

# LED Dance Floor Hardware and Software User Manual (SD Card Control System)

## Hardware and Software (SD Card Control System)

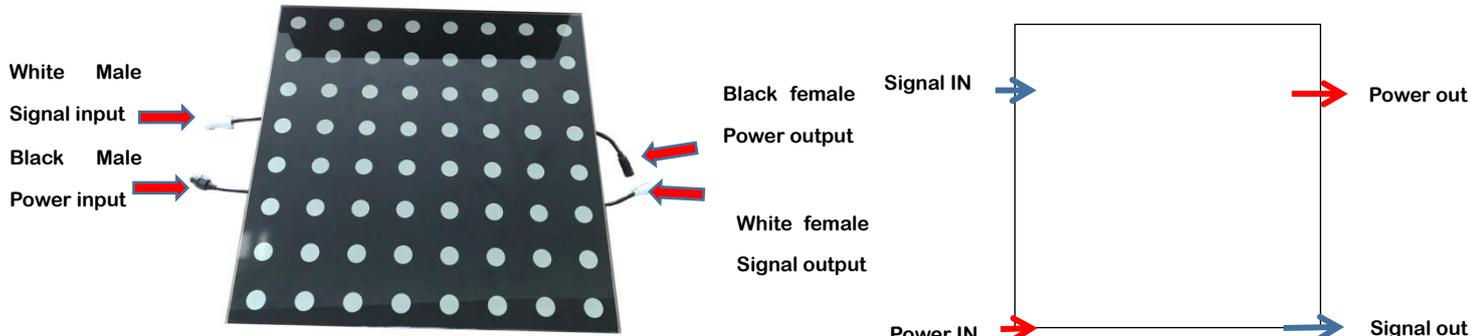
### Chapter One Overview

{Installation environment}

- 1. Temperature: 0°C to 40°C
- 2. Voltage: AC 220V

{Connection diagram and Illustration}

Different dance floor but the same connection item. Sample ID02 as follow:



The following figure is an example:

Hardware and Software (SD Card Control System)

Second chapter: hardware connection

{Power supply and signal connection}



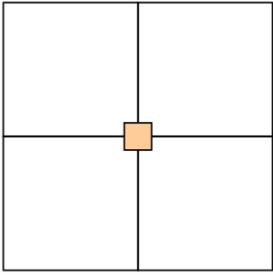
1. Get close the male input and female output of signal and power cables.
2. Follow the same color to connect them then screw up nuts clockwise.
3. Adjust the cables to make it hide in groove easily, then put panels together.

{LED Dance Floor Splicing}

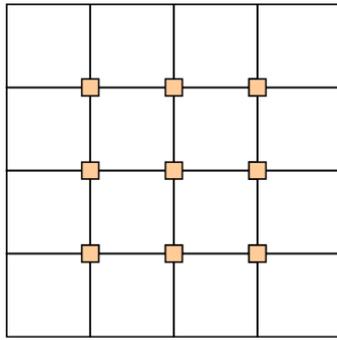
Square fixed piece -- used for fixed between four led dance floor.



The use position of the square connector is as follows:



2\*2



4\*4



**Installation operation (Connection of the 4\*2)**



**Third**

**chapter: controller classification**



**{Applicable model}: 408-SD/ 408-DMX/ 408-GPS/ 408-REMOTE**

**{error code}:**

Explanation of controller error:

Error	Introduction	Reason
01	No SD card	Poor seat connection. / No SD card.
02	SD card no response	Card is broken. / Card doesn't support read sequentially.
03	Cannot reset SD card	Card is broken. / Card doesn't support read sequentially.
04	Cannot activate SD card	Card is broken. / Card doesn't support read sequentially.
05	Cannot read SD card	Cannot read part of the card. / Bad connection.
06	Cannot find feature code	Card is unformatted. / No files.
07	SD card file sequence doesn't match the controller	SD card file error. / Unfinished video synthesis.
09	Control sequence doesn't match file sequence	Player setting does not match the cover number.
10	Wrong password	Input wrong password
11	UID does not match	UID on main controller does not match the one on slave controller in cascade
12	UID error in Config file	UID on Config file does not match the one on controller
13	Controller is not fully unlocked	When controller is reading Config file, it is not fully unlocked
14	UID error on SD card	UID on SD card does not match the one on controller

## {GPS ANTENNA NOTES}

**2m 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 larger the difficulty of searching satellite will be.**

- 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.
- For the satellite appears on the equator more than other places, in the North Hemisphere, you'd better put the GPS antenna south of the installation place.
- Please don't put GPS antenna around other transmitting and receiving equipment to avoid other transmitting antenna direction point to GPS antenna. Please keep them 2m away with each other. Suggesting install different GPS antenna in different places to avoid disturbing.



## {WIFI ANTENNA NOTES}

- Please try to keep WIFI Antenna perpendicular to the floor.
- Wall, glass and interval would reduce WIFI signal rapidly during transmission. Besides, external electromagnetic interference (EMI) could lead to signal interruption, short transmission distance, failed connection and related problems. **Therefore, the distance between mobile phone and WIFI antenna cannot be too long which should be less than 30m without blocks.** (Estimate strength of WIFI signal according to WIFI signal bar on the controller.)
- Controller can only be controlled by ONE mobile APP. Also, one mobile APP can only control ONE controller.



## {GSM NOTES}

Put SIM card into the card slot and wire the GSM signal line in the case of power failure.

- Please use standard SIM card with WCDMA or TD-SCDMA.
- Please put the controller in high place. It should be closed to open



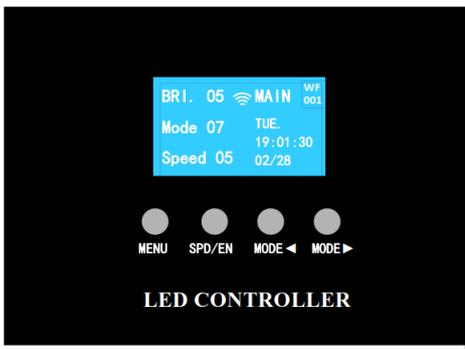
space outdoor and base station. Otherwise, it would not receive the message due to the unstable signal.

- c) Please don't put GSM antenna around other transmitting and receiving equipment to avoid other transmitting antenna direction interference GSM antenna.
- d) Please use Cell phone signal amplifier to strengthen signal in the unstable signal place

## {BUTTONS FUNCTION}

Button	Function	Explanation
MENU	Menu key	Selection picture, audio control, Voice control+audio mode. Hold press 2 seconds to enter menu setting.
SPD/EN	speed key	Common mode: 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 15, 20, 30, 50, 80, 99. Communication mode: 04AC, 06AC, 08AC, 10AC, 12AC, 20AC, 50AC, 99AC.
	confirm key	Press it to save current setting on the menu setting.
MODE◀	mode-key	Mode minus selection. Long press can be quickly change.
MODE▶	mode+key	Mode add selection. Long press can be quickly change.

## {INTERFACE INTRODUCTION}



Display	Explanation
Mode	Current display mode. (It is in autokinetic effect if shows S_MD.)
Speed	Current display speed.
TUE.	Day of the week.
SD	Wait to enter SD card time control status. It shows the n <sup>th</sup> time control list when it entered SD card time control status.
WiFi	Controller is connected with mobile APP thus it is controllable.
WF	Wait to enter WIFI time control status. It shows the n <sup>th</sup> time control list when it entered WIFI time control status.
19:01:30	Current setting Beijing time.
02/28	Date (MM/DD).
G --	Signal of searched GPS satellite. (ER: without connect the GPS line. NG: no signal. OK: the effects have been Sync.)

## {CONTROL MODE SWITCHING}

Press "MENU" button, select audio control, voice control or pictures 3 control modes.

When switch the mode, it will memorize previous effect of this mode and start to play.

Control Mode	Icon	Automatic Mode	Manual Mode (Default)	Remark
Voice Control		Automatic	01-19	User can set the quantity of effects by software. No more than 96 effects.
Audio Control		Automatic	01-19	
Picture		Automatic	01-55 (+1) / 20-70 (+1)	

## {EFFECT SWITCHING}

Press "MODE◀" and "MODE▶" on control panel to select effects.

(Apply to voice control, audio control and picture three control modes.)

It can switch increased or decreased quickly with long press "MODE◀" or "MODE▶".

## {SPEED SELECTION}

Parameters	Speed Display																Notes
	03	04	05	06	07	08	09	10	11	12	15	20	30	50	80	99	
Main Control speed																	Independent Speed
		04 AC	06 AC	08 AC	10 AC	12 AC	20 AC	50 AC	99 AC	Synchronization Speed							
Frame Rate (ms)	30	40	50	60	70	80	90	100	110	120	150	200	300	500	1000	2000	
Frame Per Second	33	25	20	17	14	13	11	10	9	8	7	5	3	2	1	0.5	

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

※ Independent speed: Independent speed: this speed is decided by the meters of hurdle lights of clients, if it is less than actual meters, the data won't display.

※ Synchronization speed: All the controllers set same speed and same mode, connect to power in the same time. They can reach synchronization.

**(Same frame rate may display differently if controller model is not the same, please confirm.)**

## {MENU SETTING}

Long press "MENU" button for 2 seconds

Select function through "MODE◀" and "MODE▶". Details functions are shown as below:

	Menu	LED Display	Operation
menu setting	MAIN/SUB	MAIN / SUB	1) Press "MODE◀" and "MODE▶" to select MAIN/SUB. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select main control properties. <i>Resting Stste only "MENU" can use. Other functions are controlled by main controller.</i> 3) Press "SPD/EN" to save. And press "MENU" return to parent menu.
	DMX ADDR	DMX ADDRESS ***	1) Press "MODE◀" and "MODE▶" to select DMX ADDR. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select address data (long press change quickly). 3) Press "SPD/EN" to save. And press "MENU" return to parent menu. <i>SY DMX additional function occupy 8 channels, next DMX equipment address is X+8.</i>
	TIME DATE	TUESDAY 00: 01 2017/02/28	1) Press "MODE◀" and "MODE▶" to select TIME DATE. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select the curmet data. Press "SPD/EN" to save. 3) Press "SPD/EN" 2 second to confirm the setting. And press "MENU" return to parent menu. <i>※ The controller with GPS function cannot change the time and the date.</i>
	Language	Chinese English	1) Press "MODE◀" and "MODE▶" to select LANGUAGE. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select LANGUAGE diplay. 3) Press "SPD/EN" to save. And press "MENU" return to parent menu.
	BRIGHT.	Brightness 5	1) Press "MODE◀" and "MODE▶" to select BRIGHT. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select brightness. 1 is the darkest, and 5 is the brightest. 3) Press "SPD/EN" to save. And press "MENU" return to parent menu.
	SENSTV.	Sensitivit 2	1) Press "MODE◀" and "MODE▶" to select SENSTV. Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" to select sensitivity. 0 is the dullest, and 5 is the strongest. 3) Press "SPD/EN" to save. And press "MENU" return to parent menu. <i>※ Apply to the controller with voice control or audio control only. Merged SD.BIN file must contain musical effects.</i>
	TIME CTL.	SD_CTL WiFi_CTL OFF	1) Press "MODE◀" and "MODE▶" select "TIME CTL", Press "SPD/EN" enter. 2) Press "MODE◀" and "MODE▶" select "SD_CTL", "WiFi_CTL", "OFF". 3) Press "SPD/EN" to save. And press "MENU" return to parent menu.
	Versions		Get the imformation of the current version.

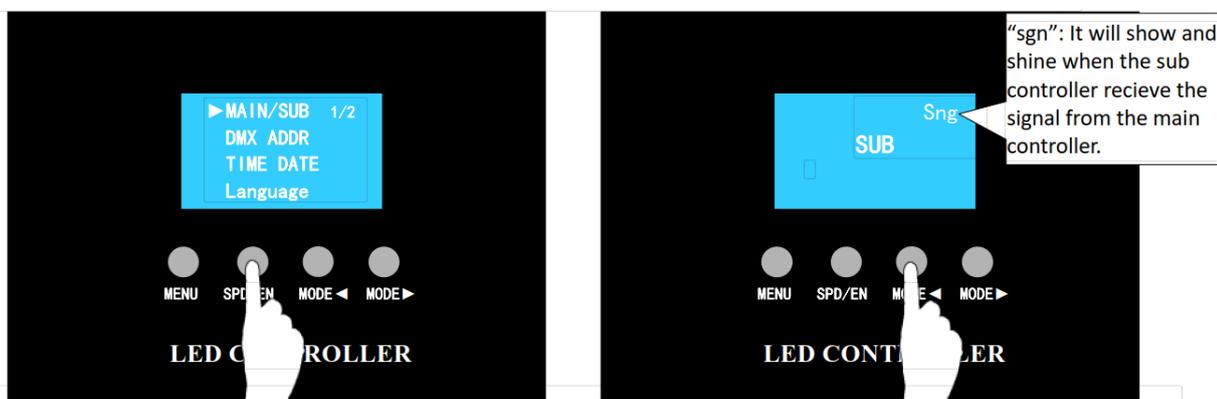
## {CASCADE FUNCTION}

If single controller cannot drive the whole project lights, can try cascade controllers. It connects Main controller with slave controllers by cables to make the whole project synchronization.

The normal controller (the model is MS.) should be set as sub controller.

1. Long press "MENU" to enter MENU SETTING UP.
2. Press "MODE◀" and "MODE▶" select "MAIN / SUB". Press "SPD/EN" enter.
3. Press "MODE◀" and "MODE▶" to select "SUB" control. Press "SPD/EN" to save.

**Change "SUB" into "MAIN" at the end to set as main controller.**



Switch off the controller. Plug a head of network cable into main controller "OUT", plug the other head into sub-controller "IN". Then restart the controller.

**Slave control S can only start to work by connecting to Master control. CASADE controller uses high**

quality cables as connection, the distance must be less than 50M. GND and DATA signals only use Orange white + orange twisted pair wires. Clients can extend the cables or by clipping straight-through wires (cables two ends based on T568B).



### {DMX512 DECODING (With DMX model) }

User can adjust the effect, speed and brightness by DMX512 control console. The same or different addresses can be set in the controller, so that DMX512 control console is able to control several controllers with same or different effects. *The actual effect is determined by SD card and mode selection of the controller.*

**K-SY-408W-AVTXMS** can connect with DMX console by using DMX cable.

Port Introduction:

P1 = GND; P2 = D-/B; P3 = D+/A

Male port and female port can be the receiving terminal or the transfer terminal. The one receives the signal of DMX512 control console or the output terminal of previous device. The other one is the transfer terminal to connect with next DMX512 controller or DMX device.

Address Setting:

01) Long press "MENU" for 2 seconds to enter MENU SETTING UP mode.

02) Press "MODE ◀" and "MODE ▶" to select DMX ADDR, Press "SPD/EN" enter.

The controller screen shows "DMX ADDRESS: \*\*\*"

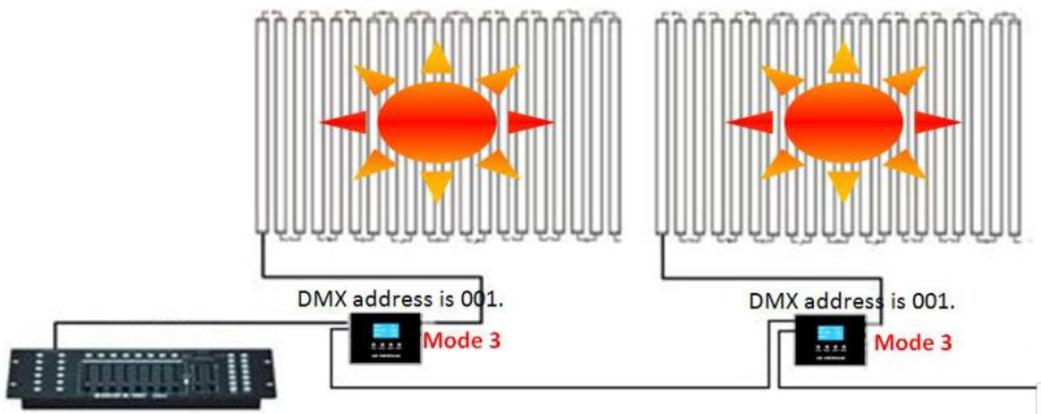
03) Press "MODE ◀" and "MODE ▶" to select address data (long press change quickly).

※ Formula of address setting:  $(N-1) * 8 + 1$ . N represents the N<sup>th</sup> controller.

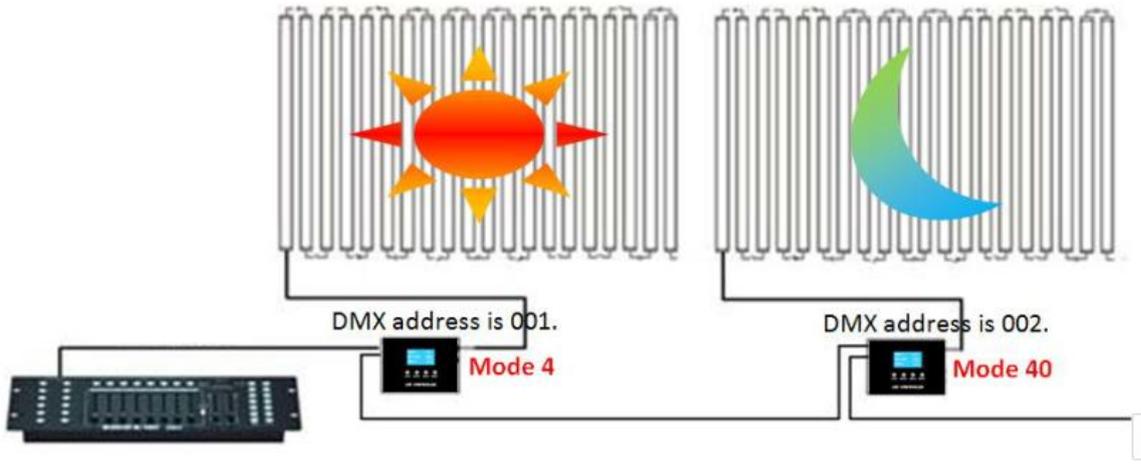
04) When address setting is finished, press "SPD/EN" to confirm, then press "MENU" to return to status of general mode.

※ If the distance between DMX 512 decode controllers exceeds 100m, the repeater A88D will be required.

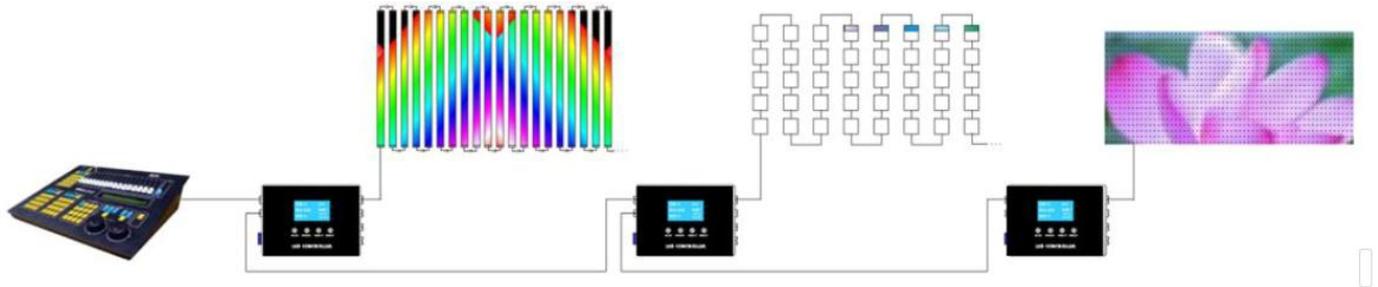
Controllers with the same parameter and address:



Controllers with the same parameters but different addresses:



Controllers with the same addresses but different parameters:



Introduction of Push Rod of DMX Control Console:

Label Diagram: **DC Status**

CH.	01			02			03			04			05			06	07			08																
	Sensitivity			Speed			Effect			Mode (Tensdigit)			Mode (Single digit)				Sync Status			Brightness																
	Show	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range																
Position of Push Road	05	215 ~ 255	~	99	240 ~ 255	~	Audio Control	170 ~ 254	~	09	225 ~ 255	~	09	225 ~ 255	/	AC	128 ~ 255	~	05	204 ~ 255	~															
																						04	172 ~ 214	~	80	224 ~ 239	~	08	200 ~ 224	~	08	200 ~ 224	~	04	153 ~ 203	~
	02	86 ~ 128	~	20	176 ~ 191	~	06	150 ~ 174	~	06	150 ~ 174	~																								
													01	43 ~ 85	~				15	160 ~ 175	~	05	125 ~ 149	~	05	125 ~ 149	~									
	00	0 ~ 42	~	12	144 ~ 159	~	04	100 ~ 124	~	04	100 ~ 124	~																								
													00	0 ~ 42	~				11	128 ~ 143	~	03	75 ~ 99	~	03	75 ~ 99	~									
	00	0 ~ 42	~	10	112 ~ 127	~	02	50 ~ 74	~	02	50 ~ 74	~																								
													00	0 ~ 42	~				9	96 ~ 111	~	01	25 ~ 49	~	01	25 ~ 49	~									
	00	0 ~ 42	~	8	80 ~ 95	~	00	0 ~ 24	~	00	0 ~ 24	~																								
													00	0 ~ 42	~				7	64 ~ 79	~	00	0 ~ 24	~	00	0 ~ 24	~									
	00	0 ~ 42	~	6	48 ~ 63	~	00	0 ~ 24	~	00	0 ~ 24	~																								
00													0 ~ 42	~	5	32 ~ 47	~	00	0 ~ 24	~	00	0 ~ 24	~													
	00	0 ~ 42	~	4	16 ~ 31	~	00	0 ~ 24	~	00	0 ~ 24	~																								
00													0 ~ 42	~	3	0 ~ 15	~	00	0 ~ 24	~	00	0 ~ 24	~													

Label Diagram: **AC Status**

CH.	01			02			03			04			05			06	07			08													
	Sensitivity			Speed			Effect			Mode (Tensdigit)			Mode (Single digit)				Sync Status			Brightness													
	Show	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range		Sho w	Range													
Position of Push Road	05	215 ~ 255	~	99AC	224 ~ 255	~	Audio Control	170 ~ 254	~	09	225 ~ 255	~	09	225 ~ 255	/	AC	128 ~ 255	~	05	204 ~ 255	~												
																						04	172 ~ 214	~	50AC	192 ~ 223	~	08	200 ~ 224	~	08	200 ~ 224	~
	02	86 ~ 128	~	12AC	128 ~ 159	~	06	150 ~ 174	~	06	150 ~ 174	~																					
													01	43 ~ 85					~	10AC	96 ~ 127	~	05	125 ~ 149	~	05	125 ~ 149	~					
	00	0 ~ 42	~	08AC	64 ~ 95	~	04	100 ~ 124	~	04	100 ~ 124	~																					
													00	0 ~ 42					~	06AC	32 ~ 63	~	03	75 ~ 99	~	03	75 ~ 99	~					
	00	0 ~ 42	~	04AC	0 ~ 31	~	02	50 ~ 74	~	02	50 ~ 74	~																					
													00	0 ~ 42					~	00	0 ~ 24	~	01	25 ~ 49	~	01	25 ~ 49	~					
	00	0 ~ 42	~	00	0 ~ 24	~	00	0 ~ 24	~	00	0 ~ 24	~																					
													00	0 ~ 42					~	00	0 ~ 24	~	00	0 ~ 24	~	00	0 ~ 24	~					

- ★ When the fastest speed of software is 5, it will display 5 in the controller even it is in 3-5. It will display accordingly from 6.
- ★ **The channel will be blank if the controller doesn't have corresponding function.**

**{WIFI CONNECTION}**

It will set the effect and speed by APP when the controller connect WIFI. The operation please refer to WIFI MOBILE APP USER MANUAL.

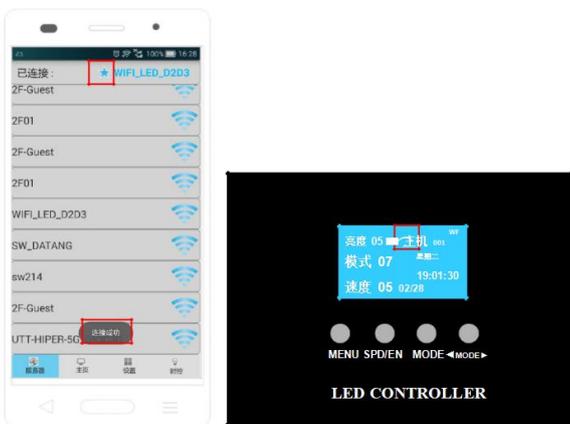
Connect the WIFI antenna to the controller, and power on. Connect the app and controller through wireless network. The operation below.



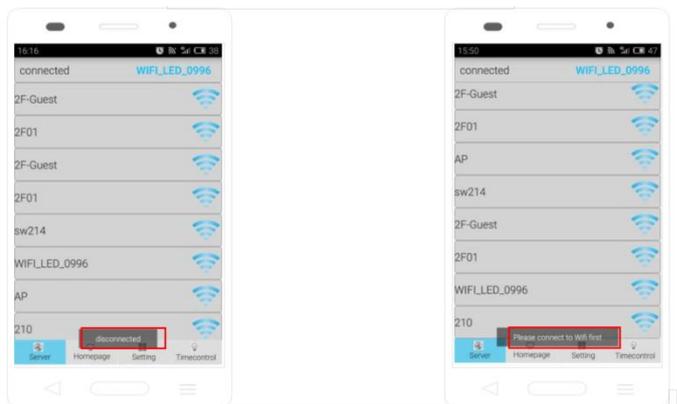
User can set the WIFI account and password. The operation please refer to WIFI MOBILE APP USER MANUAL.

When mobile APP successfully connects with controller, APP interface shows the prompt it is connected and the account of WIFI connected will show in the top right corner. The icon ★ in front of it indicates the successful connection. In the meantime, “ ” will show in the top center of controller LCD screen as Figure 3-5.

- When a mobile is connected, the others will not be able to connect again and the APP will show “disconnected” as Figure 3-6.
- When the mobile APP cannot connect with controller through WIFI, all the functions in APP will be disabled. It shows the error prompt “Please connect to WIFI first” if press the other menu. As shown in Figure 3-7.
- The connection between mobile APP and controller will automatically disconnect if there is not any operation within FIVE minutes. However, the lamp will continue the status as it works before WIFI disconnects. It shows the error prompt “Please connect to WIFI first” if press the other menu. As shown in Figure 3-7. Please manually re-connect mobile APP with controller if would like to use mobile phone to control the controller.
- If fail to connect, please completely exit the APP and open it again (must exit in the background as well).



手机 APK 与控制盒连接成功

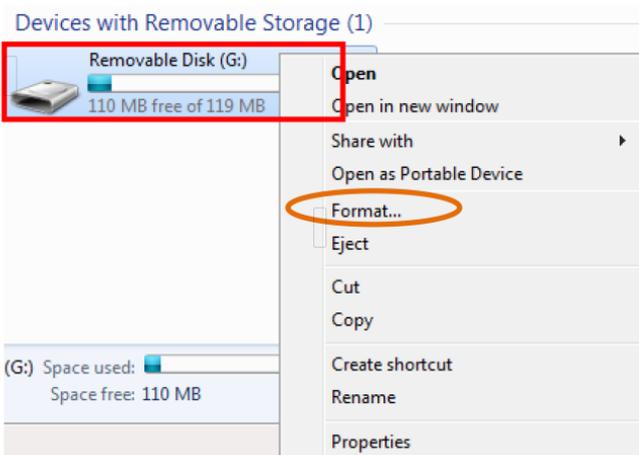


Controller is connected by the other user

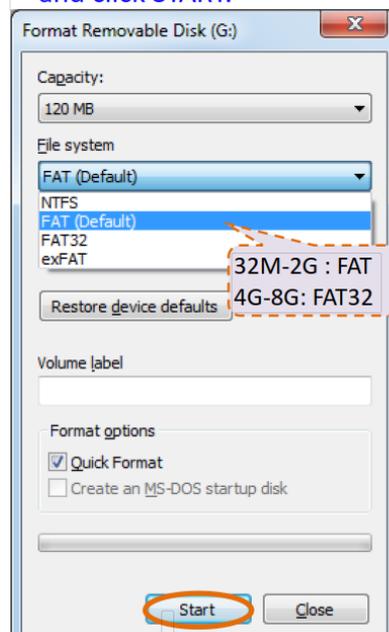
Press the other menu when WIFI disconnected

## {SD CARD COPY}

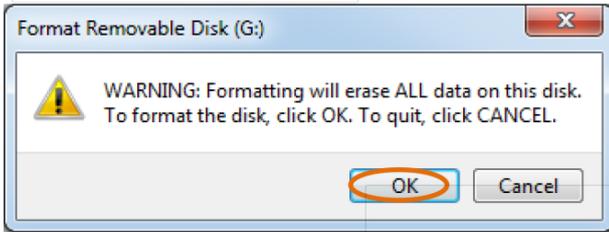
1) Right click the disk where the SD card locates.



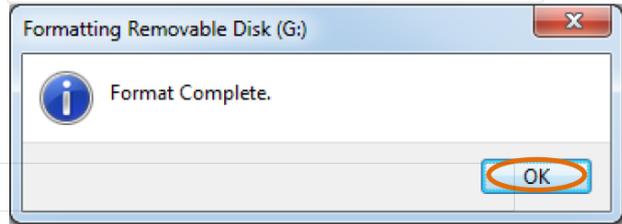
2) Select -FAT (Can tick off “Quick Format”) and click START.



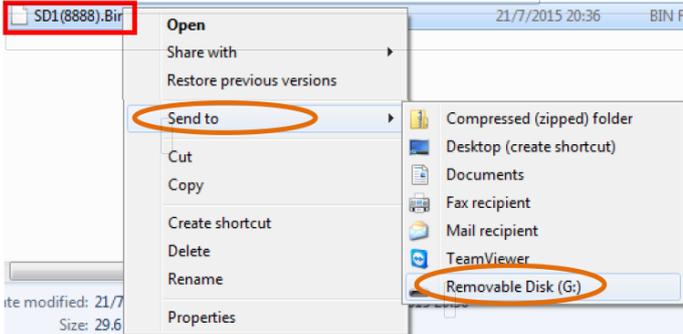
3) Confirm to format the Disk.



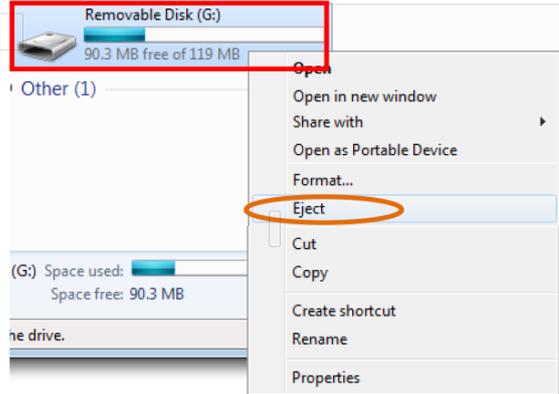
4) Finished the formatted, click confirm to exit.



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



6) Right click removable disk and select pop to pop the SD card.



7) Put the SD-card into controller. When start the equipment the SD- card can use. (There is only one bin file in the card.)

This page is focus on waterproof IP67 serious products, if indoor version can ignore.

Dear customers, thanks for using our products.

**Notice: Please must take time out of your busy schedule to read matters need attention of installation and operation as follow carefully, otherwise our company won't be responsible for maintenance of product resulting from it.**

**1. Electrical safety: To ensure joints are tightly connected and must be cover with electrical tape. Silicone cover the joints nut finally.**

**2. Do not wash floor with water within a week. Had better use a damp cloth to clean.**

**3. When installation completed, do not use acidic silicon to fill the crack between led dance floors and ground. It must be neutral silicon to fill.**