

# **IM-LEDB300**

## **300W LED Module Beam Moving Head Light**



## **USER MANUAL**



beam Lighting

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**Congratulations on purchasing this 300W LED Module Beam Moving Head Light**

**Thank you for extending your trust in our technology**

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## Chapter 1 Installation and attention

### 1.1 Maintenance

- | To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- | Intermittently using will extend this item's service life.
- | Please clear the fan ,fan net , and optical lens in order to keep good work state.
- | Do not use the alcohol or any other organic solvent to wipe the shell.

### 1.2 Statement

The product has perfect performance and integrity packing. All users should be strictly complying with the warning and operating instructions as stated. Or we aren't in charge of any result by misusing. Any damage resulting by misuse is not within the Company's warranty. Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

**Note:** All information is subject to change without prior notice.

### 1.3 Safety Precaution

- | In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60 degrees.
- | Always mount this unit in safe and stable matter.
- | Install or dismantle should operate by professional engineer.
- | Using lamp, the change rate of power voltage should be within $\pm 10\%$ , If the voltage is too high, it will shorten the light's life; If it's not enough, will influence the effect.
- | Please restart it 20 minutes later after turning off light , until full-cooling. Frequent switching will reduce the life span of lamps and bulbs; intermittent using will improve the life of bulbs and lamps.
- | In order to make sure the product is used well, please read the Manual carefully.

## 1.4 Product Instruction

- I Voltage: AC100-240V,50-60Hz
- I Power: 300W
- I Led source: 300W LED Module
- I Color Temperature: 8000K
- I LED Life Time: 50000 Hours
- I Channels: 16 DMX channel
- I Control: DMX/Master-slave/Auto/Sound activated
- I Pan: 540 degree + fine
- I Tilt: 270 degree + fine
- I Focus Funtion: Yes
- I Dimmer: 0-100% smooth linear dimmer
- I Strobe: 1-25 Hz with pulse effect
- I Color Wheel: 14 colors + open, with 1pcs extral rainbow color wheel
- I Gobo Wheel: 17 gobos + open
- I Two Prism wheels: 8 facet prism + 24 facet prism
- I Display: LCD display, can adjust 180 degree to fit different installation position

## 1.5 Cable connection ( DMX )

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and 3.

**IMPORTANT:** The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

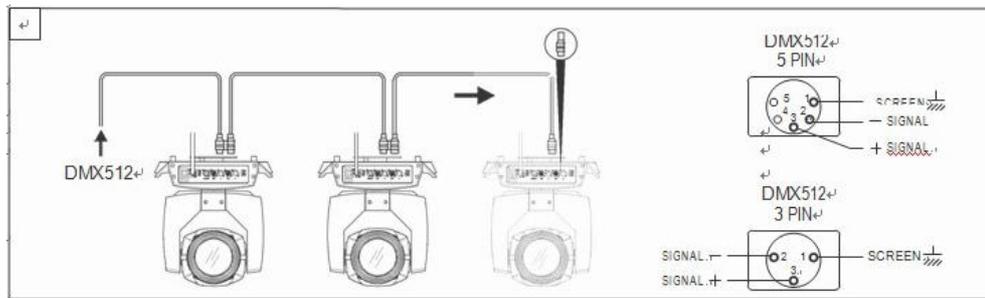


Figure 1 DMX Cable connection

## 1.6 Rigging (Optional)

This equipment can be positioned and fixed by clamp in every direction of the stage. Locking system makes it easy to fasten to the bracket.

Attention! Two clamps is needed to fix the equipment. Every clamp is locked by fastener of 1/4 kind. Fastener can only be locked clockwise.

Attention! Fasten a safety string to the additional hole of side aluminum piece. The secondary accessory can not hang on the delivery handle. Nip the equipment on bracket.

- I Check if rigging clamp (not including the one inside) damaged or not? If stand ten times weight as the equipment. Make sure the architecture can stand ten times weight as all the equipments, clamps, wirings and other additional fixtures.
- I Screws for clamping must be fixed firmly. Take one M12 screw (Grade 8.8 or higher) to clamp bracket, and then screw the nuts.
- I Level the two hanging points at the bottom of clamp. Insert fastener to the bottom, lock the two levers by 1/4 rotating clockwise; then install another clamp.
- I Install on safety string which stands at least ten times weight as equipment. Terminal of the accessory is designed for clamps.
- I Make sure pan/tilt lock unlocked or not. Keep the distance more than 1M from equipment to flammable material or lighting source.

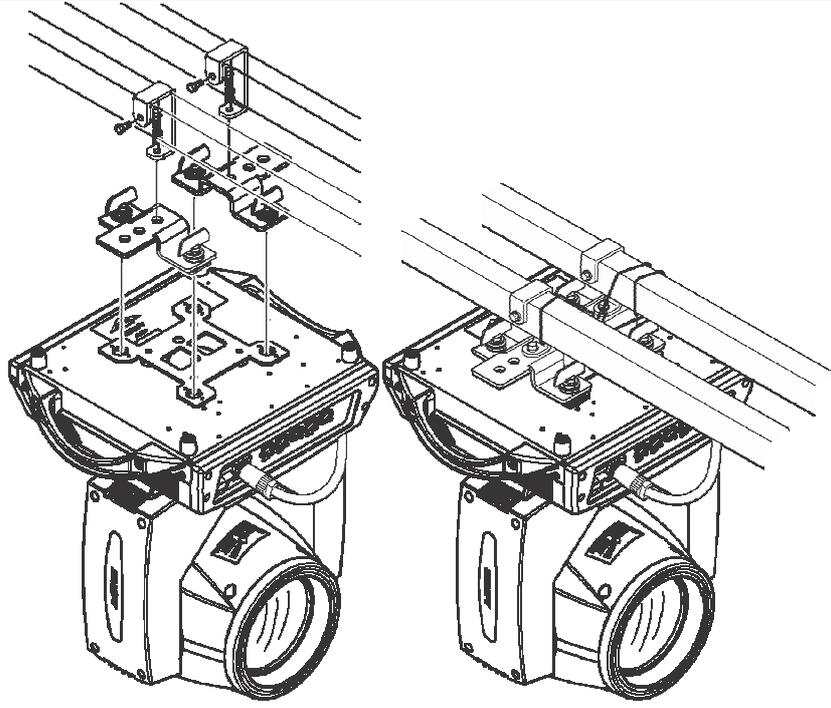


Figure 2 Installation

## Chapter 2 Panel operation

### 2.1 Brief

The light panel diagram show as Figure 3, Left area is TFT Displayer, support touch, and right area is KEY, both of touch and KEY can operate light and setting.

Display & operation just like ‘Android operation system’, touch the item will set or modify setting.

Note: Prevent damage the touch or TFT displayer, Can not use sharp objects chick displayer.



Figure 3 Panel diagram

### 2.2 Operation

#### 2.2.1 Operate light with touch or KEY

- I The left area is TFT Displayer and touch, chick item or value with finger will to complete operation of set light setting(parameters) or view light state.
- I The area on the right hand side is 4 KEY, As auxiliary input interface, if disable touch function,, the KEYr can been choose to set the parameter.

#### 2.2.2 Parameter value setting

When the selected item is value need to been modified, the dialog shown in Figure 4 will popup.

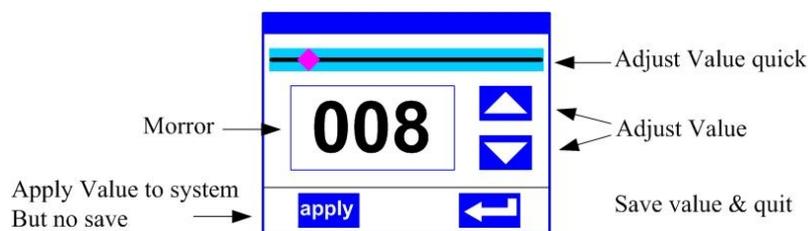


Figure 4 Dialog of value setting

- I **Modify value:** Can quickly modify value via pull the slider to the desired position, or click the button of ‘up’ or ‘down’ whit finger on the right side to set the exact desired value, another way is roll encoder on the right hand side of panel.
- I **Apply value:** When Value had been modified, Then press the bottom of ‘apply’ in the left corner to apply to the light, but hav’t saved;
- I **Save Value:** Any time, click on the lower right corner of the "OK" button, the setting will been saved into internal memory.

#### 2.2.3 Boolean parameter setting

- I when the selected parameters is a Boolean value (such as ON or OFF), can directly modify

setting by click corresponding item, the setting will be saved right now.

- When the parameter is a key item, click corresponding item, a dialog shown in Figure 5 will be popup ask for the confirm. Click 'sure' to confirm.

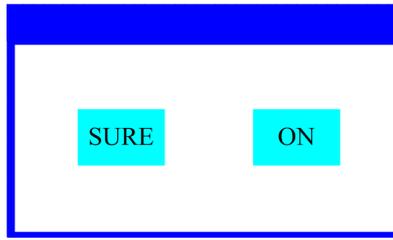


Figure 5 Dialog of confirm

### 2.2.4 Sub Menu ( Parameter )

Click item of main menu, enter corresponding sub menu, shown in Figure 6, total 6 sub menu, includes class of parameter and status:

- ADDRESS: Set light DMX address.
- WORKMOD: Set light work mode, master or slave mode when in auto run mode.
- DISPLAY: Set display parameter, eg. select language.
- TEST: Used for test light, modify DMX channel data to test function, the corresponding function of reference channel function table.
- ADVANCE: Set light running parameter.
- STATUS: view light current status.



图 6-1地址设置

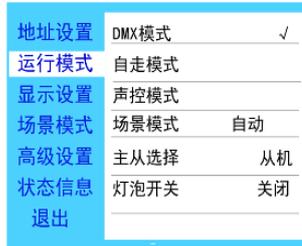


图 6-2运行设置



图 6-3显示设置



图 6-4场景设置



图 6-5高级设置

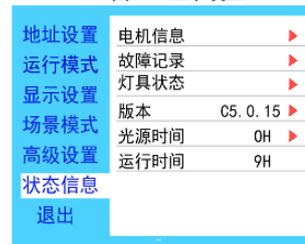


图 6-6状态信息

Figure 6 Parameter menu

## 2.3 Operation and parameter instruction

Via following operation, enter sub menu(parameter menu) shown in Figure 6

- In main menu, click 1/6 function button into corresponding parameter menu.
- In sub menu(page), click main item on the left side of displayer, can shift to corresponding sub menu(page) quickly.

### 2.3.1 ADDR--> Address: Set DMX Address

Click and select the "ADDR", can enter the page of DMX address setting, range from 1 to 512, the address code shouldn't is not greater than (512- channels quantity), otherwise the light will not be controlled. Following is the operation:

Enter the page of DMX address, as shown in Figure 7, click the blank area in right side of display will pop-up diglog as in Fig. 4, modify value, then click 'ENTER' to confirm and save DMX address code.

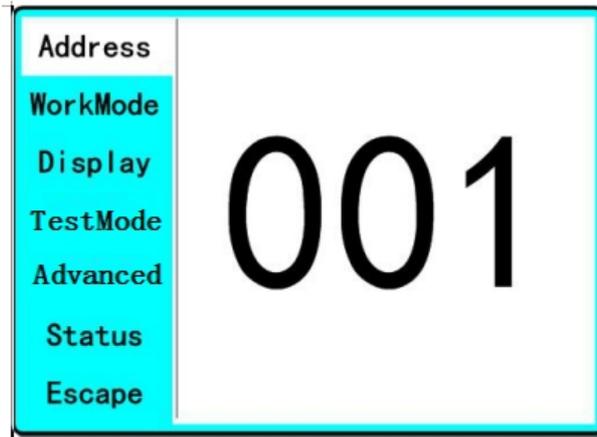


Figure 7 page of DMX Address

### 2.3.2 MODE--> WorkMode: Set Light work mode

Enter the page of 'WorkMode' as shown in Figure 8 and modify setting. Can set light work mode, control lamp and DMX channel mode.

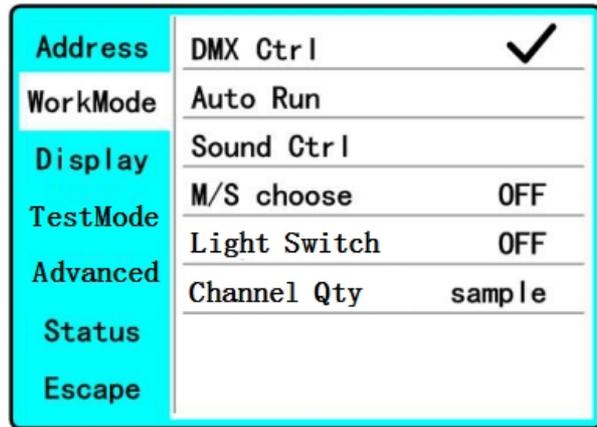


Figure 8 page of work mode

- ◆ **DMX Ctrl:** Choose to set DMX Mode,
- ◆ **Auto Run:** Choose to set Auto Mode,
- ◆ **Sound Ctrl:** Choose to set Sound Mode,
- ◆ **M/S Choose:** Available just in 'AUTO RUN' or 'SOUND Ctrl' mode.  
ON--> Master. (Data will be send to other slave lamp immediately.)  
OFF--> Slaver.(NOT send data to other lamp via DMX Cable).(Default)
- ◆ **Light Switch:**  
ON--> Turn on the light,  
OFF--> Turn off the light.
- ◆ **Channel Qty:** Light support 2 DMX Channel mode: sample or extend.  
Simple --> 16CH.(Default)  
Expand--> 20CH(or null).

### 2.3.3 DISP-->DISPLAY: Set display

Light support 2 language, rotation display, Enter page as shown in Figure9 to set parameter following:

<b>Address</b>	语言	English
<b>WorkMode</b>	Screen saver	Mode3
<b>Display</b>	Screen rotation	OFF
<b>TestMode</b>	Touch Enable	ON
<b>Advanced</b>	Touch Rectify	
<b>Status</b>		
<b>Escape</b>		

Figure9 page of display

- ◆ **Language:** English / 中文.
- ◆ **Screen Saver:** when panel is idle(these is no operation in 10 second), displayer will enter saver status.
  - OFF--> No screen saver.
  - Mode1--> Power-saving mode, turn off the display.
  - Mode2--> Displays the current address.
  - Mode3--> Displays the icon and the current working mode.(Default)
- ◆ **Screen Rotion: To turning display.**
  - ON--> Normal display.(Default)
  - OFF--> 180° turning display.
- ◆ **Touch enable:** Disable or enable touch function,.
  - ON--> Enable touch function.(Default)
  - OFF--> Dosable touch function.
- ◆ **Touch adjust:** Adjust touch function. Normally, not enter this item.

### 2.3.4 TEST--> TestMode

Enter the page as shown in Figure 10, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

<b>Address</b>	PAN	000
<b>WorkMode</b>	TILT	000
<b>Display</b>	FOCUS	000
<b>TestMode</b>	COLOR	000
	GOBO	000
<b>Advanced</b>	PRISM	000
<b>Status</b>	FROST	000
<b>Escape</b>	STROBE	000

Figure 10 page of Test

- ◆ **PAN:** range for 0 to 255;

- ◆ **TILT:** range for 0 to 255;
- ◆ **FOCUS:** range for 0 to 255;
- ◆ **COLOR:** range for 0 to 255;
- ◆ **GOBO:** range for 0 to 255;
- ◆ **PRISM:** range for 0 to 255;
- ◆ **FROST:** range for 0 to 255;;
- ◆ **STROBE:** range for 0 to 255;

### 2.3.5 ADVA-->Advanced: Set light run parameter

Enter the page as shown in Figure 10, set the parameter of light:

<b>Address</b>	PAN Inset	OFF
<b>WorkMode</b>	TILT Inset	OFF
<b>Display</b>	P/T Rectify	ON
<b>TestMode</b>	PAN Offset	010
	TILT Offset	010
<b>Advanced</b>	Lamp when	Power ON
<b>Status</b>	Data hold	OFF
<b>Escape</b>	Factory Setting	

Figure 11 page of run parameter

- ◆ **Pan Invert: Reverse PAN move**  
 OFF--> Pan Normal move.(Default)  
 ON--> Reverse PAN move.
- ◆ **Tilt Invert: Reverse TILT move**  
 OFF--> Tilt Normal move.(Default)  
 ON--> Reverse Tilt move.
- ◆ **P/T Rectify: Disable or enable position rectify function.**  
 OFF--> Disable P/T rectify  
 ON--> Enable P/T rectify-(Default)
- ◆ **Pan Offset:** Set PAN original position. **Default: 10**
- ◆ **Tilt Offset:** Set TILT original position. **Default: 10**
- ◆ **Lamp when:**  
 PowerON--> Turn on the lamp when power on.(Default)  
 RstDone--> Turn on the lamp after reset.  
 Manual--> Manually turn on the lamp.
- ◆ **Data hold:**  
 OFF--> When no DMX signal,return to middle position.(Default)  
 ON--> When no DMX signal,stop in the final position.
- ◆ **Factory Setting:** Restore all parameter to factory setting.

**2.3.6 STAT-->Status: View status**

Enter the page as shown in Figure 12:

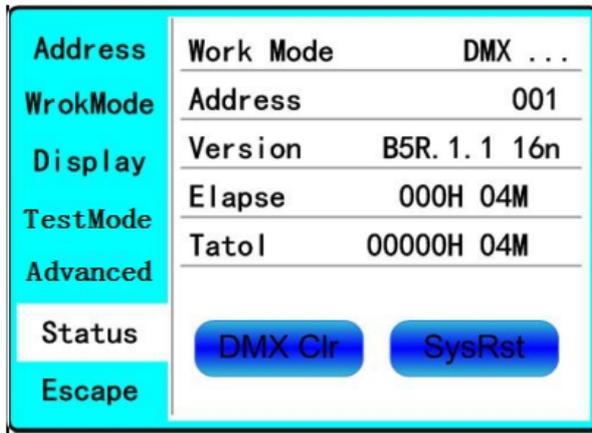


Figure 12 page of status

- ◆ **Work Mode:** Show the current working mode.
- ◆ **Address:** Show the current address.
- ◆ **Version:** Show the version of the lamp.
- ◆ **Elapse:** Working hours after turn on.
- ◆ **Tatol:** Cumulative hours of operation

<input type="button" value="DMXClr"/>	When <Data hold> set <ON>,click to clear DMX data, and make the lamp return to themiddle position.
<input type="button" value="SysRst"/>	Click to reset.

## Chapter 3 Channel description

### 3.1 Channel table

CHANNEL	NAME	VALUE	DEFIE
CH1	PAN	0-255	0-540
CH2	PAN Fine	0-255	0-270
CH3	TILT	0-255	
CH4	TILT Fine	0-255	
CH5	XY speed	0-255	fast to slow
CH6	FROST	0-127	None
		128-255	Frost
CH7	STROBE	0-3	Drak
		4-99	Slow strobe to fast strobe
		100-199	Slow strobe to fast strobe(mode 2)
		200-249	Slow strobe to fast rand strobe
		250-255	Whi te
CH8	DIMMER	0-255	0-100%
CH9	COLOR	0-4	Whi te
		5-9	Whi te + Col or1
		10-14	Col or1
		15-19	Col or1 + Col or2
		20-24	Col or2
		25-29	Col or2 + Col or3
		30-34	Col or3
		35-39	Col or3 + Col or4
		40-44	Col or4
		45-49	Col or4 + Col or5
		50-54	Col or5
		55-59	Col or5 + Col or6
		60-64	Col or6
		65-69	Col or6 + Col or7
		70-74	Col or7
		75-79	Col or7 + Col or8
		80-84	Col or8
		85-89	Col or8 + Col or9
		90-94	Col or9
		95-99	Col or9 + Col or10
100-104	Col or10		
105-109	Col or10 + Col or11		
110-114	Col or11		

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		115-119	Color11 + Color12
		120-124	Color12
		125-129	Color12 + Color13
		130-134	Color13
		135-139	Color13+ Color14
		140-144	Color14
		145-149	Color14 + White
		150-202	Rotate forward (fast to slow)
		203-255	Rotate reverse (slow to fast)
CH10	GOBO	0-4	White
		5-9	Gobo1
		10-14	Gobo2
		15-19	Gobo3
		20-24	Gobo4
		25-29	Gobo5
		30-34	Gobo6
		35-39	Gobo7
		40-44	Gobo8
		45-49	Gobo9
		50-54	Gobo10
		55-59	Gobo11
		60-64	Gobo12
		65-69	Gobo13
		70-74	Gobo14
		75-79	Gobo15
		80-84	Gobo16
		85-89	Gobo17
		90-128	Rotate forward (fast to slow)
		129-131	Stop
		132-170	Rotate reverse (slow to fast)
		171-175	Shake slow to fast Gobo1
		176-180	Shake slow to fast Gobo2
		181-185	Shake slow to fast Gobo3
		186-190	Shake slow to fast Gobo4
		191-195	Shake slow to fast Gobo5
196-200	Shake slow to fast Gobo6		
201-205	Shake slow to fast Gobo7		
206-210	Shake slow to fast Gobo8		
211-215	Shake slow to fast Gobo9		
216-220	Shake slow to fast Gobo10		
221-225	Shake slow to fast Gobo11		
226-230	Shake slow to fast Gobo12		

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		231-235	Shake slow to fast Gobo13
		236-240	Shake slow to fast Gobo14
		241-245	Shake slow to fast Gobo15
		246-250	Shake slow to fast Gobo16
		251-255	Shake slow to fast Gobo17
CH11	PRISM	0-63	None
		64-127	Pri sm1
		128-191	Pri sm2
		192-255	Pri sm1+Pri sm2
CH12	PRISM1 ROT	0-127	0-400 degrees
		128-190	Rotate forward (fast to slow)
		191-192	Stop
		193-255	Rotate reverse (slow to fast)
CH13	PRISM2 ROT	0-127	Degree
		128-190	0-400 degrees
		191-192	Rotate forward (fast to slow)
		193-255	Stop
CH14	7COLOR	0-127	Rotate reverse (slow to fast)
		128-187	7Color
CH15	FOCUS	0-255	far to near
CH16	RESET	240-255	Reset over 5 seconds

**More information welcome to visit: [www.imrelax.com](http://www.imrelax.com)**

**Order Inquiry: [kevin@imrelax.com](mailto:kevin@imrelax.com)**

**Thank you very much! :)**

**Please note: All Information is subject to change without prior notice.**