

EVENT LIGHTING

EL5000RGBPRO

5W RGB Laser

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.

Version: 1.2 (29 November 2023)

Safety Instructions

Warning

- Do not open this fixture, there are no user serviceable parts inside. Risk of electric shock.
- Do not look directly at the light source.
- Avoid contact with the unit during operation, as the housing may become hot. Allow the fixture to cool for at least 15 minutes after turning off before touching.
- Install this fixture in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Do not operate this fixture, or connect this device to power, within 50cm of any flammable material.
- Use a safety chain when mounting this fixture overhead.
- Do not operate this fixture outdoors where excessive dust, heat, water or humidity may affect it.
- Do not operate this fixture if the housing, lenses, or cables appear damaged.
- Do not connect this fixture to a dimmer or rheostat.
- Do not operate this fixture at temperatures higher than 40°C (104°F).
- **Only** connect this fixture to a grounded and protected circuit.
- **Only** use the hanging bracket to carry this fixture.
- Stop using this fixture immediately if a serious operating problem becomes apparent.

Laser Warning



Laser light can cause instant eye injury if the product is not set up and used correctly. Avoid direct eye contact with the laser light. Never intentionally expose your eyes or others to direct laser light. This laser product can potentially cause instant eye damage or blindness if laser light directly strikes the eyes. The heat from a laser cannot be felt, but it can still injure or cause blindness. This can occur even with very small amounts of exposure at a long distance.

This product contains a Class 4 Laser. **Potential hazards:**

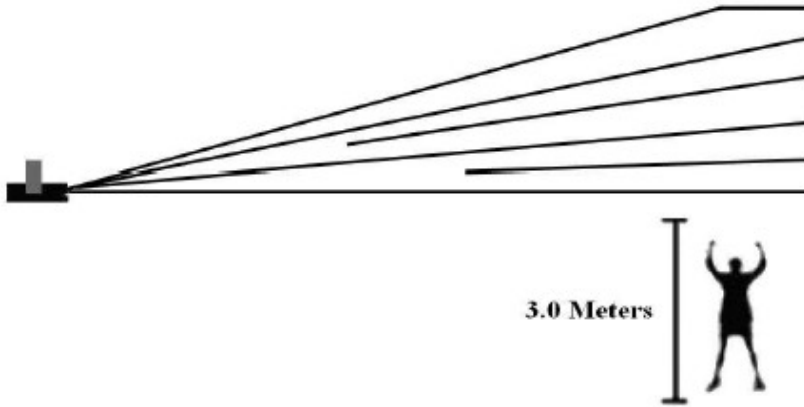
- Skin and eye hazards from exposure to direct and reflected beams.
- Eye hazard from diffuse reflections (light reflects at many angles).
- Potential fire hazard when in contact with combustible materials. Production of laser generated air contaminants is possible (for example, chemical fumes).

It is critical to prevent the possibility of ANY direct eye exposure.

- Do not operate the laser without reading and understanding the safety information contained in this manual.
- Test the product before public use to ensure the lasers are functioning correctly, and that eye exposure is impossible.
- Do not assume exposure to an individual laser beam is safe.
- Do not assume a moving laser light is safe. Eye injury can occur instantly.
- EL5000RGBPRO must be installed at least 3 metres above ground level and 3 metres from any person. See the Product Installation section for details.
- Do not point the laser at any person or animal.
- Do not point the laser towards any area where people could be exposed to them.
- Do not point the laser towards any reflective surfaces, such as windows, mirrors and shiny metals. Laser reflections can also cause injury.
- Do not point the laser towards any area where you or the operator do not know where the beams are being directed.
- Do not point the laser into the sky or towards any aircraft.
- The legal requirements for operating laser products vary between jurisdictions. It is the user's responsibility to meet the legal requirements in the location/country of use.

Product Installation

- EL5000RGBPRO can be mounted in many orientations, provided each individual device is secured by the use of the correct mounting bracket.
- This device should be directed above the heads of people. Do not direct this device towards the line of sight of anyone. Refer to the diagram below.
- A minimum of 3 metres vertical separation is required between the floor and the laser device.
- A minimum of 3 metres horizontal separation is required between the laser light and any person or public space.
- Use a safety chain when mounting EL5000RGBPRO overhead.



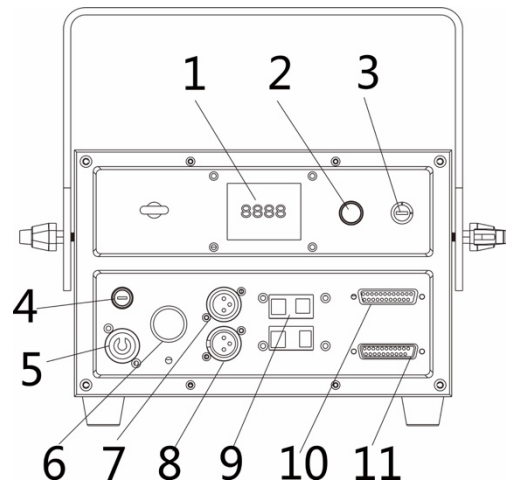
Menu

Level 1	Level 2	Default	Function
DMX ADDR	1-512	1	DMX address setting
CHANNEL	21CH	21CH	21CH
	32CH		32CH (Hold)
	64CH		64CH(Hold)
MODE	ILDA	BREAK	ILDA mode, display shows in ILDA file circularly (file's expanded-name is ILD)
	AUTO		Auto
	SOUND		Sound
	SLAVE		Slave
	BREAK		Standby
	ILD X		ILD X, random play
	ILD 0---ILD 255	ILD files single play	
SPEED	0-100	100	Auto speed from slow to fast
SENSE	0-100	90	Sound sensitivity adjust
SIZE	10-100	100	Set pattern size
PHASE XY	X+ Y+	X+ Y+	X+ Y+
	X- Y+		X- Y+
	X+ Y-		X+ Y-
	X- Y-		X- Y-
SCANNER	20K-40K	30K	Scanner speed
DIM R	0-100	100	Red dimmer
DIM G	0-100	100	Green dimmer
DIM B	0-100	100	Blue dimmer
LANGUAGE	CH/EN	EN	Language option

Menu Operation

Rotate the knob on the right side of the display to scroll through the menu and press the knob to enter a sub-menu or exit a menu. After an operation, double press the knob to save the option and exit the menu.

1. Display
2. Knob
3. Safety Key
4. Fuse
5. Power in
6. Power switch
7. DMX out
8. DMX in
9. ILDA-RJ45/DMX-RJ45
10. 25-pin ILDA out
11. 25-pin ILDA in



DMX Chart

Channel	Function	Min DMX	Max DMX	Description
1	Dimmer	0	255	Dimmer, 0-100%
2	Colour	0	69	Static colours, white-red-blue-pink-cyan-yellow-green
		70	79	Colour change (speed controlled by Ch. 3)
		80	89	Default colour (speed controlled by Ch. 3)
		90	94	Rainbow colour (speed controlled by Ch. 3)
		95	114	2-segment colour option, 5 data stepping (speed controlled by Ch. 3)
		115	139	3-segment colour option, 5 data stepping (speed controlled by Ch. 3)
		140	164	4-segment colour option, 5 data stepping (speed controlled by Ch. 3)
		165	189	8-segment colour option, 5 data stepping (speed controlled by Ch. 3)
		190	224	16-segment colour option, 5 data stepping (speed controlled by Ch. 3)
		225	229	Dynamic colour 1 (speed controlled by Ch. 3)
		230	234	Dynamic colour 2 (speed controlled by Ch. 3)
		235	239	Dynamic colour 3 (speed controlled by Ch. 3)
		240	244	Dynamic colour 4 (speed controlled by Ch. 3)

		245	249	Dynamic colour 5 (speed controlled by Ch. 3)
		250	255	Dynamic colour 6 (speed controlled by Ch. 3)
3	Colour speed	0	9	No function
		10	127	Clockwise, slow to fast
		128	255	Anticlockwise, slow to fast
4	Light dot colour	0	255	White-red-blue-pink-cyan-yellow-green
5	Strobe	0	2	No function
		3	255	Strobe, slow to fast
6	Pattern	0	255	Pattern options (controlled by Ch. 7)
7	Pattern group option	0	24	Built in group 1
		25	49	Built in group 2
		50	74	Built in group 3
		75	99	Built in group 4
		100	124	Built in group 5
		125	149	ILDA animation group 1
		150	174	ILDA animation group 2
		175	199	ILDA animation group 3
		200	224	ILDA animation group 4
		225	255	ILDA animation group 5
8	Pattern zoom	0	63	Size options
		64	127	Speed option, small to large
		128	191	Speed option, large to small
		192	255	Zoom speed
9	Centre rotation	0	127	Angle option
		128	191	Clockwise speed option
		192	255	Anticlockwise speed option
10	Horizontal rotation	0	127	Flip horizontal direction option
		128	255	Flip horizontal speed option
11	Vertical rotation	0	127	Flip vertical direction option
		128	255	Flip vertical speed option
12	Pan	0	255	
13	Tilt	0	255	
14	Horizontal wave	0	9	No function
		10	255	Wave range and speed (range small to large, speed slow to fast)
15	Vertical wave	0	9	No function
		10	255	Wave range and speed (range small to large, speed slow to fast)
16	Gradual drawing	0	1	No function
		2	63	Drawing by manual adjustment 1

		64	127	Drawing by manual adjustment 2
		128	153	Automatic drawing (increasing)
		154	179	Automatic drawing (decreasing)
		180	205	Automatic drawing (increasing to decreasing, reverse)
		206	255	Automatic drawing (increasing to decreasing)
17	Location tracking	0	15	No function
		16	47	Tracking 1, range and speed controlled by Ch. 18
		48	79	Tracking 2, range and speed controlled by Ch. 18
		80	111	Tracking 3, range and speed controlled by Ch. 18
		112	143	Tracking 4, range and speed controlled by Ch. 18
		144	175	Tracking 5, range and speed controlled by Ch. 18
		176	207	Tracking 6, range and speed controlled by Ch. 18
		208	239	Tracking 7, range and speed controlled by Ch. 18
		240	255	Tracking 8, range and speed controlled by Ch. 18
18	Tracking range and speed	0	63	Small tracking, slow to fast
		64	127	Medium tracking, slow to fast
		128	191	Large tracking, slow to fast
		192	255	Maximum tracking, slow to fast
19	Pattern mirroring	0	2	No function (original pattern)
		3	63	X mirroring
		64	127	Y mirroring
		128	191	XY mirroring 1
		192	255	XY mirroring 2
20	Built in dynamic	0	1	No function
		2	213	Built in dynamic option, speed and colour controlled by Ch 21
		214	255	Auto random, speed and colour controlled by Ch 21
21	Built in speed	0	127	Speed, fast to slow, built in fixed colour
		128	255	Speed, fast to slow, colour controlled by console

32CH

		Value	Function
CH1	Pattern A dimmer	0-255	0-100%
CH2	Pattern A Color control	0-69	White-Red-Blue-Pink-Cyan-Yellow-Green(fixed color option)
		70-79	Color change (eotic speed controlled by CH3)
		80-89	Default color (eotic speed controlled by CH3)
		90-94	Rainbow color (eotic speed controlled by CH3)
		95-114	2 segment color option, 5 data stepping (eotic speed controlled by CH3)
		115-139	3 segment color option, 5 data stepping (eotic speed controlled by CH3)
		140-164	4 segment color option, 5 data stepping (eotic speed controlled by CH3)
		165-189	8 segment color option, 5 data stepping (eotic speed controlled by CH3)
		190-224	16 segment color option, 5 data stepping (eotic speed controlled by CH3)
		225-229	Color dynamic eotic 1(eotic speed controlled by CH3)
		230-234	Color dynamic eotic 2(eotic speed controlled by CH3)
		235-239	Color dynamic eotic 3(eotic speed controlled by CH3)
		240-244	Color dynamic eotic 4(eotic speed controlled by CH3)
		245-249	Color dynamic eotic 5(eotic speed controlled by CH3)
250-255	Color dynamic eotic 6(eotic speed controlled by CH3)		
CH3	Pattern A Color eotic speed	0-9	Without eotic
		10-127	Color clockwise eotic, speed from slow to fast
		128-255	Color anti-clockwise eotic, speed from slow to fast
CH4	Pattern A strobe	0-2	No strobe
		3-255	Strobe from slow to fast
CH5	Pattern A option	0-255	Pattern option (controlled by CH6)
CH6	Pattern A group option	0-24	Built-in group 1
		25-49	Built-in group 2
		50-74	Built-in group 3
		75-99	Built-in group 4
		100 - 124	Built-in group 5
		125-255	Hold
		0-63	Pattern size option
		64-127	Speed option from small to larger

CH7	Pattern A zoom	128-191	Speed option from larger to small
		192-255	Zoom speed option
CH8	Pattern A center rotation	0-127	Angle option
		128-191	Clockwise speed option
		192-255	Anti-Clockwise speed option
CH9	Pattern A Horizontal rotation	0-127	Flip horizontal direction option
		128-255	Flip horizontal speed option
CH10	Pattern A Vertical rotation	0-127	Flip vertical direction option
		128-255	Flip vertical speed option
CH11	A Pan move	0-255	vertical direction option
CH12	A Tilt move	0-255	vertical centre location
CH13	A Horizontal wave	0-9	No wave
		10-255	Wave range and speed adjust(range from small to big, speed from slow to fast, every 32 data as one group, total 8 group)
CH14	A gradual drawing	0-1	no drawing
		2-63	gradual drawing by manual adjust 1
		64-127	gradual drawing by manual adjust 2
		128-153	auto gradual drawing (increasing)
		154-179	auto gradual drawing (decreasing)
		180-205	Auto gradual drawing(increasing to decreasing, reverse)
		206-255	Auto gradual drawing(increasing to decreasing, syntropy)
CH15	A Location tracking option	0-15	No tracking
		16-47	Tracking 1, range and speed controlled by CH18
		48-79	Tracking 2, range and speed controlled by CH18
		80-111	Tracking 3, range and speed controlled by CH18
		112-143	Tracking 4, range and speed controlled by CH18
		144-175	Tracking 5, range and speed controlled by CH18
		176-207	Tracking 6, range and speed controlled by CH18
		208-239	Tracking 7, range and speed controlled by CH18
		240-255	Tracking 8, range and speed controlled by CH18
CH16	A Tracking range and speed	0-63	Small tracking, speed from slow to fast
		64-127	Middle tracking, speed from slow to fast
		128-191	Big tracking, speed from slow to fast
		192-255	Max tracking, speed from slow to fast
CH17-CH32	Pattern B	Function same with Pattern A CH1---CH16	

64CH

		Value	Function
CH1	Pattern A dimmer	0-255	0-100%
CH2	Pattern A Color control	0-69	White-Red-Blue-Pink-Cyan-Yellow-Green(fixed color option)
		70-79	Color change (eotic speed controlled by CH3)
		80-89	Default color (eotic speed controlled by CH3)
		90-94	Rainbow color (eotic speed controlled by CH3)
		95-114	2 segment color option, 5 data stepping (eotic speed controlled by CH3)
		115-139	3 segment color option, 5 data stepping (eotic speed controlled by CH3)
		140-164	4 segment color option, 5 data stepping (eotic speed controlled by CH3)
		165-189	8 segment color option, 5 data stepping (eotic speed controlled by CH3)
		190-224	16 segment color option, 5 data stepping (eotic speed controlled by CH3)
		225-229	Color dynamic eotic 1 (eotic speed controlled by CH3)
		230-234	Color dynamic eotic 2 (eotic speed controlled by CH3)
		235-239	Color dynamic eotic 3 (eotic speed controlled by CH3)
		3240-244	Color dynamic eotic 4 (eotic speed controlled by CH3)
		245-249	Color dynamic eotic 5 (eotic speed controlled by CH3)
		250-255	Color dynamic eotic 6 (eotic speed controlled by CH3)
		CH3	Pattern A Color eotic speed
10-127	Color clockwise eotic, speed from slow to fast		
128-255	Color anti-clockwise eotic, speed from slow to fast		
CH4	Pattern A strobe	0-2	No strobe
		3-255	Strobe from slow to fast
CH5	Pattern A option	0-255	Pattern option (controlled by CH6)
CH6	Pattern A group option	0-24	Built-in group 1
		25-49	Built-in group 2
		50-74	Built-in group 3
		75-99	Built-in group 4
		100-124	Built-in group 5
		125-255	Hold
CH7	Pattern A zoom	0-63	Pattern size option
		64-127	Speed option from small to larger
		128-191	Speed option from larger to small

		192-255	Zoom speed option
CH8	Pattern A center rotation	0-127	Angle option
		128-191	Clockwise speed option
		192-255	Anti-Clockwise speed option
CH9	Pattern A Horizontal rotation	0-127	Flip horizontal direction option
		128-255	Flip horizontal speed option
CH10	Pattern A Vertical rotation	0-127	Flip vertical direction option
		128-255	Flip vertical speed option
CH11	A Pan move	0-255	vertical direction option
CH12	A Tilt move	0-255	vertical centre location
CH13	A Horizontal wave	0-9	No wave
		10-255	Wave range and speed adjust(range from small to big, speed from slow to fast, every 32 data as one group, total 8 group)
CH14	A gradual drawing	0-1	no drawing
		2-63	gradual drawing by manual adjust 1
		64-127	gradual drawing by manual adjust 2
		128-153	auto gradual drawing (increasing)
		154-179	auto gradual drawing (decreasing)
		180-205	Auto gradual drawing(increasing to decreasing, reverse)
		206-255	Auto gradual drawing(increasing to decreasing, syntropy)
CH15	A Location tracking option	0-15	No tracking
		16-47	Tracking 1, range and speed controlled by CH18
		48-79	Tracking 2, range and speed controlled by CH18
		80-111	Tracking 3, range and speed controlled by CH18
		112-143	Tracking 4, range and speed controlled by CH18
		144-175	Tracking 5, range and speed controlled by CH18
		176-207	Tracking 6, range and speed controlled by CH18
		208-239	Tracking 7, range and speed controlled by CH18
CH16	A Tracking range and speed	0-63	Small tracking, speed from slow to fast
		64-127	Middle tracking, speed from slow to fast
		128-191	Big tracking, speed from slow to fast
		192-255	Max tracking, speed from slow to fast
CH17-CH32	Pattern B	Function same with Pattern A	CH1---CH16
CH33-CH48	Pattern C	Function same with Pattern A	CH1---CH16
CH49-CH64	Pattern D	Function same with Pattern A	CH1---CH16

Technical Specifications

- Light source: 5W RGB
- Wavelength:
 - Red: 638nm
 - Green: 520nm
 - Blue: 450nm
- Pulse duration and repetition/refresh rate: 1-100Hz
- Maximum power output of each colour, and total for laser:
 - Red: 1500mW
 - Green: 1000mW
 - Blue: 2500mW
 - Total power for laser: 5000mW
- Power consumption: 70W
- Control mode: Auto/Sound/DMX512/ILDA/RJ45
- Channels : 21CH /32CH /64CH
- Scanning system: 30Kpps Scanner, $\pm 30^\circ$
- Surface temp: $T_b=45^\circ\text{C}$ (when the environment temp is 30°C)
- Working temp: 10°C -- 65°C
- Modulation: Analog
- Input voltage: AC100-240V, 50/60Hz
- Fuse: BGDG ϕ 5x20mm 250VAC F5A
- N.W: 8.5Kg
- G.W: 16.5Kg
- Outer packing size: 38.5*38.5*32cm

Warranty

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