

F9 Series Animated Laser Beam User Manual



Thank you for purchasing this product. Please read all the safety and operations instructions carefully before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check the attachments listed on this page after opening the carton. If carton damaged or attachment missed in transit, please contact your dealer or our after sales service department.

● **Package list:**

When you unpack the case, please take time to examine the items as follows:

- RGB animation laser projector 1 pcs
- Power cord 1 pcs
- User manual 1 pcs

● **Notice:**

1. Avoid direct eye exposure to laser beam. Never intentionally expose your eye or others to direct laser beam. It can potentially cause instant eye injury or blindness if laser beam striking directly to eyes.
2. Don't point onto any oncoming pedestrians, vehicles or traffic routes from land, sea or air.
3. Don't project at or within the flight path of aircraft. If your intended surface is within 10 nautical miles of airport, lower the angle of light so that no lasers pointing into the sky.
4. Don't turn on and off the unit frequently.
5. Before using this unit makes sure the power supply is ground.
6. Use cleaning tissue to remove the dust absorbed on the external lenses periodically to optimize light output.
7. Don't set the scanner speed beyond the the real scanner speed of the fixtures while control the laser via any software.
8. Only the qualified person can do the electrical installation and repair job in accordance with all applicable codes and standards.

● **Technical Parameters:**

Input power: AC90-240, 50-60HZ

Rated power: <200W

Laser power: RGB1-5W

Laser category: pure solid-state semiconductor laser, with high stability and long life.

Laser modulation: analog modulation or TTL modulation

The beam diameter of the laser exit port: <6mm

Laser beam divergence angle: <1.6mrad

Laser wavelength: red light 638±5nm, green light 525±5nm, blue light 450±5nm

Vibration mirror scanning system: 15KPPS galvanometer

Sweep angle of galvanometer: ±25°; input signal ±5V; linear distortion <2%

Laser pattern: 128 patterns and animations are built-in on the motherboard.

Control mode: ILDA standard computer laser software/DMX512/sound control/self-propelled/master-slave

Control interface: International ILDA DB25 interface (for an optional function, the cost increases by RMB50), which can be connected to general laser software such as Pangolin, and the international general DMX512 interface.

DMX channel: 6/25CH

DMX special effects: pen break, strobe, rotate, move, roll, split image, draw gradually, change color, change size, etc.

Suitable places: small and medium-sized performances, bars and other places

Working environment: indoor (minus 10 to minus 35 degrees)



Warning!!!! Do not look directly at the light beam at close range to avoid eye damage!

● **LCD display panel:**



Using touch keys and LCD Menu display, it is easy to use menu operation .The automatic loading system software ,after which will show software version .

Through the UP and DOWN key to select the function. The Mode Key is to determine the functions. Press ESC keys is to return to the level menu.

● **LCD function menu setting**

Level 1 menu	Level 2 menu	Level 3 menu
1、 DMX-512 DMX-512-function	Running (running DMX-512 function)	
	A001 (light address code)	
2、 Auto (Automatic function)	Running (automatic function)	
	Effect1、 2、 3 (Selecting Effect 1,2,3)	
3、 Music (Music control function)	Running (Running sound function)	
	Effect1、 2、 3 (Selecting Effect 1,2,3)	
4、 Testing Testing function	Running (Running Testing function)	
	Test 1、 2、 3 Select Testing pattern	
5、 Setting	1、 Address	Address

(Setting function)	(Address setting)	001 address code
	2、Light (Background light setting)	1、 ON 2、 ON 5S
	3、 One Beam One beam protect setting	1、 OFF 2、 ON
	4、 Master (Master setting)	1、 OFF 2、 ON
	5、 Channel Channel setting	1、 12CH 2、 25CH
	6、 Default (Recover the default setting)	1、 Yes 2、 No
	After selecting yes: 1: Auto-Effect1 2: Address-001Light-ON 5S、 One Beam-ON、 Master-ON、 Channel-12CH、 3: Size-128、 Color-RGB、 Invert X-No、 Invert Y-No	
6、 Laser technical parameters setting	1、 Size (Laser scanning range setting)	Setting size parameter 128
	2、 Color (Laser Color setting)	1、 Single 2、 RGY 3、 RBP 4、 GBA 5、 RGB 6、 WYAP Choose color
	3、 Invert X Opposition X	1、 Yes 2、 No
	4、 Invert Y Opposition Y	1、 Yes 2、 No

三、●12 Channel functions::

Channel		DMX-512 numerical value	Controlling
CH1	Laser off	0~41	laser off
	Automatic	42~83	manual control
		84~125	running animation effect
		126~167	running light beam effect
	Music Control	168~209	running light beam effect
		210~251	running animation effect
252~255		manual control	
CH2	Pattern group selecting	0~255	one Pattern group per 32 value

CH3	Pattern setting	0~255	one pattern per16 value
CH4	Pattern rotation	1~127	Rotation angle selection
		128~191	speed adjustment in reverse rotation
		192~255	speed adjustment in positive rotation
CH5	Patterns horizontal rotation	1~127	Horizontal rotation selection in position
		128~255	Horizontal rotation selection in speed
CH6	Patterns vertical rotation	1~127	Vertical rotation selection in position
		128~255	Vertical rotation selection in speed
CH7	Pattern horizontal move	1~127	Horizontal move selection in position
		128~255	Horizontal move selection in speed
CH8	Pattern vertical move	1~127	vertical move selection in position
		128~255	vertical moving selection in speed
CH9	Pattern scaling	0~63	pattern size selection
		64~127	Reduce speed selection
		128~191	Zoom in speed selection
		192~255	zoom speed selection
CH10	Pattern gradually drawing 一	1~127	Adjustment in gradually drawing speed
	Pattern gradually drawing 二	128~255	
CH11	Scanning speed	0~127	Adjustment in scanning speed
	Point effect	128~255	
CH12	Color mode	0~63	Fixed color selection
		64~127	Speed selection in Color change effect
		128~191	Speed selection in flowing Water effect
		192~255	Speed selection in gradually drawing

四、●25 Channel functions::

Channel		DMX-512 numerical value	Controlling
CH1	Laser off	0~41	Laser off
	Automatic	42~83	manual control
		84~125	running animation effect
		126~167	running light beam effect
	Music Control	168~209	running light beam effect
		210~251	running animation effect
252~255		manual control	
CH2	Pattern A group selecting	0~255	one Pattern group per 32 value

CH3	Group A Patterns selecting	0~255	one pattern per16 value
CH4	Group A Patterns rotation	1~127	Rotation angle selection
		128~191	speed adjustment in reverse rotation
		192~255	speed adjustment in positive rotation
CH5	Group A Pattern horizontal rotation	1~127	Horizontal rotation selection in position
		128~255	Horizontal rotation selection in speed
CH6	Group A Patterns vertical rotation	1~127	Vertical rotation selection in position
		128~255	Vertical rotation selection in speed
CH7	Group A Patterns horizontal move	1~127	Horizontal move selection in position
		128~255	Horizontal move selection in speed
CH8	Group A patterns vertical move	1~127	vertical move selection in position
		128~255	Vertical move selection in speed
CH9	Group A Pattern size	1~63	Pattern size selection
		64~127	Reduce speed selection
	Group A patterns scaling	128~191	Zoom in speed selection
		192~255	zoom speed selection
CH10	Group A Pattern gradually drawing 一	1~127	Adjustment in gradually drawing speed
	Group A Pattern gradually drawing 二	128~255	
CH11	Group A Scanning speed	0~127	Adjustment in scanning speed
	Group A Point effect	128~255	
CH12	Group A Color mode	0~63	Fixed color selection
		64~127	Speed selection in Color change effect
		128~191	Speed selection in flowing Water effect
		192~255	Speed selection in gradually drawing
CH13	Group A Biggest pattern	0~255	zoom adjustment is the biggest pattern , and selection from big to small
CH14	Pattern B group selecting	0~255	one Pattern group per 32 value
CH15	Group B Patterns selecting	0~255	one pattern per16 value
CH16	Group B Patterns rotation	1~127	Rotation angle selection
		128~191	speed adjustment in reverse rotation
		192~255	speed adjustment in positive rotation
CH17	Group B Pattern horizontal rotation	1~127	Horizontal rotation selection in position
		128~255	Horizontal rotation selection in speed
CH18	Group B Patterns vertical rotation	1~127	Vertical rotation selection in position
		128~255	Vertical rotation selection in speed
CH19	Group B Patterns horizontal move	1~127	Horizontal move selection in position
		128~255	Horizontal move selection in speed

CH20	Group B patterns vertical move	1~127	vertical move selection in position
		128~255	Vertical move selection in speed
CH21	Group B Pattern size	0~63	Pattern size selection
	Group B patterns scaling	64~127	Reduce speed selection
		128~191	Zoom in speed selection
		192~255	zoom speed selection
CH22	Group B Pattern gradually drawing 一	0~127	Adjustment in gradually drawing speed
	Group B Pattern gradually drawing 二	128~255	
CH23	Group B scanning speed	0~127	Adjustment in scanning speed
	Group B Point effect	128~255	
CH24	Group B Color mode	0~63	Fixed color selection
		64~127	Speed selection in Color change effect
		128~191	Speed selection in flowing Water effect
		192~255	Speed selection in gradually drawing
CH25	Group B Biggest pattern	0~255	zoom adjustment is the biggest pattern , and selection from big to small

● **Maintenance**

It is very important to keep the RGB Animation laser light clean, therefore please clean Dust-proof glass monthly to keep the lights away from dust, dirt or fog juice.