# **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  $^\circ\!\mathrm{C}\,_\circ$ 

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

Don't use is beyond the voltage AC110V $\sim$ 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.



Play system: DMX512, Sound control, AUTOControl system: High-speed scanner, scanning angle±20°Effects: Beams, complicated graphs, animationProgramming: It can program beams, animationsInterface: RJ45 interface (DMX512)Power supply: AC 110/220V50/60HZ

#### 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
СНЗ	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
CH5 Color selection	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

СН	Channel	Function
	0	All close
	1-99	AUTO
	100-199	Sound control
Turn on con 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
	208-223	No. 1 4 graphs library

	224-239	No. 1 5graphs library
	240-255	No. 0 graphs library
CH4	0-255	Each value corresponds to one graph; if the value is beyond graphs'
Graphs selection		quantity, the system uses the max. graph to replace.
	0	No zoom
	1-31	Zoom effect 1
	32-63	Zoom effect 2
CH5	64-95	Zoom effect 3
Graphs zoom	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
	0-63	Manual-operate rotation
	64-95	Rotation effect 1
CHE	96-127	Rotation effect 2
Graphs rotation	128-159	Rotation effect 3
Cruphe rotation	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	96-127	horizontal Move effect 2
Horizontal	128-159	horizontal Move effect 3
movement	160-191	horizontal Move effect 4
	192-223	horizontal Move effect 5
	224-255	horizontal Move effect 6
	0-63	Manual-operate graph vertical move
	64-95	vertical move 1
CLIP	96-127	vertical move 2
Vertical	128-159	vertical move 3
movement	160-191	vertical move 4
	192-223	vertical move 5
	224-255	vertical move 6
	0-63	Manual-operate X zoom
	64-95	X zoom effect 1
0.10	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
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	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
	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
CH15	32-63	Negative manual drawing
Drawing control	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
auxiliary		control the distortion range for the above distortion effects.
		NO use
CH17 grating selection	0-51	No grating
grating selection	52-102	Baby's breath grating
grating selection	52-102 103-153	Baby's breath grating One-dimensional grating
grating selection	52-102 103-153 154-204	Baby's breath grating One-dimensional grating 3D face 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
	100 200	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	200 200	
array		
CH21	0-255	Each value corresponds to one graph: if the value is beyond graphs' quantity
	0	
	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
	160-101	Zoom effect 6
	102 223	Zoom effect 7
	224 255	Zoom effect 8
	0.63	
	64.05	
	04-95	Rotation effect 2
CH23	90-127	Rotation effect 2
graph rotation	120-109	Rotation effect 4
	160-191	Rotation effect 4
	192-223	Rotation effect 0
	224-200	Rotation effect o
	0-03	
	04-95	
CH24	96-127	norizontal move 2
horizontal	128-159	horizontal move 3
movement	160-191	nonzontal move 4
	192-223	norizontal move 5
	224-255	norizontal move 6
	0-63	Manual graph vertical move
	64-95	
CH25	96-127	vertical move 2
vertical	128-159	vertical move 3
movement	160-191	vertical move 4
	192-223	
	224-255	vertical move 6
CH26 horizontal	0-63	
	04-95	
	96-127	X zoom 2
	128-159	X zoom 3
zoom	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

	00.407	Y A	
	96-127	Y zoom 2	
	128-159	Y ZOOM 3	
	160-191	Y ZOOM 4	
	192-223	Y ZOOM 5	
01100	224-255	Y ZOOM 6	
CH28	0	Default color	
Foiced	1-255		
	0-7	Uriginal 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		
	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	
	(tł	ne red part means it's different channel function from Graph A.)	
CHOO	0-63	Normal stroke	
Loint&break point	64-127	Graphs no stroke, retrace line stroke	
control	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	
	<i>A</i>	Attention: the bigger the value is, the higher the joint brightness is.	
01104	Needs to work	with CH32	
CH31	Manual drawing when CH32 is 0-63.		
auxiliary	The graph dyn	amics drawing lay-out holding time when CH32 is 64-127, or 160-191	
auxiliary	Cursory drawir	ng joint quantity when CH32 is 192-255	
	Needs to work	with CH31	
	0-31	Positive manual drawing	
CH33	32-63	Negative manual drawing	
Drawing control	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	0-255	The bigger the value is, the smaller the distortion is.	
Distortion control	Attention: When in zoom, rotation, movement and rolling distortion effect, CH16 car		
CH34 projection extent control	(the red part m	neans it's different channel function from Graph A.)	
	0-255		
	20-39	In each compart, the higger the value is the smaller the prejection output	
		in each segment, the bigger the value is, the smaller the projection extent.	
	220-239		
	240 255		