SS-9800 Controller Manual

V1.0

Beijing Softstone Optoelectronic Technology Co., LTD 04/10, 2024



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Chapter 1 : Introduction to Controller Functions

Section 1 : Product Performance

- 1. Double RJ45 Gigabit network port, convenient networking in practical application, improve system stability.
- The controller has an independent IP address, support ARP protocol, can automatically allocate IP address, more convenient network monitoring and management;
- 3. 8 output ports, each port output can support 3M maximum drive 8192 channels;
- 4. Controller parameters are not written, the controller is universal, allowing for direct replacement of faulty controllers and reduce the maintenance workload;
- 5. Single firmware support including DMX512, return to zero code and other chip communication protocols, reduce the complexity of project maintenance;
- 6. Support DMX512 chip online addressing, chip parameters online writing;
- 7. Up to 65536 level grayscale control, can truly restore the image color and details;
- 8. Three-color or four-color hardware brightness control and hardware anti-gamma correction function, which can accurately adjust the image;
- 9. In the playback state can also be real-time through the software to view the controller online status;

Section 2 : Design concept

1. Synchronous control mode, can be added offline player, to achieve offline playback, because the end user needs to choose;

2. With independent intellectual property rights of video editing, playback and wiring design software "Easy Show" can adapt to a variety of shaped screen, multi-screen, text screen, pixel light screen and other complex applications;

3. The function of the software system is highly integrated and open, and the design of playback content and wiring can be completed by the application party

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independently; The software supports automatic, timing, holiday preset effect playback; Support multi-screen display, screen and then split screen; Support red, green, blue, white four color lamp control; Support music spectrum display, external video call; Support uninterrupted display screen play instant message; Wiring support import CAD, import reference pictures and other special functions to meet the diversified needs of customers;

4. Receive data directly from the network card of the computer, abandon the mode of "dedicated graphics card + master + sub-control", make the installation easier, and the cost is greatly reduced;

Section 3 : Expandability

1. Can simultaneously play a variety of formats of video and picture file content;

2. Can display all Windows operating systems supported by the countries of the text;

3. Support all the LED driver chips and DMX512 protocol chips changed to single line and dual line serial data interface;

4. Support IP grouping function, to achieve the stability of the larger project multiple controllers;

5. Support wireless network transmission or wireless bridge connection;

Chapter 2 : Controller Model and Appearance

Section 1 : Product Model

The SS-9800 controller is an industrial type with a shell, 8 output ports, and the maximum number of pixels per port can reach 4096 channels.

The controller can be widely used in: architectural landscape, hotels, supermarkets, department stores, government lighting projects, construction projects, commercial space, airports, subways, hospitals and other places. For investment owners and architects, designers, flood lighting engineering industry,



construction engineers and other professionals to provide architectural art visual dynamic color lighting comprehensive technical solutions.

Section 2 : Product pictures

1.SS-9800 front view



2.Rear view of the SS-9800



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Controller basic parameter table

Input voltage	AC 220V
Maximum power	15W
Length	26.00 CM
Width	17.50 CM
High	4.40 CM
Fixed hole spacing	2.5 * 28.1 CM

Section 3 : Output interface line sequence

1. The SS-9800 output ports are 8 4P ports, 1 to 8 respectively (as shown in the figure).

1	PORT	1	PO	ORT2	1	PORT	3	PORT4	F [PORTS	1	PORT6		PORT7	1	PORT8	
	DMD	512					21	VIRE				1 WIRE					
7		-		5				- 1 - 2	1				_				

2. 4P terminals from left to right, signals in sequence:

Туре					2	WIRE				
	1	2	3	4	5	1	2	3	4	5
	to	Data	Data	Add		to			clock	Data
		+	-	ressi						
				ng						
	GND	A+	B-	W		GND			CLK	DATA
Туре			1 WIRE							
	1	2	3	4	5					
	Gro				Data					
	und									
	GND				DATA					

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Chapter 3 : EASY SHOW Software Instructions

Section 1 : Synopsis

Easy-show is the light control software developed by our company, powerful, for online control SS-9800 controller, in order to more concise and clear to SHOW you the use of software, the following use example mode to explain, the detailed function of the software operation please refer to the "EASY SHOW software manual"

1. Install EASY SHOW software, click to open the software;



2. Enter the project name, screen size (pixels) and click New project;



3. Select quick new cabling in the pop-up function box;

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4. Select host network card IP and other information, click OK to enter the main

page. (If you do not select IP, after entering the software interface, the information window will prompt "Network initialization failed! Please check the network IP address Settings ";

Cabling file name	Display _1_partition _1	
	Display_1_partition_1	
Cabling width (pixels)	300	
Wiring height (pixels)	300	
Wiring directions	Upper side input (4)	
Host network card IP	192.168.2.5	
Controller type	16-port \$990	
Number of port channels	1024	
Luminaire color	RGB	
Earlinaire color		
Cai	ncel OK	

5. The file is successfully created, and the software interface is

displayed;

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ES Real external operation esproj-Easy Sho File (F) View (V) Item (P) Winng 중 🏠 😫 ◆ ∔ 💥 🗗 🚓 🗶 🔍	L) Run (R) Desg (D) Tools (T) Help (H)		- 8 X
	Cabling Preview controller list	Habitability	4 ×
€ System		Basic setup	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
	05	File path	CAProgram Files (x8
La Eye fragment 1 0	6 03	Total frame count Play option	
5		Casting mode	
			5 seconds
		Delay Start play	
		E Image options	
		Opacity (%) 100 Image Blend	
		100 Image Blend	No Blend 👻
	48 +×		

6. Create a new piece of colorful text "welcome", running left to right;

ر System Settings [Basic Settings P D lisplay_1<300/300> ده File path CAProgram File	
Media resource \$ x prime List of cabing preview controllers to tablability 4 System String: Easis Setting: > Display_1-300x300> 10 Flepath C.AProgram File	
(System Setting) + P Display_1<300:300> 5:0 File path C-AProgram File	
La National fragment 1 5.05 Total frame count 0	
La Main playback window 3.05	
L AWelcome to stat 5.05 Playmode	
Specified duration 5 seconds	
Deby start play 05	
Weekome to subtic Coloriful Text X (Image Options	
File (F) Opacity (%) 100	
26 welcome. Day animation options	
Entrance extination Shift Left •	
Entry time 2.0 seconds •	
Holding time -	
Welcome.	
And domain and the second	
e year Tece colons	
- 95	
Color bar with 254 puels 🔶 Color code color	
▶ II 85/175 Output	

7. Click output, the new dazzling text file successfully;

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ES Example Run esprej-Easy Show		- 6 X
File (F) Edit (E) View (V) (tem (F) Wiring (L)	Run (R) Debug (D) Tools (T) Help (H)	
0 😄 🖬 🔹 🐐 👘 🗗 🖄 🛎 🔍 Q Q		
Media resources 🛛 🕹 🕹	Expressed List of cabling preview controllers	Habitability # ×
		[Basic setup
▲ Early display 1<300x300> 7.0		File path CAProgram Files (x8 Total number of frames
La Drawing Fragment 1 7.0		175
La Main playback window 7.0		Play option Play modeFrame by frame delay
L , Welcome to ssbat 7.0		start play
		Oseconds forest wood interception
		Play all image options Opacity
		(%)
	Please enter text	
	r lease effer text	
	3時	

8. Click "Cabling preview", this example adopts the fast cabling mode, the cabling file has been automatically generated according to the setting, the file is 300×300 pixels, the controller SS-9800 with 8 ports is selected, the software automatically generates the cabling file composed of 19 controllers, 18 use all ports, the last one uses 12 ports, That is, 18×18+12=300, forming a 300×300 wiring file as shown in the figure below. Click "Controller parameters" to set the lamp chip information and other related parameters, save and output the file;

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9. New advanced wiring instance;



10. New advanced cabling instance, screen size 600×300 pixels of the project file, file

name "advanced cabling instance", a light bit for one pixel;

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Eary	Show	SSG	ì	
Version: 9.0.25 private beta				
Recent Projects	Paths			
Example 1	C:∖Program Fil	es (x86)\Easy Show	9\example\	
Project name Advanced cal 项目路径 C:\Program File	<u> </u>	Screen 600	Screen 300]
	Cancel	Open other items	New proje	ect

11. Click the new project after the pop-up advanced cabling new information text box,

enter the name of the new cabling file "advanced cabling display _1_partition _1";

Easy Show	×
Please enter the wiring file name:	_ ок
	Cancel
Advanced Cabling Display _1_partition _1	

12. In the pop-up "project Settings" page set the relevant properties. Example use the controller 9800, the maximum number of channels per unit is 4096, 8 ports per unit, the color of the engineering light control chip is set to RGB (three channels per light), that is, the maximum number of lights per port is 1365. The wiring file sets each port control light to 300 (width pixels) ×4 (height pixels) =1200 (all pixels), and distributes the light in a rectangular way. The controller number algorithm is 600× 地址: 北京市通州区中关村科技园通州园景盛南四街 17号 65 号楼 邮编: 101102 电话: 010-56370005 传真: 010-56370005-810 http://www.ssg-china.cn

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300÷1200÷8≈19 (sets).

To wit: Length (pixels) $\,\times\,$ width (pixels) $\,\div\,$ number of actual control lights per port

🔽 Display grid
Align to grid Port random color display Wringlightforures can be overlapped Themaximum number of headlight points allowed for the end cloth
► Show X, Y
ort 4096 channels
-
10 🛨

 $\div\,$ number of ports per controller $\approx\,$ number of controllers

13. Click OK to enter the Easy Layout page, select the image mask, and import the instance picture as the background, as shown in the figure.

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14. According to the lamp picture template, select automatic wiring, calculate the length to width ratio of the wiring file of each port, and check the sequence port according to the rule wiring, set as shown below;

大小	像素	高度	11 🛨 像素
非线风格			
□ ´ Z´ 形排列			
□ 水平或垂直翻	转		
		++ +	***
	₩	##	
		***	000 C
水平间隔: 0	重重	聊幕: 0	
L			
后序端口按规则有	듃线		
应用到后序控制器	R		

15. Move the wiring file to a suitable position in the drawing area, and the position of

the head light is located in the lower left corner of the building, as shown in the

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following picture;



16. After the sequence port is selected and routed according to the rules, all ports of the controller will be automatically routed, and all ports of the set controller 8 or 16 will be automatically routed, as shown in the figure below;



17. Use automatic wiring to complete all building wiring;

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18. After the wiring is completed, save the wiring file, you can click save to save the default file address or save as a custom file address. Close the Easy Layout page. The cabling preview window is shown below;

Play preview Color Proves Controller list		

19. Click Play Preview to create a new animation file. Setting method refer to section 5

of Chapter 3 animation special effects production example;

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Note: animation Settings, you can import the picture file as a reference background to determine the display position.

Chapter 4 : Factory Configuration

- 1.SS-9800 controller;
- 2.Power cord;
- 3.Instructions;
- 4.User manual;
- 5. Warranty card.

Chapter 5: Precautions

Cut off the power supply of the product before installation to avoid electric shock;
 Before commissioning, check whether there is a short circuit in the external line,
 so as not to cause the decline of the product device, resulting in normal use;

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3.When debugging and using the controller, pay attention to waterproof, anti-steam and anti-knock, otherwise it is easy to cause failure and electric shock; 4.Without the consent of our company, shall not privately disassemble the product; 5.Please follow our company's product instructions for wiring, operation, use, etc., in case of violation of our company's product instructions,Our company will not be responsible for any failure of the product.

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