

# **IMRELAX BEAM 311W MOVING HEAD (IM-MH311) AC90~260V**



## **USER MANUAL**



beam Lighting

Congratulations on purchasing this Beam 311W Super Moving Head Light  
Thank you for extending your trust in our technology

# Installation and attention

## 1.1 Maintenance

- I To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- I Intermittently using will extend this item's service life.
- I Please clear the fan ,fan net , and optical lens in order to keep good work state.
- I 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

- I In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.
- I Always mount this unit in safe and stable matter.
- I Install or dismantle should operate by professional engineer.
- I 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.
- I 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.
- I In order to make sure the product is used well, please read the Manual carefully.

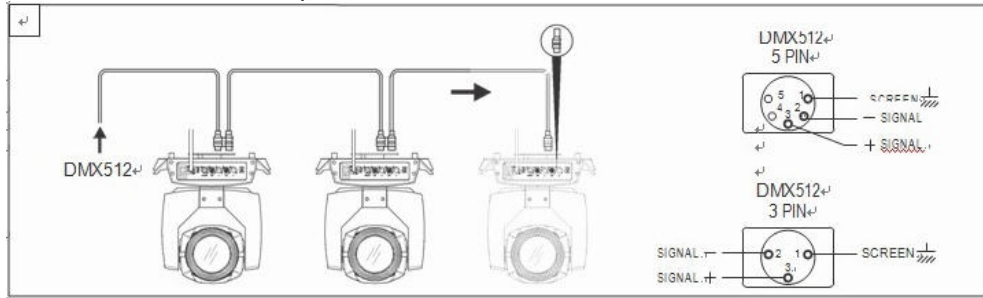
## 1.4 Specification

- 1) Voltage: AC100-240V,50-60Hz
- 2) Full load Power: 350W
- 3)Light source:Original Osram SIRIUS HRI 311W Bulb
- 4) Channel: 16/18 DMX channel
- 5)Lens optical system:Super Powerful, 700,000+ Lux in 10 meters!
- 6) Pan: 540 degree + fine
- 7) Tilt: 270 degree + fine
- 8) Dimmer: 0-100% smooth linear dimmer
- 9) Strobe: 1-25 Hz with pulse effect
- 10) Color Wheel: 14 colors + open, with 6 color rainbow effect wheel;
- 11) Gobo Wheel: 13 gobos + open
- 12)Prism one:8 facet prism;
- 13)Prism two:48 facet prism;
- 14)Prism overlapping:8+48 facet prism available
- 15) Display: Touch Screen display, can adjust 180 degree to fit different installation position
- 16) Control: DMX/Master-slave/Auto/Sound activated
- 17) Product Size:38×40×53cm
- 18) Packing Size: 40\*42\*55cm
- 19) N.W: 21kg
- 20) G.W: 23kg

## 1.5 Cable connection (DMX)

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120 Ohm characteristic impedance, 22-24 AWG, 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 120 Ohm (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.



Picture 1 DMX Cable connection

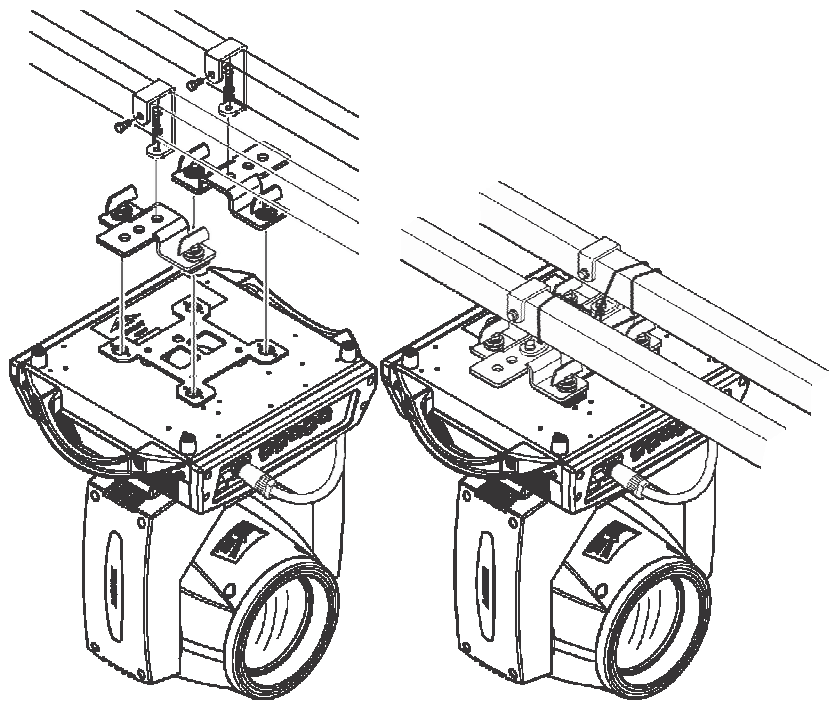
## 1.6 Rigging (Optional)

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.



Picture 2 Installation

## 2. Panel operation

### 2.1 Brief

The light panel diagram show as Picture 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 click displayer.



Picture 3 Panel diagram

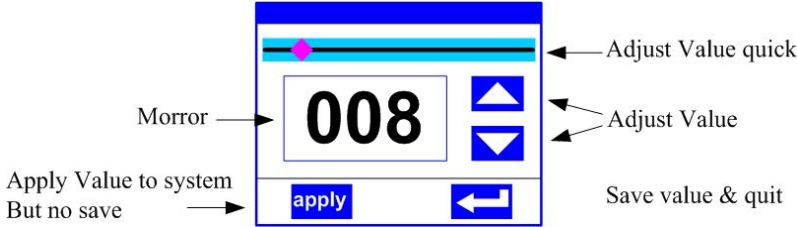
## 2.2 Operation

### 2.2.1 Operate light with touch or KEY

- I The left area is TFT Displayer and touch, click 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 Picture 4 will popup.

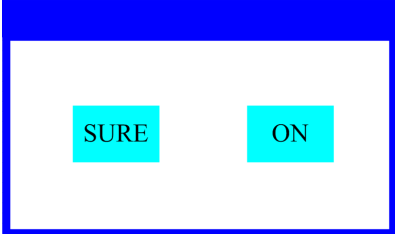


Picture 4 Dialog of value setting

- 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 chick corresponding item, the setting will been saved right now.
- I When the parameter is a key item, chick corresponding item, a dialog shown in Picture 5 will been popup ask for the confirm. Chick 'sure' to confirm.



Picture 5 Dialog of confirm

2. 2.4 Sub Menu （Parameter）

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

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

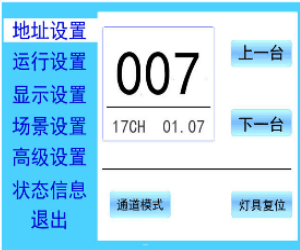


图 6-1地址设置

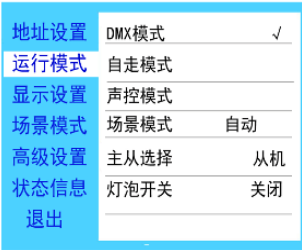


图 6-2运行设置

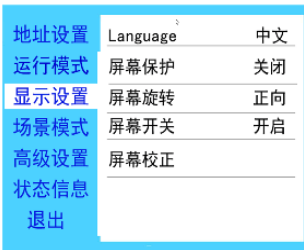


图 6-3显示设置



图 6-4场景设置

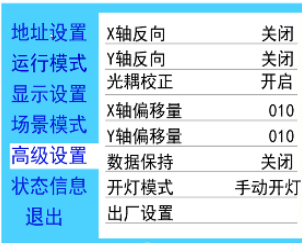


图 6-5高级设置

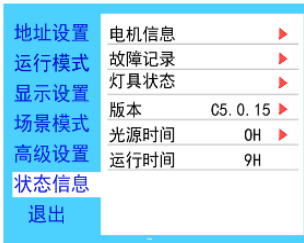


图 6-6状态信息

Picture 6 Parameter menu

## 2.3 Operation and parameter instruction

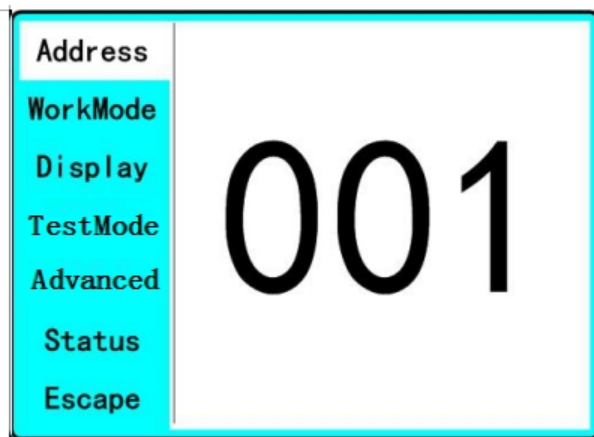
Via following operation, enter sub menu(parameter menu) shown in Picture 6

- I In main menu, click 1/6 function button into corresponding parameter menu.
- I In sub menu(page), click main item on the left side of display, 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 been controlled. Following is the operation:

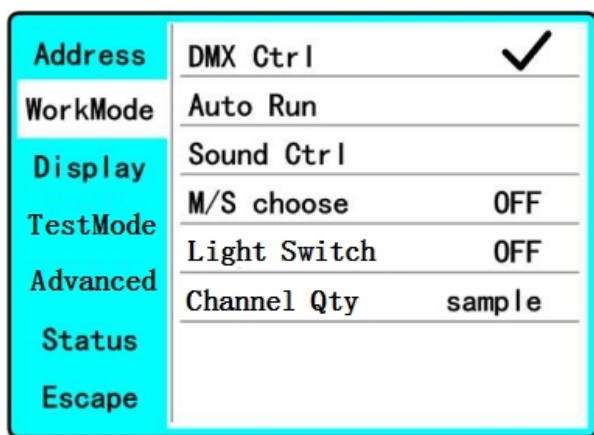
Enter the page of DMX address, as shown in Picture 7, click the blank area in right side of display will pop-up diglog as in Fig. 4, modify value, then click 'ENTER' to confirm and save DMX address code.



Picture 7 page of DMX Address

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

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



Picture 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 Picture9 to set parameter following:

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

Picture9 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 Picture 10, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

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

Picture 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 Picture 10, set the parameter of light:

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

Picture 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 Picture 12:

Address	Work Mode	DMX ...
WrokMode	Address	001
Display	Version	B5R. 1. 1 16n
TestMode	Elapse	000H 04M
Advanced	Tatol	00000H 04M
Status	<div>DMX Clr</div> <div>SysRst</div>	
Escape		

Picture 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

**DMXClr**

When <Data hold> set <ON>,click to clear DMX data, and make the lamp return to themiddle position.

**SysRst**

Click to reset.

### 3. DMX Channel:

#### 16 Channels:

CH1	PAN	0-255	0-540°
CH2	PAN 16bit	0-255	
CH3	TILT	0-255	0-270°
CH4	TILT 16bit	0-255	
CH5	XY Speed	0-255	Fast to slow
CH6	Frost	0-127	None
		128-255	Insert frost
CH7	Strobe	0-3	Drak
		4-103	Slow strobe to fast strobe
		104-107	White
		108-207	Slow strobe to fast strobe(mode 2)
		208-212	White
		213-251	Free strobe
		252-255	White
CH8	Dimmer	0-255	0-100%
CH9	Color	0-3	White
		4-7	White + COLOR1
		8-11	COLOR1
		12-16	COLOR1 + COLOR2
		17-20	COLOR2
		21-24	COLOR2 + COLOR3
		25-28	COLOR3
		29-33	COLOR3 + COLOR4
		34-37	COLOR4
		38-41	COLOR4 + COLOR5
		42-45	COLOR5
		46-50	COLOR5 + COLOR6
		51-54	COLOR6
		55-58	COLOR6 + COLOR7
		59-63	COLOR7
		64-67	COLOR7 + COLOR8
		68-71	COLOR8

		72-75	COLOR8 + COLOR9
		76-80	COLOR9
		81-84	COLOR9 + COLOR10
		85-88	COLOR10
		89-92	COLOR10 + COLOR11
		93-97	COLOR11
		98-101	COLOR11 + COLOR12
		102-105	COLOR12
		106-109	COLOR12 + COLOR13
		110-114	COLOR13
		115-118	COLOR13 + COLOR14
		119-122	COLOR14
		223-127	COLOR14 + WHITE
		128-191	Rotate forward (fast to slow)
		192-255	Rotate reverse (slow to fast)
<b>CH10</b>	<b>Gobo</b>	0-4	White
		4-9	GOBO1
		9-14	GOBO2
		14-19	GOBO3
		19-24	GOBO4
		24-29	GOBO5
		29-34	GOBO6
		34-39	GOBO7
		39-44	GOBO8
		44-49	GOBO9
		49-54	GOBO10
		54-69	Rotate forward (fast to slow)
		69-135	Stop
		135-140	Rotate reverse (slow to fast)
		140-205	Shake slow to fast GOBO1
		205-210	Shake slow to fast GOBO2
		210-215	Shake slow to fast GOBO3
		215-220	Shake slow to fast GOBO4
		220-225	Shake slow to fast GOBO5
		225-230	Shake slow to fast GOBO6
		230-235	Shake slow to fast GOBO7
		235-240	Shake slow to fast GOBO8
		245-250	Shake slow to fast GOBO9
		250-255	Shake slow to fast GOBO10
<b>CH11</b>	<b>Prism1</b>	0-63	None
		64-127	Prism1
		128-191	Prism2
		192-255	Prism1 + Prism2
<b>CH12</b>	<b>Prism1 Rotation</b>	0-127	0-400 degrees
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
<b>CH13</b>	<b>Prism2 Rotation</b>	0-127	0-400 degrees
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)

<b>CH14</b>	<b>7 Colurful</b>	0-127	None
		128-255	Insert 7 colorful
<b>CH15</b>	<b>Focus</b>	0-255	From far to near
<b>CH16</b>	<b>Lamp/Reset</b>	100-105	Close lamp over 3 sencods
		200-205	Open lamp over 3 sencods
		210-215	Reset over 3 sencods
		220-235	Close lamp over 3 sencods
		240-255	Open lamp over 3 sencods

### 18Channels:

<b>CH1</b>	<b>PAN</b>	0-255	0-540°
<b>CH2</b>	<b>PAN 16bit</b>	0-255	
<b>CH3</b>	<b>TILT</b>	0-255	0-270°
<b>CH4</b>	<b>TILT 16bit</b>	0-255	
<b>CH5</b>	<b>XY Speed</b>	0-255	Fast to slow
<b>CH6</b>	<b>Dimmer</b>	0-255	0-100%
<b>CH7</b>	<b>Strobe</b>	0-3	Drak
		4-103	Slow strobe to fast strobe
		104-107	White
		108-207	Slow strobe to fast strobe(mode 2)
		208-212	White
		213-251	Free strobe
		252-255	White
<b>CH8</b>	<b>Frost</b>	0-127	None
		128-255	Insert frost
<b>CH9</b>	<b>Color</b>	0-3	White
		4-7	White + COLOR1
		8-11	COLOR1
		12-16	COLOR1 + COLOR2
		17-20	COLOR2
		21-24	COLOR2 + COLOR3
		25-28	COLOR3
		29-33	COLOR3 + COLOR4
		34-37	COLOR4
		38-41	COLOR4 + COLOR5
		42-45	COLOR5
		46-50	COLOR5 + COLOR6
		51-54	COLOR6
		55-58	COLOR6 + COLOR7
		59-63	COLOR7
		64-67	COLOR7 + COLOR8
		68-71	COLOR8
		72-75	COLOR8 + COLOR9
		76-80	COLOR9
		81-84	COLOR9 + COLOR10

		85-88	COLOR10
		89-92	COLOR10 + COLOR11
		93-97	COLOR11
		98-101	COLOR11 + COLOR12
		102-105	COLOR12
		106-109	COLOR12 + COLOR13
		110-114	COLOR13
		115-118	COLOR13 + COLOR14
		119-122	COLOR14
		223-127	COLOR14 + WHITE
		128-191	Rotate forward (fast to slow)
		192-255	Rotate reverse (slow to fast)
<b>CH10</b>	<b>Gobo</b>	0-4	White
		4-9	GOBO1
		9-14	GOBO2
		14-19	GOBO3
		19-24	GOBO4
		24-29	GOBO5
		29-34	GOBO6
		34-39	GOBO7
		39-44	GOBO8
		44-49	GOBO9
		49-54	GOBO10
		54-69	Rotate forward (fast to slow)
		69-135	Stop
		135-140	Rotate reverse (slow to fast)
		140-205	Shake slow to fast GOBO1
		205-210	Shake slow to fast GOBO2
		210-215	Shake slow to fast GOBO3
		215-220	Shake slow to fast GOBO4
		220-225	Shake slow to fast GOBO5
		225-230	Shake slow to fast GOBO6
		230-235	Shake slow to fast GOBO7
		235-240	Shake slow to fast GOBO8
		245-250	Shake slow to fast GOBO9
		250-255	Shake slow to fast GOBO10
<b>CH11</b>	<b>7 Colourful</b>	0-127	None
		128-255	Insert 7 colorful
<b>CH12</b>	<b>Prism1</b>	0-127	None
		128-255	Prism1
<b>CH13</b>	<b>Prism1 Rot</b>	0-127	0-400 degrees
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
<b>CH14</b>	<b>Prism2</b>	0-127	None
		128-255	Prism2
<b>CH15</b>	<b>Prism2 Rot</b>	0-127	0-400 degrees
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
<b>CH16</b>	<b>Focus</b>	0-255	From far to near

<b>CH17</b>	<b>Lamp</b>	100-105	Close lamp over 3 sencods
		200-205	Open lamp over 3 sencods
<b>CH18</b>	<b>Reset</b>	210-215	Reset over 3 sencods
		220-235	Close lamp over 3 sencods
		240-255	Open lamp over 3 sencods

***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.**