Prism Angle adjustment Reverse rotation (fast to slow) stop Positive rotation (from slow to fast)
7	Prism 2	000-127 128-255	Prism 2 fade Prism 2 slide
8	Prism 2 rotation	000-127 128-190 191-192 193-255	Prism Angle adjustment Reverse rotation (fast to slow) stop Positive rotation (from slow to fast)
9	Zoom	000-255	The gobo sharpness from far to near
10	Pan scan	000-255	Pan 540 degree scan
11	Pan fine	000-255	Pan 1.2 degree fine
12	Tilt scan	000-255	Tilt 270 degree scan
13	Tilt fine	000-255	Tilt 1.2 degree fine
14	Frost&colorful	000-127 128-191 192-255	No use Frost lens slide Colorful lens slide
15	Reset	000-209 210-215 220-225 250-255	No use XY reset All effect motors reset All motors reset
16	Lamp control	000-099 100-105 200-205 250-255	No use Turn off the lamp Turn on the lamp All motor reset

2	Strobe	000-003	Shutter close
		004-103	Strobe from slow to fast
		104-107	shutter open → (controlled by dimming channel)
		108-207	
		208-212	Pulse strobe from slow to fast
		213-251	shutter on → (controlled by dimming channel)
		252-255	Random strobe from slow to fast shutter on → (controlled by dimming channel)
3	Dimmer	000-255	From dark to light
4	Gobo	000- 004	White
		005- 009	Fixed gobo 1
		010- 014	Fixed gobo 2
		015- 019	Fixed gobo 3
		020- 024	Fixed gobo 4
		025- 029	Fixed gobo 5
		030- 034	Fixed gobo 6
		035- 039	Fixed gobo 7
		040- 044	Fixed gobo 8
		045- 049	Fixed gobo 9
		050- 054	Fixed gobo 10.
		055- 059	Fixed gobo 11.
		060- 064	Fixed gobo 12
		065- 069	Fixed gobo 13
		070- 074	White shake
		075- 079	Fixed gobo 1 shake (from slow to fast)
		080- 084	Fixed gobo 2 shake (from slow to fast)
		085- 089	Fixed gobo 3 shake (from slow to fast)
		090- 094	Fixed gobo 4 shake (from slow to fast)
		095- 099	Fixed gobo 5 shake (from slow to fast)
		100- 104	Fixed gobo 6 shake (from slow to fast)
		105- 109	Fixed gobo 7 shake (from slow to fast)
		110- 114	Fixed gobo 8 shake (from slow to fast)
		115- 119	Fixed gobo 9 shake (from slow to fast)
120- 124	Fixed gobo 10 shake (from slow to fast)		
125- 129	Fixed gobo 11 shake (from slow to fast)		
130- 134	Fixed gobo 12 shake (from slow to fast)		

Gobo wheel reset failed	Gobo wheel hall or gobo motor has error
Focus reset failed	focus hall or focus motor has error
Lamp control failed	Failed to light up or turn off the bulb, there is a problem with the ignitor or bulb

## 2.4 Advance

A password is set here to prevent non-professionals from operating by mistake. The default password is "up, down,up,down." Press "OK" for password verification

Option		Description
Reset calibration	Pan calibration	Enter sub-menu, reset for Pan/tilt motor can be adjusted to compensate the errors caused by hardware installation. Adjustment range: -128~+127, +0 means no adjustment
	Tilt calibration	
	Color calibration	
	Gobo calibration	
	Focus calibration	
	Dimmer calibration	
	Prism 1 calibration	
	Prism 2 calibration	
	Frost calibration	
Lit bulb time		0-9999 hours, the system defaults to 2000 hours, the system will alert when operating to the maximum lit bulb time
Clear bulb lit time		After that, the record starts from 0
Sensor monitoring	Pan hall	0: Function properly, 1: otherwise
	Tilt hall sensor	0: Function properly, 1: otherwise
	Color hall sensor	0: Function properly, 1: otherwise
	Gobo wheel hall	0: Function properly, 1: otherwise

sensor	
Focus hall sensor	0: Function properly, 1: otherwise
Prism 1 hall sensor	0: Function properly, 1: otherwise
Prism 2 hall sensor	0: Function properly, 1: otherwise
Frost hall sensor	0: Function properly, 1: otherwise
Pan Encoder State	2 figures, each one is corresponding to Photoelectric switch for the encoder involved
Tilt Encoder State	2 figures, each one is corresponding to Photoelectric switch for the encoder involved
Pan Encoder Value	The value increases when following original setting and decreases when moving from another direction. It shows the same value when passing a certain place, otherwise error occurs.
Tilt Encoder Value	The value increases when following original setting and decreases when moving from another direction. It shows the same value when passing a certain place, otherwise error occurs.

### 3. CHANNEL(16/20CH)

Follow 1-16 when you choose 16CH mode, follow 1-20 ch when you choose 20 CH mode

CH	FUNCTI ON	NUMBE RS	EFFECT
1	Color wheel	000-004	White
		005 -009	White+color 1
		010- 014	Color 1
		015- 019	Color 1+color 2
		020- 024	Color 2
		025- 029	Color 2+color 3
		030- 034	Color 3
		035- 039	Color 3+color 4
		040- 044	Color 4
		045- 049	Color 4+color 5
		050- 054	Color 5
		055- 059	Color 5+color 6
		060- 064	Color 6
		065- 069	Color 6+color 7
		070- 074	Color 7
		075- 079	Color 7+color 8
		080- 084	Color 8
		085- 089	Color 8+color 9
		090- 094	Color 9
		095- 099	Color 9+color 10
100 -104	Color 10		
105 -109	Color 10+color 11		
110 -114	Color 11		
115 -119	Color 11+color 12		
120 -124	Color 12		
125 -129	Color 12+color 13		
130 -134	Color 13		
135 -139	Color 13+white		
140 -200	Positive flow effect(from fast to slow)		
201- 255	Reverse flow effect(from slow to fast)		