EVENT LIGHTING lite

LM220BWS

220W Hybrid Beam Wash Spot Moving Head

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.

Safety Instructions

Warning

- Do not open this device, there are 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 500 mm from adjacent surfaces.
- Do not leave any flammable material within 500 mm of this unit while operating or connected to power.
- Use a safety wire 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 40° C (104° F). Do not operate this device at higher temperatures.

Power Input & Power Linking

This device has an auto-switching power supply to work with an input voltage range of 100~240 V AC, 50/60 Hz.

Link up to a maximum of 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 re-screw it so it is secured in place (clockwise).

Product Installation

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

INSTALLATION DIAGRAM
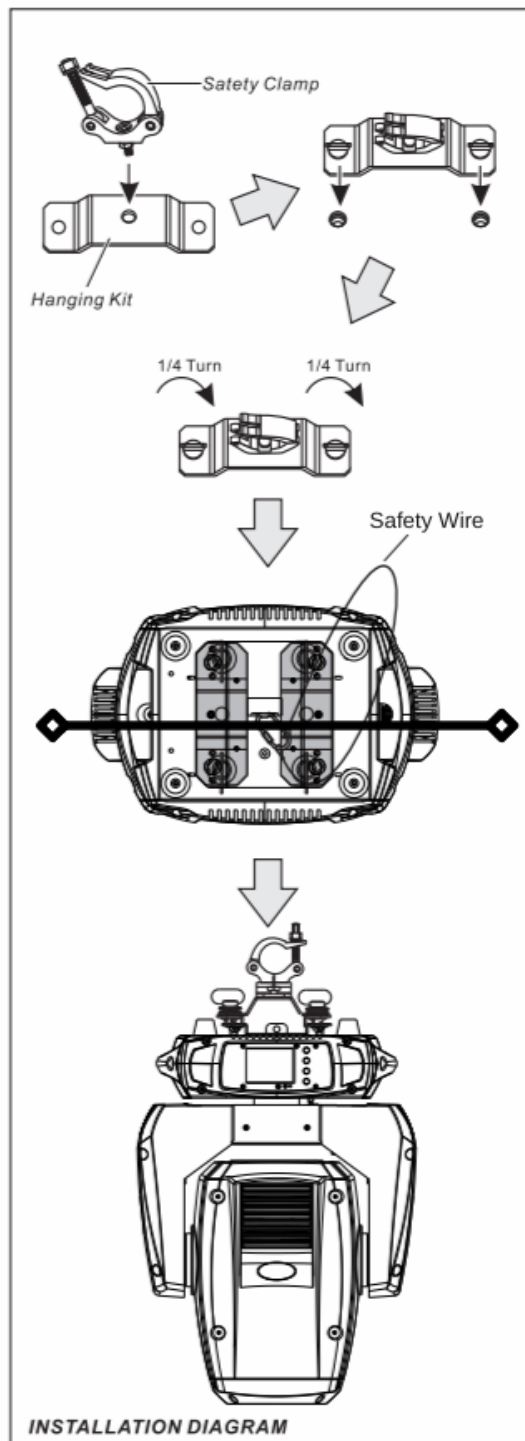
Dimensions
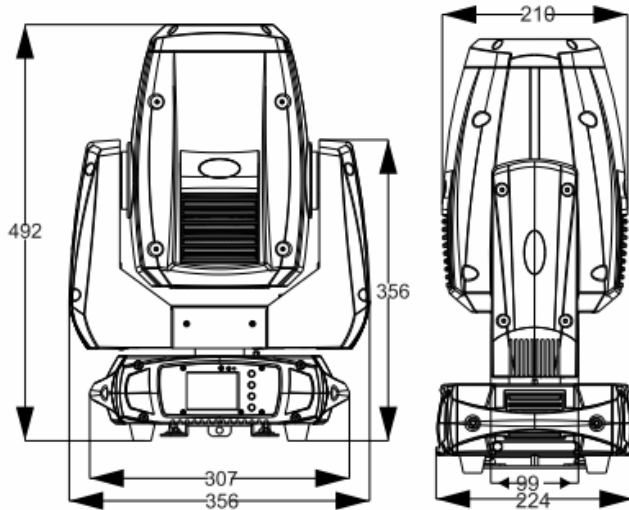
Lux Chart

Lux @ 2.5° (Beam)			
2.5m	5m	7.5m	10m
Ø0.23	Ø0.37	Ø0.50	Ø0.66
110,000	43,000	20,000	12,450

Lux @ 14° (Beam)			
2.5m	5m	7.5m	10m
Ø1.17	Ø2.23		
4,600	1,300	630	360

Lux @ 8° (Spot)			
2.5m	5m	7.5m	10m
Ø0.34	Ø0.58	Ø0.81	Ø1.07
56,000	20,000	10,400	6,150

Lux @ 36° (Spot)			
2.5m	5m	7.5m	10m
Ø1.55	Ø3.00		
2,550	990	480	300

Colour Wheel

○	Open
●	Colour 1
●	Colour 2
●	Colour 3
●	Colour 4
●	Colour 5

●	Colour 6
●	Colour 7
●	Colour 8
●	Colour 9
●	Colour 10

Rotating Gobo Wheel

○	Open
	Position 1
	Position 2
	Position 3
	Position 4
	Position 5
	Position 6
	Position 7

Static Gobo Wheel

	Open		Position 9
	Position 1		Position 10
	Position 2		Position 11
	Position 3		Position 12
	Position 4		Position 13
	Position 5		Position 14
	Position 6		Position 15
	Position 7		
	Position 8		

Menu

Menu – Either enters the menu from home page or Escapes back a level.
Up – Move selection up one item.
Down – Move selection down one item.
Enter – Selects or confirms any selection.

Menu

MENU			DESCRIPTION
Function Mode	DMX Address	A001~AXXX	DMX Address Setting
	Channel Mode	CH17	17 Channel Mode
		CH15	15 Channel Mode
		CH19	19 Channel Mode
	Auto Run	Internal Program1~9	Internal Program
		State: Master/Alone	Auto Run State
		Auto Run (On/Off)	Toggle Auto Run
	Music Control	Internal Program1~9	Internal Program
		State: Master/Alone	Sound Control State
		Music Run (On/Off)	Toggle Sound Control
Option	Reset Default	Yes/No	Reset to Default Setting
	Signal Set	DMX Wireless DMX Wireless TX Auto DMX	Wired DMX Wireless DMX Receiver Wireless DMX Transceiver Wireless first
	Pan / Tilt	Reverse Pan (On/Off) Reverse Tilt (On/Off) Select Pan 630°/540°/360° Select Tilt 270°/180°/90° Limit Mode OFF/CEN./R/L	Reverse Pan Reverse Tilt Pan Degree (540°) Tilt Degree (270°) Select Edge or Corner Range
	UI SET	Mic Sens. 0~99% Hold on no DMX(On/Off) Half Colour (On/Off) Flip Display (On/Off)	Microphone Sensitivity Setting Hold or no hold When no Signal Select half Colour Flip Display
Information	Temperature	XXX°C/°F	Current Temperature
	Software Version	V1.0~V9.9	Current Software Version
Manual Control	Reset	All Pan/Tilt Colour Gobo Others	Reset all Settings Reset Pan/tilt Settings Reset Colour Settings Reset Gobo Settings Reset Other Settings
	Channel	PAN=XXX……	Manual Control Channel
ADVANCED (Access Code 088)	Calibration	PAN=XXX……	Calibration

The default selection for each setting is highlighted.
Reverse the display: Press the Up and Down buttons simultaneously for 3 seconds.

DMX Chart

- This fixture is controlled by the universal DMX512 protocol. The DMX address is the first channel used to receive instructions from the external controller. For independent control, each fixture must be assigned a unique address for each of its control channels. For Example: if a device has three channel modes: 17/15/19, if the unit is set to 17 channel mode, and there are several fixtures that need to be independently controlled, simply address the first fixture at 1, and second fixture at 18, third one at 35, etc.
- If multiple fixtures have the same DMX address, they will behave synchronically.
- Display will flash when no DMX signal is received.

Mode/Channel			Min DMX	Max DMX	Function
17 Ch	15 Ch	19 Ch			
1	1	1	0	255	Pan
2		2	0	255	Pan-fine
3	2	3	0	255	Tilt
4		4	0	255	Tilt-fine
5*	3*	5*	0	9	Colour Mode 1 – Open
			10	19	Colour Mode 1 - Colour 1
			20	29	Colour Mode 1 - Colour 2
			30	39	Colour Mode 1 - Colour 3
			40	49	Colour Mode 1 - Colour 4
			50	59	Colour Mode 1 - Colour 5
			60	69	Colour Mode 1 - Colour 6
			70	79	Colour Mode 1 - Colour 7
			80	89	Colour Mode 1 - Colour 8
			90	99	Colour Mode 1 - Colour 9
			100	127	Colour Mode 1 - Colour 10
			128	189	Forward rainbow, fast to slow
			190	193	Colour rotation stop
			194	255	Reverse rainbow effect, slow to fast
5*	3*	5*	0	4	Colour Mode 2 - Open
			5	9	Colour Mode 2 - White + Colour 1
			10	14	Colour Mode 2 - Colour 1
			15	19	Colour Mode 2 - Colour 1 + Colour 2
			20	24	Colour Mode 2 - Colour 2
			25	29	Colour Mode 2 - Colour 2 + Colour 3
			30	34	Colour Mode 2 - Colour 3
			35	39	Colour Mode 2 - Colour 3 + Colour 4
			40	44	Colour Mode 2 - Colour 4
			45	49	Colour Mode 2 - Colour 4 + Colour 5
			50	54	Colour Mode 2 - Colour 5
			55	59	Colour Mode 2 - Colour 5 + Colour 6
			60	64	Colour Mode 2 - Colour 6

			65	69	Colour Mode 2 - Colour 6 + Colour 7
			70	74	Colour Mode 2 - Colour 7
			75	79	Colour Mode 2 - Colour 7 + Colour 8
			80	84	Colour Mode 2 - Colour 8
			85	89	Colour Mode 2 - Colour 8 + Colour 9
			90	94	Colour Mode 2 - Colour 9
			95	99	Colour Mode 2 - Colour 9 + Colour 10
			100	104	Colour Mode 2 - Colour 10
			105	127	Colour Mode 2 – Colour 10 + White
			128	189	Forward rainbow, fast to slow
			190	193	Colour rotation stop
			194	255	Reverse rainbow, slow to fast
6	4	6	0	9	Rotating Gobo - Open
			10	19	Rotating Gobo 1
			20	29	Rotating Gobo 2
			30	39	Rotating Gobo 3
			40	49	Rotating Gobo 4
			50	59	Rotating Gobo 5
			60	69	Rotating Gobo 6
			70	89	Rotating Gobo 1 shake, slow to fast
			90	109	Rotating Gobo 2 shake, slow to fast
			110	129	Rotating Gobo 3 shake, slow to fast
			130	149	Rotating Gobo 4 shake, slow to fast
			150	169	Rotating Gobo 5 shake, slow to fast
			170	189	Rotating Gobo 6 shake, slow to fast
			190	255	Rotating Gobo Forward wheel spin, slow to fast
7	5	7	0	127	Rotating Gobo - Indexing
			128	189	Rotating Gobo - forward rotation, fast to slow
			190	193	Rotating Gobo - stop rotation
			194	255	Rotating Gobo - reverse rotation, slow to fast
8	6	8	0	5	Static Gobo - Open
			6	11	Static Gobo 1
			12	17	Static Gobo 2
			18	23	Static Gobo 3
			24	29	Static Gobo 4
			30	35	Static Gobo 5
			36	41	Static Gobo 6
			42	47	Static Gobo 7
			48	53	Static Gobo 8
			54	59	Static Gobo 9
			60	65	Static Gobo 10
			66	71	Static Gobo 11
			72	77	Static Gobo 12
			78	83	Static Gobo 13
			84	89	Static Gobo 14
			90	95	Static Gobo 15
			96	103	Static Gobo 1 shake, slow to fast
			104	111	Static Gobo 2 shake, slow to fast
			112	119	Static Gobo 3 shake, slow to fast
			120	127	Static Gobo 4 shake, slow to fast
			128	135	Static Gobo 5 shake, slow to fast

			136	143	Static Gobo 6 shake, slow to fast
			144	151	Static Gobo 7 shake, slow to fast
			152	159	Static Gobo 8 shake, slow to fast
			160	167	Static Gobo 9 shake, slow to fast
			168	175	Static Gobo 10 shake, slow to fast
			176	183	Static Gobo 11 shake, slow to fast
			184	191	Static Gobo 12 shake, slow to fast
			192	199	Static Gobo 13 shake, slow to fast
			200	207	Static Gobo 14 shake, slow to fast
			208	215	Static Gobo 15 shake, slow to fast
			216	255	Static Gobo - forward wheel spin, slow to fast
9	7	9	0	31	Shutter - Closed
			32	63	Shutter - Open
			64	95	Strobe effect, slow to fast
			96	127	Shutter - Open
			128	159	Pulse effect, slow to fast
			160	191	Shutter - Open
			192	223	Random strobe effect, slow to fast
			224	255	Shutter Open
10	8	10	0	255	Dimmer, 0-100%
11	9	11	0	255	Focus, near to far
12	10	12	0	255	Focus-fine, near to far
13	11	13	0	255	Zoom, in (near) to out (far)
14	12	14	0	5	Rotating Prism, off
			6	127	Rotating Prism, on
			128	189	Rotating Prism, forward rotation, fast to slow
			190	193	Rotating Prism, stop
			194	255	Rotating Prism, reverse rotation, slow to fast
15	13	15	0	199	Frost - off
			200	255	Front - on
16	14	16	0	225	Pan/tilt speed, fast to slow
			226	235	Blackout during pan/tilt
			236	245	Blackout when colour or gobo changing
			246	255	TBD
17	15	17	0	79	TBD
			80	84	Reset all
			85	87	Reset scan
			88	90	Reset colour
			91	93	Reset gobo
			94	96	TBD
			97	99	Reset other motors
			100	109	Internal Program 1
			110	119	Internal Program 2
			120	129	Internal Program 3
			130	139	Internal Program 4
			140	149	Internal Program 5
			150	159	Internal Program 6
			160	169	Internal Program 7
			170	179	Internal Program 8

			180	189	Internal Sound Program 1
			190	199	Internal Sound Program 2
			200	209	Internal Sound Program 3
			210	219	Internal Sound Program 4
			220	229	Internal Sound Program 5
			230	239	Internal Sound Program 6
			240	249	Internal Sound Program 7
			250	255	Internal Sound Program 8
		18	0	255	Colour speed, fast to slow
		19	0	255	Gobo speed, fast to slow

* Colour mode 1 applies when Half Colour is set to Off. Colour mode 2 applies when Half Colour is set to On.

Technical Specifications

Photometrics
- Light Source: 220W White LED 7,500K
- Beam Angle: 2.5°-14° (beam), 8°-36° (spot)
- Output: 110,000 lux @ 2.5 m @ 2.5°, 2,550 lux @ 2.5 m @ 36°
- LED Lifespan: 50,000 hours

Colour
- 1 colour wheel (10 Colours + Open)

Gobo
- Fixed: 1 x (15 + open) fixed gobo wheel
- Rotating: 1 x (7 + open) rotating gobo wheel

Effects
- Prism: 3-facet
- Dimming: 0~100%
- Strobe: 1.2~20Hz
- Focus: 2~20m linear via DMX

Movement
- 8/16 – bit, auto-reposition
- Pan: 360°/540°/630°
- Tilt: 90°/180°/270°
- Limit mode: Centre/Corner/Edge

Power
- Input Voltage: 90~260V AC, 50/60Hz
- Power Consumption: 276W
- Connection: PowerCon in/out
- Fuse: F4A, 250V

Control
- Protocol: DMX512
- Operation modes: DMX, manual, auto, sound active, master/slave
- DMX Channels: 15/17/19
- Interface: 3-pin XLR in/out

- Built-in Programming: Yes
- Sound Active: Yes
- Display: 4-button 2.4inch TFT LCD display control panel

Housing

- Materials: Metal and flame retardant ABS
- Finishing: Matte black
- IP rating: IP20
- Cooling: Fan
- Net Weight: 16.3 kg
- Rigging: 2x omega brackets with 1/4-turn quick locks

Optional Accessories

- Road case: LM2CASEVL
- Wireless DMX: WDMXLM

Warranty

Please refer to your local dealer or contact Event Lighting Pty Ltd.