# RGE Animated Laser Lamp

User Manual

Please read precautions before use

### Dear user:

This is product integrates many advanced technologies like optics, electronics, digital graphic processing, especially designed for dancing halls and DISCO. According to music rhythms, built-in beam program can be activated; if using smoke, light curtain wall and time tunnel can be formed to create a colorful and fantastic laser world.

## matters needing attention

- ※ Please operate according to this manual and do not disassemble the lamp without permission
- ★The optimum operating temperature range of laser lamp: 15~35 °C
- \*The installation environment is well ventilated to prevent the lamp from being used under impact and high-frequency vibration
- ※Please do not use under voltage other than AC110V<sup>2</sup>40V, and ensure reliable grounding
- \*\*Do not switch the power supply frequently to avoid affecting the normal service life of the laser lamp
- \*\*Please clean the lens with alcohol every 3 months to achieve the best brightness effect
- X During suspension installation, it must be ensured that the suspension force point can bear more than 10 times the weight of the lamp
- \*When transporting again, please do a good job of packaging protection to prevent collision and shock
- XThe hazard level of this lamp is Ciass III B, so do not direct it to the human eye, or to avoid injury
- \*Please ensure that combustible materials are more than 10 meters away from the lamp
- \*The power supply voltage fluctuates within 10%. If it exceeds this value, please use a voltage stabilizer to stabilize the voltage
- ※In the installation and construction environment, please put on a plastic bag for protection to avoid entering excessive dust
- \*Please disconnect the power supply of the lamp when performing any maintenance
- Ensure that the installation is firm and safety protection is added (such as safety rope and hardware fastener)
- \*Artificial damage or tearing of the warranty label is not covered by the warranty

#### parameter

Control system: DMX512, automatic, sound control

Control system: high-speed scanning motor; Scanning angle ± 20°

Procedural effects: color beam, animation

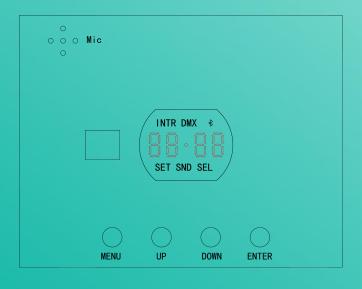
Programming: various beam and animation programs

Control interface: RJ45/bayonet optional (standard DMX512 protocol communication)

Power supply: AC 110/240V 50/60HZ

If there appears breakdown, please ask experts to repair; do not remove the laser yourself.

Attention: Destroy the laser or tear up the warranty label artificially, it's all beyond warranty scope. Please read the warranty rules.



# Display and the corresponding functions:

function	Value	Operation method	
Automatic mode	INTR	Automatic mode (mixed play of all animation patterns and geometric beam patterns), at this time, press MENU key to jump to DMX mode, or press ENTER key to enter voice control, and then press ENTER key to exit voice control	
SOUND	INTR FILL SND	Sound mode (press ENTER once to enter or exit sound control in automatic mode), if SND is on, the sound control has been turned on, otherwise it is turned off, and the sensitivity of sound control depends on the knob potentiometer	
6СН	INTR DMX	6CH simple DMX mode, the 1 after A is the address code 1, which can be $1^{\sim}512$ (press UP or DOWN to modify the address code, and the set address code will be automatically saved)	
34CH	E SND	34CH standard DMX mode, the 1 after A is the address code 1, which can be 1~512. Press UP or DOWN to modify the address code, and the set address code will be automatically saved)	
Pure beam mode	INTR E.E.	Pure beam mode 1 Pure animation mode (press UP or DOWN in automatic mode)	
Pure beam mode	INTR E.E. E.	Pure beam mode 2 Pure animation mode (press UP or DOWN in automatic mode)	
Pure animation mode	INTR E E E	Pure animation mode (press UP or DOWN in automatic mode)	
Graphic image and entering the setting		nd hold the MENU key, and the SET light in the lower left corner lights up after	
X direction setting	rin ! !	Press UP/DOWN to find it and press ENTER to change the X.Y direction. If the SEL light is on, it has been reversed. Otherwise, the direction is normal. You can judge it by watching the coordinates	
Y direction setting	SET –	projected by the laser. Press and hold the MENU key to save and exit after completion	
X.Y direction setting		After pressing UP/DOWN to find it, press ENTER to change the X and Y directions at the same time. If the SEL light is on, the direction has been reversed. Otherwise, the direction is normal. You can judge it by watching the coordinates projected by the laser. Press and hold the MENU key to save and exit after completion	
Image size setting: setting interface	Image size setting: press and hold the MENU key, and the SET light in the lower left corner lights up after entering the setting interface		
Size setting in X direction	SET SEL	Press UP/DOWN to find it, press the MENU key once to light up the SEL, and it is allowed to modify it at this time. Press UP/DOWN key to modify the X.Y size. After that, press the MENU key once to turn off	
Size setting in Y direction	-   TITI SET SEL	the SEL light before turning the page, and then press and hold the MENU key to save and exit	

## Simple DMX mode

CH	Channel	Function
CH1	0	close
Turn on &off	1-255	open
CH2	0-127	AUTO
Sound control	128-255	Sound control
	0-15	No. 1 graphs library
	16-31	No.2 graphs library
	32-239	No.3 graphs library
	240	invalid
CH4	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity, the
scene		system uses the max. graph to replace.
	0-31	color
	32-63	red
CHE	64-95	yellow
CH5 Color	96-127	green
selection	128-159	Indigo
SCICOLIOII	160-191	blue
	191-223	purple
	224-255	white
CH6	0	Default speed
	1-255	From slow to fast

### Simple DMX mode

Simple DMX mode			
CH	Channel value	Function	
CH1	0	close	
Turn on &off laser	1-255	open	
CH2	0-127	AUTO	
Sound control	128-255	Sound control	
	0-15	No. 1 graphs library	
	16-31	No.2 graphs library	
	32-47	No.3 graphs library	
	48-63	No.4 graphs library	
	64-79	No.5 graphs library	
	80-95	No.6 graphs library	
	96-111	No.7 graphs library	
CH3	112-127	No.8 graphs library	
graphs selection	128-143	No.9 graphs library	
	144-159	No.10 graphs library	
	160-175	No.11 graphs library	
	176-191	No.12 graphs library	
	192-207	No.13 graphs library	
	208-223	No.14 graphs library	
	224-239	No.15 graphs library	
	240-255	No.0 graphs library	
CH4	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity, the system uses the max.	
scene selection		graph to replace.	
	0-31	color	
	32-63	red	
CH5	64-95	yellow	
Color selection	96-127	green	
	128-159	Indigo	
	160-191	blue	
	191-223	purple	
	224-255	white	
CH6	0	Default speed	
	1-255	From slow to fast	

# **Professional DMX512 MODE Channel Form1**

CH	Channel	Function
CH1 Turn on &off laser	0	All close
	1-99	Modify action parameters manually (5-in-1 pattern lamp, motor steering and rotation can be adjusted within the segment value)
	100-200	Manual modification of action parameters, driven by sound
	201-250	6CH mode (Please check 6ch mode for operation method)
	251~255	Graph A close, Graph B can light
CH2	0-49	Outside pass
Graph outside &	50-99	Outside reentry
size	100-149	Outside disappear
	150-199	Graph enlarge, outside disappear
	200-255	hold
	0-15	No. 1 graphs library
	16-31	No. 2 graphs library
	32-47	No. 3 graphs library
	48-63	No. 4 graphs library
	64-79	No. 5 graphs library
	80-95	No. 6 graphs library
	96-111	No. 7 graphs library
CH3	112-127	No. 8 graphs library
Graph selection	128-143	No. 9 graphs library
	144-159	No. 10 graphs library
	160-175	No. 11 graphs library
	176-191	No. 12 graphs library
	192-207	No. 13 graphs library
	208-223	No. 1 4 graphs library
	224-239	No. 1 5graphs library
	240-255	No. 0 graphs library
CH4 Graphs selection	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity, the system uses the max. graph to replace.
	0	No zoom
	1-31	Zoom effect 1
	32-63	Zoom effect 2
CUE	64-95	Zoom effect 3
CH5 Graphs zoom	96-127	Zoom effect 4
Grapino 200m	128-159	Zoom effect 5
	160-191	Zoom effect 6
	192-223	Zoom effect 7
	224-255	Zoom effect 8
	0-63	Manual-operate rotation
	64-95	Rotation effect 1
OHO	96-127	Rotation effect 2
CH6 Graphs rotation	128-159	Rotation effect 3
	160-191	Rotation effect 4
	192-223	Rotation effect 5
	224-255	Rotation effect 6
	0-63	Manual-operate graph horizontal move
	64-95	horizontal Move effect 1
0.117		
CUZ	96-127	horizontal Move effect 2
CH7 Horizontal		horizontal Move effect 2 horizontal Move effect 3

	192-223	horizontal Move effect 5
	224-255	horizontal Move effect 6
	0-63	Manual-operate graph vertical move
	64-95	vertical move 1
	96-127	vertical move 1
CH8	128-159	vertical move 3
Vertical	160-191	vertical move 3
movement	192-223	vertical move 4
	224-255	vertical move 6
	0-63	Manual-operate X zoom
	64-95	X zoom effect 1
CH9	96-127	X zoom effect 2
Horizontal zoom	128-159	X zoom effect 3
	160-191	X zoom effect 4
	192-223	X zoom effect 5
	224-255	X zoom effect 6
	0-63	Manual-operate Y zoom
	64-95	Y zoom 1
01140	96-127	Y zoom 2
CH10 Vertical zoom	128-159	Y zoom 3
Vertical 200111	160-191	Y zoom 4
	192-223	Y zoom 5
	224-255	Y zoom 6
CH11	0	GRAPH ORIGINAL COLOR
Forced segmentation	1-255	SEGMENTCOLOR LENGTH
- cogca.c	0-7	Original color (default)
	8-15	red
	16-23	yellow
	24-31	green
	32-39	indigo
CH12	40-47	blue
Graph color	48-55	purple
change	56-63	white
	64-95	Graph red/green/blue change
	96-127	Graph indigo/blue/purple change
	128-159	Seven colors changes
	160-191	Seven colors change
	192-223	Positive cursory color
	224-255	Negative cursory color
CLIAD	0-63	Normal stroke
CH13 Joint & break	64-127	Graphs no stroke, retrace line stroke; the bigger the value is, the higher the joint brightness is.
point control	128-159	Graphs no stroke, retrace line no stroke; the bigger the value is, the higher the joint brightness is.
	160-255	hold
CH14	Need to work	c with CH15
	0-255	Manual drawing (when CH15 is 0-63)
	0-255	The time it can hold for graph dynamics drawing lay-out ( when CH15 is 64-127 or 160-191.)
	0-255	The joint quantity of cursory drawing ( when CH15 is 192-255.)
	CH15 needs to work with CH14	
	0-31	Positive manual drawing
	32-63	Negative manual drawing
CLI1E		

	64-95	Extended drawing
	96-127	Zoom drawing
	128-159	Zoom drawing in two sides at the same time
	160-191	Zoom drawing in the start and in the end separately
	192-223	Cursory drawing
	224-255	
CH16	0-255	The bigger the value is, the smaller the distortion is.
Distortion effect		Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range
auxiliary		for the above distortion effects.
	If it's not a multi effect light, it won't work	
CH17 grating selection	0-51	No grating
	52-102	Baby's breath grating
	103-153	One-dimensional grating
	154-204	3D face grating
	205-255	3Dline grating

**Form 2:** CH18-Ch34, the channel function of graph B, these 17 channels can only control Graph B, except any special stated. Graph A can not be controlled by these:

Attention: For easy check, we mark it in Gray, which is different from Graph A.

	0	close
CH18 Turn on &off laser	1-99	AUTO
	100-199	Sound control
	200-254	hold
	255	Graph A close, graph B lights on
	0-49	Outside pass
CH19	50-99	Outside retrace
Graph outside &	100-149	Outside disappear
size	150-255	hold
CH20 the		(c)
distribution angle	0-99	The smaller the segment is, the bigger the angle distribution gap of each unit is, the gap is positive.
of each element of	100-199	The smaller the segment is, the bigger the angle distribution gap of each unit is, the gap is negative.
the array	200-255	hold
CH21	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity, the system uses the max. graph
01121	0	No zoom
	1-31	Zoom effect 1
	32-63	Zoom effect 2
	64-95	Zoom effect 3
CH22	96-127	Zoom effect 4
graph zoom	128-159	Zoom effect 5
	160-191	Zoom effect 6
	192-223	Zoom effect 7
	224-255	Zoom effect 8
	0-63	Manual graph rotation
	64-95	Rotation effect 1
	96-127	Rotation effect 2
CH23	128-159	Rotation effect 3
graph rotation	160-191	Rotation effect 4
	192-223	Rotation effect 5
	224-255	Rotation effect 6
	0-63	Manual graph horizontal move
	64-95	horizontal move 1
	96-127	horizontal move 2
CH24	128-159	horizontal move 3
horizontal	160-191	horizontal move 4
movement	192-223	horizontal move 5
	224-255	horizontal move 6
	0-63	Manual graph vertical move
	64-95	vertical move 1
CH25 vertical movement	96-127	vertical move 2
	128-159	vertical move 3
	160-191	vertical move 4
	192-223	vertical move 5

	224-255	vertical move 6
	0-63	Manual X zoom
CH26 horizontal zoom	64-95	
		X zoom 1
	96-127	X zoom 2
	128-159	X zoom 3
	160-191	X zoom 4
	192-223	X zoom 5
	224-255	X zoom 6
	0-63	Manual Y zoom
	64-95	Y zoom 1
CH27	96-127	Y zoom 2
vertical zoom	128-159	Y zoom 3
751110411 200111	160-191	Y zoom 4
	192-223	Y zoom 5
	224-255	Y zoom 6
CH28	0	Default color
Forced	1-255	The segment color length
	0-7	Original color (default)
	8-15	red
	16-23	yellow
	24-31	green
	32-39	indigo
CH29	40-47	blue
graphs color	48-55	purple
change	56-63	white
	64-95	The graph red/green/blue color change
	96-127	The graph indigo/blue/purple color change
	128-159	Seven color change
	160-191	Seven color change
	192-223	Positive cursory color
	224-255	Negative cursory color
		he red part means it's different channel function from Graph A.)
	0-63	Normal stroke
CH30	64-127	Graphs no stroke, retrace line stroke
Joint & break	128-159	Graphs no stroke, retrace line no stroke;
point control	160-191	Graph A array based on Graph B, the color can be set like Graph A
	192-255	Graph A array based on Graph B, the color can be set like Graph B joint color
		Attention: the bigger the value is, the higher the joint brightness is.
	Needs to work	<u> </u>
CH31		ng when CH32 is 0-63.
drawing control		namics drawing lay-out holding time when CH32 is 64-127, or 160-191
auxiliary		ng joint quantity when CH32 is 192-255
	Needs to work	
	0-31	Positive manual drawing
	32-63	Negative manual drawing
CH32	64-95	Enlarge drawing
Drawing control	96-127	Zoom drawing
	128-159	Zoom drawing  Zoom drawing in both sides at the same time
	160-191	Zoom drawing in both sides at the same time  Zoom drawing at the start and in the end separately
	192-223	Cursory drawing
		Turn-around cursory drawing
CHSS	224-255	The bigger the value is, the smaller the distortion is.
CH33 Distortion control	0-255	
Distortion control		en in zoom, rotation, movement and rolling distortion effect, CH16 can control these distortion degree of these
		neans it's different channel function from Graph A.)
CH34	0-255	
projection extent	20-39	In each segment, the bigger the value is, the smaller the projection extent.
control		in each segment, the bigger the value is, the smaller the projection extent.
	220-239	
	240-255	
		to at with the aready ate, the petual aready ate and about areas.

If the instructions are inconsistent with the products, the actual products sold shall prevail

Product performance is subject to upgrade and change without notice

Thank you for your use