

# LT-600 LED LIGHTING CONTROL SYSTEM



LT-600 lighting control system is our latest launch of a world's advanced LED lighting products video display control system. LT-600 kernel is VLSI. It can achieve computer's simultaneously play, offline video on demand, Wi-Fi wireless transmission, automatic timing control and its exterior connect with DMX console to reach the world's first 5 in 1 function. Achieving synchronization/offline seamlessly switch, no need any splitter. Online control doesn't need to add DVI display adapter and send cards, easy to install, matching software's function perfect. Easy to operate. Compatible with a variety of LED driving IC; break through traditional rule of cabling restrictions, support a variety of any cabling's abnormal lighting project, make the controlling cabling more flexible, apply to any indoor or outdoor LED lights online / offline control. Advanced color grey level processing technology, consistent with human eye's visual sensory, display effect will be more vivid, higher brightness, richer color, Let your LED lights effect performance thoroughly, one-upmanship!

## 1. Specifications:

### LT-600 LED video control system

Working voltage	12V DC (matching 100-240V AC power supply adaptor)
Output signal channels	16 channels
SPI Output	Max 1364 pixel×16CH    21824 pixel
DMX Output	Max 170 pixel×16CH    2720 pixel
Input & output interface	RJ45
Grey level	Max 65536 scale(64K)
Refreshing frequency	60Hz~3000Hz
Online transmission mode	TCP/IP standard internet protocol
Off-line storage media	SD memory card
SD card capability	2GB Max.
The 3th interface	DMX512/1990 Protocol
Operating system	Support Chinese and English Windows 2000/2003/XP/Vista/Windows 7
Product size	L197XW120XH47(mm)
Packing size	L250XW125XH88(mm)
Weight	920g(N.W.) 1450g(G.W.)

## 2. Features:

- One set controller collect 5 kinds major function, which reached by previous multiple controllers.
  - 1) Ethernet real time computer control via synchronous display, Supporting Wi-Fi wireless transmission.
  - 2) Offline play stored programme in SD card, stored programme, Speed chosen and other functions will be seen with half an eye on the LCD.
  - 3) Compatible with DMX protocol, Connecting DMX console to build lighting control network.
  - 4) Support Wi-Fi wireless transmission, Suitable for special occasion, No need to cabling
  - 5) Supporting timing display. Realize display different programs, No matter on working day or weekend.
- Output DMX signal directly, and controlling various LED driving chips, The LED lights base on the following IC can be controlled: 74HC595, 6B595, MBI5026, DM134, ZQ9712, LPD6803, LPD6813, LPD1101, D705, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2801, WS2803, WS2811, WS2812, WS2812b, HL1609, SM16716, SD600, P9813, LPD8803, LPD8806, LPD8809, LPD8812, TLS3001, TLS3002, TLS3003, TM1803, TM1804, TM1809, TM1812, MBI6120 etc..
- LED lights not only in accordance with the rule of cabling, but also support a variety of any cabling's abnormal lighting project. Easy to operate via setting software.
- Extra large control capability, 16 channels signal output, Max. control 32768 full color pixels per LT-600. Support network synchronization of multiple controllers, multiple networked can control max. 250, 000 full-color pixels.
- On-line controlling adopt universal 10/100/1000MBPS network interface, With TCP/IP standard Ethernet protocol, accommodate to wide range. Reliable communication, support Wi-Fi wireless network transmission and real-time simultaneous display, Also can use internet's remote control to achieve real-time simultaneous display.
- Adopting advanced image processing technology. Online synchronous play doesn't need to add DVI display adapter and send card, any desktop and laptop can control it, convenient for project's debugging and demonstration.
- Adopting the way of network synchronization, synchronous controlling of multiple can be achieved through network switch. The transmission distance will be unlimited.
- Animation, video files converted generate ultra-fidelity off SD card's read files. ultra-small size, let the time of request programmes longer. And the content more affluent ; SD card is easy to play the animation, either pull down and then use card reader to update, Can also be updated remotely via Ethernet.
- Advanced color grey level processing technology, consistent with human eye's visual sensory, display effect will more vivid, higher brightness, richer color. Effectively remove the tooth angle produced by the floating line in video. Show the smooth and natural image.
- Perfect software function, simple to operate, built-in video player, support most media format. User can compile various picture, texts, cartoon, video as programmes that will be present. Can input any text display in the process of play. Support viewfinder read the display on screen directly, Breakthroughing the restrictions to code stream format, Play format file at will. Achieve split screen display, can divide screen at will. Switching Chinese and English version freely.

## 3. Spare Parts:

1. network cable	2 pcs	4. SD memory card	1 pcs
2. signal cable converter	16 pcs	5. SD card reader	1 pcs
3. power supply adaptor	1 pcs		



network cable



signal cable converter



power supply adaptor

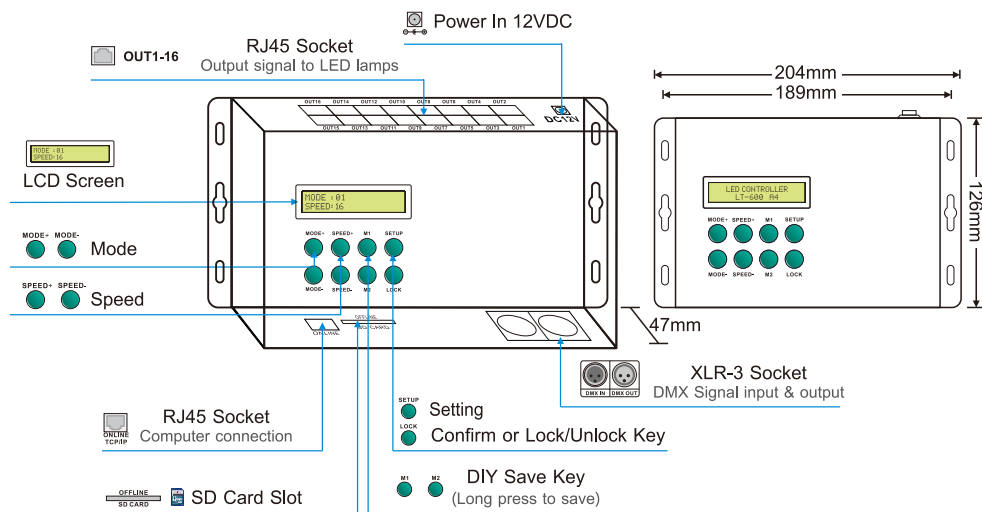


SD memory card



SD card reader

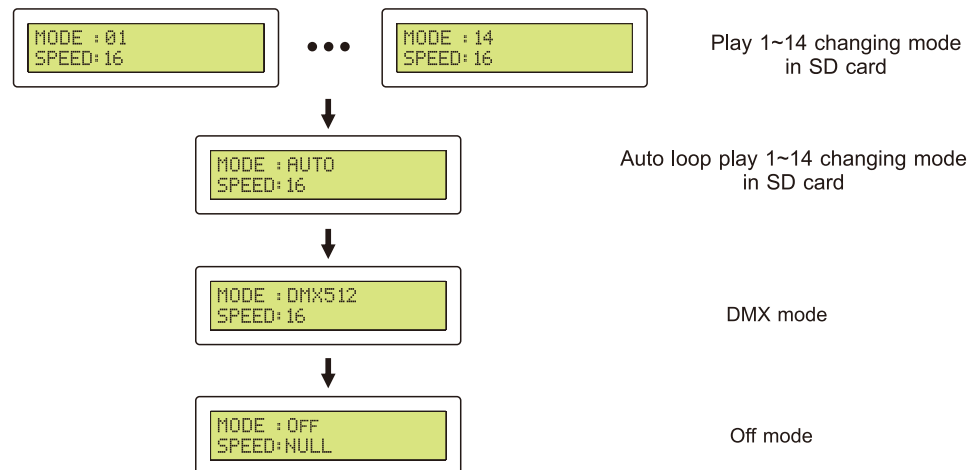
#### 4. Product Diagram:



#### 5. Offline Operating Instructions:

There are 8 function keys on the controller: MODE+/MODE-, SPEED+/SPEED-, M1/M2, SETUP, LOCK

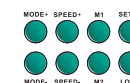
5.1 Press **MODE+/MODE-** to switch:



5.2 Long press **LOCK** key to lock/unlock the keypad:

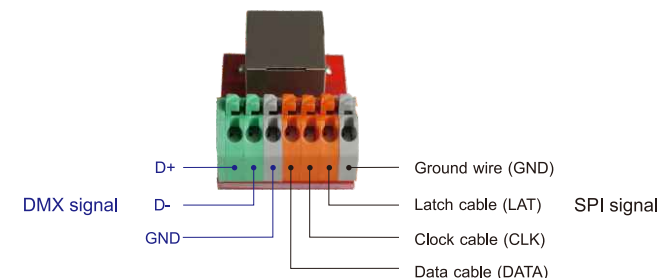


5.3 Press **SETUP** key to setup DMX address:



Press **MODE+/-** to adjust the hundred numbers  
Press **SPEED+/-** to adjust the ten digit numbers  
Press **M1/M2** to adjust the single digit numbers  
Press **LOCK** to confirm

#### 6. Signal Cable Definition:

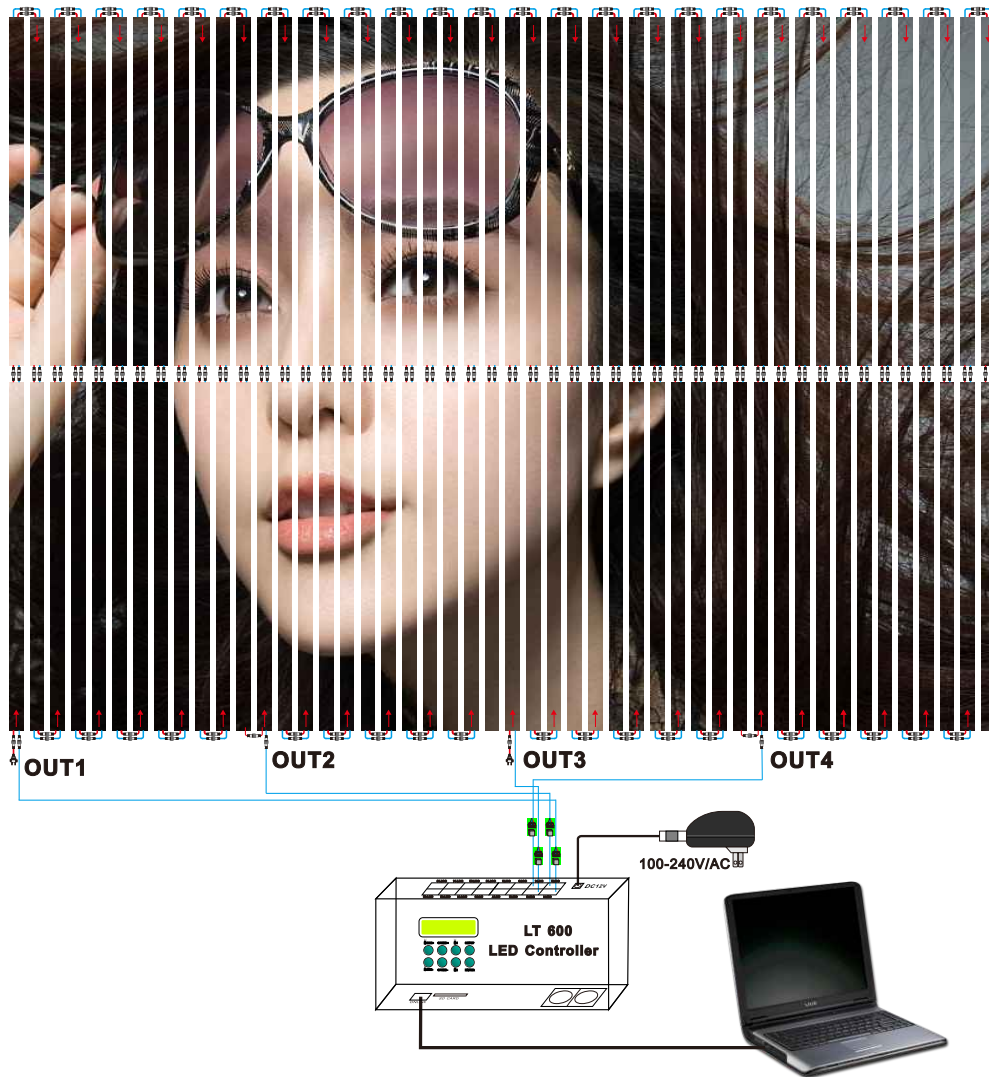


#### 7. SPI Compatible with Various IC:

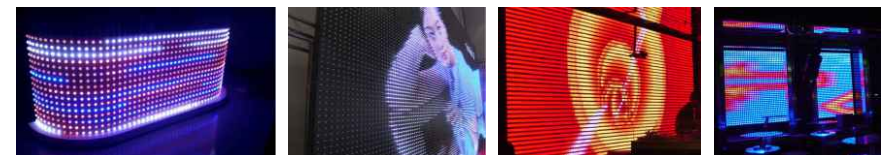
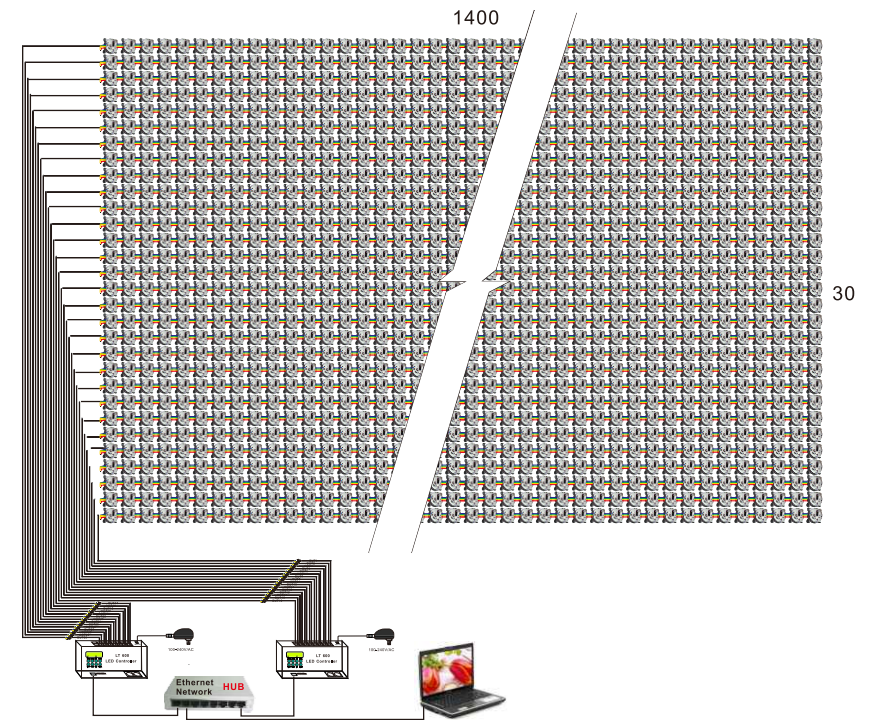
Connection	Signal cable	Support IC Model	Software Setting Option
	Single cable DATA	TM1803, TM1804, TM1809, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811, WS2812, WS2812B	1804/1812
		TLS3001, TLS3002, TLS3003	3001/3002
		MBI6120	MBI6120
	2 cables DATA CLK	LPD6803, LPD1101, D705, UCS6909, UCS6912	6803/D705
		WS2801, WS2803	2801/2803
		SD600	SD600
		P9813	P9813
		SM16716	16716
	3 cables DATA CLK LAT	LPD8803, LPD8806, LPD8809, LPD8812, LPD6813	8803/8806
		74HC595, 6B595, MBI5026, DM134, ZQ9712	RGB
	3 cables DATA+ DATA- GND	DMX512/1990	DMX512

## 8. Wirng Diagram:

Connection with tube:



## 点光源连接图





## 6. Attention:

- 1) The product shall be installed and serviced by a qualified person.
- 2) This product is non-waterproof. Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- 3) Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 4) Please check if the output voltage of any LED power supplies used comply with the working voltage of the product.
- 5) Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
- 6) Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 7) If a fault occurs, please return the product to your supplier. Do not attempt to fix this product by yourself.

## 7. Warranty Agreement:

- 1) We provide lifelong technical assistance with this product:
    - A 5-year warranty is given from the date of purchase. The warranty is for free repair or replacement and covers manufacturing faults only.
    - For faults beyond the 5-year warranty, we reserve the right to charge for time and parts.
  - 2) Warranty exclusions below:
    - Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
    - The product appears to have excessive physical damage.
    - Damage due to natural disasters and force majeure.
    - Warranty label, fragile label and unique barcode label have been damaged.
    - The product has been replaced by a brand new product.
  - 3) Repair or replacement as provided under this warranty is the exclusive remedy to the customer. LTECH shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.
  - 4) Any amendment or adjustment to this warranty must be approved in writing by LTECH only.
- ★ This manual only applies to this model. LTECH reserves the right to make changes without prior notice.