K-4000CK Using Manual



-, K-4000CK 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 four out ports, each port can support up to 1024 lights.
- 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. 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: 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)

- __, Support chips (PC Software Select K-8000-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 (Support up to 1024*4=4096 pixels)
 - 01: SM16716, 16726 (Support up to 1024*4=4096 pixels)
 - 02: P9813 (Support up to 1024*4=4096 pixels)
 - 03: LPD6803 (Support up to 1024*4=4096 pixels)
 - 04: LX1003, 1203 (Support up to 1024*4=4096 pixels)
 - **05:** WS2801 (Support up to 1024*4=4096 pixels)
 - 06: LPD1886 (Support up to 1024*4=4096 pixels)
 - 07: TM1913 (Support up to 1024*4=4096 pixels)
 - 08: TM1914 (Support up to 1024*4=4096 pixels)
 - 09: P9883, P9823 (Support up to 1024*4=4096 pixels)
 - 10: DMX (support up to 512*4=2048 pixels, suggest to support \leq 320*4=1280 pixels)
 - 11: DMX 500K (support up to 512*4=2048 pixels, suggest to support \leq 320*4=1280 pixels)
- 12: DMX 250K-CZF(support up to 512*4=2048 pixels, suggest to support \leq 320*4=1280 pixels)
- 13: DMX 250K-CZF (support up to 512*4=2048 pixels, suggest to support \leq 320*4=1280 pixels)

NOTE: The lights with DMX signal only support single line DMX, do not support A (DAT+), B(DAT-) signal line.

三、Appearance Picture:





四、 Screen print meaning:

Button	Meaning		
CHIP	Select chip model		
MODE	Switch files		
SPEED+	Speed up	Press SPEED+ and SPEED- the same time, would enter	
SPEED-	Speed down	effect files looping mode.	

DC 5V	DC5V power input	Select 5V or 12-24V DC power		
GND	Negative power supply	supply, 5V using a DC power supply		
DC12-24V	DC power supply 12-24V	plug, 12-24V use terminals		
POWER	Power indicator			
Status	Status indicator			
sync	Cascade indicator			
SD CARD	SD card slot			

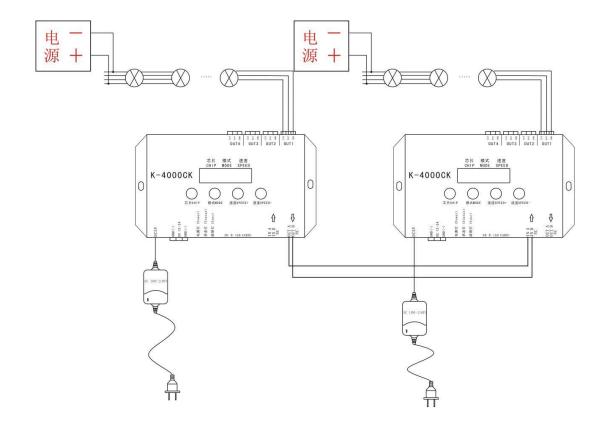
Signal output (TTL/245 signal):

GND	GND(Negative)	
DAT	Data	
CLK	Clock	

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

五、Wiring diagram



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

2. When multiple controllers cascade, the first controller output port OUT1 correspond with the lighting figure C1P1, OUT2 correspond with C1P2, OUT3 correspond with C1P3, OUT4 correspond with C1P4; The second controller's output port OUT1 correspond with lighting figure's C2P1, OUT2 correspond with C2P2, and so on.

六、Specific parameter:

Memory card:

Type: SD card

Capacity: 128MB—32GB

Format: FAT or FAT32

Storage file: *.led

Physical parameter:

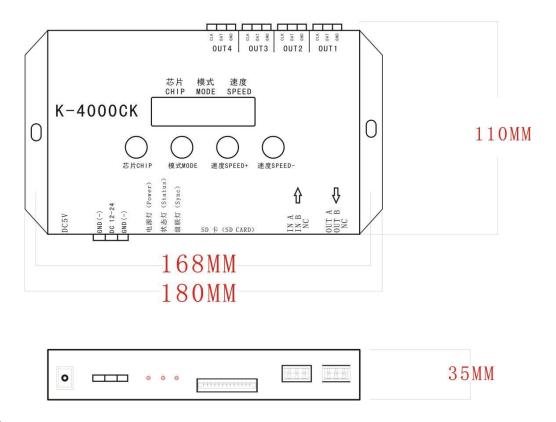
Working temperature: -30°C—85°C

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

Power consumption:5W

Weight: 0.85Kg

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:

- ①Please check if the signal line of the lamps and the controller connected correctly.
- ©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.
 - 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.