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 ~ 35℃。

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.

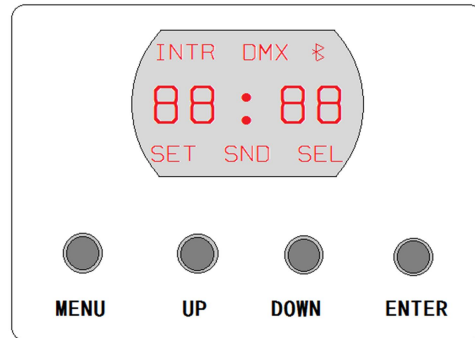Please ask professional repairing person to repair when in faults. Don't open the laser on yourself.

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

Operation panel

MENU: Mode selection
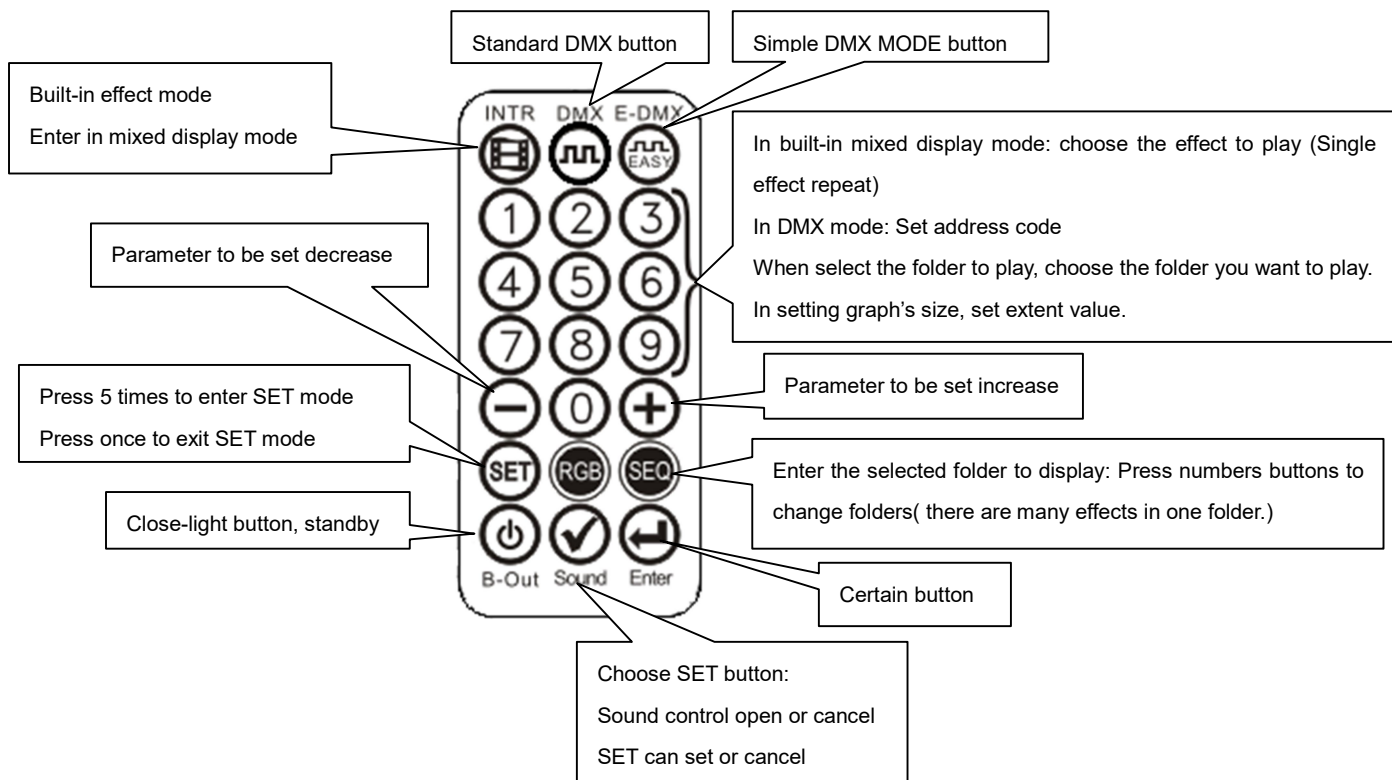
UP & DOWN : modify parameters

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 '═' 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.

Standard DMX button

Simple DMX MODE button

Built-in effect mode
Enter in mixed display mode

In built-in mixed display mode: choose the effect to play (Single effect repeat)
In DMX mode: Set address code
When select the folder to play, choose the folder you want to play.
In setting graph's size, set extent value.

Parameter to be set decrease

Parameter to be set increase

Press 5 times to enter SET mode
Press once to exit SET mode

Enter the selected folder to display: Press numbers buttons to change folders(there are many effects in one folder.)

Close-light button, standby

Certain button

Choose SET button:
Sound control open or cancel
SET can set or cancel

S - 11 **Power:** Green150mw(532nm) Red 500mw(650nm) Blue 400mw(450nm)
Vs-2000 **Power:** Green500mw(520nm) Red 500mw(650nm) Blue1000mw(450nm)
Vs-4000 **Power:** Green1000mw(520nm) Red 1000mw(650nm) Blue2000mw(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

CH	Channel value	Function
CH1	0	close
Turn on &off laser	1-255	open
CH2	0-127	AUTO

Sound control	128-255	Sound control
CH3 graphs selection	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
	112-127	No.8 graphs library
	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 scene selection	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity, the system uses the max. graph to replace.
CH5 Color selection	0-31	color
	32-63	red
	64-95	yellow
	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	AUTO
	100-199	Sound control
	200-254	hold
	255	Graph A close, Graph B can light
CH2 Graph outside & size	0-49	Outside pass
	50-99	Outside reentry
	100-149	Outside disappear
	150-199	Graph enlarge, outside disappear
	200-255	hold
CH3 Graph selection	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
	112-127	No. 8 graphs library
	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.
CH5 Graphs zoom	0	No zoom
	1-31	Zoom effect 1
	32-63	Zoom effect 2
	64-95	Zoom effect 3
	96-127	Zoom effect 4
	128-159	Zoom effect 5
	160-191	Zoom effect 6
	192-223	Zoom effect 7
	224-255	Zoom effect 8
CH6 Graphs rotation	0-63	Manual-operate rotation
	64-95	Rotation effect 1
	96-127	Rotation effect 2
	128-159	Rotation effect 3
	160-191	Rotation effect 4
	192-223	Rotation effect 5
	224-255	Rotation effect 6
CH7 Horizontal movement	0-63	Manual-operate graph horizontal move
	64-95	horizontal Move effect 1
	96-127	horizontal Move effect 2
	128-159	horizontal Move effect 3
	160-191	horizontal Move effect 4
	192-223	horizontal Move effect 5
	224-255	horizontal Move effect 6
CH8 Vertical movement	0-63	Manual-operate graph vertical move
	64-95	vertical move 1
	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
CH9 Horizontal zoom	0-63	Manual-operate X zoom
	64-95	X zoom effect 1
	96-127	X zoom effect 2
	128-159	X zoom effect 3
	160-191	X zoom effect 4
	192-223	X zoom effect 5
	224-255	X zoom effect 6
CH10 Vertical zoom	0-63	Manual-operate Y zoom
	64-95	Y zoom 1
	96-127	Y zoom 2
	128-159	Y zoom 3
	160-191	Y zoom 4
	192-223	Y zoom 5
	224-255	Y zoom 6

CH11 Forced segmentation color	0	GRAPH ORIGINAL COLOR
	1-255	SEGMENTCOLOR LENGTH
CH12 Graph color change	0-7	Original color (default)
	8-15	red
	16-23	yellow
	24-31	green
	32-39	indigo
	40-47	blue
	48-55	purple
	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
CH13 Joint&break point control	0-63	Normal stroke
	64-127	Graphs no stroke, retrace line stroke; the bigger the value is, the higher the joint brightness is.
	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	
	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 Drawing control	CH15 needs to work with CH14	
	0-31	Positive manual drawing
	32-63	Negative manual drawing
	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 Distortion effect auxiliary	0-255	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.
CH17 grating selection	NO use	
	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.

CH18 Turn on &off laser	0	close
	1-99	AUTO
	100-199	Sound control
	200-254	hold
	255	Graph A close, graph B lights on
CH19 Graph outside & size	0-49	Outside pass
	50-99	Outside retrace
	100-149	Outside disappear
	150-255	hold
CH20 the distribution angle of each element of the array	(c)	
	0-99	The smaller the segment is, the bigger the angle distribution gap of each unit is,
	100-199	The smaller the segment is, the bigger the angle distribution gap of each unit is,
	200-255	hold
CH21	0-255	Each value corresponds to one graph; if the value is beyond graphs' quantity,
CH22 graph zoom	0	No zoom
	1-31	Zoom effect 1
	32-63	Zoom effect 2
	64-95	Zoom effect 3
	96-127	Zoom effect 4
	128-159	Zoom effect 5
	160-191	Zoom effect 6
	192-223	Zoom effect 7
	224-255	Zoom effect 8
CH23 graph rotation	0-63	Manual graph rotation
	64-95	Rotation effect 1
	96-127	Rotation effect 2
	128-159	Rotation effect 3
	160-191	Rotation effect 4
	192-223	Rotation effect 5
	224-255	Rotation effect 6
CH24 horizontal movement	0-63	Manual graph horizontal move
	64-95	horizontal move 1
	96-127	horizontal move 2
	128-159	horizontal move 3
	160-191	horizontal move 4
	192-223	horizontal move 5
	224-255	horizontal move 6
CH25 vertical movement	0-63	Manual graph vertical move
	64-95	vertical move 1
	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
CH26 horizontal zoom	0-63	Manual X 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 vertical zoom	96-127	Y zoom 2
	128-159	Y zoom 3
	160-191	Y zoom 4
	192-223	Y zoom 5
	224-255	Y zoom 6
CH28 Forced	0	Default color
	1-255	The segment color length
CH29 graphs color change	0-7	Original color (default)
	8-15	red
	16-23	yellow
	24-31	green
	32-39	indigo
	40-47	blue
	48-55	purple
	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
CH30 Joint&break point control	(the red part means it's different channel function from Graph A.)	
	0-63	Normal stroke
	64-127	Graphs no stroke, retrace line stroke
	128-159	Graphs no stroke, retrace line no stroke;
	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.	
CH31 drawing control auxiliary	Needs to work with CH32	
	Manual drawing when CH32 is 0-63.	
	The graph dynamics drawing lay-out holding time when CH32 is 64-127, or 160-191	
	Cursory drawing joint quantity when CH32 is 192-255	
CH32 Drawing control	Needs to work with CH31	
	0-31	Positive manual drawing
	32-63	Negative manual drawing
	64-95	Enlarge drawing
	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 Distortion control	0-255	The bigger the value is, the smaller the distortion is.
	Attention: When in zoom, rotation, movement and rolling distortion effect, CH16 can control	
CH34 projection extent control	(the red part means it's different channel function from Graph A.)	
	0-255	In each segment, the bigger the value is, the smaller the projection extent.
	20-39	
	....	
	220-239	
	240-255	