# K-4000CK Using Manual

## 一、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)

## 二、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 ≤320*4=1280 pixels）

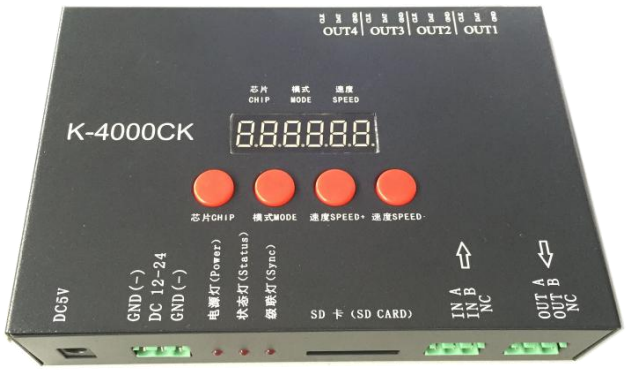
11：DMX 500K（support up to 512*4=2048 pixels, suggest to support ≤320*4=1280 pixels）

12：DMX 250K-CZF(support up to 512*4=2048 pixels, suggest to support ≤320*4=1280 pixels)

13：DMX 250K-CZF （support up to 512*4=2048 pixels, suggest to support ≤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 effect files looping mode. |
| SPEED- | Speed down | |

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

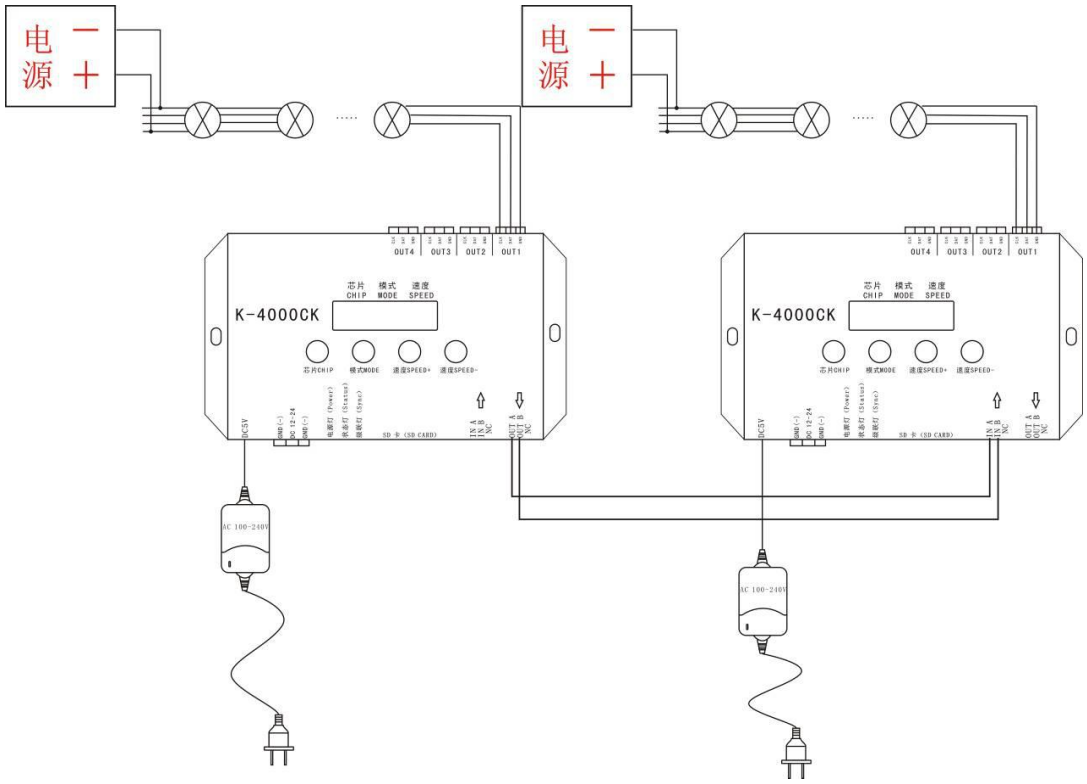
Signal output (TTL/245 signal):

| | |
|---|---|
| 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:

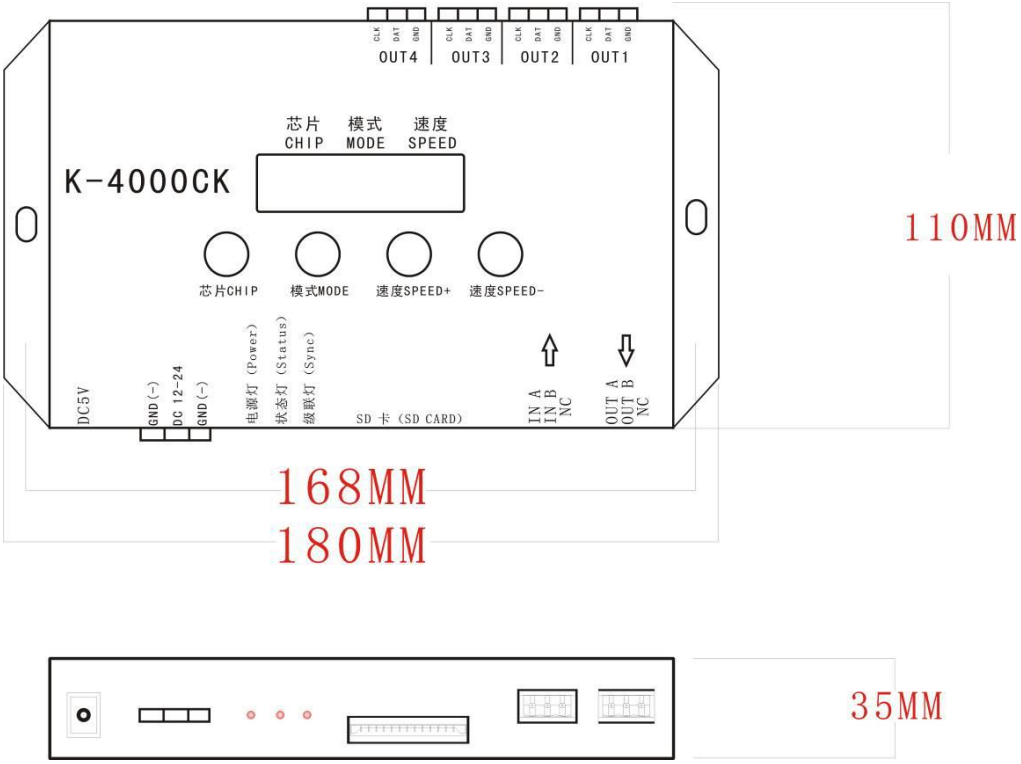
Working temperature: -30℃—85℃

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.

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.