Full Color Animation Laser Light

User Manual

(Please read this user manual carefully before use.)

Dear User,

This product combines many advanced technologies like optics, electronics and digital graphic processing into one, specially suitable for dancing halls and DISCO. It can operate built-in beam effects according to music, and with smoke it can create light-curtain wall and time-tunnel effects; it can build a romantic colorful laser would.

Attentions:

The perfect working temperature of the laser is: $20 \sim 35^{\circ}$ C.

Don't illuminate to eyes directly to avoid eye hurt.

Don't use is beyond the voltage AC110V~240V and make sure it's grounded safely.

Don't turn on and turn off frequently to avoid affect the working lifespan of the laser.

Please avoid to start it for long time based on all solid-state laser; Please turn off the light for 15minutes after 3-hour continuous work. You can turn on it after it's complete cooled.

Don't touch the lens in the projection window to avoid any effects of operation.

Please ask professional repairing person to repair when in faults. Don't open the laser on yourself.

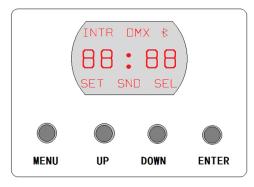
Attention: Man-made damage or tearing out warranty labels is beyond warranty. Please read warranty details carefully.

Operation panel

MENU: Mode selection

UP & DOWN: modify parameters

ENTER: Determine

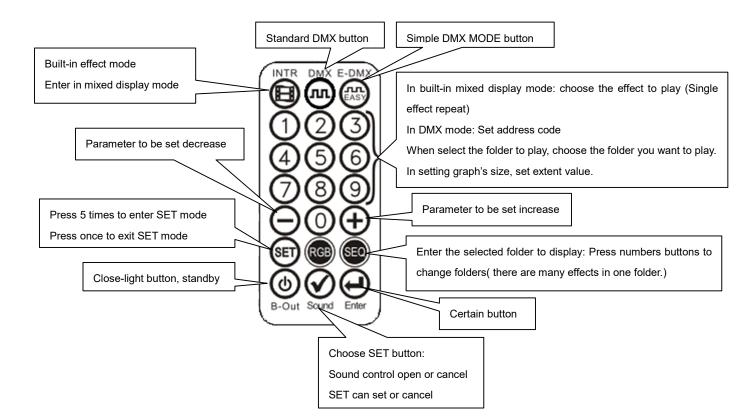


1 Display and the corresponding functions:

Value	Functions	
RL+ INDR	Mixed display mode (play all the effects in the file.)	
RL+ SND	Sound control mode(In mixed display mode, press CERTAIN button to enter or exit	
	sound control, But in remote, you should press SOUND button.)	
R 1 + INDR + DMX	Simple DMX mode, the 1 after R is address code 1, it can be 1~512	
R 1 + DMX	Standard DMX mode, the 1 after R is address code 1, it can be 1~512	
SE-1 +SET + SEL	The 1 after SE is the folder serial number, it can be 1~9(In mixed display mode, long	
	press the button MODE to enter, and press the buttons $+$ to revise parameters; press	
	CERTAIN button to select or not. Long press the button MODE to save &exit.)	
dr- + SET	Press the button CERTAIN to revise X phase	
dr- = + SET	Press the button CERTAIN to revise Y phase	
dr- = + SET	Press the button CERTAIN to revise X phase and Y phase both.	
100 + SET	The 100 after ' ' means graph's size, it can be 10~100. Press CERTAIN button and the	
	SEL lights on; press UP or DOWN to change X direction and its size; after change,	
	please press CERTAIN button, and then turn off SEL light and save it.	
= 100 + SET	The 100 after '二' means graphs' size, it can be 10~100. Press CERTAIN button and SEL	

	lights on, press UP or DOWN to change Y direction and its size; after change, please
	press CERTAIN button, and then turn off SEL light and save it.
r0FF + SET	It means whether close remote control function, when SEL lights on, long press the
	button MODE to exit; and it close remote control function. Otherwise remote control
	function opens.
oR du	Test function

Attention: In the SET mode, when increase or decrease to a certain folder, the SEL lights on, it means the effects in the folder can be transferred in AUTO or Sound control mode; If the SEL does not light on, the effects can not be transferred.



 S - 11
 Power:
 Green150mw(532nm)
 Red 500mw(650nm)
 Blue 400mw(450nm)

 Vs-2000
 Power:
 Green500mw(520nm)
 Red 500mw(650nm)
 Blue 1000mw(450nm)

 Vs-4000
 Power:
 Green1000mw(520nm)
 Red 1000mw(650nm)
 Blue 2000mw(450nm)

Play system: DMX512, Sound control, AUTO

Control system: High-speed scanner, scanning angle±20°

Effects: Beams, complicated graphs, animation **Programming:** It can program beams, animations

Interface: RJ45 interface (DMX512)

Power supply: AC 110/220V 50/60HZ

Simple DMX mode

СН	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,
scene selection		the system uses the max. graph to replace.
	0-31	color
	32-63	red
0115	64-95	yellow
CH5 Color selection	96-127	green
Color Selection	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

СН	Channel	Function
	0	All close
	1-99	AUTO
CH1	100-199	Sound control
Turn on &off laser	200-254	hold
	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

224-239 No. 1 Sgraphs library		208-223	No. 1 4 graphs 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. CH6 Graphs zoom 1.31 Zoom effect 1 CH6 Graphs zoom 96-127 Zoom effect 3 Graphs zoom 96-127 Zoom effect 4 128-159 Zoom effect 5 160-191 Zoom effect 7 224-255 Zoom effect 8 0-63 Manual-operate rotation 64-95 Rotation effect 1 96-127 Rotation effect 2 128-159 Rotation effect 3 64-95 Rotation effect 3 160-191 Rotation effect 3 160-191 Rotation effect 4 192-223 Rotation effect 3 160-191 Rotation effect 4 192-223 Rotation effect 3 64-95 Poctation effect 3 64-95 Rotation effect 4 192-223 Rotation effect 3 160-191 Horizontal Move effect 1 192-125 Rotation effect 6 0-63 Manual-operate graph vertical move <t< td=""><td></td><td></td><td></td></t<>			
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224-255	Graphs rotation		
224-255		192-223	Rotation effect 5
CH7			
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CH10 Vertical zoom 64-95		224-255	X zoom effect 6
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160-191 Y zoom 4 192-223 Y zoom 5		128-159	Y zoom 3
	vertical zoom	160-191	Y zoom 4
224-255 Y zoom 6		192-223	Y zoom 5
		224-255	Y zoom 6

	0	GRAPH ORIGINAL COLOR
Forced		
segmentation color	1-255	SEGMENTCOLOR LENGTH
	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
	0-63	Normal stroke
CH13	64-127	Graphs no stroke, retrace line stroke; the bigger the value is, the
Joint&break point		higher the joint brightness is.
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	with CH15
		Manual decision (cdess OUAF is 0.00)
	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.)
		The time it can hold for graph dynamics drawing lay-out (when
	0-255 0-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.)
	0-255 0-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.)
OLME	0-255 0-255 CH15 needs	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14
CH15	0-255 0-255 CH15 needs 0-31	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing
CH15 Drawing control	0-255 0-255 CH15 needs 0-31 32-63	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing
	0-255 0-255 CH15 needs 0-31 32-63 64-95	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing
	0-255 CH15 needs 0-31 32-63 64-95 96-127	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing
	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time
	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately
Drawing control CH16	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is.
CH16 Distortion effect	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can
Drawing control CH16	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects.
CH16 Distortion effect	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255 0-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects. NO use
CH16 Distortion effect auxiliary	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255 0-255	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects. NO use No grating
CH16 Distortion effect auxiliary CH17	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255 0-255 0-51 52-102	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects. NO use No grating Baby's breath grating
CH16 Distortion effect auxiliary	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255 0-255 0-51 52-102 103-153	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects. NO use No grating Baby's breath grating One-dimensional grating
CH16 Distortion effect auxiliary CH17	0-255 CH15 needs 0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255 0-255 0-51 52-102	The time it can hold for graph dynamics drawing lay-out (when CH15 is 64-127 or 160-191.) The joint quantity of cursory drawing (when CH15 is 192-255.) to work with CH14 Positive manual drawing Negative manual drawing Extended drawing Zoom drawing Zoom drawing in two sides at the same time Zoom drawing in the start and in the end separately Cursory drawing The bigger the value is, the smaller the distortion is. Attention: In zoom, rotation, move or roll distortion effects, CH16 can control the distortion range for the above distortion effects. NO use No grating Baby's breath 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	1-99	AUTO
Turn on &off	100-199	Sound control
laser	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
	130-233	(c)
CH20	0-99	The smaller the segment is, the bigger the angle distribution gap of each unit is,
the distribution	100-199	The smaller the segment is, the bigger the angle distribution gap of each unit is,
angle of each	200-255	hold
element of the	200-255	Hold
array		
CH21	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity,
OHZI	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	
	64-95	Manual graph rotation 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
	96-127	vertical move 1 vertical move 2
CH25	128-159	vertical move 2
vertical		
movement	160-191	vertical move 4 vertical move 5
	192-223 224-255	vertical move 5
CH26 horizontal	0-63 64-95	Manual X zoom
		X zoom 1
	96-127	X zoom 2 X zoom 3
	128-159	X zoom 4
zoom	160-191	
	192-223	X zoom 5
	224-255	X zoom 6
	0-63	Manual Y zoom
	64-95	Y zoom 1

	96-127	Y zoom 2	
CH27	128-159	Y zoom 3	
vertical zoom	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	
CHOO	40-47	blue	
CH29 graphs color	48-55	purple	
change	56-63	white	
i s.i.a.i.ge	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	
		ne 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 point	128-159	Graphs no stroke, retrace line no stroke;	
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		
CH31	Manual drawir	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 in both sides at the same time	
	160-191	Zoom drawing at the start and in the end separately	
	192-223	Cursory drawing	
	224-255	Turn-around cursory drawing	
CH33	0-255	The bigger the value is, the smaller the distortion is.	
Distortion control	Attention: Wh	en in zoom, rotation, movement and rolling distortion effect, CH16 can control	
	(the red part means it's different channel function from Graph A.)		
CH34 projection extent control	0-255		
	20-39		
		In each segment, the bigger the value is, the smaller the projection extent.	
	220-239		
	240-255		
	270 233		