Laser Show System
User Guide

User Manual

Like above picture,
MODE: Press one time change one mode
UP、DOWN: when in PRG and IL mode short press to change the working file, long press to change the whole folder, when in sound mode, it' ll change the acoustic sensitivity.

matters needing attention

1: The optimum temperature range of laser lamp is 20 ~ 35 ℃.

2: Do not direct the laser at human eyes to avoid injury.

3: Please do not use beyond AC110V ~ 240V voltage, and ensure reliable grounding

4: Please do not switch frequently, so as not to affect the normal service life of the laser lamp.

5: Do not touch the lens of the laser projection window with your hand, so as not to affect the use effect.

6: In case of failure, please ask professional personnel for maintenance. Do not disassemble the lamp without authorization.

7: According to the use environment, clean the lens regularly to ensure the light efficiency

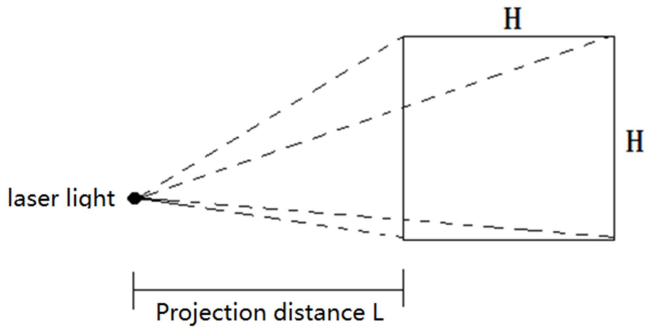
Please note: artificial damage or tear warranty label, are not within the scope of warranty! Please refer to the warranty details

Power consumption table of laser lamp:

Output power / W	Total power（W）	
	Min	Max
RGB/6W	40	70
RGB/10W	60	110
RGB/12W	70	130
RGB/15W	80	140
RGB/20W	95	220
RGB/30W	310	520
RGB/40W	370	580
RGB/50W	410	670
RGB/60W	480	720

Laser range and coverage:

The projection range is a square size of H* H, as shown in the figure



The length of H = projection distance * 0.93

0.93 is the scanning coefficient of plus or minus 25 degrees. If the scanning parameter is plus or minus 20 degrees, the coefficient needs to be changed to 0.73

Contents displayed on the display, comparison table of various functions

Function list	Subdirectory	Function description
Auto	show	Classification of program groups 0 is recommended
	step	For the sub programs in each folder, when cycle is selected, all sub programs will be played
	rate	Pattern movement speed. The higher the value, the faster the movement speed. It is recommended to set it equal to 20
Sound	show	Classification of program groups 0 is recommended
	step	For the sub programs in each folder, when cycle is selected, all sub programs will be played
	Sensitivity	Adjust the control sensitivity of the sound
	clear	Learn to adapt and filter out special noise in the environment
DMX:1~512	type	DMX512　18CH/25CH
	Start add	address code
Slave	Slave mode	When DMX interfaces are connected to each other, they follow the actions of the host (self-propelled playback, sound control, SD list and storage list are played with the host)
SD List	show	The folders in SD card are classified program groups. When cycle is selected, the programs under all folders will be played in cycle
	file	For the sub programs under each folder, when cycle is selected, the sub programs in the current folder will be played in cycle
	mode	Program in SD card, automatic and sound control switching
	rate	The larger the value, the slower the picture moves
ExFlash	show	View program class storage order
	file	View sub program storage order
	mode	Automatic and voice controlled switching
	rate	The larger the value, the slower the picture moves
Setting	Scan-speed	Scan parameter setting
	DB25-ilda -XY	Adjust ILDA X, Y positive and negative, and adjust whether to automatically recognize the insertion of DB25 pin parallel port line
	XY	X and Y direction setting, sizing. This setting is invalid when using external ILDA interface input
	Color	Color and brightness adjustment
	FFT/sound	Sound control action parameter adjustmen
	SD	SD card playback parameter regulator
	DMX	DMX parameter adjustment will affect 22 channel performance in 25 channel mode
	Catch DMX	Not open, function temporarily reserved
	Safe THR	Single point residence time setting, the larger the value, the better the protection effect and the safer
	Shutter use	Detect DB25 pin parallel port (13th pin)
	interpolate	Enabled by default to prevent gaps in mobile graphics, which will affect the performance of channel 22 in 25CH mode
Device	Language/语言	English / Chinese
	Closed time	Set the on time of the LCD
	RESET Parameter	Restore factory settings

DMX Channel table

18CH

Channel	function	section	Control description
CH1	Dimmer	0~255	Dimmer
CH2	Model	0-49	Auto (0<CH3<250，pattern)(CH3=>250，Loop Playback)
		50-99	Sound(0<CH3<250，pattern) (CH3=>250，Loop Playback)
		100-149	count down
		150-200	animation
		201-255	Geometric beam
CH3	gobo /frame	0-249	pattern
		250-255	Sound control or auto loop animation
CH4	Strobe	0-10	No Strobe
		11-199	Flash by frequency
		200-255	Sound control flashing
CH5	color	0-1	Fixed color
		2-15	7 solid colors （detail with in below Table18）
		16-19	Automatic change of 7 solid colors
		20-33	7 colors（detail with in below Table18）
		34-37	7 kinds of color automatic change
		38-154	Color segment（detail with in below Table18）
		155-255	Color segment flow
CH6	Line & surface	0-63	Show as faceted effect
		64-127	Plane dot display effect
		128-191	Segmented display
		192-255	Only point and line effects
CH7	X move	0-125	Manually adjust the X position
		126-185	Automatic cyclic movement in X direction
		186-225	Automatic jumping movement in X direction
		226-245	Automatic irregular jump in X direction
		246-255	Sound control X-direction irregular jump
CH8	Y move	0-125	Manually adjust the Y position
		126-185	Automatic cyclic movement in Y direction
		186-225	Automatic jumping movement in Y direction
		226-245	Automatic irregular jump in Y direction
		246-255	Sound control Y-direction irregular jump
CH9	Zoom	0-10	No zoom
		11-87	Manually zoom
		88-150	Auto zoom in
		151-200	Auto zoom out
		201-255	Cycle zoom in and zoom out
CH10	X_zoom	0	No zoom
		1-128	Manual zoom in X direction
		129-255	Auto zoom in X direction

CH11	Y_zoom	0	No zoom
		1-128	Manual zoom in Y direction
		129-255	Auto zoom in Ydirection
CH12	rotate	0	Stop rotation
		1-128	Manual rotation
		129-192	Automatic clockwise rotation
		193-255	Automatic counter clock rotation
CH13	depiction	0-10	no depiction
		10-74	Manually hide and add
		75-104	Automatic depiction (The higher the value, the faster the speed)
		105-144	Auto hide (The higher the value, the faster the speed)
		145-184	Auto paint and hide (The higher the value, the faster the speed)
		185-224	Automatic cycle painting1 (The higher the value, the faster the speed)
		225-255	Automatic cycle painting2(The higher the value, the faster the speed)
CH14	X wave	0-9	No X wave
		10-69	X Small wave
		70-129	X Middle wave
		130-189	X larger wave
		190-255	X max wave
CH15	Y wave	0-9	No Y wave
		10-69	Y Small wave
		70-129	Y Middle wave
		130-189	Y larger wave
		190-255	Y max wave
CH16	red	0-255	0 = 100%, 255 = 0%
CH17	green	0-255	0 = 100%, 255 = 0%
CH18	blue	0-255	0 = 100%, 255 = 0%

Table18(TTL)

2-15	7 segment pure color		
	2-3		red
	4-5		green
	6-7		blue
	8-9		yellow
	10-11		cyan
	12-13		purple
	14-15		white
20-33	7 segment multi-color（red，green，blue，yellow，cyan，purple，white）		
		Color flow	
	20--21	1 step	From: red，green，blue，yellow，cyan，purple，white To ：green，blue，yellow，cyan，purple，white，red
	22--23	2 step	From: red，green，blue，yellow，cyan，purple，white To ：blue，yellow，cyan，purple，white，red，green
	24--25	3 step	From: red，green，blue，yellow，cyan，purple，white To ：yellow，cyan，purple，white，red，green，blue
	26--27	4 step	From: red，green，blue，yellow，cyan，purple，white To ：cyan，purple，white，red，green，blue，yellow
	28--29	5 step	From: red，green，blue，yellow，cyan，purple，white

			To ：purple，white，red，green，blue，yellow，cyan
	30--31	6 step	From: red，green，blue，yellow，cyan，purple，white To ：white，red，green，blue，yellow，cyan，purple
	32--33	7 step	From: red，green，blue，yellow，cyan，purple，white To ：red，green，blue，yellow，cyan，purple，white

25CH

Channel	function	section	Control description
CH1	Dimmer	0~255	Dimmer
CH2	Model	0-4	close
		5-49	Auto (0<CH3<250，pattern)(CH3=>250，Loop Playback)
		50-99	Sound(0<CH3<250，pattern) (CH3=>250，Loop Playback)
		100-149	count down
		150-200	animation
		201-255	Geometric beam
CH3	gobo /frame	0-249	pattern
		250-255	Sound control or auto loop animation
CH4	Automatic playback speed	0-4	Default speed
		5	Speed 0, forbidden
		6-255	5 = slow, 255 = fast. (interval 5)
CH5	In Color	0-3	Fixed color
		4-6	Color change, CH5 and CH7 are pushed here, and the overall color change can be realized through CH6
		7-9	Solid color, CH5 and CH7 are pushed here, and the overall solid color change can be realized through CH6
		10-127	Color segment（detail with in below Table25）
		128-191	Discoloration 1 — For analog laser, please refer to the color table in SD card: 64 colors; For TTL lasers, see color table: table25
		192-255	Discoloration 2
CH6	Color Drawing	0-63	Manually Fade Out — Fade In The fade color is determined by the "CH5" channel Fade Out The fade color is determined by the "CH7" channel
		64-127	Manually Fade In
		128-159	Auto Fade Out
		160-191	Auto Fade in
		192-223	Cycle auto fade in and out 1
		224-255	Cycle auto fade in and out 2
CH7	Out Color	0-3	Fixed color
		4-6	Color change, CH5 and CH7 are pushed here, and the overall color change can be realized through CH6
		7-9	Solid color, CH5 and CH7 are pushed here, and the overall solid color change can be realized through CH6
		10-127	Color segment（detail with in below Table25）
		128-191	Solid color — For analog laser, please refer to the color table in SD card: 64 colors; For TTL lasers, see color table: table25
		192-255	colour
CH8	Move X	0	0%, Middle pos
		1-255	1 = -100%, 127 = 0%, 255 = 100%
CH9	auto Move X	0-84	Front to end
		85-169	End to front
		170-255	End to end loop

CH10	Move Y Y	0	0%, Middle pos	
		1-255	1 = -100%, 127 = 0%, 255 = 100%	
CH11	auto Move Y	0-84	Front to end	
		85-169	End to front	
		170-255	End to end loop	
CH12	scale	0-127	Size, 0 = 100%, 127 = 1%	
		128-169	Zoom bigger	
		170-211	Zoom small	
		212-255	Zoom Big-small loop	
CH13	center rotate	0-127	Rotate, 1= 5 degree , 128 = 720 degrees	
		128-191	reverse rotation	
		192-255	forward rotation	
CH14	X zoom Twist	0-127	Manual zoom in X direction	
		128-191	Auto zoom in X direction	
		192-255	Twist in X direction	
CH15	X zoom Twist	0-127	Manual zoom in Y direction	
		128-191	Auto zoom in Y direction	
		192-255	Twist in Y direction	
CH16	X Wave	0-127	Manually adjust the amplitude	period and amplitude setting by ch18(Wave ref)
		128-191	X forward wave	
		192-255	X reverse wave	
CH17	Y Wave	0-127	Manually adjust the amplitude	period and amplitude setting by ch18(Wave ref)
		128-191	Y forward wave	
		192-255	Y reverse wave	
CH18	Wave ref period and amplitude	0-63	1 period wave	
		64-127	2 period wave	
		128-191	3 period wave	
		192-255	4 period wave	
CH19	Show Point Line&surface	0-9	Default display	
		10-129	The number of points is 30 ~ 4. The larger the value, the lower the brightness. The fewer the value, the higher the brightness	
		130-191	point number： 16	
		192-255	point number： 8	
CH20	Strobe	0-2	No strobe	
		3-255	Flash by frequency	
CH21	Array	0	no	
		1-63	1 graph 8 position	X or Y movement may be affected (9-12 channels), depending on the array position, and the multi graph array will accelerate the original movement speed.
		64-127	2 graphs 4 position	
		128-175	3 graphs 3 position	
		176-255	4 graphs 2 position	
CH22	Border	0-63	Have subdivide with interpolate	Eliminate visible gaps in end joints
		64-127	Real time	
		128-191	Have subdivide with interpolate	
		192-255	Real time	

CH23	red	0-255	0 = 100%, 255 = 0%
CH24	green	0-255	0 = 100%, 255 = 0%
CH25	blue	0-255	0 = 100%, 255 = 0%

Table25(TTL)

<table>
<tr><td rowspan="9">128-191</td><td colspan="3">7 segment pure color</td></tr>
<tr><td colspan="2">128-137</td><td>red</td></tr>
<tr><td colspan="2">138-147</td><td>green</td></tr>
<tr><td colspan="2">148-157</td><td>blue</td></tr>
<tr><td colspan="2">158-167</td><td>yellow</td></tr>
<tr><td colspan="2">168-177</td><td>cyan</td></tr>
<tr><td colspan="2">178-187</td><td>purple</td></tr>
<tr><td colspan="2">188-191</td><td>white</td></tr>
<tr><td rowspan="9">192-255</td><td colspan="3">7 segment multi-color（red，green，blue，yellow，cyan，purple，white）</td></tr>
<tr><td></td><td>Color flow</td><td></td></tr>
<tr><td>192--201</td><td>1 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：green，blue，yellow，cyan，purple，white，red</td></tr>
<tr><td>202--211</td><td>2 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：blue，yellow，cyan，purple，white，red，green</td></tr>
<tr><td>212--221</td><td>3 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：yellow，cyan，purple，white，red，green，blue</td></tr>
<tr><td>222--231</td><td>4 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：cyan，purple，white，red，green，blue，yellow</td></tr>
<tr><td>232--241</td><td>5 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：purple，white，red，green，blue，yellow，cyan</td></tr>
<tr><td>242--242</td><td>6 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：white，red，green，blue，yellow，cyan，purple</td></tr>
<tr><td>252--255</td><td>7 step</td><td>From: red，green，blue，yellow，cyan，purple，white
To ：red，green，blue，yellow，cyan，purple，white</td></tr>
</table>