# K-1000C Using Manual



## 一、K-1000C 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 one output port, can support up to 512/2048 pixels(DMX lighting support up to 512 pixels).
- 4. Play content stored in the SD card, the SD card can store up to 32 effects File, SD card capacity support 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.

Notes: 1, The controller load lamps 512 points pixel, speed can reach up to 30 frames / sec, 1024 point pixel speed can reach up to 25 frames / sec, 2048 point pixel speed is about 15 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.

### 二、**Support chips**(PC Software Select K-1000-RGB):

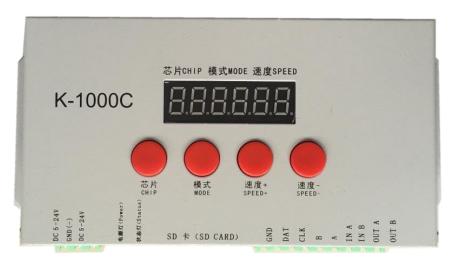
00: UCS1903,1909,1912,2903,2904, 2909,2912; TM1803,1804,1809,1812; SM16703, 16709,16712; WS2811, WS2812, WS2813, WS2815,WS2818; INK1003; LX3203,1603,1103; GS8205,8206; SK6812 (max. Supports 2048 pixels)

- 01: SM16716,16726 (support up to 2048 pixels)
- 02: P9813 (support up to 2048 pixels)
- 03: LPD6803 (support up to 2048 pixels)
- 04: LX1003,1203 (support up to 2048 pixels)
- 05: WS2801 (support up to 2048 pixels)
- 06: LPD1886 (support up to 2048 pixels)
- 07: TM1913 (support up to 2048 pixels)
- 08: TM1914 (support up to 2048 pixels)
- 09: P9883,P9823 (support up to 2048 pixels)
- 10: DMX (support up to 512 pixels, suggest to support ≤320 pixels)
- 11: DMX 500K (support up to 512 pixels, suggest to support ≤320 pixels)
- 12: DMX 250K-CZF (support up to 512 pixels, suggest to support ≤320 pixels)
- 13: DMX 500K-CZF (support up to 512 pixels, suggest to support ≤320 pixels)
- 14: UCS5603-Test (support up to 2048 pixels)
- 15: UCS5603A (support up to 2048 pixels)
- 16: UCS5603B (support up to 2048 pixels)
- 17: TM1814 (support up to 2048 pixels)
- 18: INK1003 (support up to 2048 pixels)
- 19: APA102 (support up to 2048 pixels)
- 20: UCS8904 (support up to 2048 pixels)
- 21: SM16714 (support up to 2048 pixels)
- 22: SM16813 (support up to 2048 pixels)
- 23: GS8512 (support up to 512 pixels, suggest to support≤320 pixels)
- 24: **QED3110** (support up to 2048 pixels)

NOTES: 1.If support RGBW four channels' lights should select K-1000-RGBW.

2.If support single channel light should choose K-1000-W, at this time, one channel means one pixel, the software effect make as white lighting.

### 三、Appearance Picture:



# 四、Screen print meaning:

## **Button meaning:**

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

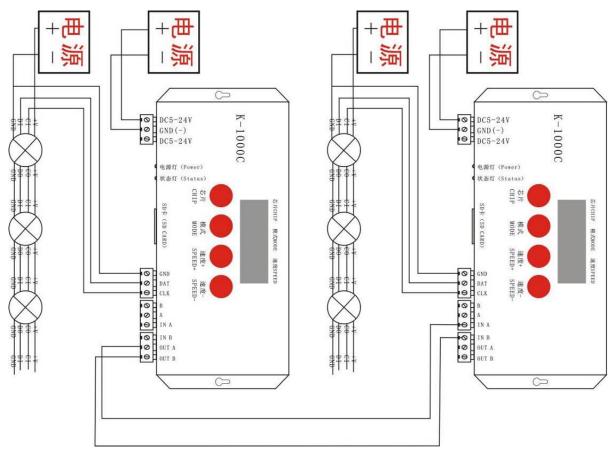
#### **Interface Meaning:**

interface ivicaning:				
DC 5-24V	5v-24V DC power positive input			
GND	DC power supply negative input			
POWER	Power indicator			
状态灯 ERROR	状态指示灯			
SD card (SD CARD)	SD card slot			
GND	Ground line			
CLK	Clock line (Coding line if DMX lights)			
DAT	Data line			
В	Signal -			
Α	Signal +			
IN A	Cascade sync signal, connect the front OUT			
	A			
IN B	Cascade sync signal, connect the front OUT			
	В			
OUT A	Cascade sync signal, connect the next IN A			
OUT B	Cascade sync signal, connect the next IN B			

### 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

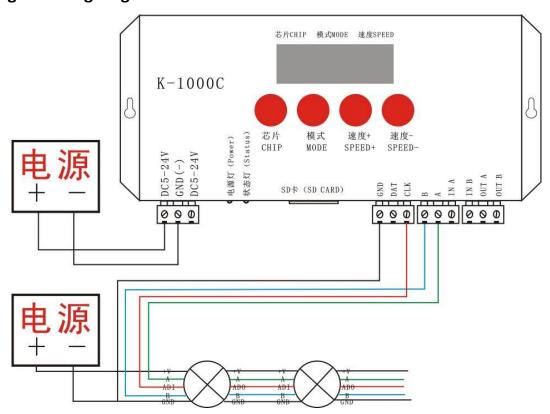
# $\pm$ 、Conventional IC lamps wiring



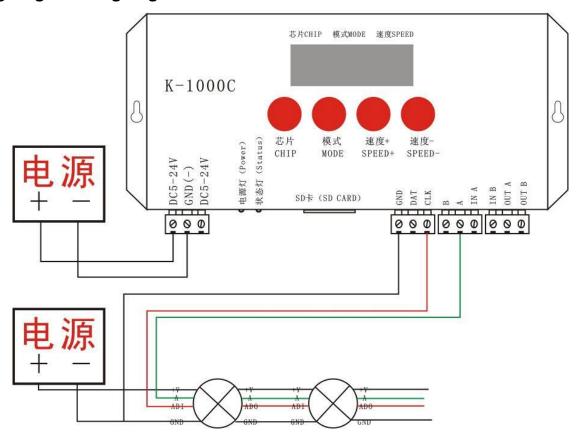
NOTE:1.When multiple controllers cascade, beginning from the second controller digital screen display 222, and status lights: on, off, on, off, strobe, all cascade controllers' playback speed controlled by the first set.

## 六、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. Like below:



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 250Kbps playback mode. At this time, press MODE button and SPEED button can separately switch playback mode and adjust speed, as below:



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.

## 六、Specific parameter:

#### Memory card:

Type: SD card

Capacity: 128MB-32GB

Format: FAT or FAT32

Storage file: \*.led

## **Physical parameter:**

Working temperature :  $-30^{\circ}\text{C} - 85^{\circ}\text{C}$ 

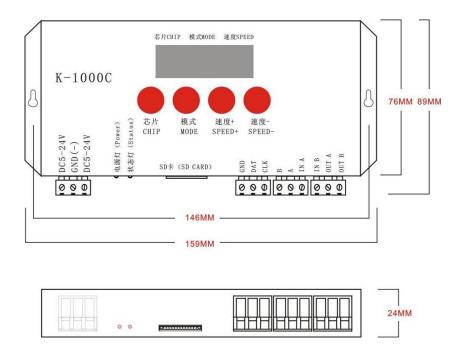
Working power: DC 5V -24V input

Power consumption: 2W

Data transmission interface: 3pin binding post

Weight: 0.35Kg

Size:



### 七、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.



## 八、How to handle the common problems:

**Problem 1:** After powered on, the controller screen display FFF, and no effect output.

Answer: The screen display FFF means the controller did not read the SD card correctly, the exist problems as below:

- 1 SD card is empty, has no effect files.
- 2 The 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.
  - (3) Change 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:

- ① Please check if the signal line of the lamps and the controller connected correctly.② Conventional 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:

- (1) The 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.
  - 4 The 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.

- 2 The 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).
  - (3) If the above operations can not solve the formatting problems, please change the SD card and retest.