

# 2012 T-300k Operating manual



## 1. T-300k System features

- A. 32—256 grade Gray level, Support software Gamma correction。
- B. Support the rules and special-shaped handle.
- C. 8 ports output, one port can support 512-1024 lamp pixels.
- D. On-line (also can SD Card) control, offline control Can be multiple controllers used in combination, the contents of the line control program stored in the SD card.
- E. Compatible with single line or double line chips.
- F. If the controller to the lamps distance can choose photoelectric isolated transmission and as far as several distances of up to 200-300 M

**Note:** use LEDEdit2014 for online and offline control

### Support chips:

Support chips:	Software code& Controller type	Lamps/(MAX)	NOTE
LPD6803,D705,1101,6909, 6912	T-300K-6803	8192	32 grade gray level
LPD8806,LPD8809	T-300K-8806	4096/8192	
TM1803,TM1804,TM1809, TM1812, WS2812,WS2813	T-300K-TM	4096/8192	TM1804&TM1809 Divided into high speed and low speed

TM1903, TM1904, TM1909, TM1912	T-300K-TM19	4096/8192	
UCS6909 , UCS6912 , UCS7009, UCS5903	T-300K-UCS32	8192	
UCS1903 , UCS1909 , UCS1912	T-300K-UCS256	4096/8192	Divided into high speed and low speed
UCS3903	T-300K-UCS102 4	4096/8192	
DMX512	T-300K-DMX	1360/4096	Compatible with standard DMX512
WS2801,WS2803	T-300K-WS	4096/8192	
WS2811	T-300K-WS2811	4096/8192	Divided into high speed and low speed
DS189	T-300K-DS189	4096/8192	
TLS3001,TLS3002, TLS3008	T-300K-TLS	4096/8192	
P9813	T-300K-P9813	4096/8192	
SM16715	T-300K-SM1671 5	4096/8192	Divided into high speed and low speed
SM16716	T-300K-SM1671 6	4096/8192	
BS0901,BS0902	T-300K-0901	4096/8192	
BS0815	T-300K-0815	4096/8192	

**NOTE:** if chip is 256 grade gray level and Single-line IC choose .When programming choice high speed mode and one interface controls 1024 lamps the play speed can reach 30 frames/s. Double-line IC or single-line IC with low speed , one interface controls 512 lamps the play speed can reach 30 frames/s.

## 2. Appearance picture



**Picture 1**



**picture 2**

## 4.The meaning of flag

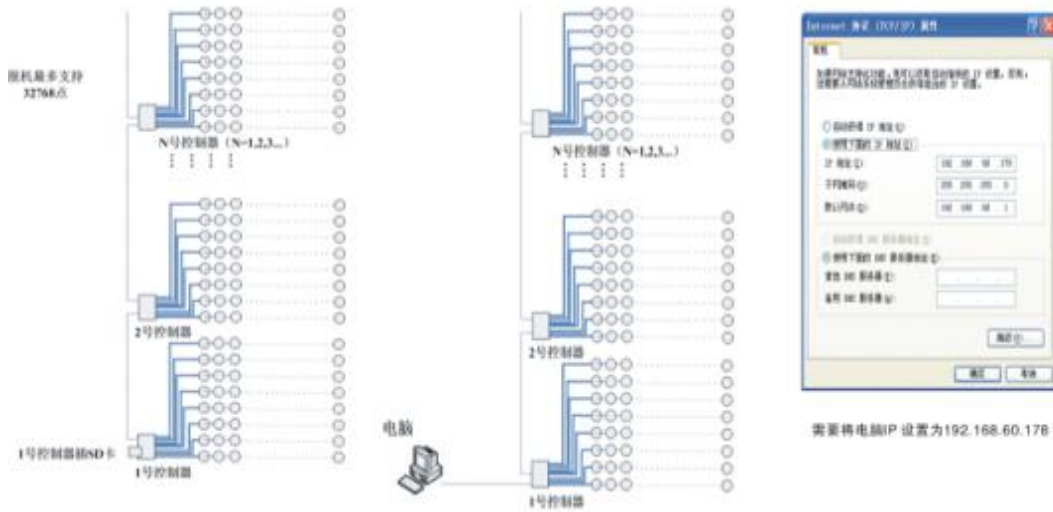
### TTL signal (245 signal):

<b>AC IN</b>	Exchange 220V power supply	<b>COM</b> (common port)	<b>GND</b> (ground wire)
<b>POWER</b>	<b>POWER LIGHT</b>	<b>DAT</b>	<b>Signal</b>

<b>STATUS</b>	Status light	<b>CLK</b>	The clock line
<b>SD CARD</b>	SD card slot		

**NOTE:** According to TTL signal output, Ground of the controller must be connected to the lamp ground.

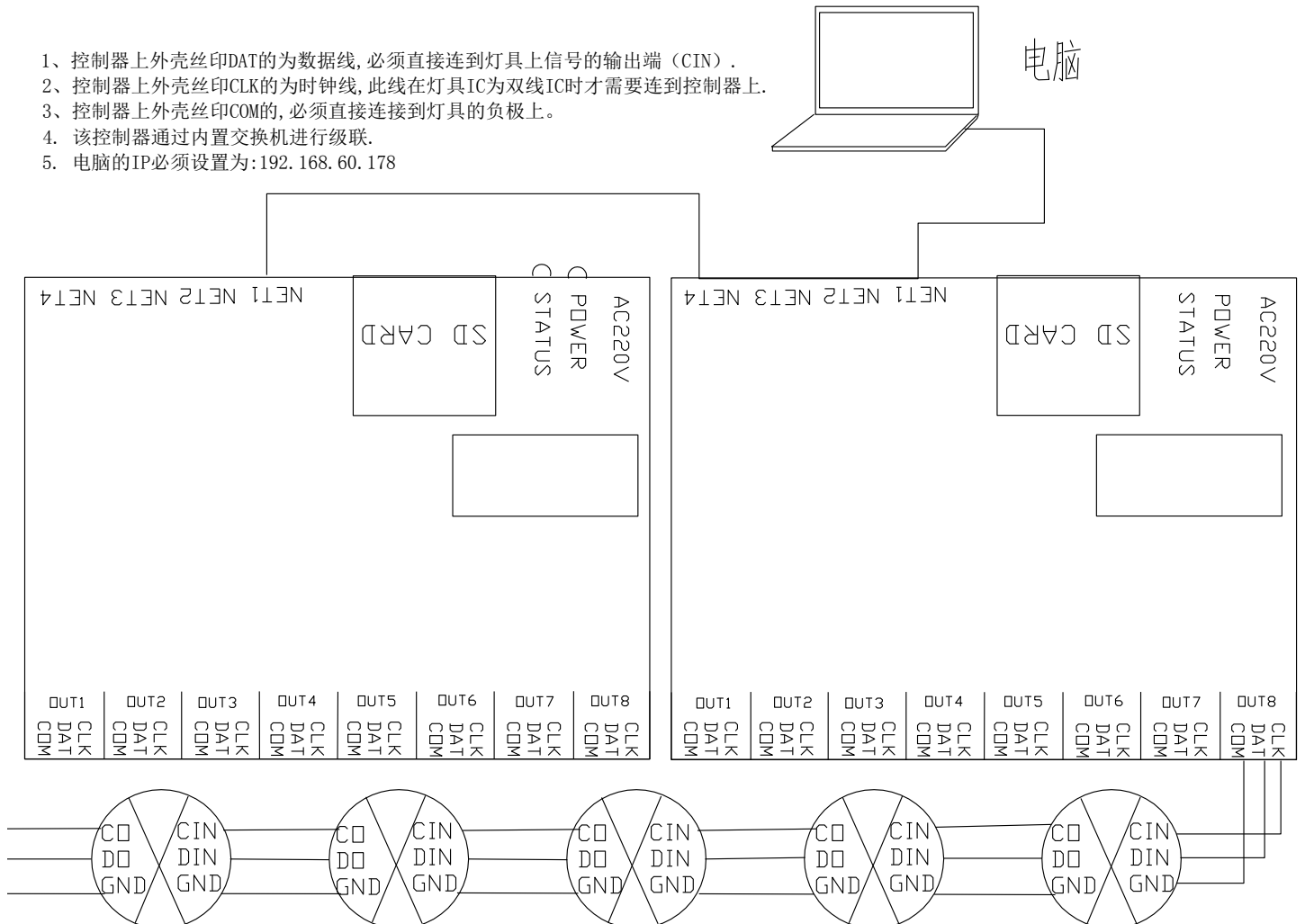
## 5. System architecture figure



**Note:** The IP address of the computer should be set to: 192.168.60.178

## 6. wiring diagram

- 1、控制器上外壳丝印DAT的为数据线, 必须直接连到灯具上信号的输出端 (CIN) .
- 2、控制器上外壳丝印CLK的为时钟线, 此线在灯具IC为双线IC时才需要连到控制器上.
- 3、控制器上外壳丝印COM的, 必须直接连接到灯具的负极上.
- 4、该控制器通过内置交换机进行级联.
- 5、电脑的IP必须设置为: 192. 168. 60. 178



**Note:**

1. If the distance between controller and lamps more than 50m we suggest using differential signal transmission control or Photoelectric isolated signal transmission control, please read the manual carefully. Signal lines must be a cable, the best is Super five kinds of cable.

## 7. Application scope

LED digital tube, LED point light source, the exterior light and a module, pixel screen (dazzle colour screens), high power DMX lighting.

## 8. Specific parameters:

### Memory card:

**Type:** SD card (if controlling so many lamps it is best to use the high-speed SD card.)

**Capacity:** 128MB—2GB

**Format:** FAT

**Store file:** \*.led

### Physical parameters:

Working temperature : -30°C—85°C

Weight: 1.35KG

Working voltage: AC220V

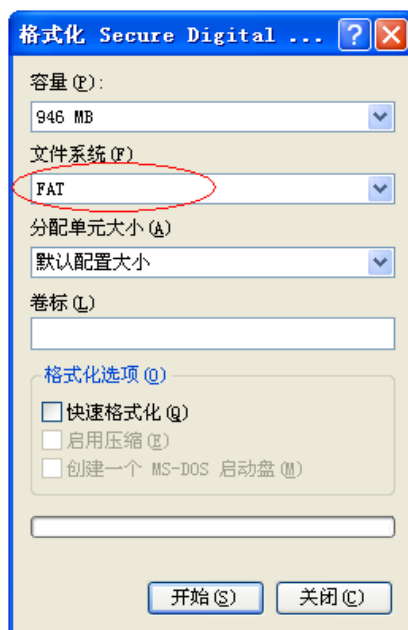
Working power: 8W

Size: L270mm×W180mm×H55mm

Signal port: 3pin connect port

**NOTE:** T-300K Support online download the effect-file to SD card.

Before copy files to SD card , The SD card must be formatted as FAT format.



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

## 9. Differential signal transmission control

### 1. Purpose:

For many big engineering, the distance between lamps and controller more than 50m and less than 200m.

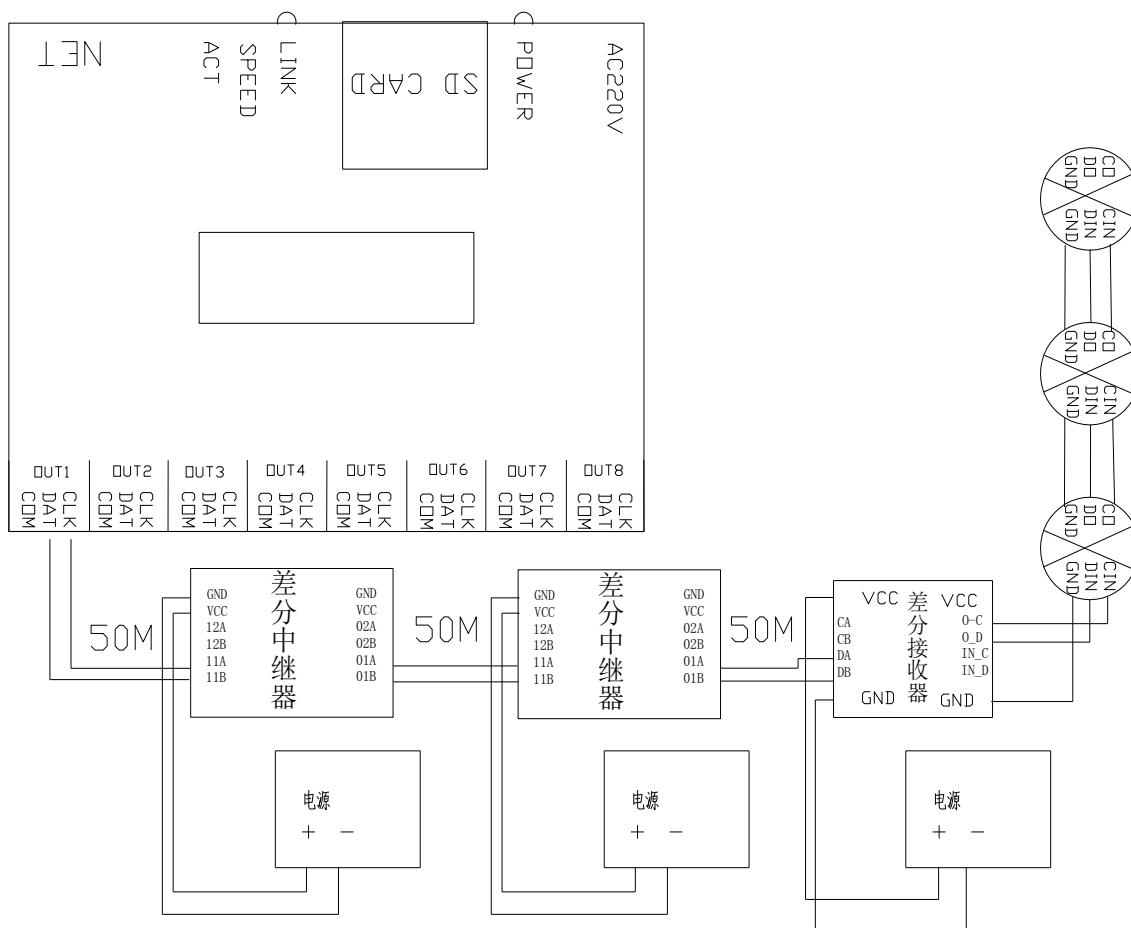
### 2. details

built-in Signal transmitter → signal transmission Repeaters → signal transmission receiver。

### 3. Appearance picture



### 4. Mode of connection:



### 5. Attention:

the distance, between controller and transmission Repeaters, between transmission Repeaters and transmission Repeaters, between transmission Repeaters and signal transmission receiver can't more than 50m. The maximum distance between controller and signal transmission receiver is 200m.

## 10. Trouble shooting

**Question 1:** controller 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.

### Question2

After power, the T-300k 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:

- ①SD card is empty, with no effect file.
- ②The 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.
- ③SD card did not format to FAT before copy effect files.
- ④Please check the supply power voltage, the controller can be individually powered to exclude power reasons
- ⑤Changing the SD card and then test to exclude the possibility of a bad SD card