S402 MANUAL

Version: 4.3

2026-1

Contents

1. FUNCTION OVERVIEW

1. GPS Satellite synchronization. Short positioning time and accurate positioning.
2. No need to connect cables between controllers. After set the mode and speed of all the controllers to be the same, it will go to synchronous system in 2 minutes.(No need to restart the controllers) GPS Satellite synchronous controller is applicable to the situation that the lighting cannot be connected among buildings. Besides, the synchronous display and the overall effect display are available.
3. 2-port output signal (data-independent).

SW Single chip:	D**S, D**J.
SPI:	TM180*-400K/800K, UCS19**, UCS29**, WS2811/12, TLS3001(1Mhz), SM167**, TM1913-790K, TM-1913-790K.
DMX512:	SW-D, SW-U, UCS512A/B/C0/C4/D/E0/EH, DMX512AP/SM512, SM16500P/511/512, SM17500P/512P/522P, SM17512/522, SM18522/522PH, Hi512A0/A4/A6/D/E, TM512AB3/AL1/ACx/AD, QED512P, GS8512/513/515, standard DMX512 luminaire on the market. Please refer to the "CHIP SUPPORT" section for addressing.
Breakpoint resume:	UCS5603, WS2818, GS8206, P9883, TM1914, XT1506S.

4. Set the address and parameters of chip, it will write them while the controller power on.

2. TECHNICAL PARAMETERS

2.1. PRODUCT INFORMATION

Cover material:	Iron
Input voltage:	AC 100V - 240V
Output port:	RS-485 & TTL×2 channels
Pixel drove:	SPI: 3072 channels ×2 ports, Standard DMX512: 512 channels ×2 ports, Extended DMX: 1024 channels ×2 ports, Breakpoint resume: 2160 channels ×2 ports.
Output power:	＜3W
Working temperature:	-15℃～60℃
Relative humidity:	≤50%
IP grade:	IP20 (Prevent people from touching the components inside electrical appliance, prevent object which diameter is more than 12.5mm from getting in, no special protection to water or moisture.)
Working environment:	1. Please do not install the controller in magnetic, high pressure, high temperature or seriously wet environment. 2. Please do connect the earth safely in order to reduce risks of fire and damage which cause by short circuit. 3. Please ensure AC100-240V power supply is used, and same polarity is connected between transformer and controller in order to guarantee the proper supply voltage. 4. No waterproof function in the control system, please pay attention on rainproof and waterproof during installing.

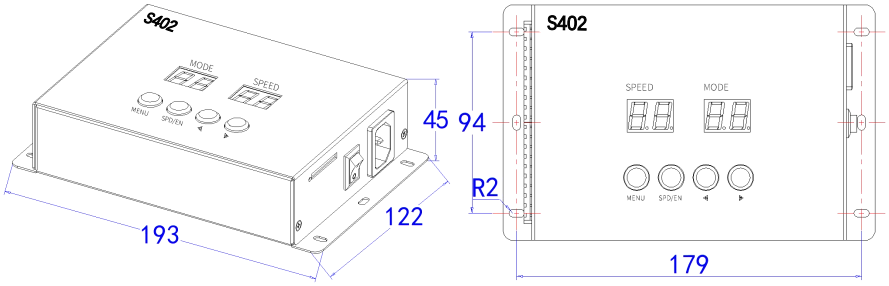
Transportation requirements:

1. The controller has a built-in button battery. According to the relevant regulations of air transportation, such goods must perform the filing procedures.
If you need air transportation, please contact our business department to obtain relevant qualification documents and arrange transportation after completing the filing.
2. The 4G antenna or GPS antenna matched with the controller is a magnetic item and cannot be delivered directly by air.
If air transportation is required, we should negotiate with our business department in advance. After our company replaces the non-magnetic antenna, we will arrange the shipment according to the air transportation process.

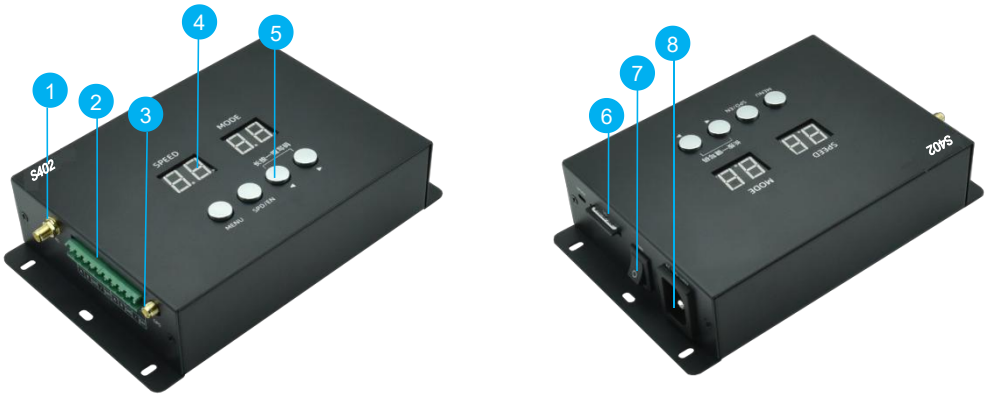
Net weight: 0.55 Kg

Size: L193*W122*H45

(Unit: mm)



2.2. COMPONENT

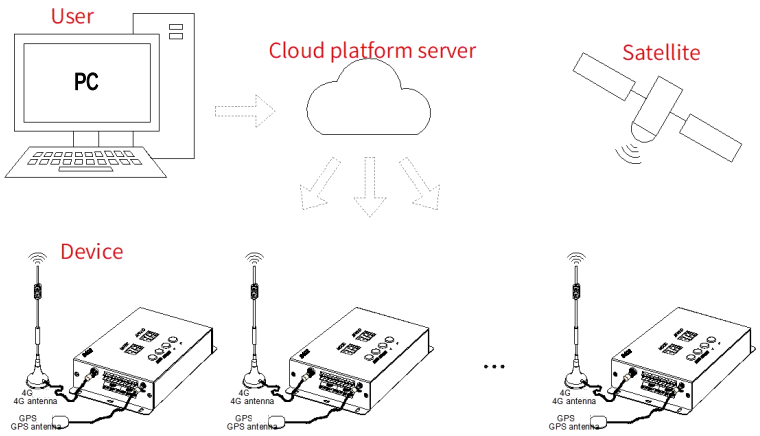


① 4G antenna socket (only for 4G)
② Output control luminaire
③ GPS antenna socket
④ LED Display
⑤ Control button
⑥ SD card port
⑦ Power switch
⑧ Power input AC100-240V

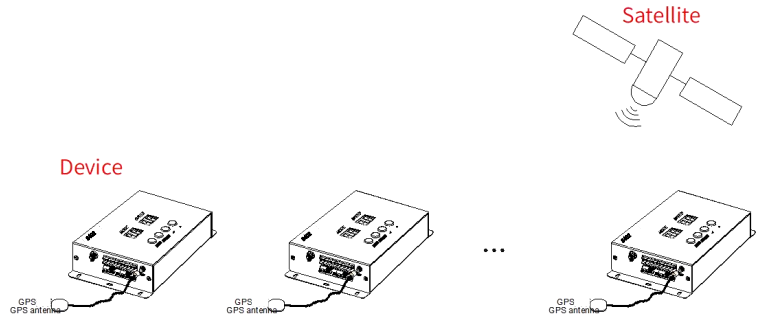
3. CONNECTION MODE

3.1. APPLICATION SOLUTION

3.1.1. ISENGAGES FROM CLOUD CONTROL

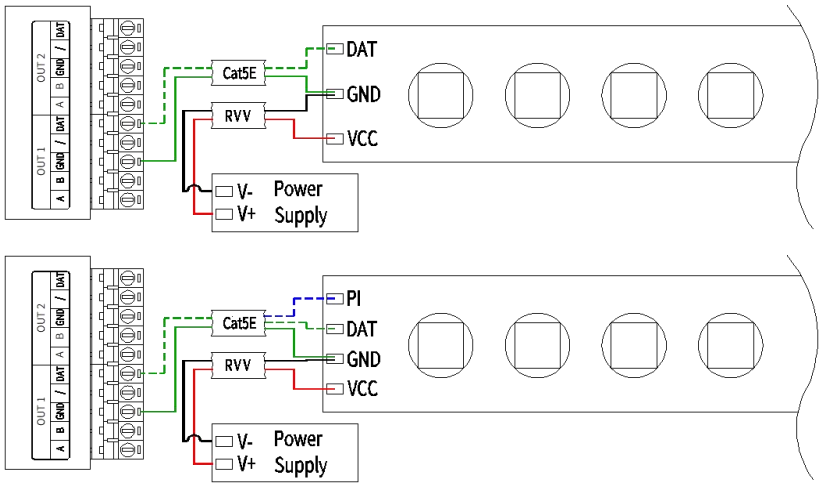


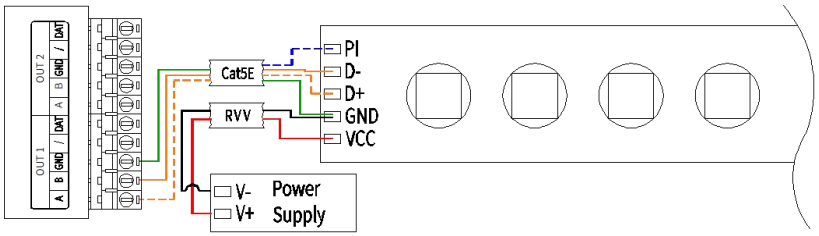
3.1.2. SINGLE GPS SYNCHRONIZATION



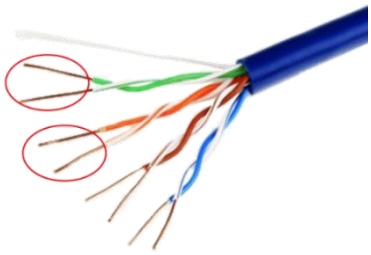
3.2. CONNECTION MODE

Please connect the cables in accordance with silk print on luminaires.





★ Signal cables connection cautions:

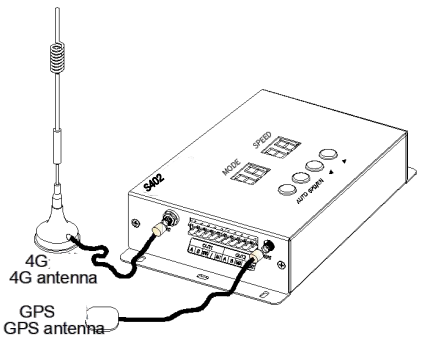


1. Use UTP—Unshielded Twisted Pair (resistance per 100M<10Ω), low quality Ethernet cables, telephone cables and copper wires are unavailable.
2. Use one group twisted pair, suggest green + green white or orange + orange white. The quality and color of the cable are very important. Blue and brown wires greatly influence the signal transmission. Please don't use several groups of twisted pairs together.
3. Controller signal output GND must connect directly with input GND of luminaire. Cannot connect with luminaire through power supply.
4. Switch on the controller after all hardware signal and power cables are connected. Please don't CONNECT / DISCONNECT the signal cables while the controller is power on;avoid back-flow current burning circuit and components of output port.

TRANSMISSION DISTANCE

Transmission Type	Signals	Medium	Distance (M)	Remark
MP / PC → EN controller EN controller → EN controller	100M Ethernet	UTP CAT5e	50-80	
EN controller→DMX lighting DMX lighting→DMX lighting	RS-485	UTP CAT5e	30-50	The address wire must be within 5m. Controllable pixels reduce if wire is over 5m.
		Three core wire	1-20	
		Four core wire	1-20	
EN controller→Single-wire lighting DMX lighting→DMX lighting	TTL	UTP CAT5e	5-20	
		Two core wire	1-5	
		Three core wire	1-5	
Single-wire lighting→Single-wire lighting	TTL	UTP CAT5e	1-2	Pixels controlled less if over 1m.
		Two core wire	0.1-1	

3.3. GPS ANTENNA AND 4G ANTENNA REQUIRE



1. GPS antenna,

3m GPS antenna is provided. User can also purchase GPS marine antenna with standard SMA

interface according to on-site engineering requirement. The longer the antenna is, the more difficult to search satellite.

1) GPS Antenna should be installed in open space to guarantee view angle within 30 degree, there is no big shades (such as trees, iron towers, buildings etc.). GPS Antenna should be more than 2m away from the metal objects which size is bigger than 20cm.
2) Due to the satellite appearing on the equator more than other places, it preferably put the GPS antenna in the south of location for the north hemisphere.
3) Please don't put GPS antenna around other transmitting and receiving equipment to avoid radiation of other transmitting antenna facing to GPS antenna. Please keep them 2m away with each other.

2. **4G antenna,**

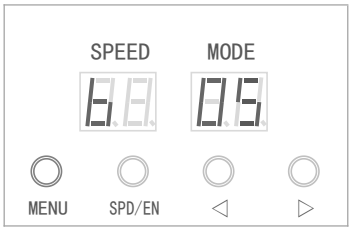
The controller is equipped with 4G module and 4G iot card. Access to the antenna as shown in the figure, and access to 4G network can be realized by electrification.

a) Try to place the antenna as high as possible, and close to the open air.
b) Applicable to China only.

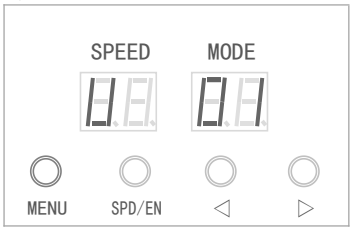
4. BASIC OPERATION

4.1. BOOT DISPLAY

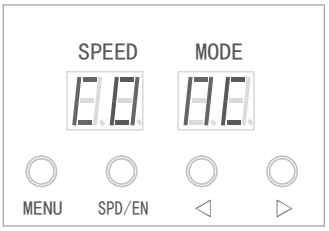
“b 05” → “U 01” → “88 88” is displayed when the controller power on.



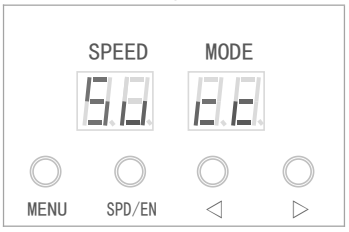
The boot program version.



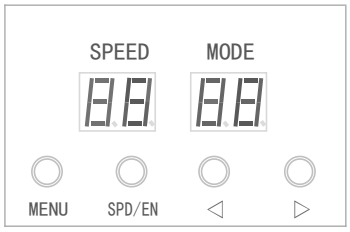
The controller's version.



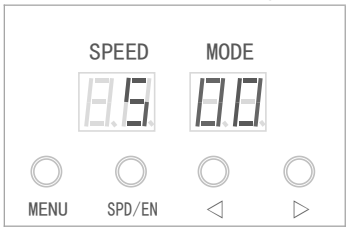
Cat1 is initializing.



Successfully connect to cloud service.



Initializing



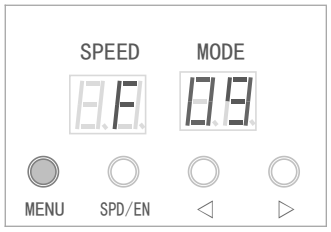
Normal working interface

4.2. BUTTONS OPERATION

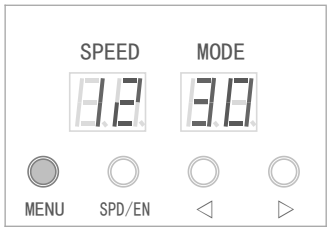
4.2.1. BUTTONS FUNCTION

Button	Operation	Function
MENU	Short press	Signal strength of searched GPS satellite, real time (mm:ss) searched by GPS.
	Long press	Enter into the parameter menu.
SPD/EN	Short press	Set the speed.
◄	Short press	Decrease the mode.
	Long press	Decrease quickly the mode.
►	Short press	Increase the mode.
	Long press	Increase quickly the mode.

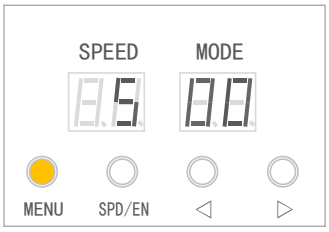
4.2.2. SATELLITE SIGNAL



Press “MENU” once, it shows “F **”.(** is the signal strength of searched GPS satellite. Larger value with better signal.)



Press “MENU” once, it shows the real Beijing time (mm ss) searched by GPS.



Long press “MENU”, the mode shows “00” (audio mode).

★ Press "SPD/EN", "◄" or "►" to return to "Normal Mode" interface from "Satellite" interface. The controller will save the previous speed and effect mode.

The main interface of the controller displays the GPS synchronization status every 10 seconds in a rotating manner. If the GPS synchronization is successful, it displays "G OK", and if it is not synchronized,

it displays "G Er".

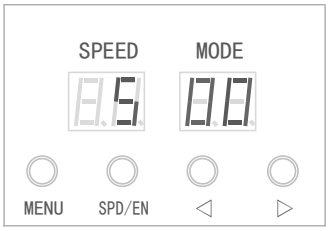
4.2.3. SPEED SELECTION

Press button “SPD/EN” on control panel to select play speed, the less the rate, the quicker the speed.

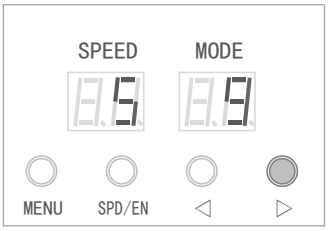
Parameters	Speed gear											
Interface	2	2.	3	3.	4	4.	5	5.	6	7	8	9
Frame Rate(ms)	20	25	30	35	40	45	50	55	60	70	80	90
(fps)	50	40	33	28	25	22	20	18	17	14	13	11
Parameters	Secondary menu speed gear											
Interface	10	11	12	15	20	30	50	80	99			
Frame Rate(ms)	100	110	120	150	200	300	500	1000	2000			
(fps)	10	9	8	7	5	3	2	1	0.5			

4.2.4. EFFECT SWITCHING

Press “◄” and “►” on control panel to select effects.



Press “MENU” once, Mode = 0.



Press “►” 9 times, Mode = 09.

4.2.5. PARAMETER SETTINGS

Long press the MENU button on the controller to enter the controller parameter setting menu, which will display as follows.

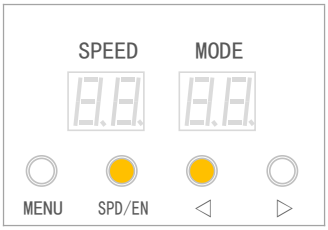
Interface Display	Parameter Description
B.***	The overall brightness of the current controller can be set.
SP **	The current controller speed gear can be set.
A.***	The current controller node code can be set, and the node code set here must be consistent with the effect file name in order to update the effect.
CL.ON/CL.OF	The cloud control cloud update effect function switch is enabled by default, and the interface displays "CL. ON". Only when this function is enabled can the cloud update effect function be used. Please do not turn it off.
SD/FS	The current controller data source priority can be set, with SD as the default.
FAC7	Restore the factory settings switch, and after confirmation, the controller will automatically start restoring the factory settings.
Copy	Reserved function.
ERAS	Reserved function.
CNNP	Reserved function.
LIN*	Cloud control lines can be set, and "LIN3" line 3 (default), "LIN2" line 2, and "LINC" customized lines can be set.
GT.ON/GT.OF	The first frame switch of the time control is on by default, and the interface displays "GT. ON", which can be set to "ON" or "OF".
NF.E.*	Reserved function.

Parameter setting method:

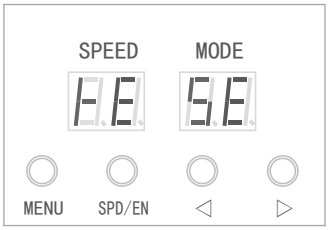
After the controller enters the parameter setting menu, short press “◄” or “►” to switch between selecting parameters. When a parameter needs to be modified, short press “SPD/EN” to confirm the setting of the current parameter. At this time, the digital display flashes and can be switched through “◄” or “►”. After the setting is completed, short press “SPD/EN” twice to confirm. At this time, the digital display stays on, indicating that the parameter modification is successful.

4.2.6. RESTORE FACTORY SETTINGS

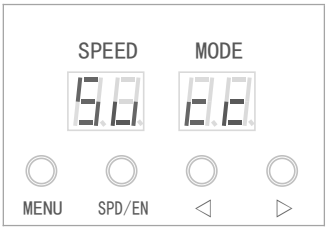
Press and hold “SPD/EN” and “◄”, power onto enter the reset state, after the successful reset will automatically restart.



Press and hold “SPD/EN” and “◄”, power it on.



Resetting



Reset successfully.

5. WRITING ADDRESSING AND PARAMETERS QUICKLY

5.1. CHIP SUPPORTED

Chip	Addressing	Custom Channel	Set parameters					
			No signal State	Power-on Setting	Current	Forward	Issue	Gamma
UCS512A	√	×	×	×	×	×	×	×
UCS512B	√	×	×	×	×	×	×	×
UCS512C0	√	×	×	×	×	×	×	×
UCS512C4	√	×	×	√	×	×	×	×
UCS512CN	√	×	√	√	×	×	×	×
UCS512D	√	×	√	√	√	×	×	×
UCS512E0	√	√	√	√	√	√	×	×
UCS512G4	√	×	√	√	√	×	×	×
UCS512G6	√	×	√	√	√	×	×	×
UCS512H	√	×	√	√	√	×	×	×
UCS512H4	√	×	√	√	√	×	×	×
UCS512H4L	√	×	√	√	√	×	×	×
UCS512KH	√	√	√	√	√	√	×	×
UCS512KL	√	√	√	√	√	√	×	×
UCS512C1	√	×	√	√	√	×	×	×
UCS512C1L	√	×	√	√	√	×	×	×
UCS512C2	√	×	√	√	√	×	×	×
UCS512C2L	√	×	√	√	√	×	×	×
UCS512CBL	√	×	√	√	√	×	×	×
DMX512AP	√	×	×	×	×	×	×	×
SM512	√	×	√	√	√	×	×	×
SM16511	√	×	×	×	×	×	×	×
SM16512	√	×	×	×	×	×	×	×

Chip	Addressing	Custom Channel	Set parameters					
			No signal State	Power-on Setting	Current	Forward	Issue	Gamma
SM16500P	√	×	√	√	×	×	×	×
SM16520P	√	×	×	×	×	×	×	×
SM16522P	√	×	×	×	×	×	×	×
SM16522PS	√	×	×	×	×	×	×	×
SM17500P	√	√	√	√	√	×	×	×
SM17512P	√	×	√	√	√	×	×	×
SM17520P	√	×	√	√	×	×	×	×
SM17522P	√	×	√	√	√	×	×	×
SM18500P	√	√	√	√	√	√	×	×
SM18500PS	√	√	√	√	√	√	×	×
SM18522P	√	×	√	√	√	×	×	√
SM18522PH	√	×	√	√	√	×	×	√
SM18512P	√	×	×	×	×	×	×	×
SM18512PK	√	×	×	×	×	×	×	×
SM19522PS	√	×	×	×	×	×	×	×
SM19522PH	√	×	√	√	√	×	×	×
SM19522PHG	√	×	√	√	√	×	×	√
SW-D	√	×	×	×	×	×	×	×
Hi512A0	√	√	×	×	×	×	×	×
Hi512A4	√	×	√	√	×	×	×	×
Hi512A6	√	×	√	√	×	×	×	×
Hi512D	√	×	√	√	√	×	×	×
Hi512E	√	×	√	√	√	×	×	×
Hi512B4L	√	×	×	×	×	×	×	×
TM512AB3	√	×	×	×	×	×	×	×
TM512AL1	√	×	×	×	×	×	×	×
TM512ACx	√	×	×	×	×	×	×	×
TM512AD	√	×	√	√	√	×	×	×
QED512P	√	×	√	√	√	×	×	×
GS8511	√	×	×	×	×	×	×	×
GS8512	√	×	×	×	×	×	√	√
GS8513	√	×	×	×	√	×	√	√
GS8515	√	×	×	×	√	×	√	√
GS8516	√	×	√	√	√	×	√	×
GS8516B	√	×	√	√	√	×	√	×
GS8523	√	×	√	√	√	×	√	×
GS8524	√	×	√	√	√	×	√	×
GS8525	√	×	√	√	√	×	√	×
GS8525T2	√	×	√	√	√	×	×	×
GS8526	√	×	√	√	√	×	√	×
A512D4	√	×	×	√	×	×	×	×

5.2. SUCCESSFULLY ADDRESSED AND SETTING PARAMETERS

Chip	Lighting color after power on	Addressed		Byte + No signal + No signal		Current parameter		Self-Channel Setting	
		First chip	Other chip	First chip	Other chip	First chip	Other chip	First chip	Other chip
UCS512A	White	Blue	Blue	-	-	-	-	-	-
UCS512A1	White	Blue	Blue	-	-	-	-	-	-
UCS512A2	White	Blue	Blue	-	-	-	-	-	-
UCS512B3	White	Blue	Blue	-	-	-	-	-	-
UCS512C	Custom	White	White	-	-	-	-	-	-
UCS512C0	-	White	White	-	-	-	-	-	-
UCS512C1	Blue	Yellow	White	Power on	Power on	White	White	-	-
UCS512C1L	Blue	Yellow	White	Power on	Power on	White	White	-	-
UCS512C2	Blue	Yellow	White	Power on	Power on	White	White	-	-
UCS512C2L	Blue	Yellow	White	Power on	Power on	White	White	-	-
UCS512CBL	Blue	Yellow	White	Power on	Power on	White	White	-	-
UCS512C3	Custom	White	White	Red	Red	-	-	-	-
UCS512C4	Custom	White	White	Red	Red	-	-	-	-
UCS512CN	Custom	Yellow	White	Yellow	Power on	-	-	-	-
UCS512D	Custom	Yellow	White	Yellow	Power on	Yellow	Red	-	-
UCS512E0	Custom	Yellow	White	Yellow	Power on	-	-	Yellow	Green
UCS512EH	Custom	Yellow	White	Yellow	Power on	Yellow	Red	Yellow	Green
UCS512G4	Custom	Yellow	White	White / Red or yellow	White / Red or yellow	White	White	-	-
UCS512G6	Custom	Yellow / Custom	White / Custom	White / Red or yellow	White / Red or yellow	White	White	-	-
UCS512H UCS512H4 UCS512H4L	Custom	Yellow / Red or green	White / Red or green	Yellow	Red	-	-	-	-
UCS512KH UCS512KL	Custom	Yellow / Red or green	White / Red or green	-	-	-	-	Yellow / Red or green	White / Red or green
DMX512AP	-	White	White	-	-	-	-	-	-
SM512	White	Green	Green	-	-	-	-	-	-
SM16512	-	Green	Green	-	-	-	-	-	-
SM16511	-	Green	Green	-	-	-	-	-	-
SM16500P	Custom	Red	Green	Red	Power on	-	-	-	-
SM16520	-	Green	Green	-	-	-	-	-	-
SM16522P	Custom	Green	Green	-	-	-	-	-	-
SM16522PS	Custom	Green	Green	-	-	-	-	-	-
SM17500P	Custom	Red	Green	Red	Power on	Red	Yellow	Red	Purple
SM17512P	Custom	Red	Green	Blue	Blue	-	-	-	-
SM17520P	-	Red	Green	Red	Blue	Red	Yellow	-	-
SM17522P	-	Red	Green	Red	Blue	Red	Yellow	-	-
SM18500P	-	Red	Green	Red	Blue	Red	Yellow	Red	Purple
SM18500PS	-	Red	Green	Red	Blue	Red	Yellow	Red	Purple
SM18522P	Custom	Red	Green	Blue	Blue	-	-	-	-
SM18522PH	-	Red	Green	Red	Blue	Red	Yellow	-	-
SM19522PH	-	-	-	-	-	-	-	-	-
SM18522PHG	-	Red	Green	Red	Blue	Red	Yellow	Red	Purple
SW-D	-	Yellow	Green	-	-	-	-	-	-
Hi512A4	Custom	Red	Green	Red	Green	-	-	-	-
Hi512A6	Custom	Red	Green	Red	Green	-	-	-	-
Hi512A0	-	White	White	White	White	-	-	-	-
Hi512D	-	Red	Green	Green	Green	Green	Green	-	-
Hi512E	-	Red	Green	Green	Green	Green	Green	-	-
TM512AB3	White	Blue	Blue	-	-	-	-	-	-
TM512AL1	White	Blue	Blue	-	-	-	-	-	-

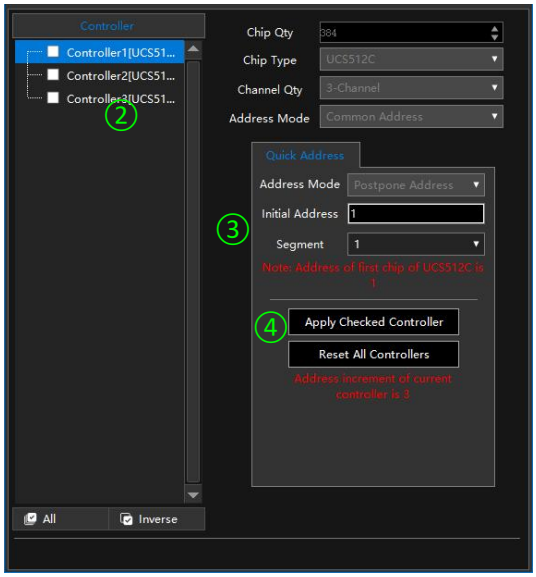
Chip	Lighting color after power on	Addressed		Byte + No signal + No signal		Current parameter		Self-Channel Setting	
		First chip	Other chip	First chip	Other chip	First chip	Other chip	First chip	Other chip
TM512AC0	-	White	White	-	-	-	-	-	-
TM512AC2	Custom	White	White	-	-	-	-	-	-
TM512AC3	Blue	White	White	-	-	-	-	-	-
TM512AC4	Blue	White	White	-	-	-	-	-	-
TM512AD	Blue	Yellow	White	Yellow	Power on	Yellow	Red	-	-
GS8512	-	Red	Cyan	-	-	-	-	-	-
GS8511	-	-	-	-	-	-	-	-	-
GS8513	-	Red	Cyan	-	-	-	-	-	-
GS8515	-	Red	Cyan	-	-	-	-	-	-
GS8516	-	Red	Cyan	-	-	-	-	-	-
GS8516B	-	Red	Cyan	Blue	Blue	Blue	Blue	-	-
GS8523	-	Red	Cyan	-	-	-	-	-	-
GS8524	-	Red	Cyan	-	-	-	-	-	-
GS8525	-	Red	Cyan	-	-	-	-	-	-
GS8525T2	-	Red	Cyan	-	-	-	-	-	-
GS8526	-	-	-	-	-	-	-	-	-
A512D4	-	White	White	Red	Red	-	-	-	-

5.3. SUPPORT FOR VERSION OF LED PLAYER

LED Player 3.2 or later version.

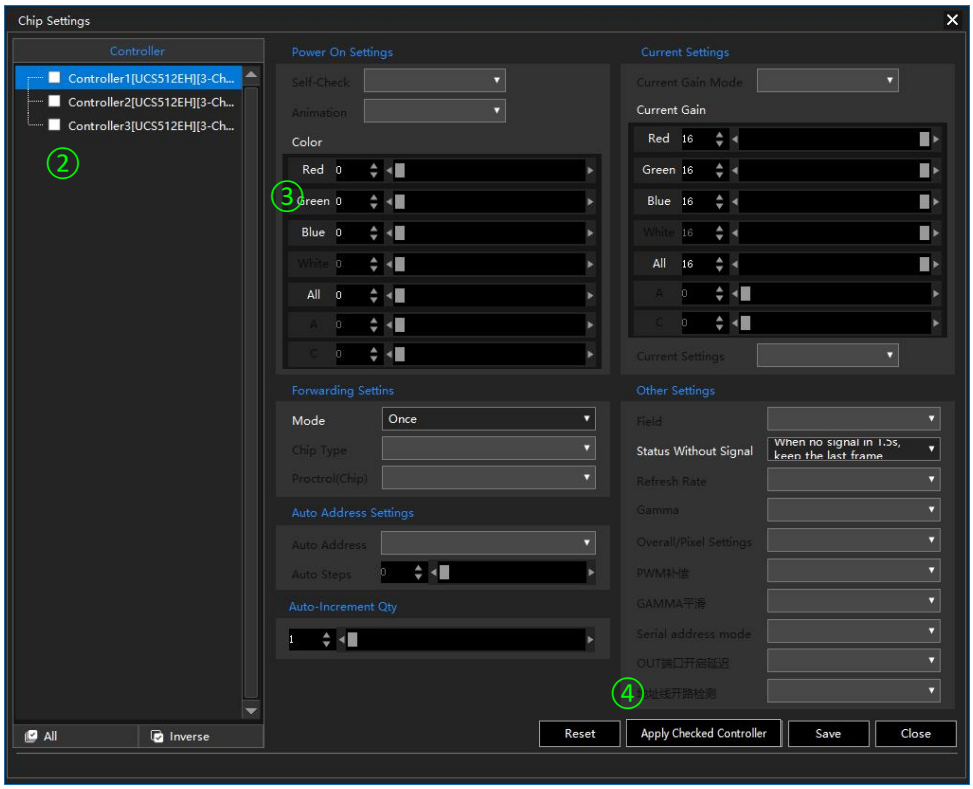
5.4. ADDRESSING AND WRITE PARAMETER

5.4.1. SETTING THE ADDRESSING IN LED PLAYER



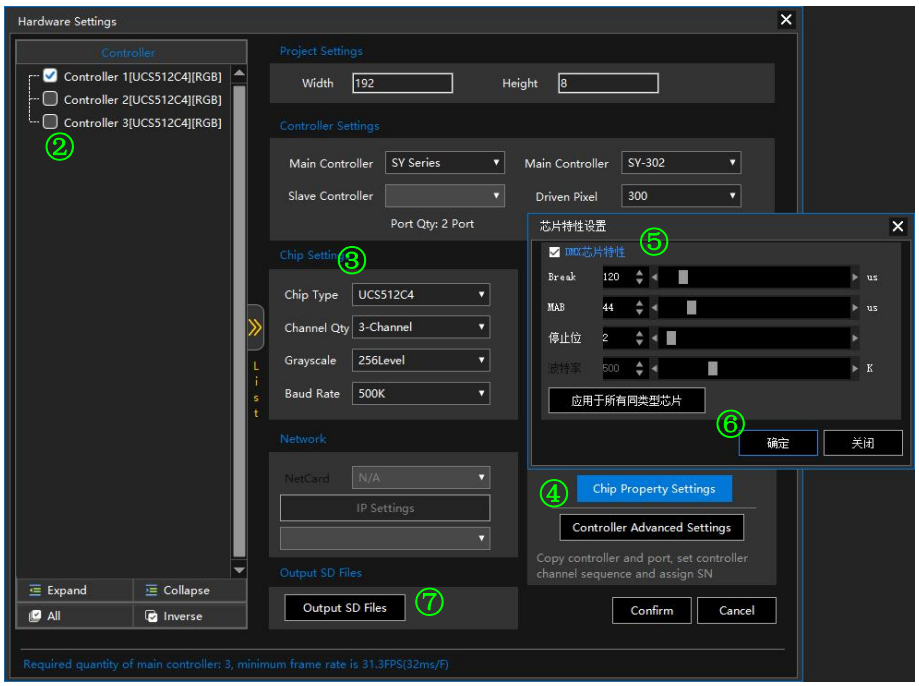
1. Click “Quickly Addressing” of Debug, and open the setting windows.
2. Select the controller be set.
3. Set the initial address and segment.
4. Click “Apply Checked Controller” to save.
5. Close and quit.
6. Output and copy the SD card. (Please refer to OUTPUT AND COPY THE SD CARD FILE.)

5.4.2. SETTING THE PARAMETERS IN LED PLAYER

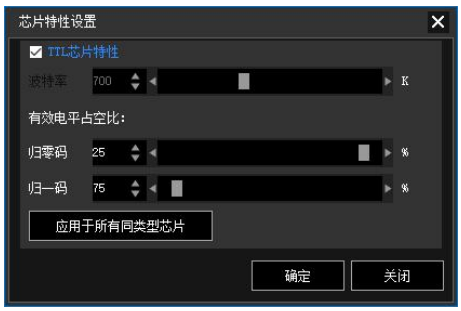


1. Click “Chip” of Settings, and open the setting windows.
2. Select the controller be set.
3. Set the parameters of chip.
4. Click “Apply Checked Controller” to save.
5. Close and quit.
6. Output and copy the SD card. (Please refer to OUTPUT AND COPY THE SD CARD FILE.)

5.4.3. SETTING THE CHIP PROPERTY IN LED PLAYER



DMX protocol chip

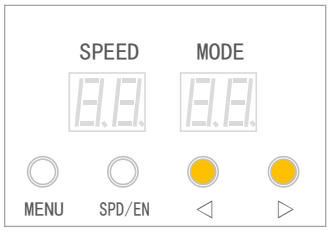


SPI protocol chip

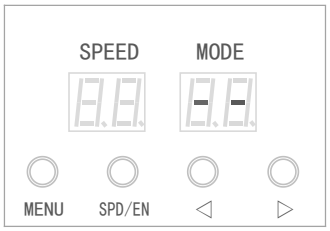
① Click “Hardware Settings” of Settings, and open the setting windows.
② Select the controller be set.
③ Select the chip type.
④ Click “Chip Property Settings” to open the setting window.
⑤ Check and set the value.
⑥ Click “确定” and close the window.
⑦ Output and copy the SD card. (Please refer to OUTPUT AND COPY THE SD CARD FILE.)

5.4.4. OPERATION ON THE CONTROLLER

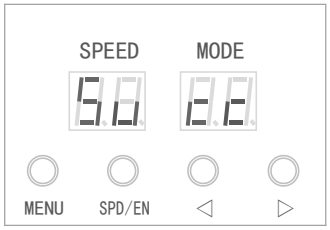
Put into the SD card.



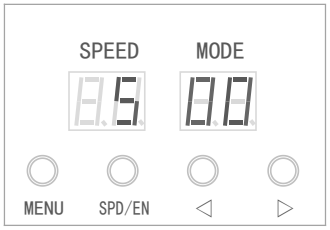
Press and hold ◄ and ► when it is working.
Or press and hold ◄ and ► then power it on.



Release the button when it shows ”- -”, then it start addressing and setting parameters.



It will restart after show “Su cc”.



It will restart after setting.

Order of setting parameters: Setting adaptive channel → Setting parameters → Addressing → Adaptive channel coding → Addressing check → Checking Genies chip

Addressing check: First chip lights yellow and the others light green 3 seconds → Goes off 3 seconds → White scan

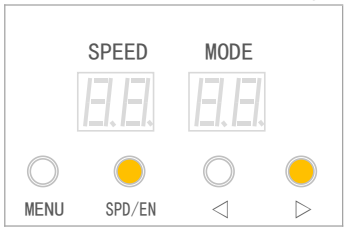
6. REMOTE OPERATION OF CLOUD CONTROL SYSTEM

S402 controller has built-in 4G card. The correct access to our cloud platform can realize the functions of remote setup, address writing.

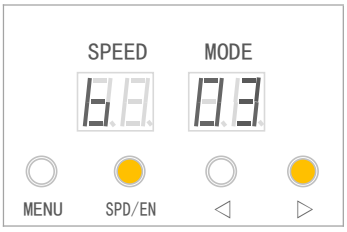
6.1. GETTING THE DEVICE CODE

A sticker printed with the UID code of the controller and the corresponding two-dimensional code is affixed to the side of the controller. It can be seen that in the next section, enter the engineering code of this sticker and use the mobile phone to scan the code and bind.

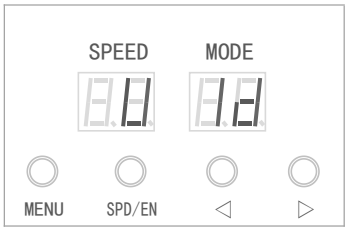
When the sticker is damaged and the display information is incomplete and cannot be bound, we can get the UIDcode in the following ways.



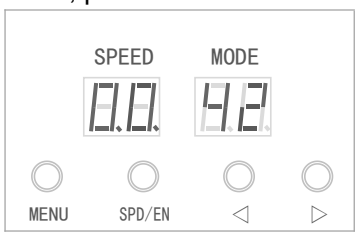
Press and hold down SPD/EN and ►, power on.



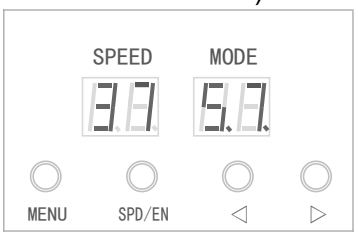
Shows the boot version (hold down SPD/EN and ►).



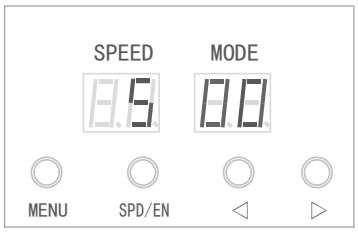
Shows the UID text and release the button.



The UID start code is displayed “.” in the lower left corner



The UID end code is displayed “.” in the lower left corner



When the display is complete, the main screen is displayed.

- **The 24 bit UID code shows in sequence,**

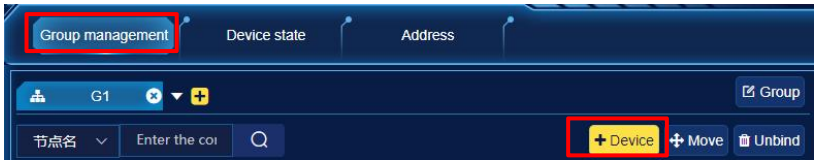
SPEED MODE	SPEED MODE	SPEED MODE	SPEED MODE	SPEED MODE	SPEED MODE
Page 1	Page 2	Page 3	Page 4	Page 5	Page 6

6.2. SETTING BY CLOUD SERVER OF WEBSITE

6.2.1. ACCESS STEPS ON WEBSITE

The Cloud server Web site: https://cloud-3.seekway.cn

Click the [+ Device] in the [Group management]. Enter the 24 characters in the ID bar and click [Confirm]



Parameter	Specification
ID	Enter the code of device.
Device	The device's name.
Group	Group the device.

6.2.2. SETTING THE STATE BY CLOUD SERVER ON WEBSITE

After the controller is connected to the cloud platform, under the "** Grouping" (such as project A) interface of "Node Status", check a controller (multiple selection supported) to remotely set the speed, brightness, animation, etc.

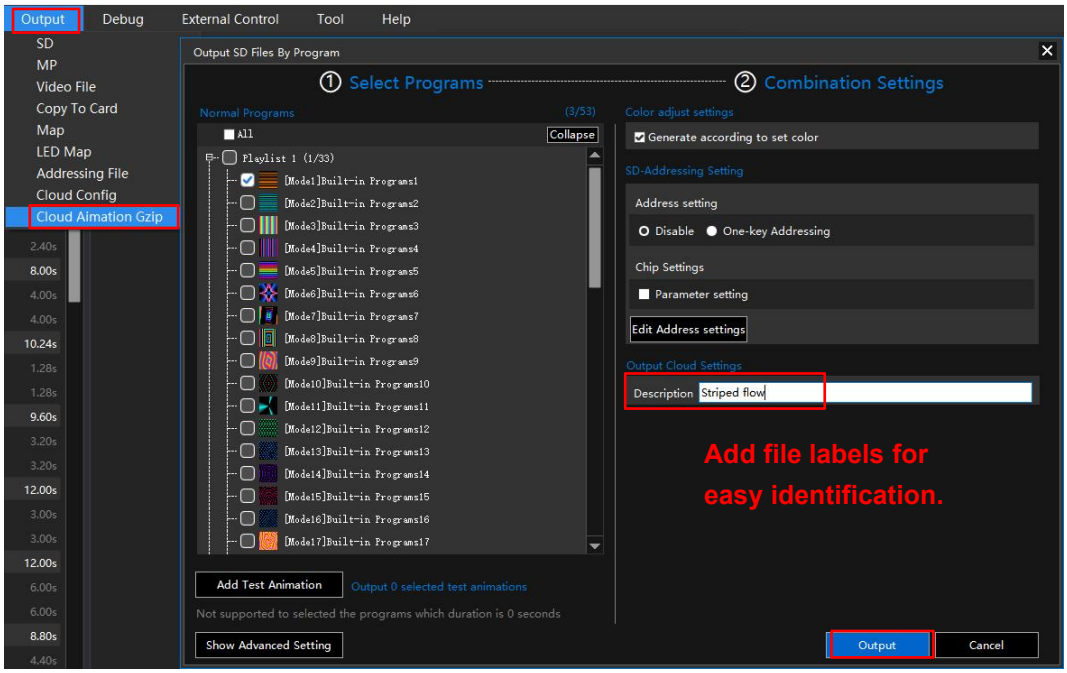
6.2.3. CLOUD UPDATE ANIMATION FILE

The S402 series controller not only supports remote switching of animations on the cloud platform, but also supports uploading and updating animation files through the cloud platform, and automatically backs up the effect files to the controller after 5 power on/off cycles.

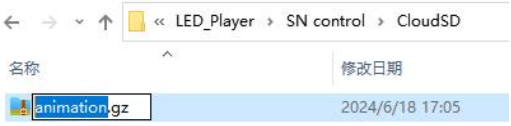
Attention: The update process cannot be powered off.

6.2.3.1. OUTPUT THE ANIMATION FILE IN LED Player

Open LED Player and click “Cloud Animation Gzip” of “Output” in the menu bar. In the pop-up window interface, select the animation material to be output and click [Output] to output.

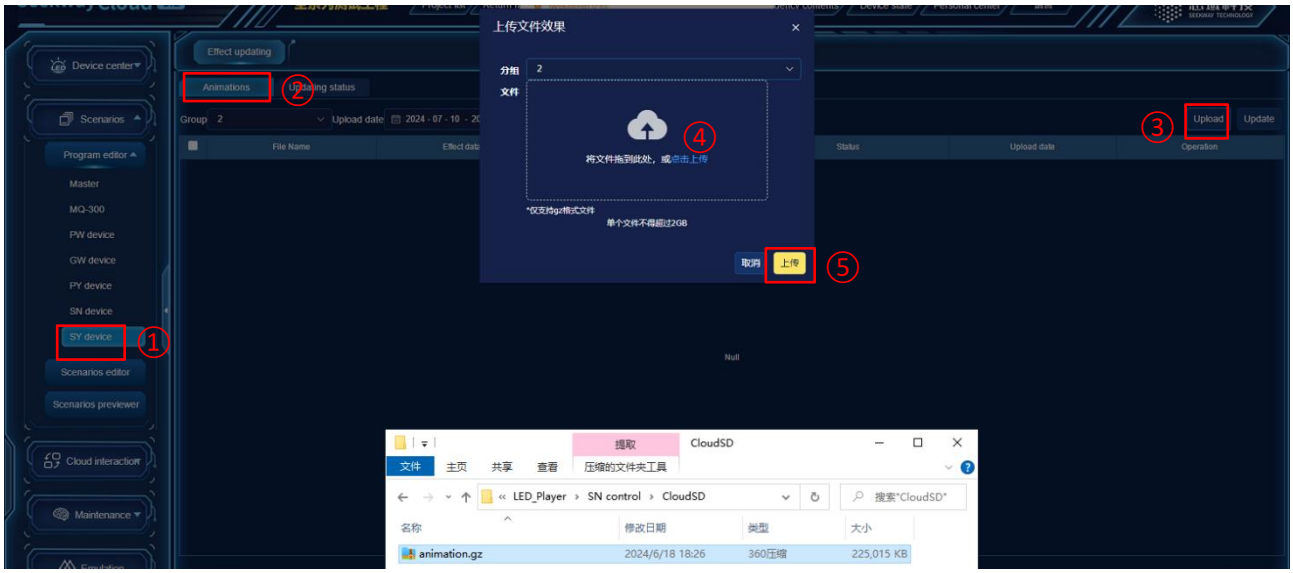


The output effect file is stored in the CloudSD folder under the root directory of the current project. The default file name is SD*.bin.gz. And it can be changed twice. (Retain the “.gz” test.)

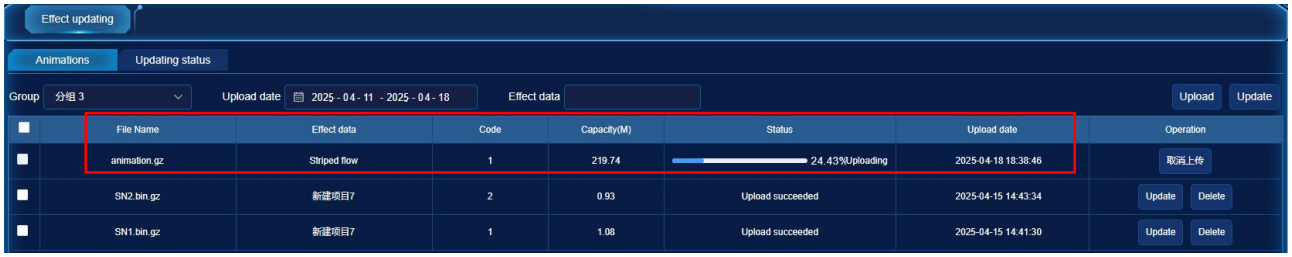


6.2.3.2. UPLOAD THE .GZ FILE

On the “SY Series” screen of “Scenario”, select the corresponding packet device and click “Upload”. In the pop-up window, add (or drag) the file that needs to be updated for uploading.



After the upload is complete, the newly uploaded effect file can be seen on the interface (identified by the file name, effect data, and upload time).

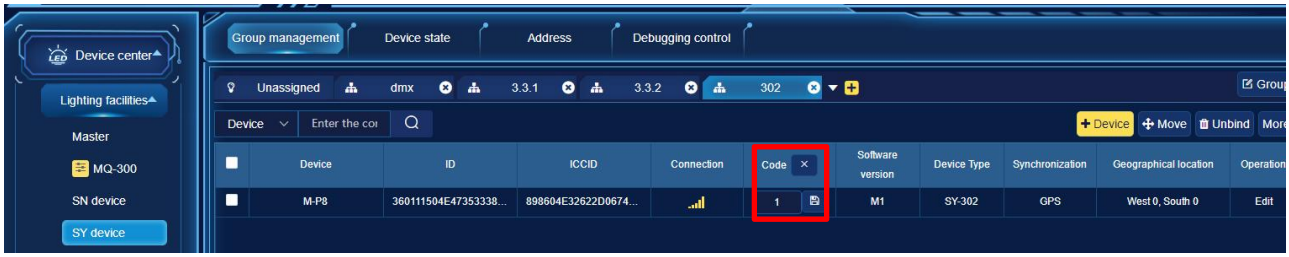


6.2.3.3. SET THE NODE CODE OF SY CONTROLLER (REQUIRED).

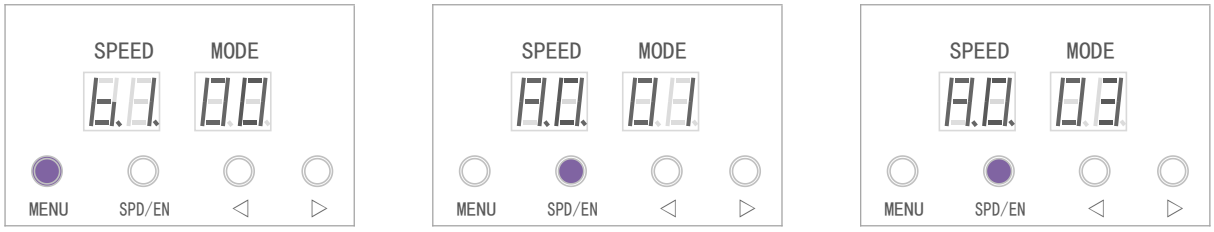
Before updating the animation file, ensure that the device code (also called node code) of each SN controller has been assigned to download the animation file correctly. If it has been allocated, it does not need to be allocated again.

The assignment operation is as follows.

Method 1, Under "Group management" - "** Group" (such as project A), click next to "Code" and enter the editing state. Enter the corresponding value and click to save. When all Settings are complete, click to exit editing state.



Method 2, Long press the MENU button on the controller to enter the parameter setting menu. Switch to the node code parameter setting through ◄ or ►. Short press the SPD/EN button to confirm the parameter modification. The parameter will flash and display. After modification, short press the SPD/EN button twice to confirm the modification. The parameter will remain on and display successfully.



6.2.3.4. DOWNLOAD THE UPDATE FILE TO THE SN CONTROLLER

In the Animations interface of "Program editor", select the corresponding group and click "Update" (multiple selection + simultaneous update is supported).

All SY controller matching the updated file node code (device code) will update the file.

1. The node code of the SY controller must be consistent with the node code of the animation file assigned by the LED Player to ensure the correct update.

2. The online SY controller will immediately execute the file update command, and the offline device will be updated the next time it is online.
3. The download effect process needs to be temporarily interrupted, we can press pause first (do not power off), and continue to download after completing other operations.
4. During the download process, the controller is disconnected from the network. That is, it needs to wait for the next power on the network to connect to the cloud, and automatically updates from the beginning.
5. If an error message is displayed in Update Status, check the network status.

We can view the update details on the Update Status page.

6.2.4. ADDRESSING BY CLOUD SERVER ON WEBSITE

1. Check the node in the Group * of “Address” (multiple selection supported) to address it has drove the controllers.
   Please make sure that SD card save with the addressing file.
2. After the address is complete, the Address Succeeded message is displayed on the node list.
   The actual addressing success depends on the luminaire effect.

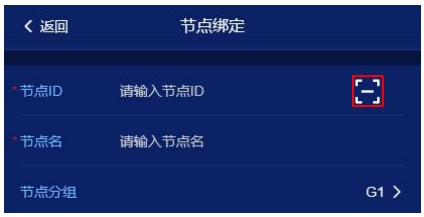
6.3. SETTING BY CLOUD SERVER OF PHONE

6.3.1. ACCESS STEPS ON THE PHONE

Use your mobile phone to log in to the operation interface.

Select “SY device” of “Device center”. And then select “+添加节点” in the “节点列表”.

Select the icon to scan the UID code in the controller and select “确定”.



6.3.2. SETING AND ADDRESSING BY CLOUD SERVER ON PHONE

After the controller is connected to the cloud platform, under the "** Grouping" (such as project A) interface of "控制面板", check a controller (multiple selection supported) to remotely set the speed, brightness, animation, etc.

Parameter specification,

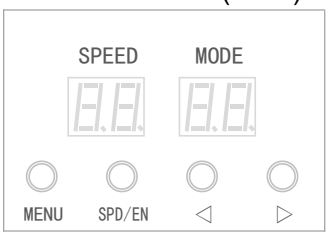
Parameter	Specification
切换效果	Select the animation to play. (Single[单循环], multiple loops[多循环] and random[随机] can be selected.) When playing a single loop, you can click to select any effect to play.
调节设置	帧速, Set the number of frames per second (FPS) to play, ranging from 0.5 to 33 frames per second.

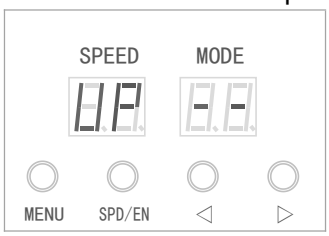
	亮度, The values range from 0-100, where 100 is the brightest and 0 is all black.
时控开关	Enable or disable the SD time control function.
一键写码	Select to address. The coding result is judged by the display color of the lumaires. The write parameters are automatically read from the SD card file and cannot be set on the cloud platform.
GPS 开关	Enable or disable the GPS synchronization function.

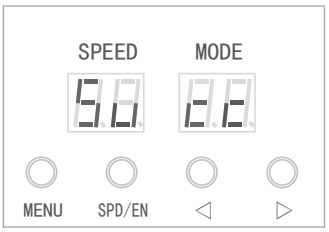
7. FIRMWARE UPDATE

The controller supports reading the SD card parameters (T302_xxx.bin file) to update its procedure. Please refer to the follow steps.

1. Please refer to MANUAL FORMAT AND COPY CARD and copy the T302_xxx.bin file into SD card.
2. Power on the controller after inserting the SD card. The nixie display shows “UP --” and it will start to update.
3. The nixie display shows “Succ” when finishing update. Power off the controller and insert the SD card with the SD(8888).bin file into. After the controller is powered on, it can continue to work.

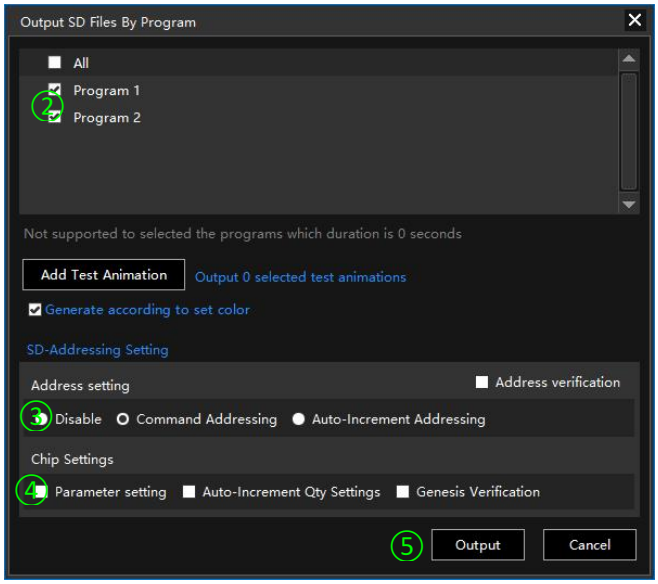






8. OUTPUT AND COPY THE SD CARD FILE

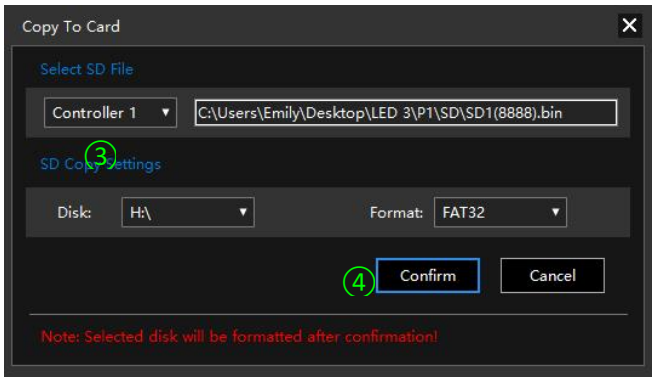
8.1. OUTPUT THE SD CARD FILE



1. Click “SD” of Output, and open the windows.
2. Select the program be out-put. The total number of selected programs must be less than 96.
3. Select the addressing setting.
4. Select the chip settings.
5. Click Output.

Note: please don’t select the addressing setting and chip settings if no address and parameters need to be set.

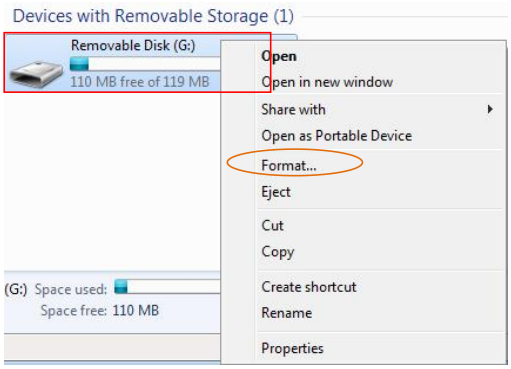
8.2. COPY THE SD FILE BY LED PLAYER



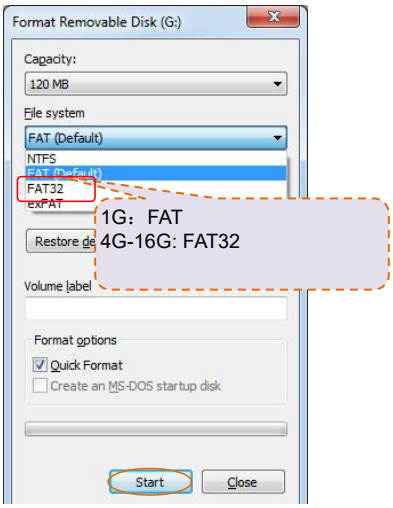
1. Input the SD card.
2. Click “Copy to SD” of Output, and open the windows.
3. Select the controller number be copied.
4. Click Confirm.

8.3. MANUAL FORMAT AND COPY CARD

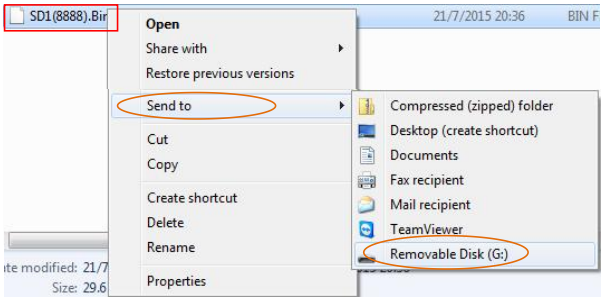
1) Right click the disk where the SD card



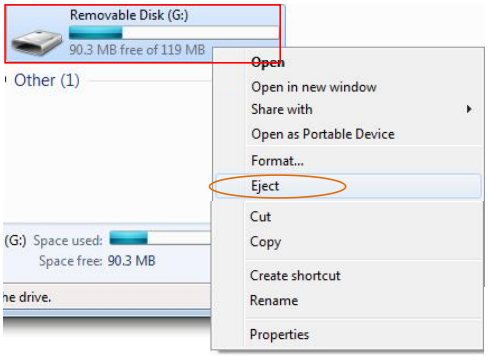
2) Select File systerm and 32KB (can check “Quick Format”) and click START.



3) Right click SD1(8888).Bin file, send the file to removable disk.



4) Right click removable disk and click “Eject”.



9. ERROR CODE

Error	Introduction	Reason
E01.xx.xx	No SD card.	Poor seat connection. / No SD card.
E02.xx.xx	SD card no response.	Card is broken. / Card doesn't support read sequentially.
E03.xx.xx	Cannot reset SD card.	Card is broken. / Card doesn't support read

Error	Introduction	Reason
		sequentially.
E05.xx.xx	Cannot read SD card.	Cannot read part of the card. / Bad connection.
E07.xx.xx	SD card file sequence doesn't match the controller.	SD card file error. / Unfinished video merging.
E18.xx.xx	The design of the program has exceeded its pixel limit.	Please reduce the program's total number of loaded pixels.
E22.xx.xx	The firmware file is abnormal.	Please use the correct firmware file.
E23.xx.xx	The firmware program is missing.	Please contact the after-sales service.
E24.xx.xx	The firmware upgrade failed.	Check whether the firmware is correctly upgraded and upgrade it again.
E27.xx.xx	The SD card has too many bad areas.	Replace the new SD card.
E28.xx.xx	Slow response to card reading	The SD card performance deteriorates. Please replace the SD card with a new one.

Description: The code is 6 digits. The first two digits are the fault code, and the last four digits are the subarea code to facilitate us to analyze the specific problem.

10. FITTINGS

Shows	Item	Number	Remark
	SD Card	1	
	Power line	1	
	5P terminal	2	
	Straight screwdriver	1	
	Antenna stand	1	
	GPS antenna (3 meters)	1	GPS control fitting
	4G antenna (3 meters)	1	Cloud control fitting