

AVTech SATURN700RGB 700W Power LED Tilt Moving Strobe



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AVTech SATURN700RGB 700W Power LED Tilt Moving Strobe



Specifications

- **Product Name:** SATURN70 0 RGB
- **Power:** 700W LED tilt moving strobe
- **Usage:** Indoor and outdoor (IP65)

Product Usage Instructions

Safety Instructions

1. After receiving the lights, check for any damages caused by transportation. If there are damages, do not use the device and contact your dealer or manufacturer immediately.
2. Do not install the fixture on inflammable surfaces directly.
3. The fixture should only be handled by qualified personnel for installation, operation, and maintenance.
4. Maintain a minimum distance of 3 meters when projecting the beam onto inflammable surfaces.

Dimensions

- Refer to the product manual for detailed dimensions.

Control Panel

- The control panel includes operation buttons for mode selection, power input/output details, ART-NET and DMX connections. Follow the specific panel operations as described in the manual.

Lighting Parameters

- Refer to the Technical Data Sheet for detailed optical and electronic parameters of the product.

FAQ

Q: Can this product be used outdoors?

A: Yes, the product is suitable for both indoor and outdoor use with an IP65 rating.

Q: What is the power requirement for this product?

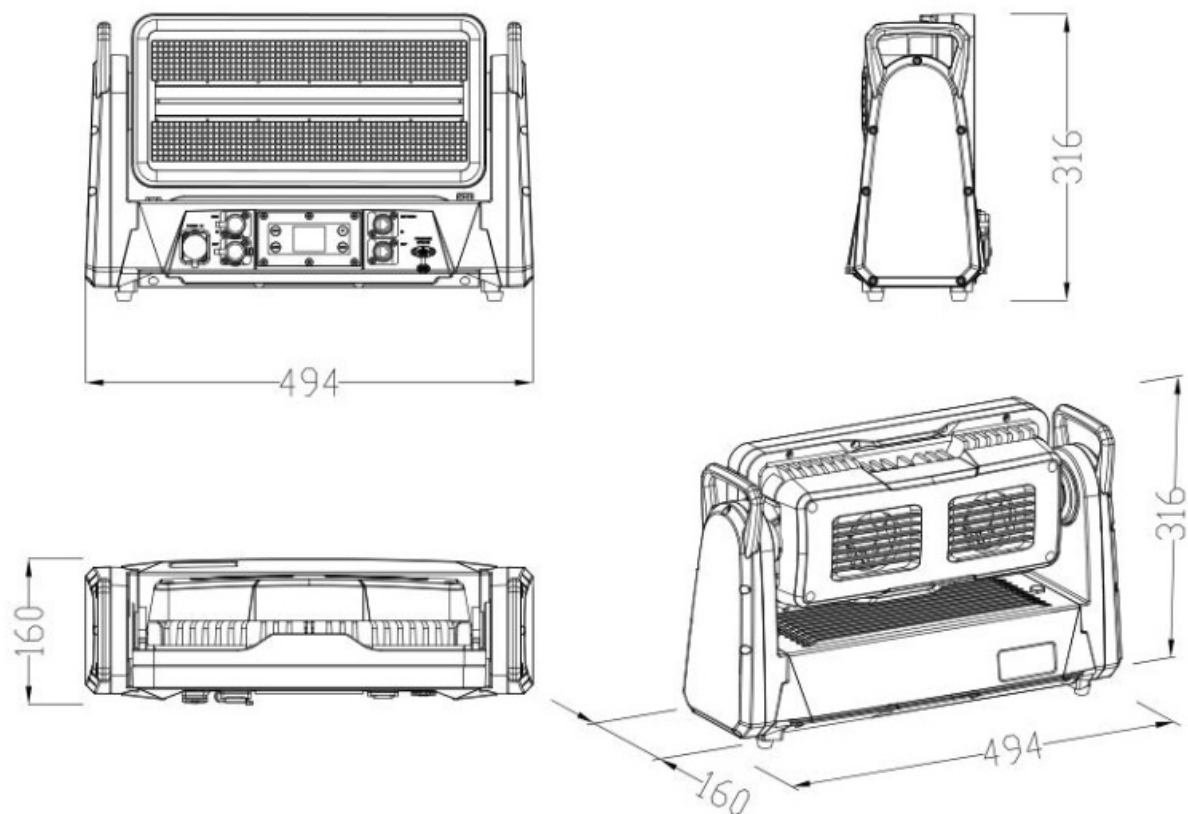
A: The input voltage range is 100-240V at 50/60Hz with a power output of 700W.

Before using this lamp, please read this manual thoroughly

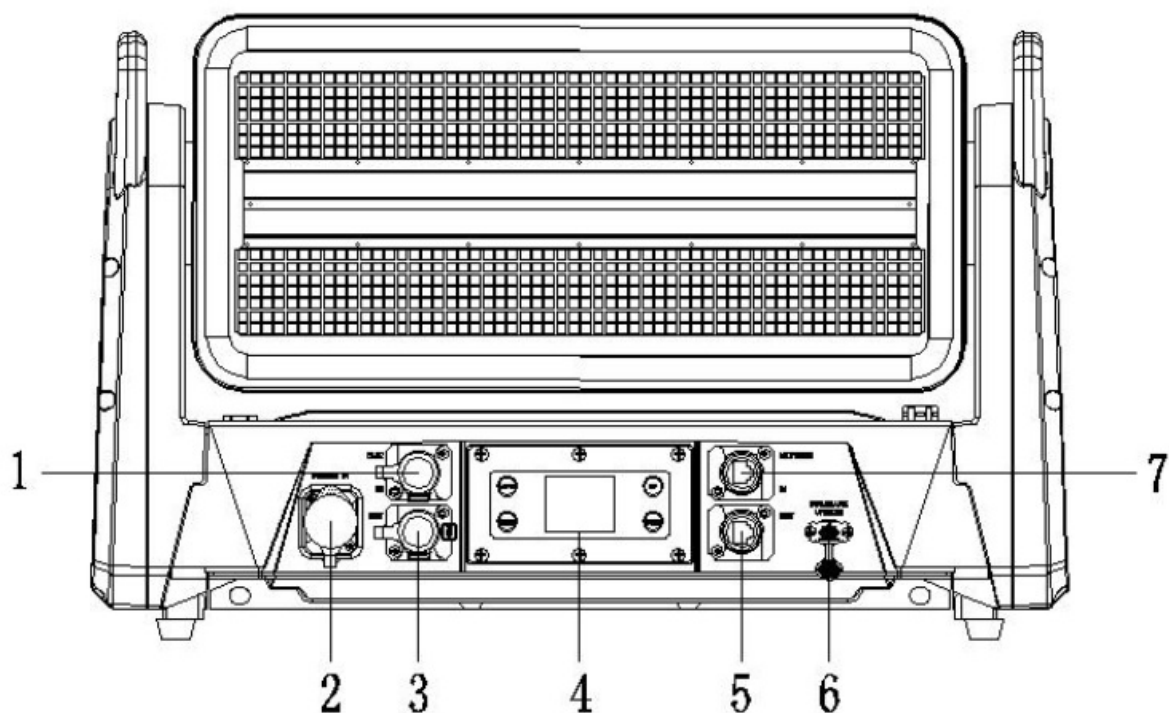
Safety instructions

- After receiving the lights, please open to check whether there is any damage caused by transportation.
- In case of damages caused by transportation, please don't this device and contact your dealer or manufacturer as soon as possible.
- The projector is for indoor and outdoor use, IP65.
- Do not install the fixtures onto inflammable surfaces directly. 
- The fixture is only intended for installation, operation and maintenance by qualified personnel.
- Do not project the beam onto inflammable surfaces, minimum distance is 3 meters.  3m
- Avoid direct exposure to the light from the lamp. The light is harmful to the eyes.
- Do not attempt to dismantle and/or modify the projector in any way.
- Electrical connection must only be carried out by qualified personnel.
- Before installation, ensure that the voltage and frequency of the power supply match the power requirements of the fixture.
- It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards. 
- Do not connect this device to any other type of dimmer apparatus.
- The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in the "Installing the projector" section.
- Shields and lenses shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.
- The exterior surface temperature of the luminaire after 5 minutes of operation is 45°C when steady state is achieved 70°C. There are no user-serviceable parts inside the projector, do not open the housing and never operate the fixture with the covers removed.
- There are no user-serviceable parts inside this light, please check whether all covers or shells have been installed and screws have been tightened securely. It is forbidden to use lights with covers(or shells) open.
- If you have any questions, don't hesitate to consult your dealer or manufacturer.

Dimensions



control Panel



1. **Panel operation buttons:** mode UP Down Enter
2. **power input:** IP65 POWER CON cable Input voltage 100-240V 50/60HZ
3. **Power Output:** IP65 POWER CON power cable Output voltage 100-240V 50/60HZ
4. **ART-NET input:** Connect network input
5. **DMX input:** 3-core DMX waterproof signal line input
6. **DMX output:** 3-core DMX waterproof signal line output
7. **ART-NET output:** Connect network output

- The specific operations of the panel functions are as follows:

Display panel function description

- Press the button UP or DOWN if you want to browse through the various Setup Options.
- Press the button ENTER to save your settings or enter the next menu.
- Press the button UP or DOWN to shift.
- Press button Menu will return to the upper menu one by one.

Lighting parameter

Technical Data Sheet

Optical parameters	
light source	1.56W white 392pcs 2835 lamp beams,1W RGB3 in1 784pc 5050 lamp beads
color temperature	2800K-8000K
Optical output of the whole machine	R:5480 Lm G 11760 lm B 1560 lm W 45000 lm ALL 63880 lm
Illumination	ALL:/ Lux: R / Lux: G / Lux: B / Lux: W / Lux: @5m
Colour rendering index	Ra≥90
R9	≥90
dominant wavelength	R 622nm G 525nm B 457nm
Light source life	20000H
beam angle	110°
dynamic effect	
strobe	0 20Hz
Dimming	Four dimming curves, 0-100% dimming
Electronic parameters	

Input voltage and frequency	100 240VAC,50 60Hz
power	Full brightness 700W Strobe 1200W
power connection	Waterproof POWERCORN input;
signal connection	Waterproof 3-core DMX signal line input/output, the maximum number of connections is 32; waterproof network signal input and output
Power Factor	0.95 @230V
working environment	-10° 45°
switching power supply	100 240VAC, 50 60Hz,28V 800W
Structural parameters	
Size	Product size 494×316×160 mm
Weight	Net weight 12.0Kg(Clamps and quick lock not included)
degree of protection	IP65
cooling system	Waterproof low-noise fan forced cooling
shell	Die-cast magnesium + aluminium alloy; black
installation method	side hanging, hanging installation

control	
control method	Art-net/DMX512/RDM
DMX Channel	8/11/13/24/30/74/97CH
Display	TFT
refresh rate	600Hz/1200 Hz/2000 Hz/4000 Hz/6000 Hz/25KHz
pixel matrix	white light 2*14 rgb 2*7

Accessories	
Standard	Standard power cord 1PC; manual 1PC
Optional	

menu function

	Main Level	Programming Levels		
1	Protocol	DMX512		
		Art-Net		
		sACN		
2	DMX Address	1–512*		
3	DMX Channel	8CH		
		11CH		
		13CH		
		24CH		
		30CH		
		74CH		
		97CH		
4	Static	Fixed Color	R	
			G	
			B	
			GB	
			RB	
			RG	
			RGB	
		Manual Color Mixer	Red	0-255
			Green	
			Blue	

5	Plate FX	Plate FX 1	Speed	1-100
		Plate FX 2	Plate Intensity	000-255
		Plate FX 3		
		Plate FX 4	Background Color	R
		Plate FX 5		G
		Plate FX 6		B
		Plate FX 7		GB

		Plate FX 8 Plate FX 9		RB
				RG
				RGB
				Off
			Foreground Color	R
				G
				B
				GB
				RB
				RG
				RGB
				Off
6	Beam Intensity	000-255		
7	Beam Flash Duration	000-255		

8	Beam Flash Rate	000-255	
9	Tilt	000-255	
10	Tilt Offset	000-255	
11	Tilt Invert	No	
		Yes	
12	Pixel Invert	Plate1 Invert	No
			Yes
		Plate2 Invert	No
			Yes
		Tube1 Invert	No
			Yes
		Tube2 Invert	No
			Yes
13	LED Array Swap	Plate Swap	No
			Yes
		Beam Swap	No
			Yes
14	Master/Slave	Master	
		Slave	
	Dimmer M	OFF	

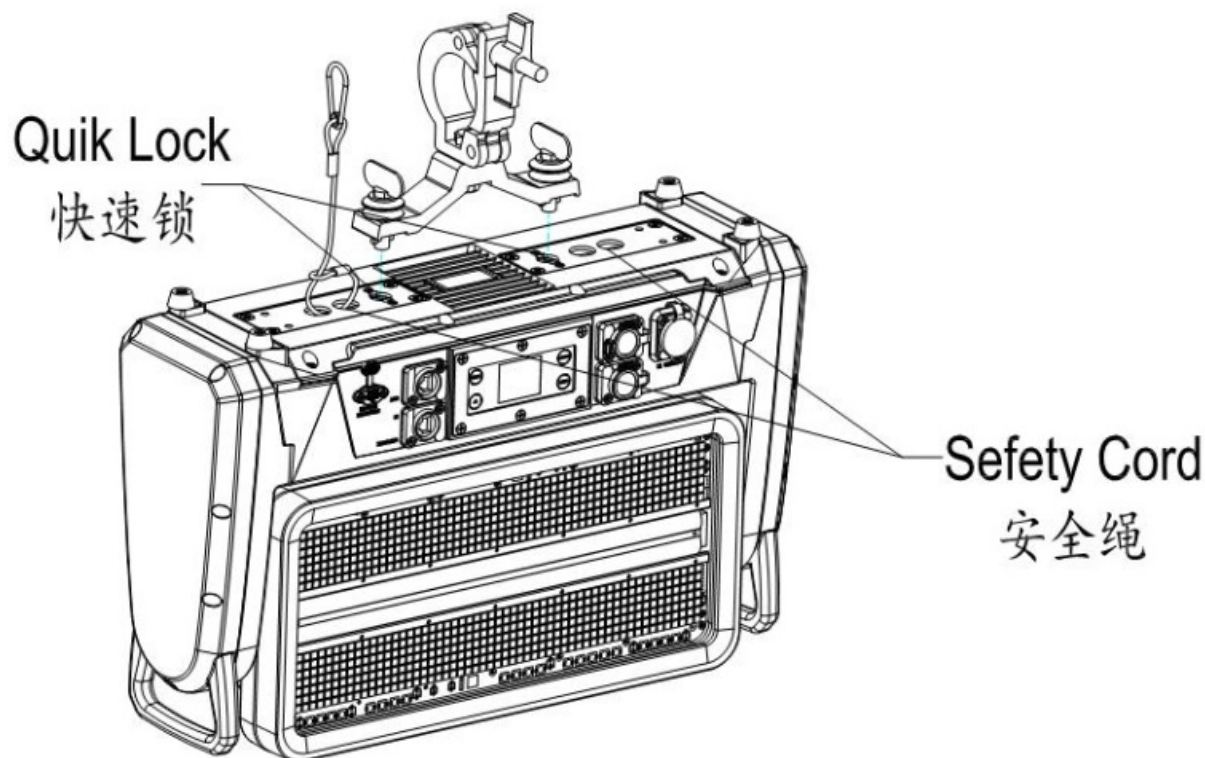
15	ode	DIM1–3		
16	White Balance	Off		
		Manual	Red Green Blue	125-255

17	LED Frequency	600Hz 1200Hz 2000Hz 4000Hz 6000Hz 25000Hz		
18	Fan Mode	Auto		
		On		
19	Display Invert	No		
		Yes		
20	Backlight	10s		
		30s		
		2Min		
		Always On		
21	Key Lock	On		
		Off		
22	Ethernet Setting	Universe	0–255 (ArtNet)	
			1–255 (sACN)	

		IP Address	2.192.0.1
23	Information	Fixture Hours:	___Hours
		LED Hours:	__H
		Disp Ver:	V_._._._._
		Drv-Y Ver:	V_._
		LED-A Ver:	V_._
		LED-C Ver:	V_._
		Net Ver:	V_._
		UID	_____
24	Update Firmware	Only this Unit	_____.CHL
			...
		Multiple Units	_____.CHL
			...
		Other Fixture Type	_____.CHL
			...
25	Factory Reset	No	
		Yes	

Installation and connection

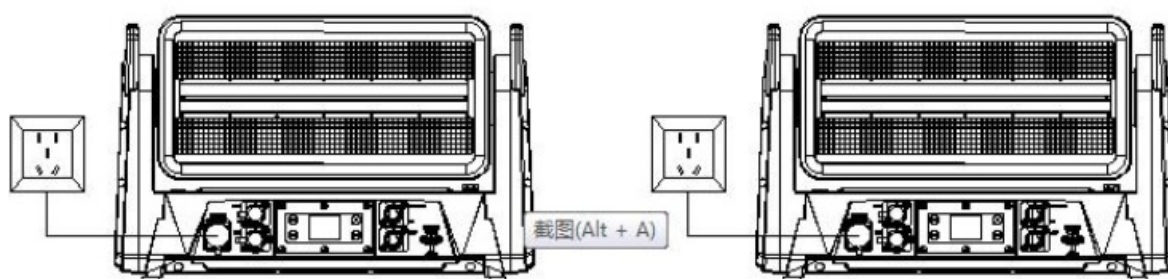
Installation diagram



Precautions

- This product is suitable for indoor and outdoor use, and its protection level is IP65. The lamp should be kept clean and should not be used in a humid or dusty environment. It should be maintained every three months.
- Only qualified professionals can install, operate and maintain the lamps, and ensure that the operation is strictly under the procedures described in this manual.
- The lamps and lanterns should be installed in a well-ventilated place, at least 50 away from the wall, and check whether the ventilation holes are unobstructed. Do not look directly at the light source to avoid damage to the eyes.
- Parts that make electrical connections must be operated by qualified installers.
- Each lamp should be safely grounded, and electrical installation should be carried out under relevant standards.
- Do not use the power cord with damaged insulation, and do not put the power cord on other wires.
- When the lamp is not in use or cleaned, please unplug the power cord. Do not pull or pull the power cord vigorously.
- If the back cover of the lamp is equipped with a safety buckle or a connection hole, for safety reasons, please use the safety rope to pass through the connection hole for auxiliary hoisting.08

power connection



This product uses a Power con in/out

input power cord

Note: Due to the power, a 1.5 square power cord



POWER IN

Do not connect too many lamps to a single power cord, or overload it.

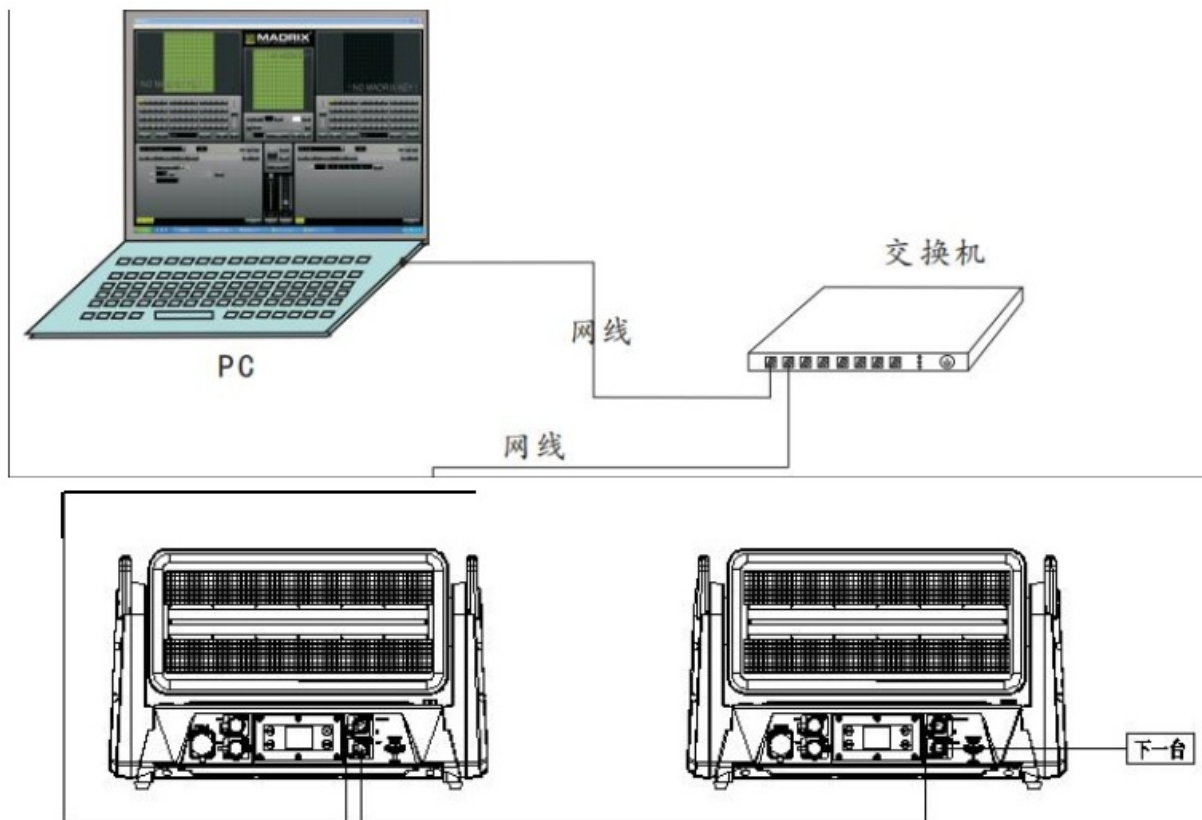
Do not use the power cord with damaged insulation, and do not put the power cord on other wires.

When the lamp is not in use or cleaning, please unplug the power cord

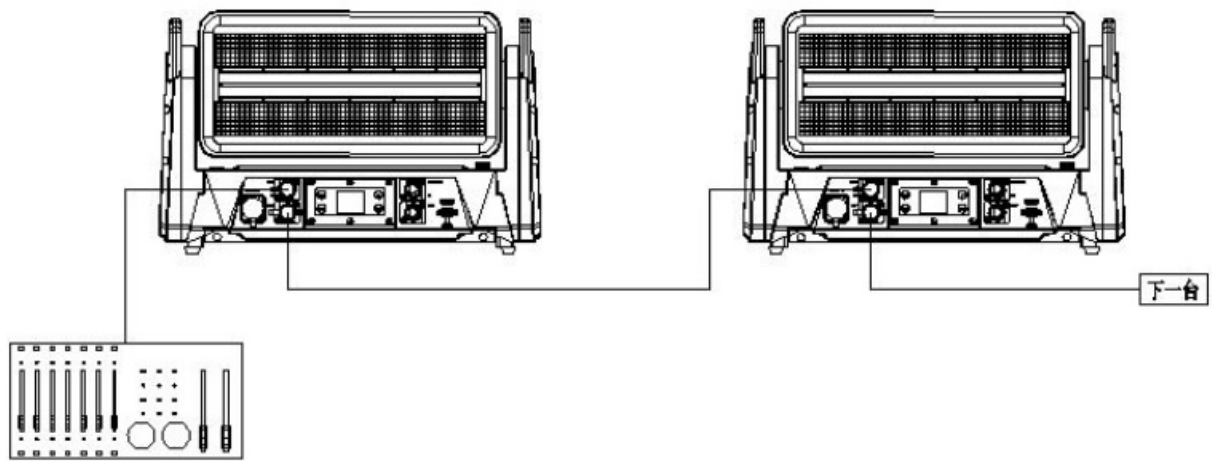
Do not pull or plugin vigorously or drag the power cord directly.

signal connection

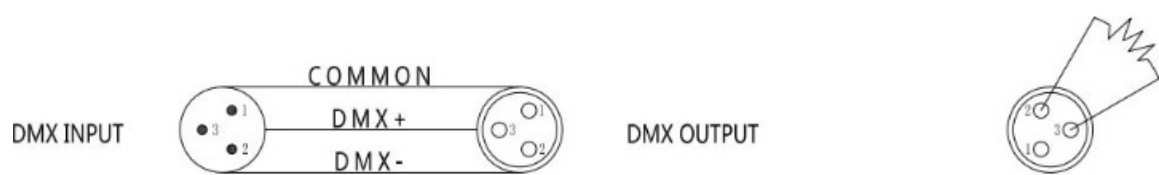
Internet connection



DMX Connection



DMX connection instructions



- To reduce signal errors and avoid signal weakening and interference during transmission, a 120 ohm 1/4W resistor can be added between the 2-core and 3-core of the DMX output of the last machine.
- Use the XLR signal cable to connect the lamps, one end to the output port of the lamp, and the other end to the input port of the next lamp. Signal lines can only be used in series, not in parallel.
- Because the DMX512 signal transmission speed is very fast when the signal line is damaged, the welding place is not strong, the contact is not good, etc., it will affect the signal transmission and cause the system to shut down.
- When the machine power of a certain unit is cut off, the connection of DMX output and input is bypassed to maintain the continuity of the DMX line.
- Each light must have an address code to be able to receive information from the console.
- The terminal of the DMX512 system needs to be equipped with a terminator to reduce errors in signal transmission.

DMX Address code setting

Ch	add	first address	Second, add	Third add	Fourth add
8CH	001-008	001	009	017	025
11CH	001-011	001	012	023	034
13CH	001-013	001	014	027	040
24CH	001-024	001	025	049	063
30CH	001-030	001	031	061	091
74CH	001-074	001	075	149	223
97CH	001-097	001	098	195	292

Refer to the above picture The number of lamps to be added after the fourth one; the address code is based on the channel, and so on.

channel table

97CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Master dimmer	000-255	0-100
4	Plate dimmer	000-255	0-100
5	Beam dimmer	000-255	0-100
6	Plate flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
7	Plate flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
8	Beam flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
9	Beam flash rate	000-009	100%
		010-250	Slow to fast

		251-255	100%
10	Plate pixel 1 red	000-255	0-100
11	Plate pixel 1 green	000-255	0-100
12	Plate pixel 1 blue	000-255	0-100
13	Plate pixel 2 red	000-255	0-100
14	Plate pixel 2 green	000-255	0-100
15	Plate pixel 2 blue	000-255	0-100
16	Plate pixel 3 red	000-255	0-100
17	Plate pixel 3 green	000-255	0-100
18	Plate pixel 3 blue	000-255	0-100
19	Plate pixel 4 red	000-255	0-100
20	Plate pixel 4 green	000-255	0-100
21	Plate pixel 4 blue	000-255	0-100
22	Plate pixel 5 red	000-255	0-100
23	Plate pixel 5 green	000-255	0-100
24	Plate pixel 5 blue	000-255	0-100
25	Plate pixel 6 red	000-255	0-100
26	Plate pixel 6 green	000-255	0-100
27	Plate pixel 6 blue	000-255	0-100
28	Plate pixel 7 red	000-255	0-100

29	Plate pixel 7 green	000-255	0-100
30	Plate pixel 7 blue	000-255	0-100
31	Plate pixel 8 red	000-255	0-100
32	Plate pixel 8 green	000-255	0-100
33	Plate pixel 8 blue	000-255	0-100
34	Plate pixel 9 red	000-255	0-100
35	Plate pixel 9 green	000-255	0-100
36	Plate pixel 9 blue	000-255	0-100
37	Plate pixel 10 red	000-255	0-100
38	Plate pixel 10 green	000-255	0-100
39	Plate pixel 10 blue	000-255	0-100
40	Plate pixel 11 red	000-255	0-100
41	Plate pixel 11 green	000-255	0-100
42	Plate pixel 11 blue	000-255	0-100
43	Plate pixel 12 red	000-255	0-100
44	Plate pixel 12 green	000-255	0-100
45	Plate pixel 12 blue	000-255	0-100
46	Plate pixel 13red	000-255	0-100
47	Plate pixel 13 green	000-255	0-100
48	Plate pixel 13 blue	000-255	0-100
49	Plate pixel 14 red	000-255	0-100

50	Plate pixel 14 green	000-255	0-100
51	Plate pixel 14 blue	000-255	0-100
52	Beam pixel 1	000-255	0-100
53	Beam pixel 2	000-255	0-100
54	Beam pixel 3	000-255	0-100
55	Beam pixel 4	000-255	0-100
56	Beam pixel 5	000-255	0-100
57	Beam pixel 6	000-255	0-100
58	Beam pixel 7	000-255	0-100
59	Beam pixel 8	000-255	0-100
60	Beam pixel 9	000-255	0-100
61	Beam pixel 10	000-255	0-100
62	Beam pixel 11	000-255	0-100
63	Beam pixel 12	000-255	0-100
64	Beam pixel 13	000-255	0-100
65	Beam pixel 14	000-255	0-100
66	Beam pixel 15	000-255	0-100
67	Beam pixel 16	000-255	0-100
68	Beam pixel 17	000-255	0-100
69	Beam pixel 18	000-255	0-100
70	Beam pixel 19	000-255	0-100

71	Beam pixel 20	000-255	0-100
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72	Beam pixel 21	000-255	0-100
73	Beam pixel 22	000-255	0-100
74	Beam pixel 23	000-255	0-100
75	Beam pixel 24	000-255	0-100
76	Beam pixel 25	000-255	0-100
77	Beam pixel 26	000-255	0-100
78	Beam pixel 27	000-255	0-100
79	Beam pixel 28	000-255	0-100
80	Beam FX	000-005	No function
		006-042	Ramp up
		043-085	Ramp down
		086-128	Ramp up-down
		129-171	Random
		172-214	Lightning
		215-255	Spikes
		000-000	No function
		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)
		007-008	White(5600K)

81	Plates foreground	009-010	White(8000K)
		011	Blue R:0 G:0 B:255 W:0
		012-048	Green+/Blue R:0 G:+ B:255 W:0
		049	Cyan R:0 G:255 B:255 W:0
		050-086	Green/Blue- R:0 G:255 B:- W:0
		087	Green R:0 G:255 B:0 W:0
		088-124	Red+/Green R:+ G:255 B:0 W:0
		125	Yellow R:255 G:255 B:0 W:0

		126-162	Red/Green- R:255 G:- B:0 W:0
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		163	Red R:255 G:0 B:0 W:0
		164-200	Red/Blue+ R:255 G:0 B:+ W:0
		201	Magenta R:255 G:0 B:255 W:0
		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0
		240-247	Colour index, fast to slow
		248-255	Colour snap, fast to slow
82	Plate foreground dimmer	000-255	0-100
		000-000	No function
		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)
		007-008	White(5600K)
		009-010	White(8000K)

83	Plate background	011	Blue G:0 W:0	R:0 B:255
		012-048	Green+/Blue G:+ W:0	R:0 B:255
		049	Cyan G:255	R:0 B:255 W:0
		050-086	Green/Blue- G:255 W:0	R:0 B:-
		087	Green G:255 W:0	R:0 B:0

		088-124	Red+/Green G:255 W:0	R:+ B:0
		125	Yellow G:255 W:0	R:255 B:0
		126-162	Red/Green- G:- W:0	R:255 B:0

		163	Red R:255 G:0 B:0 W:0
		164-200	Red/Blue+ R:255 G:0 B:+ W:0
		201	Magenta R:255 G:0 B:255 W:0
		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0
		240-247	Color index,fast to slow
		248-255	Color snap,fast to slow
84	Plate background dimmer	000-255	0-100
85	Plate 1(pixels 1-7)	000-002	Plate FX All select(all on) see Plate Patterns
	FX select (see Pixel Mapping)	003-255	
	Plate 1(pixels 1-7) FX movement speed	000-005	No function
		006-124	Left to right, fast to slow

86	direction (see Pixel Mapping)	125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
87	Plate 1(pixels 1-7)	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration: short to long
88	Plate 2(pixels 8-14)	000-002	Plate FX All select(all on) see Plate Patterns
	FX select (see Pixel Mapping)	003-255	
89	Plate 2(pixels 8-14)	000-005	No function

	FX movement speed direction (see Pixel Mapping)	006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
90	Plate 2(pixels 8-14)	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration: short to long
91	Beam 1(pixels 1-14)	000-002	Beam FX All select(all on) see Beam Patterns
	FX select (see Pixel Mapping)	003-255	
92	Beam 1(pixels 1-14) FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left, slow to fast

		250-255	No function
93	Beam 1(pixels 1-14)	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration: short to long
94	Beam 2(pixels 15-28) FX select (see Pixel Mapping)	000-002	Beam FX All select(all on) see Beam Patterns
		003-255	
95	Beam 2(pixels 15-28)FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
96	Beam 2(pixels 15-28) FX cross fade (see Pixel Mapping)	000-002	Snap from cell to cell
		003-255	Fade duration: short to long
		000-005	No function
		006-010	Off (dimmer mode)
		011-015	Dimmer 1
		016-020	Dimmer 2
		021-025	Dimmer 3
		026-030	600 Hz
		031-035	1200 Hz

97	Control*	036-040	2000 Hz
		041-045	4000 Hz
		046-050	6000 Hz
		051-055	25 KHz
		056-060	Fan mode auto
		060-065	Fan mode on
		066-070	Tilt reset

		071-075	Plate 1 invert off
		076-080	Plate 1 invert on
		081-085	Plate 2 invert off
		086-090	Plate 2 invert on
		091-095	Beam 1 invert off
		096-100	Beam 1 invert on
		101-105	Beam 2 invert off
		106-110	Beam 2 invert on
		111-115	Plate swap on
		116-120	Plate swap off
		121-125	Beam swap on
		126-130	Beam swap off
		131-255	No function

74CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Dimmer	000-255	0-100
4	Strobe	000-009	Open
		010-079	Strobe, slow to fast
		080-149	Pulse, slow to fast
		150-219	Random Strobe, slow to fast
		220-255	Open
5	Plate pixel 1 red	000-255	0-100
6	Plate pixel 1 green	000-255	0-100
7	Plate pixel 1 blue	000-255	0-100
8	Plate pixel 2 red	000-255	0-100
9	Plate pixel 2 green	000-255	0-100
10	Plate pixel 2 blue	000-255	0-100
11	Plate pixel 3 red	000-255	0-100
12	Plate pixel 3 green	000-255	0-100
13	Plate pixel 3 blue	000-255	0-100
14	Plate pixel 4 red	000-255	0-100

15	Plate pixel 4 green	000-255	0-100
16	Plate pixel 4 blue	000-255	0-100
17	Plate pixel 5 red	000-255	0-100
18	Plate pixel 5 green	000-255	0-100
19	Plate pixel 5 blue	000-255	0-100
20	Plate pixel 6 red	000-255	0-100
21	Plate pixel 6 green	000-255	0-100
22	Plate pixel 6 blue	000-255	0-100
23	Plate pixel 7 red	000-255	0-100

24	Plate pixel 7 green	000-255	0-100
25	Plate pixel 7 blue	000-255	0-100
26	Plate pixel 8 red	000-255	0-100
27	Plate pixel 8 green	000-255	0-100
28	Plate pixel 8 blue	000-255	0-100
29	Plate pixel 9 red	000-255	0-100
30	Plate pixel 9 green	000-255	0-100
31	Plate pixel 9 blue	000-255	0-100
32	Plate pixel 10 red	000-255	0-100
33	Plate pixel 10 green	000-255	0-100
34	Plate pixel 10 blue	000-255	0-100

35	Plate pixel 11 red	000-255	0-100
36	Plate pixel 11 green	000-255	0-100
37	Plate pixel 11 blue	000-255	0-100
38	Plate pixel 12 red	000-255	0-100
39	Plate pixel 12 green	000-255	0-100
40	Plate pixel 12 blue	000-255	0-100
41	Plate pixel 13red	000-255	0-100
42	Plate pixel 13 green	000-255	0-100
43	Plate pixel 13 blue	000-255	0-100
44	Plate pixel 14 red	000-255	0-100
45	Plate pixel 14 green	000-255	0-100
46	Plate pixel 14 blue	000-255	0-100
47	Beam pixel 1	000-255	0-100
48	Beam pixel 2	000-255	0-100
49	Beam pixel 3	000-255	0-100
50	Beam pixel 4	000-255	0-100
51	Beam pixel 5	000-255	0-100
52	Beam pixel 6	000-255	0-100
53	Beam pixel 7	000-255	0-100
54	Beam pixel 8	000-255	0-100
55	Beam pixel 9	000-255	0-100

56	Beam pixel 10	000-255	0-100
57	Beam pixel 11	000-255	0-100
58	Beam pixel 12	000-255	0-100
59	Beam pixel 13	000-255	0-100
60	Beam pixel 14	000-255	0-100
61	Beam pixel 15	000-255	0-100
62	Beam pixel 16	000-255	0-100
63	Beam pixel 17	000-255	0-100
64	Beam pixel 18	000-255	0-100
65	Beam pixel 19	000-255	0-100
66	Beam pixel 20	000-255	0-100

67	Beam pixel 21	000-255	0-100
68	Beam pixel 22	000-255	0-100
69	Beam pixel 23	000-255	0-100
70	Beam pixel 24	000-255	0-100
71	Beam pixel 25	000-255	0-100
72	Beam pixel 26	000-255	0-100
73	Beam pixel 27	000-255	0-100
74	Beam pixel 28	000-255	0-100

30CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Master dimmer	000-255	0-100
4	Plate dimmer	000-255	0-100
5	Beam dimmer	000-255	0-100
6	Plate flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
7	Plate flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
8	Beam flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
9	Beam flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%

10	Plates red	000-255	0-100
11	Plates green	000-255	0-100
12	Plates blue	000-255	0-100
13	Beam FX	000-005	No function
		006-042	Ramp up
		043-085	Ramp down
		086-128	Ramp up-down
		129-171	Random
		172-214	Lightning
		215-255	Spikes
14	Plates foreground	000-000	No function

		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)
		007-008	White(5600K)
		009-010	White(8000K)
		011	Blue R:0 G:0 B:255 W:0
		012-048	Green+/Blue R:0 G:+ B:255 W:0

049	Cyan G:255 W:0	R:0 B:255
050-086	Green/Blue- G:255 W:0	R:0 B:-
087	Green G:255 W:0	R:0 B:0
088-124	Red+/Green G:255 W:0	R:0 B:0
125	Yellow G:255 W:0	R:255 B:0
126-162	Red/Green- G:- W:0	R:255 B:0
163	Red R:255 B:0	G:0 W:0
164-200	Red/Blue+ G:0 W:0	R:255 B:0
201	Magenta G:0 W:0	R:255 B:255

		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0

		240-247	Colour index, fast to slow
		248-255	Colour snap, fast to slow
15	Plates foreground dimmer	000-255	0-100
		000-000	No function
		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)
		007-008	White(5600K)
		009-010	White(8000K)
		011	Blue R:0 G:0 B:255 W:0
		012-048	Green+/Blue R:0 G:+ B:255 W:0
		049	Cyan R:0 G:255 B:255 W:0

16	Plates background	050-086	Green/Blue- G:255 W:0	R:0 B:-
		087	Green G:255 W:0	R:0 B:0
		088-124	Red+/Green G:255 W:0	R:++ B:0
		125	Yellow G:255 W:0	R:255 B:0
		126-162	Red/Green- G:- W:0	R:255 B:0
		163	Red R:255 B:0	G:0 W:0
		164-200	Red/Blue+ G:0 W:0	R:255 B:++
		201	Magenta G:0 W:0	R:255 B:255

		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0
		240-247	Colour index, fast to slow
		248-255	Colour snap, fast to slow
17	Plates background dimmer	000-255	0-100
18	Plate 1(pixels 1-7)	000-002	Plate FX All select(all on) see Plate Patterns
	FX select (see Pixel Mapping)	003-255	
19	Plate 1(pixels 1-7) FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
20	Plate 1(pixels 1-7)	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration:short to long
21	Plate 2(pixels 8-14)	000-002	Plate FX All select(all on) see Plate Patterns
	FX select (see Pixel Mapping)	003-255	

22	Plate 2(pixels 8-14) FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left,slow to fast
		250-255	No function
23	Plate 2(pixels 8-14)	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration:short to long
24	Beam 1(pixels 1-14)	000-002	Beam FX All select(all on) see Beam Patterns
	FX select (see Pixel Mapping)	003-255	
25	Beam 1(pixels 1-14) FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right,fast to slow
		125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
26	Beam 1(pixels 1-14)	000-002	Snap from cell to cell Fade duration: short to long
	FX crossfade (see Pixel Mapping)	003-255	

	Beam 2(pixels 15-28)	000-002	Beam FX All select(all on) see Beam Pa
		FX select	

27	(see Pixel Mapping)	003-255	tterns
28	Beam 2(pixels 15-28)FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right, fast to slow
		125-130	No function
		131-249	Right to left, slow to fast
		250-255	No function
29	Beam 2(pixels 15-28)FX crossfade (see Pixel Mapping)	000-002	Snap from cell to cell Fade duration:short to long
		003-255	
		000-005	No function
		006-010	Off (dimmer mode)
		011-015	Dimmer 1
		016-020	Dimmer 2
		021-025	Dimmer 3
		026-030	600 Hz
		031-035	1200 Hz
		036-040	2000 Hz
		041-045	4000 Hz
		046-050	6000 Hz
		051-055	25 KHz
		056-060	Fan mode auto

30	Control*	060-065	Fan mode on
		066-070	Tilt reset
		071-075	Plate 1 invert off
		076-080	Plate 1 invert on
		081-085	Plate 2 invert off
		086-090	Plate 2 invert on
		091-095	Beam 1 invert off
		096-100	Beam 1 invert on
		101-105	Beam 2 invert off
		106-110	Beam 2 invert on
		111-115	Plate swap on
		116-120	Plate swap off
		121-125	Beam swap on
		126-130	Beam swap off
		131-255	No function
24CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100

3	Master dimmer	000-255	0-100
4	Plate dimmer	000-255	0-100

5	Beam dimmer	000-255	0-100
6	Plate flash duration	000-009	Classic shutter mode:disables duration control
		010-250	Slow to fast
		251-255	100 On,no flash/strobe
7	Plate flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
8	Beam flash duration	000-009	Classic shutter mode:disables duration control
		010-250	Slow to fast
		251-255	100 On,no flash/strobe
9	Beam flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
10	Plates red	000-255	0-100
11	Plates green	000-255	0-100
12	Plates blue	000-255	0-100
13	Beam FX	000-005	No function
		006-042	Ramp up
		043-085	Ramp down
		086-128	Ramp up-down
		129-171	Random
		172-214	Lightning
		215-255	Spikes
		000-000	No function
		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)

14	Plates foreground	007-008	White(5600K)
		009-010	White(8000K)
		011	Blue R:0 G:0 B:255 W:0
		012-048	Green+ /Blue R:0 G:+ B:255 W:0
		049	Cyan R:0 G:255 B:255

			W:0
		050-086	Green/Blue- R:0 G:255 B:- W:0
		087	Green R:0 G:255 B:0 W:0
		088-124	Red+ /Green R:+ G:255 B:0 W:0
		125	Yellow R:255 G:255 B:0 W:0
		126-162	Red/Green- R:255 G:- B:0 W:0

		163	Red R:255 G:0 B:0 W:0
		164-200	Red/Blue+ R:255 G:0 B:+ W:0
		201	Magenta R:255 G:0 B:255 W:0
		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0
		240-247	Color index,fast to slow
		248-255	Color snap,fast to slow
15	Plates foreground dimmer	000-255	0-100
16	Plates background	000-000	No function
		001-002	White(2700K)
		003-004	White(3200K)
		005-006	White(4200K)
		007-008	White(5600K)
		009-010	White(8000K)
		011	Blue R:0 G:0 B:255
			W:0

012-048	Green+/Blue R:0 G:+ B:255 W:0
049	Cyan R:0 G:255 B:255 W:0
050-086	Green/Blue- R:0 G:255 B:- W:0
087	Green R:0 G:255 B:0 W:0
088-124	Red+/Green R:+ G:255 B:0 W:0
125	Yellow R:255 G:255 B:0 W:0
126-162	Red/Green- R:255 G:- B:0 W:0
163	Red R:255 G:0 B:0 W:0
164-200	Red/Blue+ R:255 G:0 B:+ W:0

		201	Magenta R:255 G:0 B:255 W:0
		202-238	Red-/Blue R:- G:0 B:255 W:0
		239	Blue R:0 G:0 B:255 W:0
		240-247	Color index,fast to slow
		248-255	Color snap,fast to slow
17	Plates background dimmer	000-255	0-100
18	Plates 1 2	000-002	Plate FX All select(all on)

	FX select (see Pixel Mapping)	003-255	see Plate Patterns
19	Plates 1 2 FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right,fast to slow
		125-130	No function
		131-249	Right to left,slow to fast
		250-255	No function
20	Plates 1 2	000-002	Snap from cell to cell
	FX crossfade (see Pixel Mapping)	003-255	Fade duration:short to long

21	Beams 1 2	000-002	Beam FX All select(all on) see Beam Patterns
	FX select (see Pixel Mapping)	003-255	
22	Beams 1 2 FX movement speed direction (see Pixel Mapping)	000-005	No function
		006-124	Left to right,fast to slow
		125-130	No function
		131-249	Right to left,slow to fast
		250-255	No function
23	Beams 1 2	000-002	Snap from cell to cell Fade duration:short to long
	FX crossfade (see Pixel Mapping)	003-255	
		000-005	No function
		006-010	Off (dimmer mode)
		011-015	Dimmer 1
		016-020	Dimmer 2
		021-025	Dimmer 3
		026-030	600 Hz
		031-035	1200 Hz
		036-040	2000 Hz
		041-045	4000 Hz
		046-050	6000 Hz

24	Control*	051-055	25 KHz
		056-060	Fan mode auto
		060-065	Fan mode on
		066-070	Tilt reset
		071-075	Plate 1 invert off
		076-080	Plate 1 invert on
		081-085	Plate 2 invert off
		086-090	Plate 2 invert on
		091-095	Beam 1 invert off
		096-100	Beam 1 invert on
		101-105	Beam 2 invert off
		106-110	Beam 2 invert on

		111-115	Plate swap on
		116-120	Plate swap off
		121-125	Beam swap on
		126-130	Beam swap off
		131-255	No function
13CH			
Channel	Function	Value	Percent/Setting

1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Plate dimmer	000-255	0-100
4	Beam dimmer	000-255	0-100
5	Plate flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
6	Plate flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
7	Beam flash duration	000-009	Classic shutter mode: disables duration control
		010-250	Slow to fast
		251-255	100 On, no flash/strobe
8	Beam flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
9	Plates red	000-255	0-100
10	Plates green	000-255	0-100
11	Plates blue	000-255	0-100

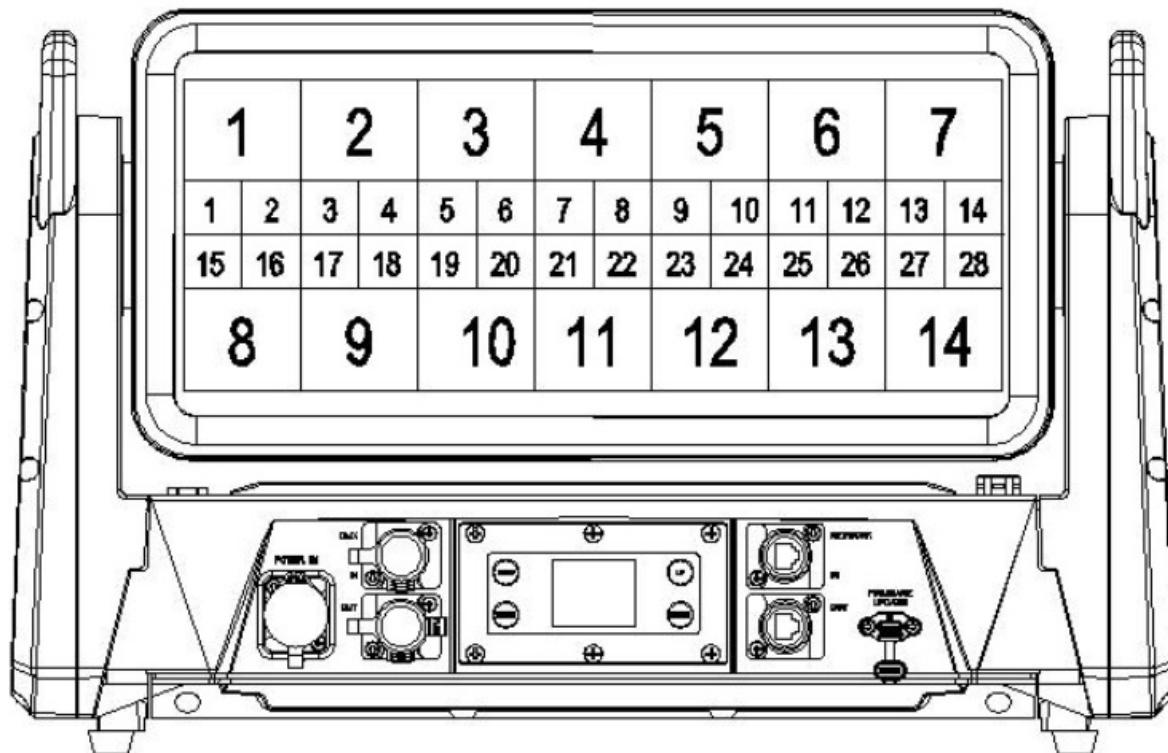
12	Beam FX	000-005	No function
		006-042	Ramp up
		043-085	Ramp down
		086-128	Ramp up-down
		129-171	Random
		172-214	Lightning
		215-255	Spikes
13	Control*	000-005	No function
		006-010	Off (dimmer mode)
		011-015	Dimmer 1
		016-020	Dimmer 2
		021-025	Dimmer 3

		026-030	600 Hz
		031-035	1200 Hz
		036-040	2000 Hz
		041-045	4000 Hz
		046-050	6000 Hz
		051-055	25 KHz
		056-060	Fan mode auto
		060-065	Fan mode on

		066-070	Tilt reset
		071-075	Plate 1 invert off
		076-080	Plate 1 invert on
		081-085	Plate 2 invert off
		086-090	Plate 2 invert on
		091-095	Beam 1 invert off
		096-100	Beam 1 invert on
		101-105	Beam 2 invert off
		106-110	Beam 2 invert on
		111-115	Plate swap on
		116-120	Plate swap off
		121-125	Beam swap on
		126-130	Beam swap off
		131-255	No function
11CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Dimmer	000-255	0-100

4	Plate flash duration	000-009	Classic shutter mode:disables duration control
		010-250	Slow to fast
		251-255	100 On,no flash/strobe
5	Plate flash rate	000-009	100%
		010-250	Slow to fast
		251-255	100%
6	Beam flash duration	000-009	Classic shutter mode:disables duration control
		010-250	Slow to fast
		251-255	100 On,no flash/strobe
7	Beam flash rate	000-009	100%
		010-250	Slow to fast

		251-255	100%
8	Plates red	000-255	0-100
9	Plates green	000-255	0-100
10	Plates blue	000-255	0-100
11	Beam	000-255	0-100
8CH			
Channel	Function	Value	Percent/Setting
1	Tilt	000-255	0-100
2	Fine tilt	000-255	0-100
3	Dimmer	000-255	0-100
4	Strobe	000-009	Open
		010-079	Strobe,slow to fast
		080-149	Pulse,slow to fast
		150-219	Random Strobe,slow to fast
		220-255	Open
5	Red	000-255	0-100
6	Green	000-255	0-100
7	Blue	000-255	0-100
8	Beam	000-255	0-100



Troubleshooting

Symptom	cause of issue	Approach
No menu displayed	1. No AC input 2. The switching power supply is damaged 3. Display board failure	1. Check the power supply line 2. Check whether the switching power supply has voltage output 3. Replace the display board
Can't receive DMX signal	1. The DMX signal line is faulty 2. The wiring sequence of the signal line is wrong 3. The IC receiving the signal at the signal input terminal is damaged 4. DMX address code setting and console Corresponding controls do not match 5. Other parameters are set incorrectly 6. After entering the menu without pressing the confirm button or MENU key to exit to the main menu	1. Check or replace the signal line 2. Check the wiring sequence of the signal lines 3. Check the display board signal receiving IC and Are the two resistors connected in series on the signal line open? 4. Check or reset the address code Or restore factory settings and try again 5. Press MENU to exit to the main menu

The surface temperature of the lamp body exceeds 75° No temperature control protection	1. The thermistor on the lamp bead board is faulty 2. The temperature control circuit on the display board is faulty	1. Replace the thermistor 2. Check the temperature control circuit on the motherboard
Uneven colour mixing Uneven colour spots	1. Improper soldering of lamp beads 2. The lens or bracket is not installed properly	1. Check the bulb welding condition 2. Check the lens assembly process and adjust the bracket assembly direction
The lamp bead is off or flickering a little	The lamp bead is damaged or the driver board has no current output	1. Replace the lamp bead 2. Replace the damaged lamp beads Or check the driver board circuit 3. Replace the corresponding driver IC
Parameters are not saved	Damaged IC for storing parameters	Replace memory IC
The whole light does not work	When the temperature is too high, the temperature control protection will cause Switching the power supply over-temperature protection does not work	Wait for the lamp body to cool down before turning it on

Documents / Resources

	AVTech SATURN700RGB 700W Power LED Tilt Moving Strobe [pdf] User Manual SATURN700RGB 700W Power LED Tilt Moving Strobe, 700W Power LED Tilt Moving Strobe, LED Tilt Moving Strobe, Tilt Moving Strobe, Moving Strobe, Strobe
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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