# EVENT LIGHTING

## **MULTIHEAD BEAM**

M6B20W & M6B10RGBW

## **USER MANUAL**



#### For safety, please read this user manual carefully before initial use.

Event Lighting reserves the right to revise the manual at any time. Information and specifications within this manual are subject to change without notice. Event Lighting assumes no liability or responsibility for any errors or omissions. Please consult Event Lighting for any clarification or information regarding this item.

www.event-lighting.com.au

## **Safety Instructions**

#### WARNING

- Do not open this device, there is no user-serviceable parts inside. Risk of electric shock.
- Do not look at the light source when the device is on.
- CAUTION: This unit's housing may be hot during and after operation.
- Install this device in a location with adequate ventilation, at least 20 inch (50 cm) from adjacent surfaces.
- Do not leave any flammable material within 50 cm of this unit while operating or connected to power.
- Use a safety chain when mounting this device overhead.
- Do not operate this device outdoors or in any location where dust, excessive heat, water, or humidity may affect it.
- Do not operate this device if the housing, lenses, or cables appear damaged.
- Do not connect this device to a dimmer or rheostat.
- ONLY connect this device to a grounded and protected circuit.
- ONLY use the hanging bracket to carry this device.
- In case of a serious operating problem, stop using immediately.
- The maximum ambient temperature is 104° F (40° C). Do not operate this device at higher temperatures.

#### **Power Input & Power Linking**

This device has an auto-switching power supply work with input voltage range of 100~240 VAC, 50/60 Hz. Link up to the maximum 8A. DO NOT exceed this.

#### **Fuse Replacement**

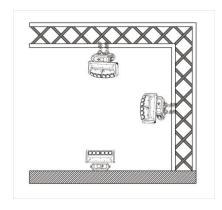
If the fine-wire fuse of the device fuses, only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead.

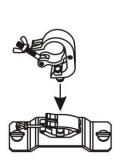
#### Procedure:

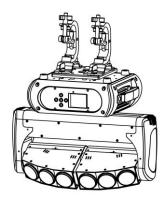
- Step 1: Unscrew the fuse holder on the rear panel with a fitting screwdriver from the housing (anticlockwise).
- Step 2: Remove the old fuse from the fuse holder.
- Step 3: Install the new fuse in the fuse holder.
- Step 4: Replace the fuse holder in the housing and fix it.

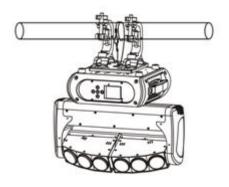
## **Product Installation**

This device can be mounted in many orientations provided each individual device is secured by the use of correct mounting bracket. Use a safety chain when mounting this device overhead.





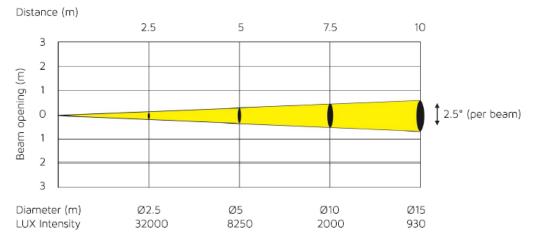




# **Product Appearance, LUX Chart, Dimensions**

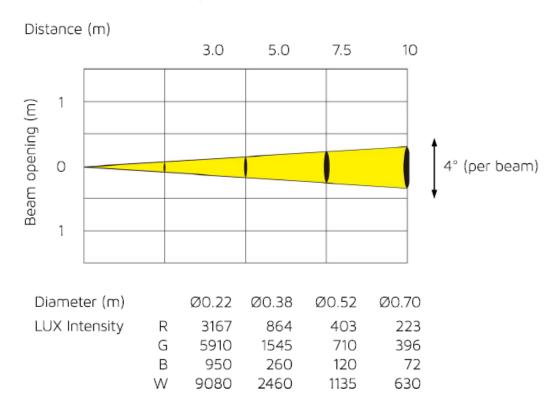
#### **M6B20W**

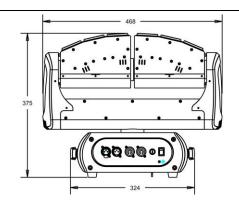


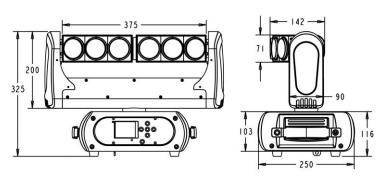


### M6B10RGBW

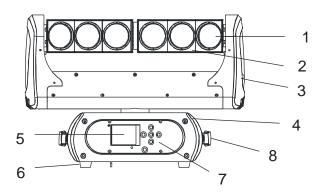
## Photometric Data (per beam)

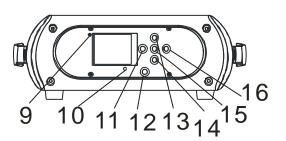


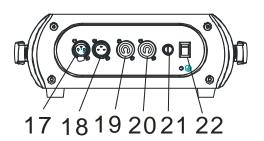




- 1. Project lens
- 2. Head
- 3. Arm
- 4. Base
- 5. Display
- 6. Foot stand
- 7. Operation button
- 8. Handle
- 9. Wireless indicator
- 10. Mic
- 11. Left button
- 12. Battery indicator
- 13. Up button
- 14. Down button
- 15. Enter button
- 16. Right button
- 17. 3-pin DMX in
- 18. 3-pin DMX out
- 19. Powercon in
- 20. Powercon out
- 21. Fuse
- 22. Power switch







# Menu operation

Description of icons in the menu

CONNECT	LIGHT	INFOMATION	SET	PROGRAM
Y		<b>(i)</b>	<b>14</b>	

## Menu

Default setting shadowed. Mark with ①can be basic reloaded, ② be program reloaded, ③can be private reloaded.

LECT.	DMX Address①	XXX		DMX address setting		
CONNECT	Wireless①			Wireless Enabled		
	Max Temperature ①	80~139°С, <mark>80°С</mark> (176~28	32°F, <mark>176°F</mark> )	Lamp will switch off when		
				temperature continuously		
LIGHT				over max temperature for		
				5 minutes		
	Lamp Adjust①			Adjust value of each		
				channels		
	Time Info.	Current XXXX(Ho	ours)	Fixture boot time		
		Fixture Life XXXX(Ho	urs)	Fixture total run time		
NFORMATION	Temperature	Near Lamp Temp (de	pends on fixture)	Temperature Sensors		
/AAT	Fans Speed	Near Lamp Fan (depe	ends on fixture)	Fan speed Sensors		
ORN	Channel Value			Display value of channel		
N N	Error Message			Error channels		
	Fixture Model	M1S150W	Display brand and model			
	Software Ver	1U01 V1.0.00		Version of each IC		
	Reset	All		Reset all		
		Pan&Tilt		Reset Pan&Tilt		
		Colors		Reset Colors		
		Gobos		Reset Gobos		
		Others		Reset Others		
	Movement	Pan Reverse①	ON/ <mark>OFF</mark>	Pan Reverse		
		Tilt Reverse①	ON/ <mark>OFF</mark>	Tilt Reverse		
		Pan Degree①	630°/ <mark>540°</mark>	Choose Pan Degree		
SET		Encoders①	ON/OFF	Encoder wheel on/off		
		Pan/Tilt Mode①	Stand/Smooth	Choose pan/tilt mode		
	UI Set	Mic Sens. ③	0~99% <mark>,60%</mark>	Sensitivity of Mic		
		No Signal⊕	Close/ <mark>Hold</mark> /Auto/Music	Mode when no signal		
		Temperature. C/F①	Fahrenheit/Celsius	Temperature at °C/°F		
		Fans Mode①	Auto / High Speed	Fans mode		
		Hibernation ①	OFF, 01M~99M , <mark>15M</mark>	Sleeping mode		
		Backlight①	02~60m <mark>02m</mark>	Show backlight time		
		Flip Display①	ON/ <mark>OFF</mark>	Display 180° reverse		

		Display Bright③	00~31 10		Display Brightness	
		Brand Show①	ON/OFF		Show brand or not	
		_				
		Key Lock①	ON/ <mark>OFF</mark>		Key lock on/off	
		Language①	En/简/繁/Fr/Sp		Language Select	
	Users	User Mode①	Standard		Standard mode	
			Extended		Extended mode	
			Basic-8bit		Basic mode-8bit	
			Basic-16bit		Basic mode-16bit	
			User		User program mode	
		Edit User③	Max Channel =	XX	Edit users mode	
			PAN = CH01			
			:			
	Calibration3	-Password-	=XXX		Password: 050	
		Color	=XXX		Calibrate channel value	
		:	:			
	Fixture ID③	Name			Name	
		-Password-			Password: 050	
		PID Code			Set PID of RDM	
	Wireless Set①	DMX On Cable	ON/ <mark>OFF</mark>		DMX Send Out	
		Reset Connect	ON/ <mark>OFF</mark>		Reset Connect	
	Reload Default	Basic Reload(①)	ON/ <mark>OFF</mark>		Basic Reload	
		Program Reload(②)	ON/ <mark>OFF</mark>		Program Reload	
		Password	XXX		Password: 050	
		Private Reload(3)	ON/ <mark>OFF</mark>		Private Reload	
		All Reload	ON/ <mark>OFF</mark>		All Reload	
	Play①	DMX Receive			DMX Receive	
		Slave Receive	Slave Receive	1,2,3	Choose slave position	
		Sequence	Master / Alone		Run Sequence	
		Music	Master / Alone		Music mode	
	Select Chase②	Chase Part 1	Chase 1 ~ 8	<mark>Chase 1</mark>	Select and run auto	
		Chase Part 2	Chase 1 ~ 8	<mark>Chase 2</mark>	program	
_		Chase Part 3	Chase 1 ~ 8	Chase 3		
PROGRAM	Edit Chase②	Chase 1	Chase Test		Test	
) 19C		:	Step 01	=SCxxx	Beginning scene	
PR		:	:	:	:	
		Chase 8	Step 64	=SCxxx	Ending scene	
	Edit Scenes②	Edit Scene 001	Pan,Tilt,	=xxx	Input manual scene	
		~ Edit Scene 250	Fade Time	=xxx	Modify manually fading time	
			Secne Time	=xxx	Modify manually scene time	
			DMX Input		Input scene from exterior	
					controller	
	Scenes Record	ScXX=>ScXX			Auto Input scenes	

# **DMX Chart for M6B20W**

	Channel		name	name function		Max DMX	
St	Ex	Ba1	Ba2				Divist
1	1	1	1	Pan	Pan Coarse	0	255
	2		2	Pan fine	Pan Fine	0	255
2	3	2	3	Tilt	Tilt Coarse	0	255
	4		4	Tilt fine	Tilt Fine	0	255
3	5	3	5	Tilt	Tilt Coarse	0	255
	6		6	Tilt fine	Tilt Fine	0	255
4	7	4	7	Movement Speed	fastest to Slowest	0	255
					Normal	0	15
5	8	5	8	Movement	Movement With Blackout	16	31
	0	5	0	Function	All Tilt Movement	32	47
					TBD	48	255
					Normal Shutter Functions	0	15
					Pulse-effect Forward	16	31
6	9			Shutter	Pulse-effect Reverse	32	47
6	9	9		Function	Random Strobe	48	63
					Effect	64	95
					TBD	96	255
					Normal Shutter Functions		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Forward		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
			Open	224	255		
					Pulse-effect Reverse		
7	10			Shutter	Close	0	31
'	10			Shuller	Strobe Rate (slow to fast)	32	223
					Open	224	255
					Random Strobe		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Effect		
					Close	0	31
				Effect Speed (slow to fast)	32	223	
					Open	224	255

					Shutter closed	0	31
					Effect 1 slow to fast	32	47
					Effect 2 slow to fast	48	63
					Strobe effect slow to fast	64	95
					Effect 3 slow to fast	96	111
		6	9	Shutter	Effect 4 slow to fast	112	127
					Pulse-effect in sequences	128	159
					Effect 5 slow to fast	160	175
					Effect 6 slow to fast	176	191
					Random strobe effect slow to fast	192	223
					No function (shutter open)	224	255
8	11	7	10	Dimmer	Dimmer(Close to Open)	0	255
9	12	8	11	White 1	White 0->100%	0	255
10	13	9	12	White 2	White 0->100%	0	255
11	14	10	13	White 3	White 0->100%	0	255
12	15	11	14	White 4	White 0->100%	0	255
13	16	12	15	White 5	White 0->100%	0	255
14	17	13	16	White 6	White 0->100%	0	255
					Normal	0	7
					Reset All	8	15
					Pan&Tilt Reset	16	23
					TBD	24	31
					TBD	32	39
					TBD	40	47
15	18	14	17	Control	TBD	48	55
					Display Off	56	63
					Display On	64	71
					TBD	72	79
					TBD	80	87
ı					Hibernation	88	95
					TBD	96	255

# **DMX Chart for M6B10RGBW**

	Channel		name	function	Min DMX	Max DMX	
St	Ex	Ba1	Ba2				
1	1	1	1	Pan	Pan Coarse	0	255
	2		2	Pan fine	Pan Fine	0	255
2	3	2	3	Tilt	Tilt Coarse	0	255
	4		4	Tilt fine	Tilt Fine	0	255
3	5	3	5	Tilt	Tilt Coarse	0	255
	6		6	Tilt fine	Tilt Fine	0	255
4	7	4	7	Movement Speed	fastest to Slowest	0	255
					Normal	0	15
5	8	5	8	Movement	Movement With Blackout	16	31
3	0	5	0	Function	All Tilt Movement	32	47
					TBD	48	255
					Normal Shutter Functions	0	15
					Pulse-effect Forward	16	31
				Object on Francisco	Pulse-effect Reverse	32	47
6	9			Shutter Function	Random Strobe	48	63
					Effect	64	95
					TBD	96	255
					Normal Shutter Functions		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Forward		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Reverse		
_	40			Objection	Close	0	31
7	10			Shutter	Strobe Rate (slow to fast)	32	223
					Open	224	255
					Random Strobe		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Effect	•	
					Close	0	31
				Effect Speed (slow to fast)	32	223	
					Open	224	255

					Shutter closed	0	31	
				Effect 1 slow to fast	32	47		
				Effect 2 slow to fast	48	63		
					Strobe effect slow to fast	64	95	
					Effect 3 slow to fast	96	111	
		6	9	Shutter	Effect 4 slow to fast	112	127	
					Pulse-effect in sequences	128	159	
					Effect 5 slow to fast	160	175	
					Effect 6 slow to fast	176	191	
					Random strobe effect slow to fast	192	223	
					No function (shutter open)	224	255	
8	11	7	10	Dimmer	Dimmer(Close to Open)	0	255	
					No Function	0	15	
					CTC Function	16	31	
				Vinteral Calan	Forward Spin	32	47	
9	12	8	11	Virtual Color Function	Reverse Spin	48	63	
					Continuous	64	79	
					Color Bounce	80	111	
					TBD	128	255	
					CTC Function			
			Colour Temperature Correction 2000K->2700K		0	223		
					White 3200K	224	231	
					White 4200K	232	239	
					White 5600K	240	247	
					White 8000K	248	255	
					Forward Spin			
					Rainbow Effect (Slow->Fast)	0	255	
					Reverse Spin			
					Rainbow Effect (Slow->Fast)	0	255	
					Continuous & Color Bounce			
					Black	0	3	
10	13	9	12	Virtual Color1	Red=full, Green->up,Blue=0,White=0	4	33	
					Red->down, Green=full,Blue=0,White=0	34	63	
					Red=0 Green=255 Blue->up White=0	64	93	
					Red=0 Green->down Blue=255 White=0	94	123	
					Red=0 Green=0 Blue=255 White->up	124	153	
					Red=0 Green=0 Blue->down White=255	154	183	
					Red->up Green=0 Blue=0 White=255	184	213	
					Red=255 Green=0 Blue=0 White->down	214	243	
					Red	244	245	
					Green	246	247	
				Blue	248	249		
				White	250	251		
					All Color	252	255	

					Color Bounce		
					Black	0	3
					Red=full, Green->up,Blue=0,White=0	4	33
					Red->down, Green=full,Blue=0,White=0	34	63
					Red=0 Green=255 Blue->up White=0	64	93
					Red=0 Green->down Blue=255 White=0	94	123
					Red=0 Green=0 Blue=255 White->up	124	153
11	14	10	13	Virtual Color2	Red=0 Green=0 Blue->down White=255	154	183
' '	• •		10	Viitaai Coloi2	Red->up Green=0 Blue=0 White=255	184	213
					Red=255 Green=0 Blue=0 White->down	214	243
					Red	244	245
					Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
					Black		3
					Color Continuous	0 4	
							243
40	4.5	44	44	0-1	Red	244	245
12	15	11	14	Color A	Green	246	247
				Blue	248	249	
					White	250	251
					All Color	252	255
				5 Color B	Black	0	3
					Color Continuous	4	243
			15		Red	244	245
13	16	12			Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
					Black	0	3
					Color Continuous	4	243
					Red	244	245
14	17	13	16	Color C	Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
					Black	0	3
					Color Continuous	4	243
					Red	244	245
15	18	14	17	Color D	Green	246	247
					Blue	248	249
				White	250	251	
					All Color	252	255
16	19	15	18	Color E	Black	0	3
.5	. 5		.5	30.0. L	Color Continuous	4	243

					Red	244	245
					Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
					Black	0	3
					Color Continuous	4	243
					Red	244	245
17	20	16	19	Color F	Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
				Normal	0	7	
				Reset All	8	15	
					Pan & Tilt Reset	16	23
					TBD	24	31
					TBD	32	39
					TBD	40	47
18	21	17	20	Control	TBD	48	55
					Display Off	56	63
					Display On	64	71
					TBD	72	79
					TBD	80	87
					Hibernation	88	95
					TBD	96	255

- The device is controlled by universal DMX 512 protocol, DMX address is the start channel used to receive instructions from the external controller. For independent control, each fixture must be assigned its unique address control channels. For example, this device has four channel modes: 18/21/17/20, if we set the mode at standard 21 channels mode, and there are several models need to be independently controlled, we just simply address first fixture at 1, and second fixture at 22, third one at 43, etc.
- If the devices have the same address, they will behave synchronically.
- Display is flashing when no DMX signal is received.

## More functions

- RDM. RDM stands for "Remote Device Management", with this function, users can realize remote control of the device, such as remotely changing DMX address, reverse pan/tilt setting, check a lot of useful information such as temperature, power consumption, fan speed. Etc. Every single device has a unique RDM code programmed at manufacture to distinguish from each other. It is not recommended for users to change this code.
- Software upgrade function via DMX cable. If there is any new firmware for this device, it can be upgraded simply via a software upgrade box, no need to change any mechanical parts. The upgrade box is not included in the package, if need any further assistance please just contact your authorized dealer.
- Hibernation. The device will enter sleeping mode if activated after a period of disconnecting DMX signal to save the power consumption, and will return immediately as soon as the DMX signal is sent again.
- Display back-up communication IC. There is a back-up communication IC installed in the display PCB, so users could replace at once if the original one is broken.
- Display flip. By press up and down button for more than 3 seconds, the display will flip automatically, this function is useful to read menu conveniently when device is hanged.

# **Technical Specifications**

	M6B20W	M6B10RGBW			
Input Voltages	100V~240V AC, 50/60Hz				
Power Consumption	206W	134W			
Light source	6 pcs 20W white LED	6 pcs 10W RGBW LED			
Power Connection	Neutrik® Powercon input and output co	nnection			
LED life	60,000 hours				
Lux	32000 lux @2.5M for per beam	3167 lux @3M Red per beam, 5910 lux			
		@3M Green per beam, 950 lux @3M Blue			
		per beam,9080 lux @3M white per beam			
Beam angle	2.5°				
PWM	1,200Hz				
Colors	white	RGBW			
Pixel control	Yes				
Separate control of two heads	Yes				
Dimmer	0-100% dimmer				
Strobe	0.5 - 26 Hz				
Head movement	630°(2.8 sec)or 540°(2.0 sec), Tile 265°(1.8 sec).16-bit resolution, auto repositioning				
Control	DMX512, 3-pin XLR interfaces,	DMX512, 3-pin XLR interfaces, 18/21/17/20			
	15/18/14/17 channel mode	channel mode			
wireless DMX is available	Yes				
2.4 inch colour LCD display	Yes				
with back-up power					
Thermostat Controlled,	Yes				
variable speed fan					
RDM and software upgrade	Yes				
via DMX					
Net weight	10Kg				
Overall Size	468x375x375mm				
Rigging	1pc omega brackets with 1/4 – turn quick locks				
Road case available	Yes				