K-8000C Manual

K-8000C system features:

1. 32 to 65536 degree Gray control, Gamma correction procession handle.
2. Support various point, line light source, and all kinds of rules and specific shaped handle.
3. The controller has eight ports output, each port can support up to 512/1024 lights(DMX lights can support up to 512 pixels).
4. The playback content stored in SD card, the SD card can store up to 32 files, SD cared capacity supports 128MB-32GB.
5. The controller can single set use,also multiple controllers cascade, cascade optical isolation mode: interference, better stability, cascade distance between two controllers can reach up to 150 meters, need to use 0.5M² pure copper power cord.
6. The controller support chip can lock the support IC in software, or not lock the support IC in the software, select the support IC through the controller CHIP button, this scheme is more flexible and convenient.
7. For the DMX lighting IC, the controller comes with write address function; In addition, with use of our 2016 LedEdit-K V3.26 or later edition can make one key write address function setting.
8. Support load lamp is 4 channels (RGBW) pixels, or split into single channel point pixels.
9. Enhanced 485 TTL and 485 differential (DMX) signal output.
10. The controller comes with the test effects were as follows: 1 red, green, blue and black jump; 2 red, green, blue and black gradient; 3 red, green, blue and goes.

Note:

1. The controller load lamps 512 points pixel, speed can reach up to 30 frames / sec, 768 point pixel speed can reach up to 25 frames / sec, 1024 point pixel speed is about 22 frames / sec (the above parameter is an example of 1903 agreement IC, different IC have difference)
2. International standard DMX512 (1990 agreement) maximum support 512 pixels. When the load is international standard 170 pixels, the speed can reach up to 30 frames / sec, 340 pixels speed is about 20 frames / sec, when 512 pixels speed is about 12 frames / sec.
3. Timing (holidays) Play Global Wireless GPS synchronization, control station channel distributor, please contact the salesman or technical support staff for more information.

Support chips (PC Software Select K-8000-RGB)

00: UCS1903,1909,1912,2903,2904，2909,2912；TM1803,1804,1809,1812；

SM16703，16709,16712；WS2811；INK1003；LX3203,1603,1103；GS8205,

8206；SK6812（Support up to 1024*8=8192 pixels）

01：SM16716,16726（Support up to 1024*8=8192 pixels）

02：P9813（Support up to 1024*8=8192 pixels）

03：LPD6803（Support up to 1024*8=8192 pixels）

04：LX1003,1203（Support up to 1024*8=8192 pixels）

05：WS2801（Support up to 1024*8=8192 pixels）

06：LPD1886（Support up to 1024*8=8192 pixels）

07：TM1913（Support up to 1024*8=8192 pixels）

08：TM1914（Support up to 1024*8=8192 pixels）

09：P9883,P9823（Support up to 1024*8=8192 pixels）

10：DMX（Support up to 512*8=4096 pixels, suggest to support ≤320*8=2560 pixels）

11：DMX 500K（Support up to 512*8=4096 pixels, suggest to support ≤320*8=2560 pixels）

12：DMX 250K-CZF（Support up to 512*8=4096 pixels, suggest to support ≤320*8=2560 pixels）

13：DMX 250K-CZF（Support up to 512*8=4096 pixels, suggest to support ≤320*8=2560 pixels）

NOTES:

1. If support RGBW four channels' lights should select K-8000-RGBW.
2. If support single channel light should choose K-8000-W, at this time, one channel means one pixel, the software effect make as white lighting.

Appearance Picture:

Screen print meaning：

Button meaning:

Button	Meaning	
SHIP	Select chip model	Press CHIP and then MODE button, can enter write code mode, 61 means UCS512-A/B coding; 62 means WS2821 coding; 63 means SM512 coding, 64 means UCS512-C coding
MODE	Switch files	
SPEED+	Speed up	Press SPEED+ and SPEED- the same time, would enter effect files looping mode
SPEED-	Speed down	

Power supply	DC5V input/DC12-24 input
POWER	Power indicator
SYNC	Cascade indicator
STATUS	Status indicator
SD CARD	SD card slot

Signal output（TTL/245 signal）：

GND	GND(negative electrode）
DAT	Data
CLK	Clock

Signal output（DMX512 signal）：

GND	GND(negative electrode）
A/DAT+	Signal +
B/DAT-	Signal -
ADDR	Coding line

The corresponding frame rate of speed level：

Speed Level	Frame Rate/Sec	Speed Level	Frame Rate/Sec
1	4 frame	9	14 frame
2	5 frame	10	16 frame
3	6 frame	11	18 frame
4	7 frame	12	20 frame
5	8 frame	13	23 frame
6	9 frame	14	25 frame
7	10 frame	15	27 frame
8	12 frame	16	30 frame

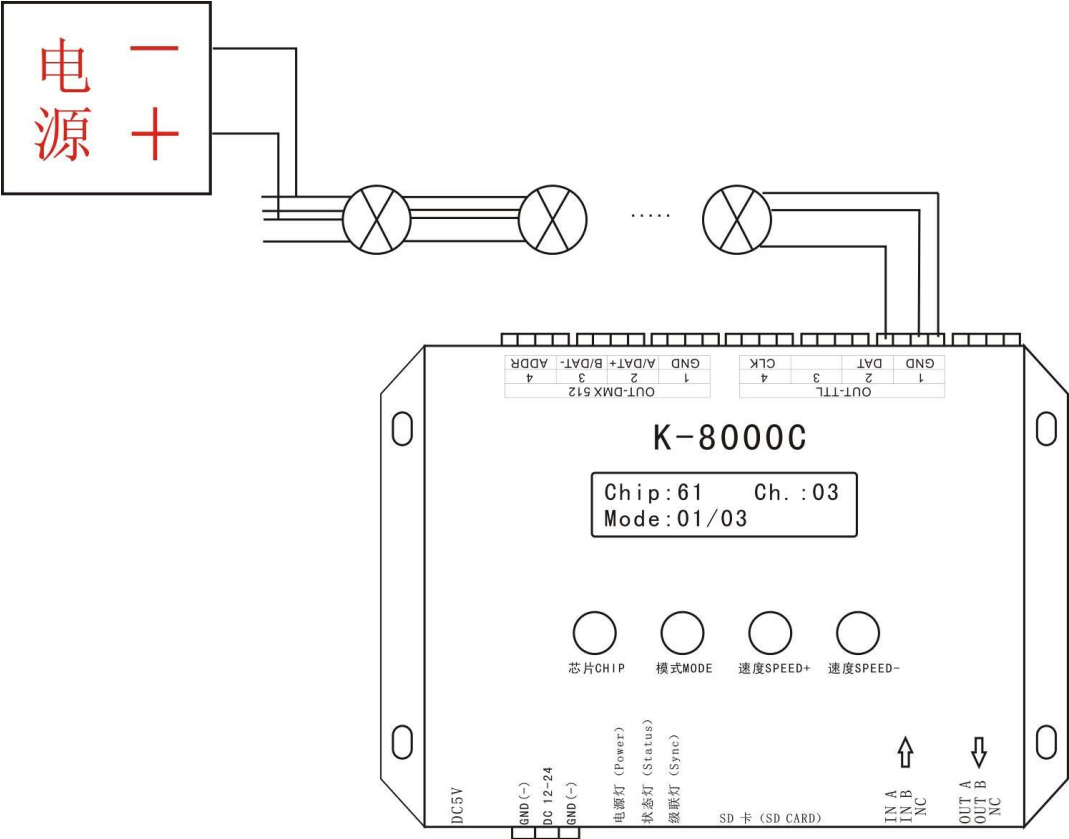**Conventional IC lamps wiring:**
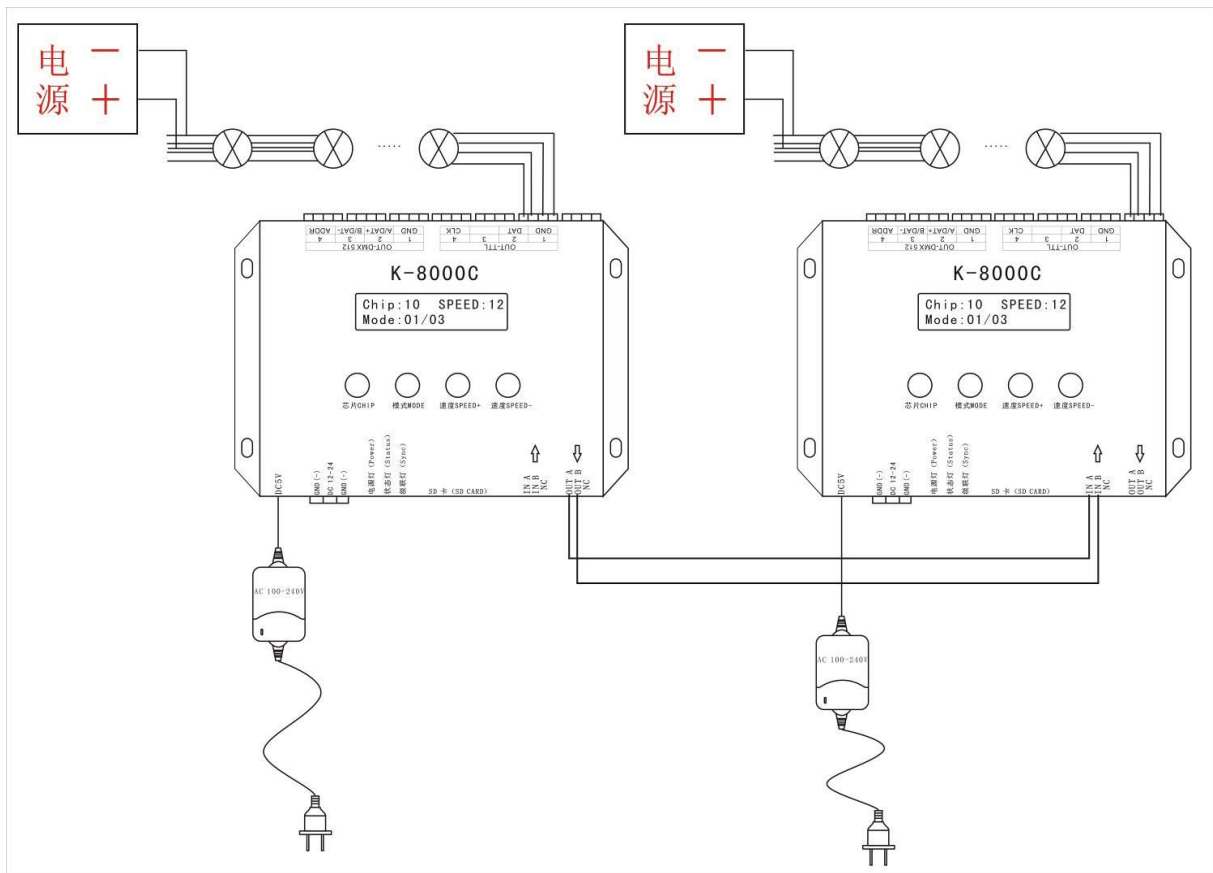
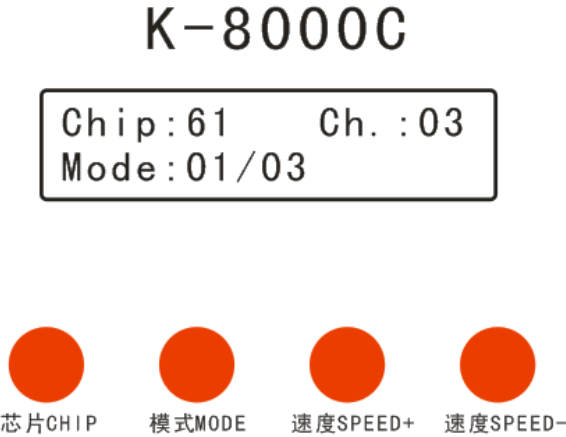**Controller support DMX lights coding and wiring method:**

Two signal wiring diagram:
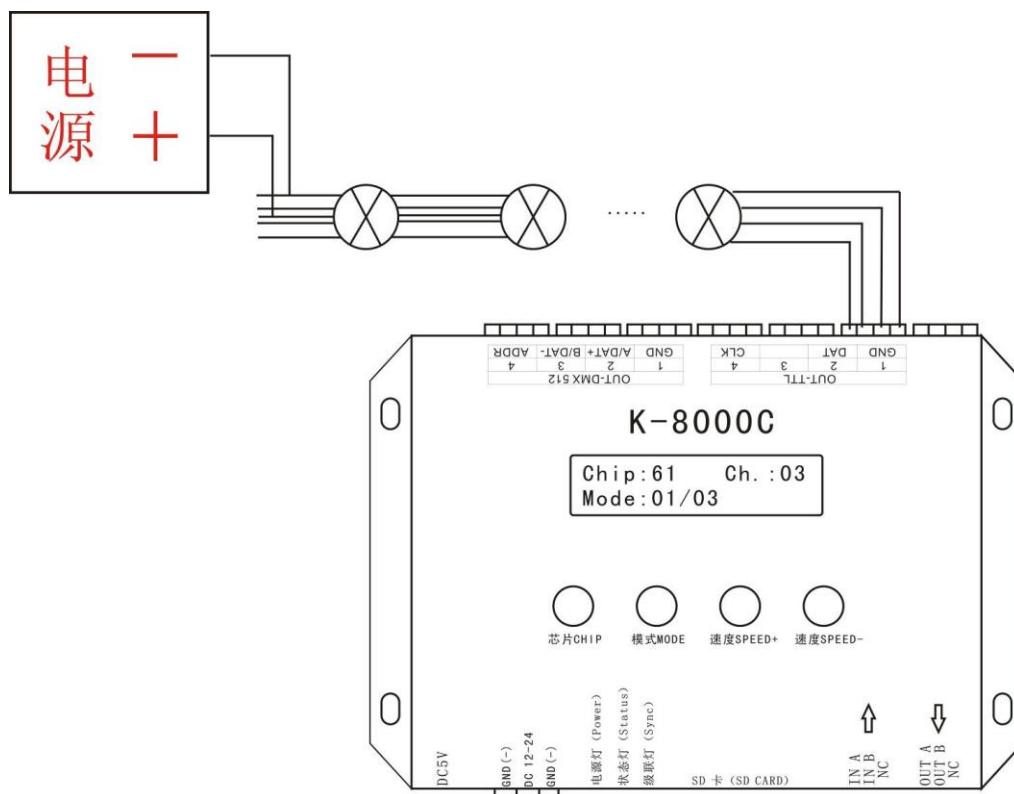
Single signal wiring diagram:

1.Like the above diagram, wired the line and start the controller, press "CHIP"and "MODE" at the same time switch to coding mode, adjust to Chip: 61 that is UCS512A or B coding mode, as below:
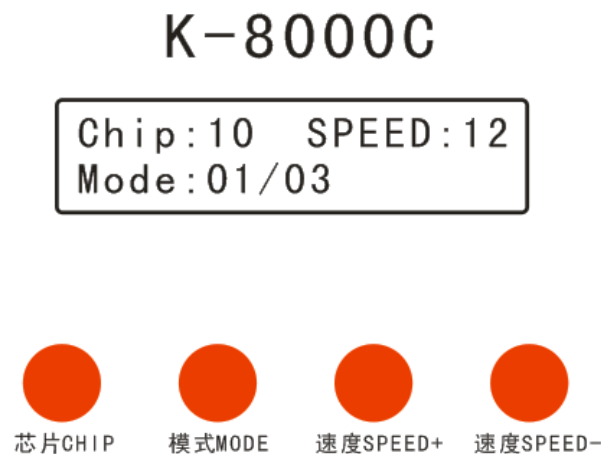

NOTE:

61 means UCS512A or B coding mode; 62 means WS2821 coding mode; 63 means SM DMX512AP; 64 means UCS512-C ； Ch.：03 means the coding channel is 3 channels

2. After selection, press "MODE" to code, then the screen would display A A A. Until finished coding, it would show Writing OK, Like below:

```
K-8000C

┌─────────────────────────┐
│ Writing Addr···         │
│                         │
└─────────────────────────┘
```

⬤   ⬤   ⬤   ⬤
芯片CHIP   模式MODE   速度SPEED+ 速度SPEED-

3.   After finished address code, press "CHIP" first and at the same time press "MODE"button, switch to playback mode, switch the chip to Chip: 10, this is the DMX512 standard agreement 250K playback mode. At this time, press MODE button and SPEED button can separately switch playback mode and adjust speed, as below:

```
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┌─────────────────────────┐
│ Chip:10   SPEED:12      │
│ Mode:01/03              │
└─────────────────────────┘
```

⬤   ⬤   ⬤   ⬤
芯片CHIP   模式MODE   速度SPEED+ 速度SPEED-

Special Remarks： Derived program after set one-key coding in the software, long press MODE for 5 seconds can write code to the lights directly, this function is very convenient and practical. Welcome to consult our engineer or salesman to learn the detailed operation method.

Encryption Glossary Explanation:

Password is OK	Password normal!
Num	The remaining boot times
Password exist	Password has existed
Can't repeated	Can't repeat set password
Set Password OK	Password set successfully
Clear Pwd OK	Clear password successfully
Pwd not right	Password not correct
No Password	Password don't exist
Has expired! Contact factory	Password expired, please contact the factory!

Specific parameter:

Memory card:

Type: SD card

Capacity: 128MB—32GB

Format: FAT or FAT32 format

Storage files: *.led

Physical parameter:
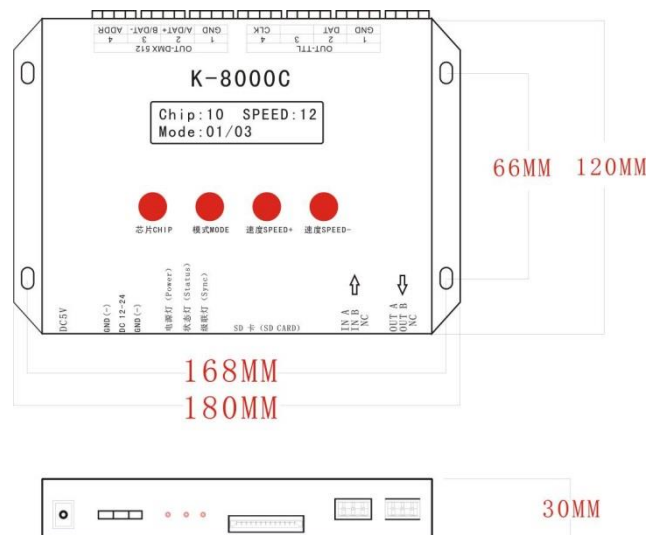
Working temperature: -20℃—85℃

Working power: DC 5V or DC 12-24V input

Power consumption: 5W

Weight: 0.8Kg

Size:

Notes:
1. To copy files to SD card, you must format the SD card first, pay attention to is that each copy must be formatted first.
2. SD card must be formatted as FAT form or FAT32 form.
3. The SD card can not be hot-swappable, plug the SD card each time, you must first disconnect the power supply controller.
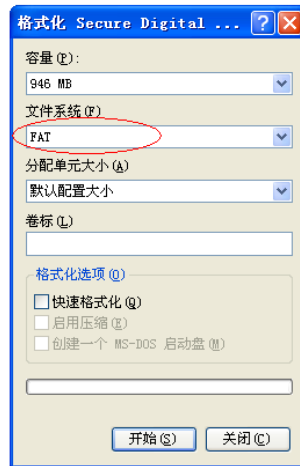
How to handle the common problems:

Problem 1: After powered on, the controller screen display SD Error, and no effect output.
Answer: The screen display SD Error means the controller did not read the SD card correctly, the exist problems as below:
①SD card is empty, has no effect files.
②The effect files *.led in SD card and the controller model is mismatch, please select correct controller model, chip model in the latest edition 2016LedEdit, and remake effect files *.led.
③Change SD card and then retesting, rule out the possibility of SD card is broken.

Problem 2: After powered on, the indicator is normal, but the lamps has no effects change.
Answer: It has the following reasons for this problems:
①Please check if the signal line of the lamps and the controller connected correctly.
②Conventional lamps signal divided into input and output, please confirm whether the controller connected the first lamp's signal input.

Problem 3: After connect the lamps and the controller, the lamps is strobe and has effect change, at the same time the controlled indicator shows normal.
　　Answer:
①The ground line of the controller and the lamps are not connected.
② The effects in SD are not correct. The IC of the lamps when making effect is not corresponding with the IC of the actual lamps.
③If did not lock the chip, when making effects in the software, need to press the controller chip to the light's corresponding chip, about press to which number, please refer to the sticker IC order on the controller.
④The power supply voltage of the lamps is insufficient.

Problem 4： SD card can not be formatted.
Answer：①Firstly, make sure if the protection switch on the side of SD card is unlocking. The unlocking direction is the gold needle side of SD card.
②The protection has designed as required, but can not formatted, if this condition appears, it always because the SD card reader is broken, please change the SD card reader(had better use good quality card reader, SSK card reader is suggested).
③If the above operations can not solve the formatting problems, please change the SD card and retest.