SPOT MOVING HEAD

M1S190W

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 15A. 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.

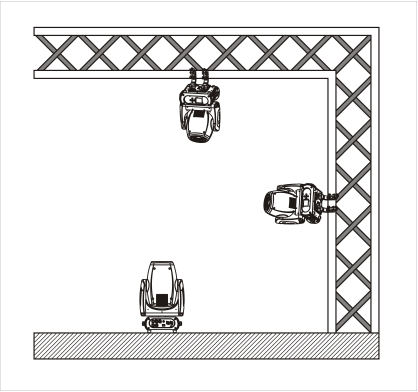
Procedure:

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.

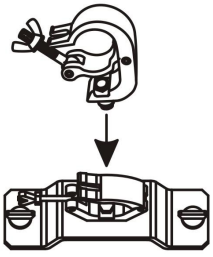
Step 4: Replace the fuse holder in the housing and fix it.

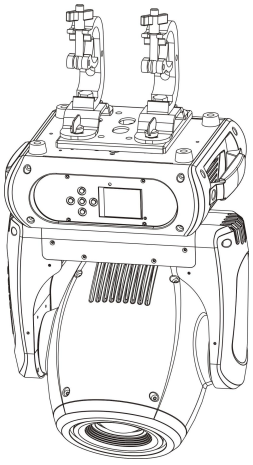


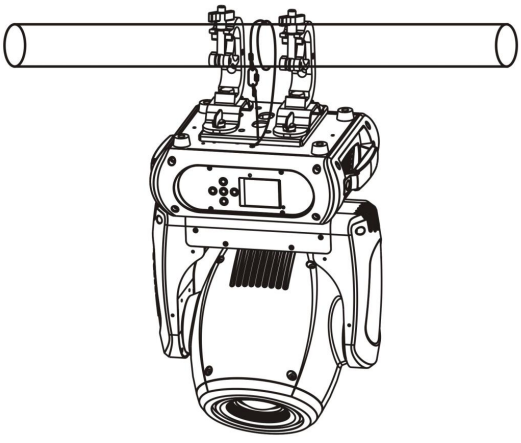
Product Installation

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.

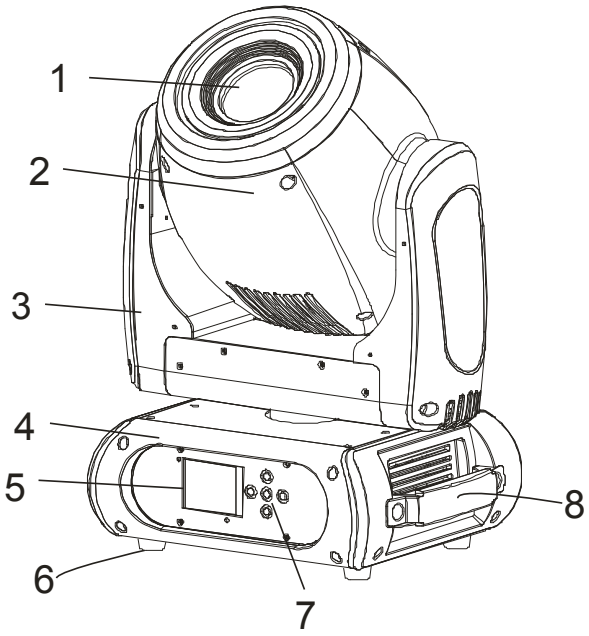


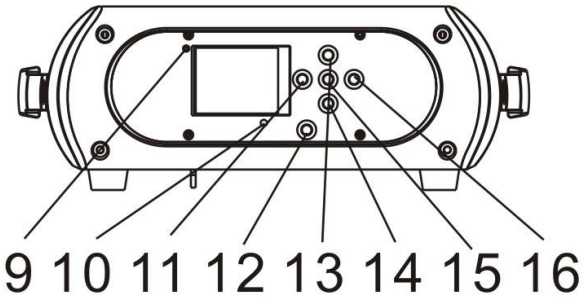


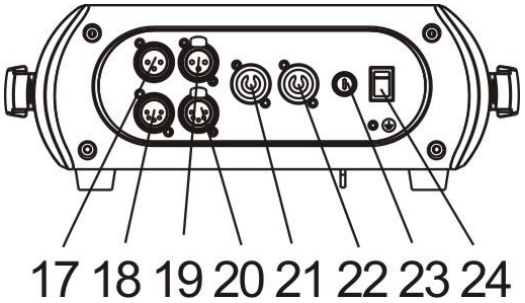


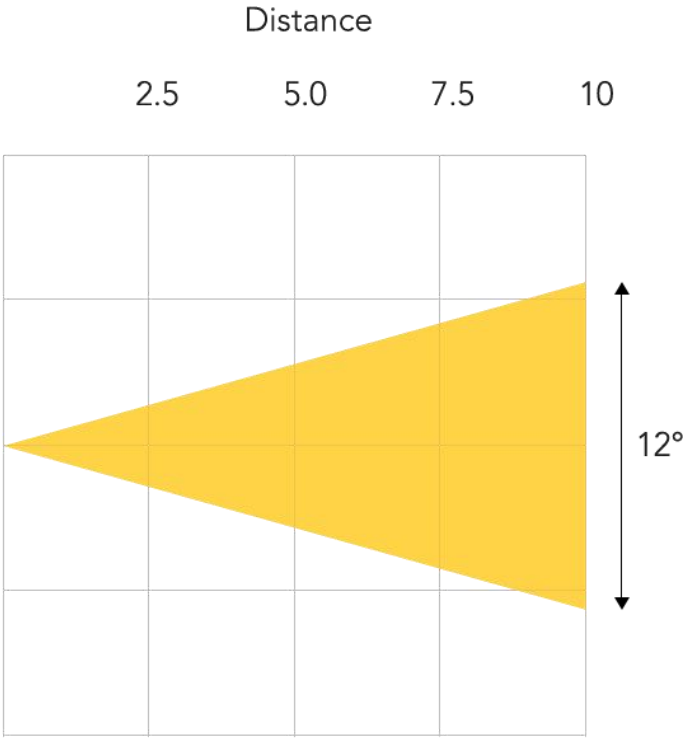
Product appearance, LUX chart, Dimensions

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

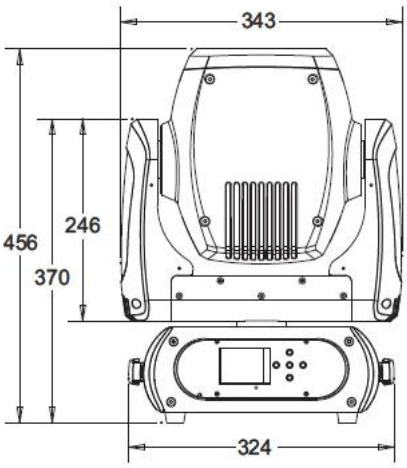


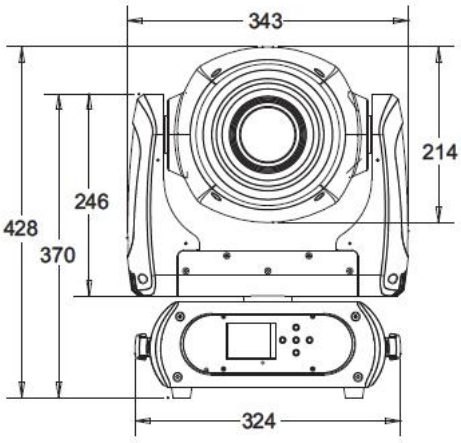


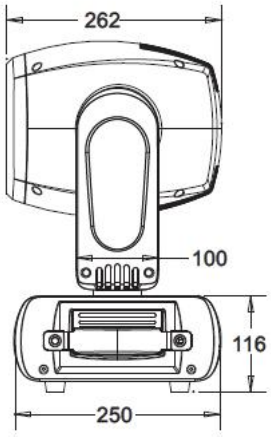




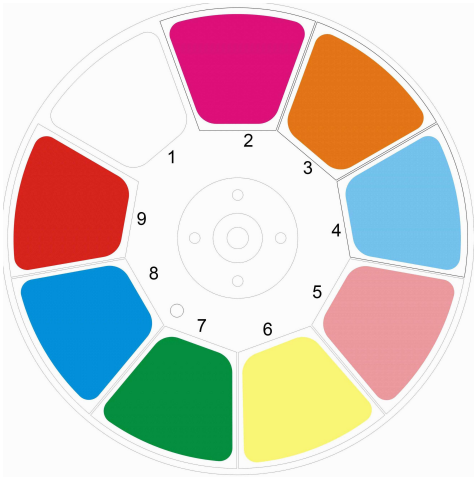
LUX @ 12°	∅ 0.53	∅ 1.05	∅ 1.58	∅ 2.1
	35,420	8,960	4,046	2,296





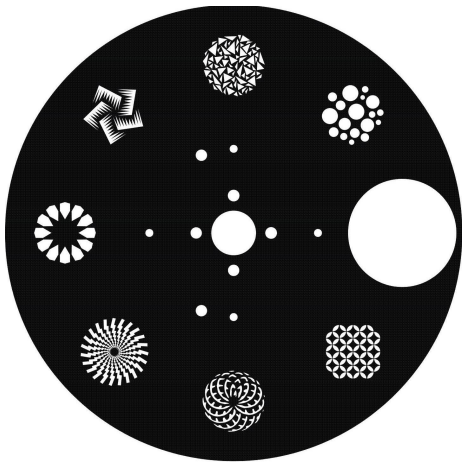


Colour wheel

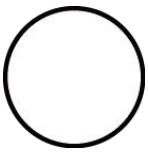


1	Open	
2		Magenta
3		Orange
4		Sky blue
5		Pink
6		Yellow
7		Green
8		Blue
9		Red

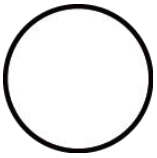
Gobo wheel

Static gobo wheel	Rotating gobo wheel (slot-in-out gobos)
	

Rotating gobo wheel

	**Position 1**
	**Position 2**
	**Position 3**
	**Position 4**
	**Position 5**
	**Position 6**
	**Position 7**
	**Position 8**

Static gobo wheel

	**Position 1**
	**Position 2**
	**Position 3**
	**Position 4**
	**Position 5**
	**Position 6**
	**Position 7**
	**Position 8**

Menu operation

Description of icons in the menu

CONNECT	LIGHT	INFOMATION	SET	PROGRAM
				

Menu

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

Connect	DMX Address①	XXX		DMX address setting
	Wireless①	XXX		Wireless Enabled
Light	Max Temperature①	80~139℃ 90℃ /176~282℉ 176℉		Lamp off if temperature continuously over for 2 minutes
	Lamp Adjust①	PAN……		Adjust value of channel
Information	Time Info.	Current XXXX(Hours)		Fixture boot time
		Fixture Life XXXX(Hours)		Fixture total run time
	Temperature	Near Lamp Temp (depends on fixture)		Temperature Sensors
	Fans Speed	Near Lamp Fan (depends on fixture)		Fan speed Sensors
	Channel Value	PAN……		Display value of channel
	Error Message	Pan, Tilt……		Error channels
	Fixture Model	xxxxxxxxxxxx		Display model brand and model
	Software Ver	1U01 V1.0.00……..		Version of each IC
Set	Reset	All		Reset all
		Pan & Tilt		Reset Pan & Tilt
		:		:
	Movement	Pan Reverse①	ON/OFF	Pan Reverse
		Tilt Reverse①	ON/OFF	Tilt Reverse
		Pan Degree①	630/540	Choose Pan Degree
		Encoders①	ON/OFF	Encoder wheel on/off
		Pan/Tilt Mode①	Stand/Smooth	Choose pan/tilt mode
	UI Set	Mic Sens. ③	0~99%,(60%)	Sensitivity of Mic
		No Signal①	Close/Hold/Auto/Music	Mode when no signal
		Temperature. C/F①	Fahrenheit /Celsius	Temperature at ℃/℉
		Fans Mode①	Auto Speed /High Speed	Fans mode
		Hibernation①	OFF, 01M~99M，(15M)	Sleeping mode
		Backlight①	02~60m (02m)	Show backlight time
		Flip Display①	ON/OFF	Display 180°reverse
		Display Bright③	00~31 (10)	Display Brightness
		Brand Show①	ON/OFF	Show brand or not
		Key Lock①	ON/OFF	Key lock on/off

		Language③	En/Fr/Sp/简/繁		Language Select
	Fixture Set	Theater Mode	ON/OFF		Theater Mode
		Frequency	600Hz---4000KHz (1200Hz)		Frequency
	Users	User Mode①	Standard		Standard mode
			Extended		Extended mode
			:		:
			User		User program mode
		Edit User③	Max Channel = XX		Edit users mode
			PAN = CH01		
			:		
	Calibration③	-Password-	=xxx		Password: 050
		Pan	=xxx		Calibrate channel value
		:	:		
	Fixture ID③	Name			Name
		Rdm Mode			RDM Mode
		-Password-			Password: 050
		PID Code			Set PID of RDM
	Wireless Set①	DMX On Cable	ON/OFF		DMX On Cable
		Reset Connect	ON/OFF		Reset Connect
	Reload Default	Basic Reload(①)	ON/OFF		Basic Reload
		Program Reload(②)	ON/OFF		Program Reload
		---Password---	XXX		Password: 050
		Private Reload(③)	ON/OFF		Private Reload
		All Reload	ON/OFF		All Reload
Program	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 Chase 1		Select and run auto program
		Chase Part 2	Chase 1 ~ 8 Chase 2		
		Chase Part 3	Chase 1 ~ 8 Chase 3		
	Edit Chase②	Chase 1	Chase Test		Test
		:	Step 01	=xxx	Beginning scene
		Chase 8	Step 64	=xxx	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

Channel				name	function	Min DMX	Max DMX
St	Ex	Ba1	Ba2				
1	1	1	1	Pan	Pan Coarse	0	255
2	2		2	Pan fine	Pan Fine	0	255
3	3	2	3	Tilt	Tilt Coarse	0	255
4	4		4	Tilt fine	Tilt Fine	0	255
5	5	3	5	Movement Speed	Fastest to Slowest	0	255
	6			Movement Function	Normal	0	15
					Movement With Blackout	16	31
					TBD	32	255
6	7			Shutter Function	Normal Shutter Functions	0	15
					Pulse-effect Forward	16	31
					Pulse-effect Reverse	32	47
					Random Strobe	48	63
					TBD	64	255
7	8			Shutter	**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		
					Close	0	31
					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
		4	6	Shutter	Shutter closed	0	31
					No function (shutter open)	32	63
					Strobe effect slow to fast	64	95
					No function (shutter open)	96	127
					Pulse-effect in sequences	128	159
					No function (shutter open)	160	191
					Random strobe effect slow to fast	192	223
					No function (shutter open)	224	255
8	9	5	7	Dimmer	Dimmer (Close to Open)	0	255
9	10			Color	Indexed	0	15

				Function	Indexed With Blackout	16	31
					Forward Spin	32	47
					Reverse Spin	48	63
					Continuous	64	79
					Color Bounce	80	111
					TBD	112	255
10	11			Color	**Indexed & Indexed with Blackout & Color Bounce**		
					Position 1 (Open)	0	13
					Position 2 ~ Position 18	14	255
					Forward Spin		
					Stop to fastest	0	255
					Reverse Spin		
					Stop to fastest	0	255
					Continuous		
					Positioning from 0-360 degrees	0	255
		6	8	Color	**Indexed**		
					Position 1 (Open)	0	2
					Position 2 ~ Position 18	3	53
					Indexed with Blackout		
					Position 1 (Open)	54	56
					Position 2 ~ Position 18	57	106
					Indexed With Bounce		
					Position 1	107	119
					Position 2 ~ Position 9	120	223
					Forward Wheel Spin		
					Stop to fastest	224	239
					Reverse Wheel Spin		
					Stop to fastest	240	255
11	12			Rot Gobo Function	Indexed	0	15
					Indexed With Blackout	16	31
					Forward Spin	32	47
					Reverse Spin	48	63
					Continuous	64	79
					Shake	80	95
					TBD	96	255
12	13			Rot Gobo	**Indexed & Indexed with Blackout & Shake**		
					Position 1 (Open)	0	31
					Position 2 ~ Position 8	32	255
					Forward Wheel Spin		
					Stop to fastest	0	255
					Reverse Wheel Spin		
					Stop to fastest	0	255
					Continuous		

					Positioning from 0-360 degrees	0	255
		7	9	Rot Gobo	**Indexed**		
					Position 1 (Open)	0	5
					Position 2 ~ Position 8	6	47
					Indexed with Blackout		
					Position 1 (Open)	48	53
					Position 2 ~ Position 8	54	97
					Indexed With Shake		
					Position 2	98	115
					Position 3 ~ Position 8	116	223
					Forward Wheel Spin		
					Stop to fastest	224	239
					Reverse Wheel Spin		
					Stop to fastest	240	255
13	14			Gobo Rot Function	Continuous	0	15
					Forward Spin	16	31
					Reverse Spin	32	47
					Forward Animate Rotate	48	63
					Forward Animate Rotate With Blackout	64	79
					Reverse Animate Rotate	80	95
					Reverse Animate Rotate With Blackout	96	111
					TBD	112	255
14	15			Gobo Rot	**Continuous**		
					Positioning from 0-360 degrees	0	255
					Forward Spin		
					Stop to fastest	0	255
					Reverse Spin		
					Stop to fastest	0	255
					Forward Animate Rotate & Forward Animate Rotate with Blackout		
					Stop to fastest	0	255
					Reverse Animate Rotate & Reverse Animate Rotate with Blackout		
					Stop to fastest	0	255
		8	10	Gobo Rot	**Continuous**		
					Positioning from 0-360 degrees	0	191
					Forward Animate Rotate		
					Stop to fastest	192	207
					Reverse Animate Rotate		
					Stop to fastest	208	223
					Forward Spin		
					Stop to fastest	224	239
					Reverse Spin		
					Stop to fastest	240	255

15	16			Gobo Function	Indexed	0	15
					Indexed with Blackout	16	31
					Forward Spin	32	47
					Reverse Spin	48	63
					Continuous	64	79
					Shake	80	95
					TBD	96	255
16	17			Fixed Gobo	**Indexed & Indexed with Blackout & Shake**		
					Position 1 (Open)	0	31
					Position 2 ~ Position 8	32	255
					Forward Wheel Spin		
					Stop to fastest	0	255
					Reverse Wheel Spin		
					Stop to fastest	0	255
					Continuous		
					Positioning from 0-360 degrees	0	255
		9	11	Fixed Gobo	**Indexed**		
					Position 1 (Open)	0	5
					Position 2 ~ Position 8	6	47
					Indexed with Blackout		
					Position 1 (Open)	48	53
					Position 2 ~ Position 8	54	97
					Indexed with Shake		
					Position 2	98	115
					Position 3 ~ Position 8	116	223
					Forward Wheel Spin		
					Stop to fastest	224	239
					Reverse Wheel Spin		
					Stop to fastest	240	255
17	18	10	12	Prism	**Indexed & Indexed with Blackout**		
					Position 1 (Open)	0	63
					Position 2	64	127
					Position 3	128	191
					Position 4	192	255
18	19	11	13	Prism Rot	**Forward Spin**		
					Stop to fastest	0	127
					Reverse Spin		
					Stop to fastest	128	255
19	20			Focus Function	Continuous	0	15
					5m Auto Focus	16	31
					7.5m Auto Focus	32	47
					10m Auto Focus	48	63
					15m Auto Focus	64	79
					>20m Auto Focus	80	95

					TBD	96	255
20	21	12	14	Focus	**Continuous**		
					Focus In to Focus Out	0	255
					Auto Focus		
					Focus In to Focus Out Fine	0	255
21	22			Iris Function	Indexed	0	15
					Pulse Opening with Forward Blackout	16	31
					Pulse Opening with Reverse Blackout	32	47
					Pulse Closing with Forward Blackout	48	63
					Pulse Closing with Reverse Blackout	64	79
					TBD	80	255
22	23			Iris	**Indexed**		
					Max. Diameter to Min. Diameter	0	255
					Pulse Opening & Pulse Closing		
					Pulse Slow to Fast	0	255
		13	15	Iris	Indexed	0	191
					Pulse Opening with Forward Blackout	192	207
					Pulse Opening with Reverse Blackout	208	223
					Pulse Closing with Forward Blackout	224	239
					Pulse Closing with Reverse Blackout	240	255
23	24	14	16	Control	Normal	0	7
					Reset All	8	15
					Pan & Tilt Reset	16	23
					Color Reset	24	31
					Gobo Reset	32	39
					TBD	40	47
					Other Reset	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: 21/24/14/16, if we set the mode at standard 23 channels mode, and there are several models need to be independently controlled, we just simply address first fixture at 1, and second fixture at 24, third one at 47, 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

Power

- Input Voltage: 100~240V AC, 50/60 Hz
- Power Consumption: 270W
- Connection: Neutrik® PowerCON – In / Out

Photometrics

- Light Source: Advanced 8000K 190W White LED Module
- Beam Angle: 12°
- Output: 15,400 lumen, 35,420lux on @2.5M
- PWM: 1,200 Hz
- LED Lifespan: 60,000 hours

Effects

- Dimming: 0 ~ 100%
- Strobe: 0.5 ~26 Hz
- Focus: Electronic Linear
- Prism: 3-facet, 8 facet & Frost
- Iris: Yes

Movement 8 / 16 bit Auto Reposition

- Pan: 630°(3.2 sec) or 540°(2.9 sec)
- Tilt: 233°(1.9 sec)

Colour 8 Colours + Open

Gobos

- Fixed: 1 x 7 + Open Fixed Gobo Wheel
- Rotating: 1 x 7 + Open Interchangeable Rotating Gobo Wheel (Outside Ø27mm, Inside Ø22mm).

Control

- Operational Modes: DMX, Auto Program, Sound Active, Master / Slave
- RDM: Yes
- Protocol: DMX512 (W-DMX™ Optional)
- DMX Channels: 23 / 24 / 14 / 16
- Interface: 3-Pin XLR & 5-Pin XLR
- Display: 2.4″ Colour LCD Control Panel with Back-up Power.
- Software Upgrade via DMX: Yes

Housing

- Materials: ABS & Steel
- Finishing: Matte black
- Cooling: Multi Sensor Thermostat Controlled Variable Speed Fan
- IP rating: IP20
- Dimension: 343 x 250 x 456 mm
- Net Weight: 14 kg
- Rigging: 2pcs Omega Brackets with 1/4-turn Quick Locks

MISC

- Road case: MCASE2LS

WARRANTY

Please refer to your local dealer or please contact Event Lighting Pty Ltd Website: www.event-lighting.com.au.