T-300K Operating manual

1. T-300k System features

A. 32～65536 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: the T-300 K controller offline control, each machine controller must put a SD card.

2012 Edition T-300K controller can only be combined with the new version software LedEdit 2012 . Using the old software does not support the new version of the controller; the new version of the controller has been print the Chinese sign.
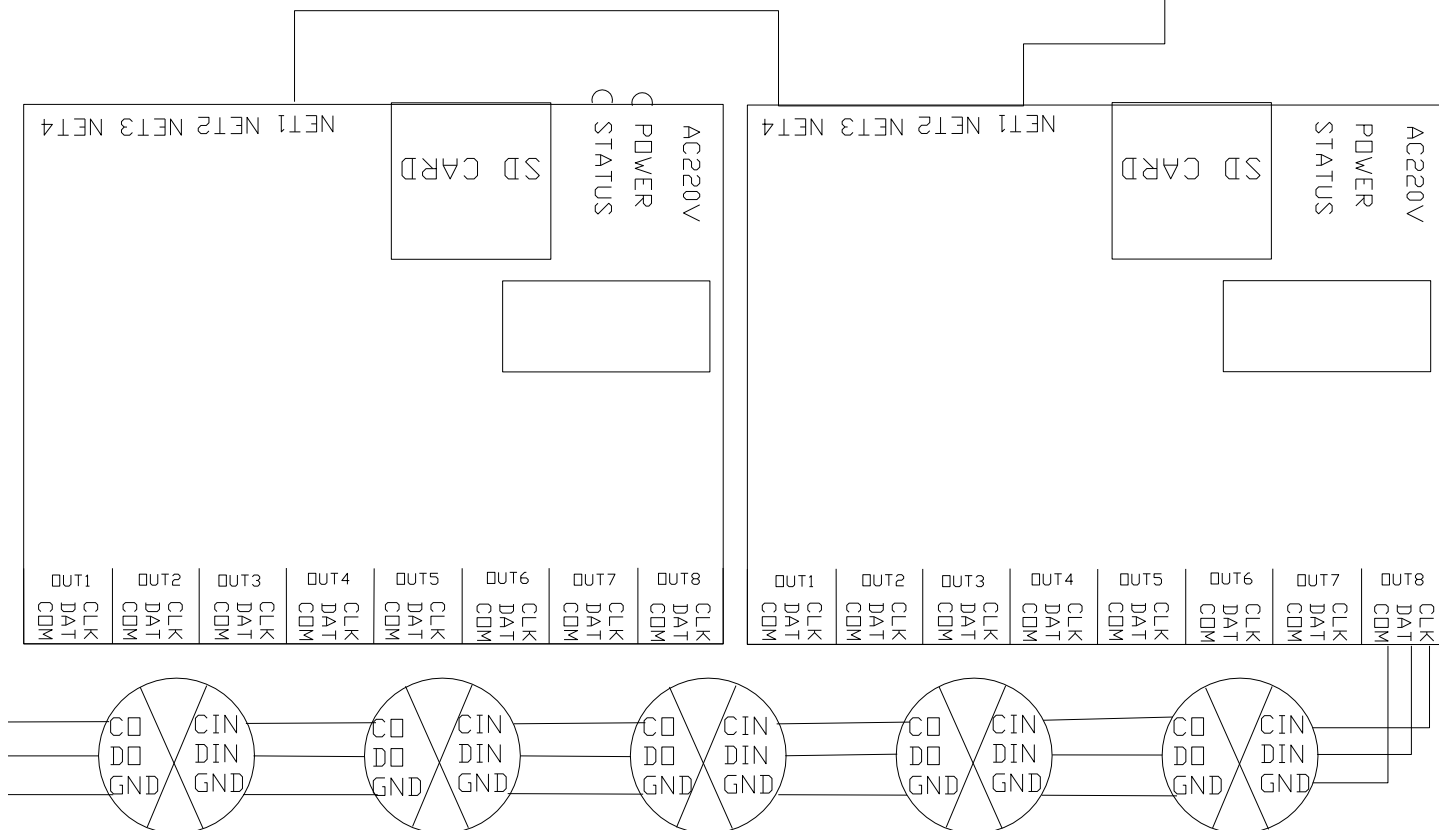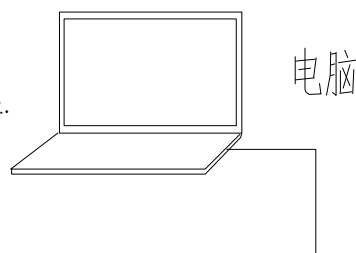
2. Support chips：

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	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-UCS1024	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-SM16715	4096/8192	Divided into high speed and low speed
SM16716	T-300K-SM16716	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.

Picture 1   picture 2

4.The meaning of flag

TTL signal（245 signal）：

AC IN	Exchange 220V power supply	COM (common port)	GND (ground wire)
POWER	POWER LIGHT	DAT	Signal
STATUS	Status light	CLK	The clock line
SD CARD	SD card slot		

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

5.System architecture figure

需要将电脑IP设置为192.168.60.178

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

电脑

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℃~85℃

      Weight：1.35KG

      Working voltage：AC 85~265V
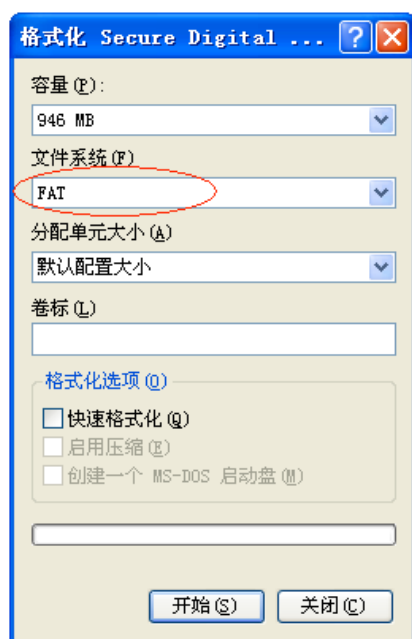
      Working power：8W

      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 cannot be hot-swappable, plug the SD card every time, you must first disconnect the power supply

9. Differential signal transmission control

    1.Purpose：

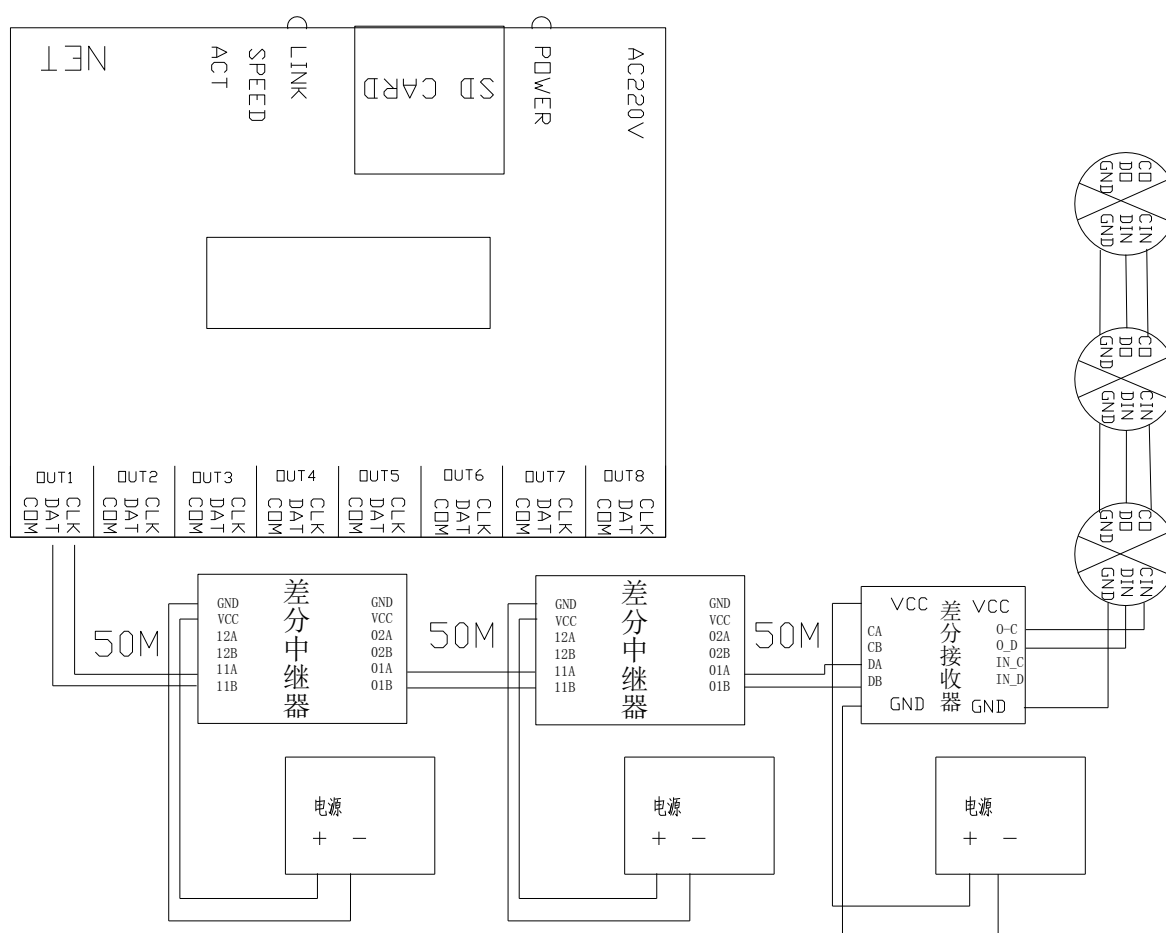   For many big engineering, the distance between lamps and controller more than 50m and less than 200m.

    2、details

      built-in Signal transmitter——> signal transmission Repeaters——> signal transmission receiver。

    3、Appearance picture

4、Mode of connection：

NET

SPEED ACT
LINK
SD CARD
POWER
AC220V

OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8
CLK DAT COM

差分中继器

GND	GND
VCC	VCC
12A	02A
12B	02B
11A	01A
11B	01B

50M

差分中继器

GND	GND
VCC	VCC
12A	02A
12B	02B
11A	01A
11B	01B

50M

差分接收器

VCC	VCC
CA	0-C
CB	0_D
DA	IN_C
DB	IN_D
GND	GND

50M

电源 + −

电源 + −

电源 + −

CO DO GND DIN
CIN DIN GND GND

CO DO GND DIN
CIN DIN GND GND

CO DO GND DIN
CIN DIN GND GND

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.

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:

   ⊖SD card is empty, with no effect file.

   ⊜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.

   ⊛SD 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