

# T-8000 Operating manual

## 1 T-8000 System features

- 1 32~65536 gray level, support software Gamma correction.
- 2 Support the rules and special-shaped handle.
- 3 Eight-port output, every port can support 512-1024 pixels.
- 4 Offline (SD Card) control, can be multiple controllers used in combination, play back content stored in the SD card.
- 5 Compatible with single and dual IC, if you control a single line IC LED lights, without being connected to the CLK line.
- 6 New T-8000 have a screen, the controller can be encrypted to limit the times of use.

### NOTES:

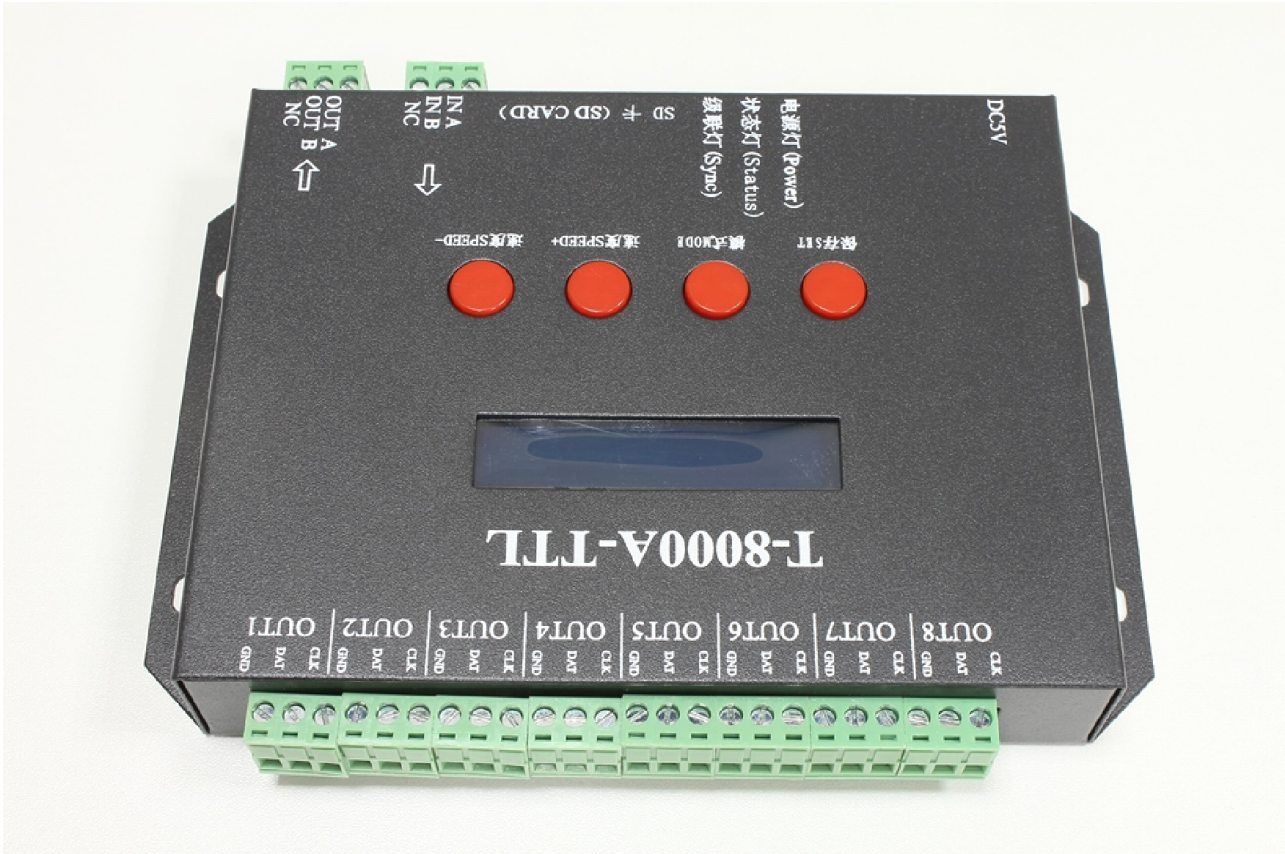
- 1 When T-8000 controller controls less than 512 lamps the frame rate can reach 30 fps. When T-8000 controls more than 512 lamps and less than 1024 lamps the frame rate will slow down automatically.
- 2 In the 2012 production version of the T-8000 to add a Chinese flag on the surface, you must use the new software; LedEdit 2012 or newer.

## 2 Supported chips

Chip type	Software code& Controller type	Lamps/(MAX)	Note
LPD6803, D705, 1101, 6909, 6912	T-8000-6803	8192	
LPD8806, LPD8809	T-8000-8806	8192	
TM1803, TM1804, TM1809, TM1812	T-8000-TM	8192	TM1804 and TM1809 are divided into high speed and low speed
TM1903, TM1904, TM1909, TM1912	T-8000-TM19	8192	
UCS6909, UCS6912, UCS7009, UCS5903	T-8000-UCS-32	8192	
UCS1903, UCS1909, UCS1912	T-8000-UCS-256	8192	divided into high speed and low speed

UCS3903	T-8000-UCS-1024	8192	
DMX512	T-8000-DMX	1360/4096	Compatible with standard DMX512
WS2801, WS2803	T-8000-WS	8192	
WS2811	T-8000-WS2811	8192	divided into high speed and low speed
DS189	T-8000-DS189	8192	
TLS3001, TLS3002, TLS3008	T-8000-TLS	8192	
P9813	T-8000-P9813	8192	
SM16715	T-8000-SM16715	8192	divided into high speed and low speed
SM16716	T-8000-SM16716 8192	8192	
BS0901, BS0902	T-8000-0901	8192	
BS0815	T-8000-BS0815	8192	

3      Appearance pictures



## 4 The meaning of flag

Button	Meaning	
SET	Save your adjust	
MODE	Switch effect file	
SPEED+	Turn up speed	Press the speed adjustment button the file will in turn play.
SPEED-	Turn down speed	

DC 5V	Power input
POWER	Power light
ERROR	Error indicator
SD Card	SD Card slot

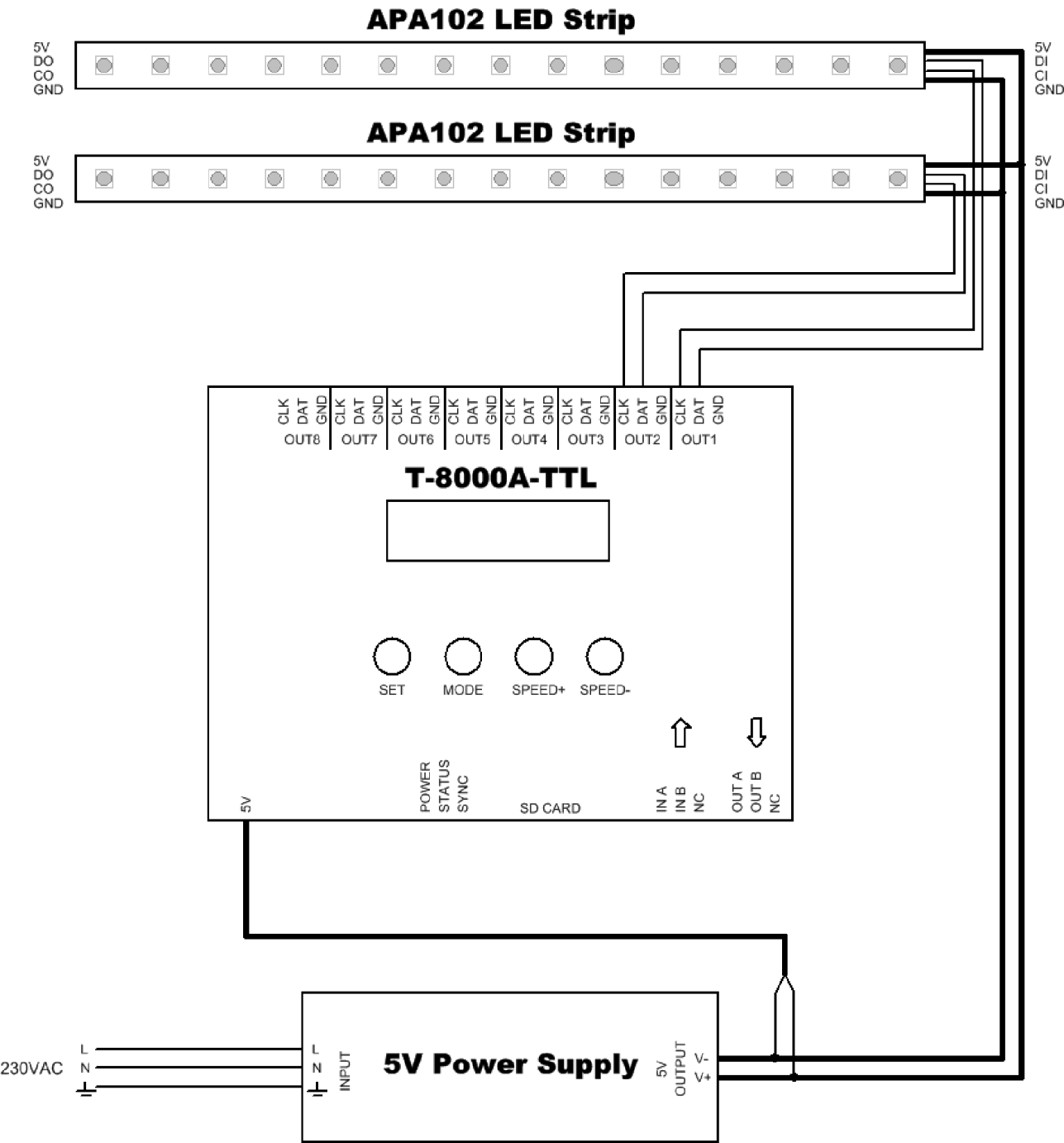
CLK	Clock line
DAT	Date line
GND	Ground wire

### NOTE:

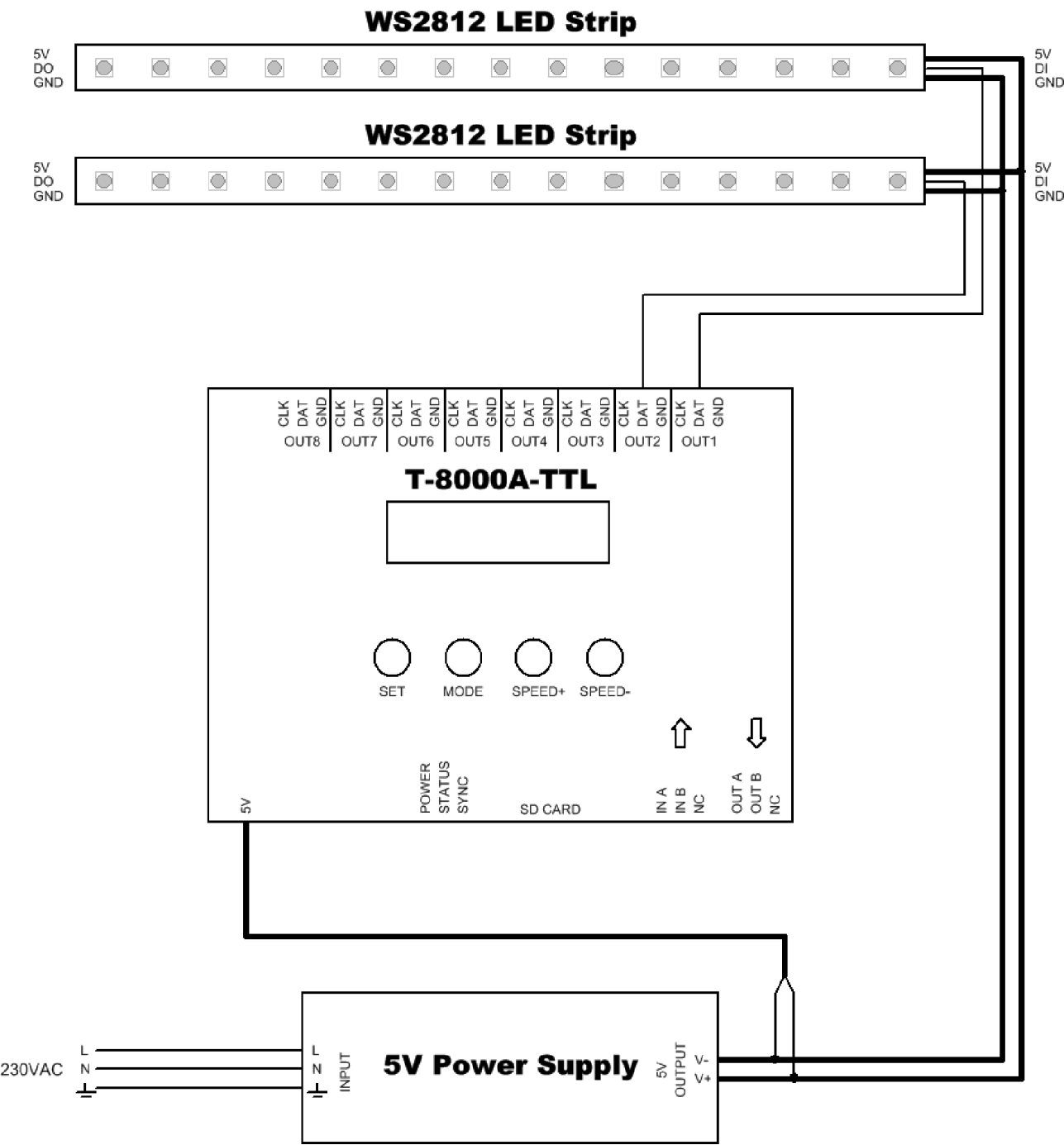
For the TTL (SPI) signal, the controller signal ground must connect to the LED ground wire directly.

5      **Wiring diagram**

With APA102 LED Strip:



With WS2812 LED Strip:



## 6 Specific parameters

### SD card:

Type : SD card (if controlling many lamps, it is best to use the high-speed SD card.)  
Capacity : 128MB to 2GB  
Format : FAT  
Store file : \*.led

### NOTE:

File numbering as follows: 00\_1.led, 01\_1.led, 02\_1.led, ... , 15\_1.led, ...

### Physical parameters:

Working temperature : -30°C to +85°C  
Weight : 1.5kg  
Working voltage : DC 5V  
Working power : 3W  
Size : L200mm x W170mm x H50mm  
Signal port : 3-pin connect port

### NOTE:

The SD card in controller cannot be hot-swappable. When you plug the SD card, every time you must first disconnect the power supply.

## 7 Trouble shooting

### Question 1:

Controllers after electrify, indicator light is normal, but the lamps no effect change

### Answer:

The reasons for this are the following:

- 1 Please check lamps signal and controller have correct connection.
- 2 If it is meet TTL signal, lamps and lanterns and controller must altogether, namely the lamps GND (ground) to the GND and controller (ground) got together.
- 3 Please check the effect file of SD card, the selected models whether current lamps and used the chip consistent.

### Question 2:

After power, the T-8000S ERROR indicator has been flashing without display output

### Answer:

The ERROR indicator has been flashing means the controller did not read the card correctly, possible problems:

- 1 SD card is empty, with no effect file.
- 2 The effect file in the SD card and the controller model are not match, please choose correct controller model in LedEdit and then re-create the effect file \*.led.
- 3 SD card did not format to FAT before copy effect files.
- 4 Please check the supply power voltage, the controller can be individually powered to exclude power reasons
- 5 Changing the SD card and then test to exclude the possibility of a bad SD card

**Question 3:**

The controller is powered on, the indicator is normal, but the lamps have no effect change

**Answer:**

The reasons for this are as follows:

- 1 Checking if the lamp's signal line and the controller connected correctly.
- 2 If be received was the TTL signal, the lamp and the controller must be common grounding, that means connect the lighting's and the controller's ground wire together.
- 3 Check if the model chose during making display files on the SD card match the chips used in the lighting.