

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 DC12V (matching 100-240VAC power supply adaptor)
- Output signal channels 16 channels
- Input & output interface RJ45
- Loading capability per channel >512-1920 pixels/channel (Max. pixel depend on LEDs' model and circuit design)
- 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:

1. 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.
2. 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, HL1609, SM16716, SD600, P9813, LPD8803, LPD8806, LPD8809, LPD8812, TLS3001, TLS3002, TLS3003, TM1803, TM1804, TM1809, TM1812 etc..
3. 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.
4. 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.
5. 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.
6. 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.
7. Adopting the way of network synchronization, synchronous controlling of multiple can be achieved through network switch. The transmission distance will be unlimited.
8. 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.
9. 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.
10. 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

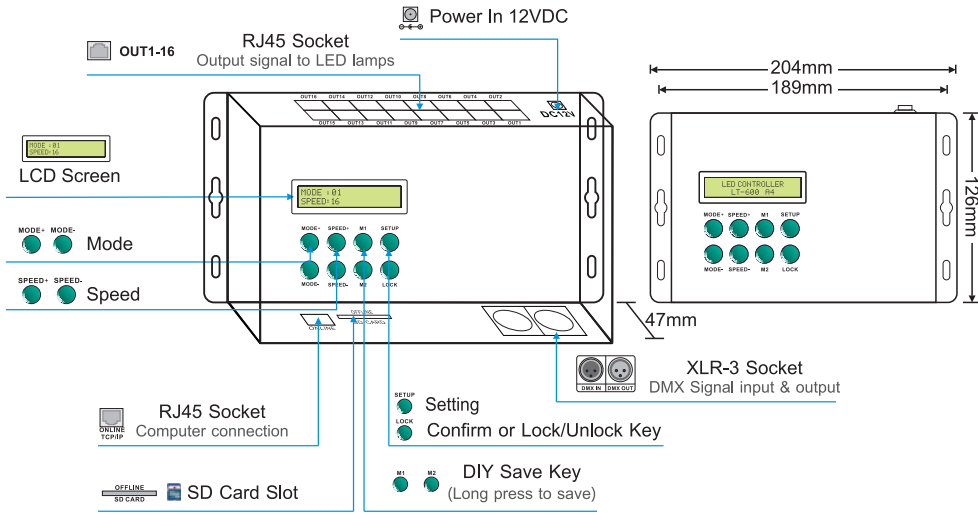


SD memory card



SD card reader

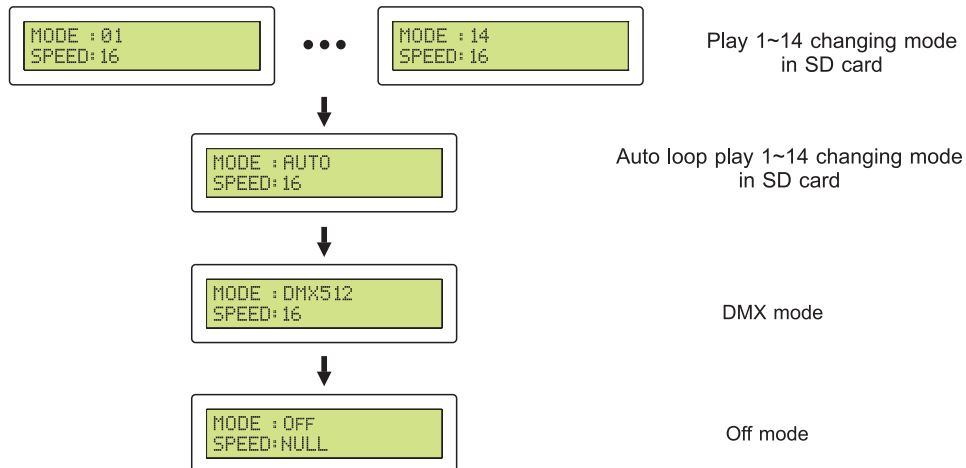
4. Product Diagram:



5. Offline Operating Instructions:

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

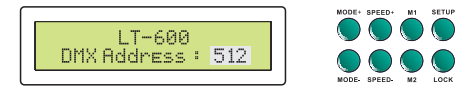
5.1 Press **MODE+/MODE-** to switch:



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:

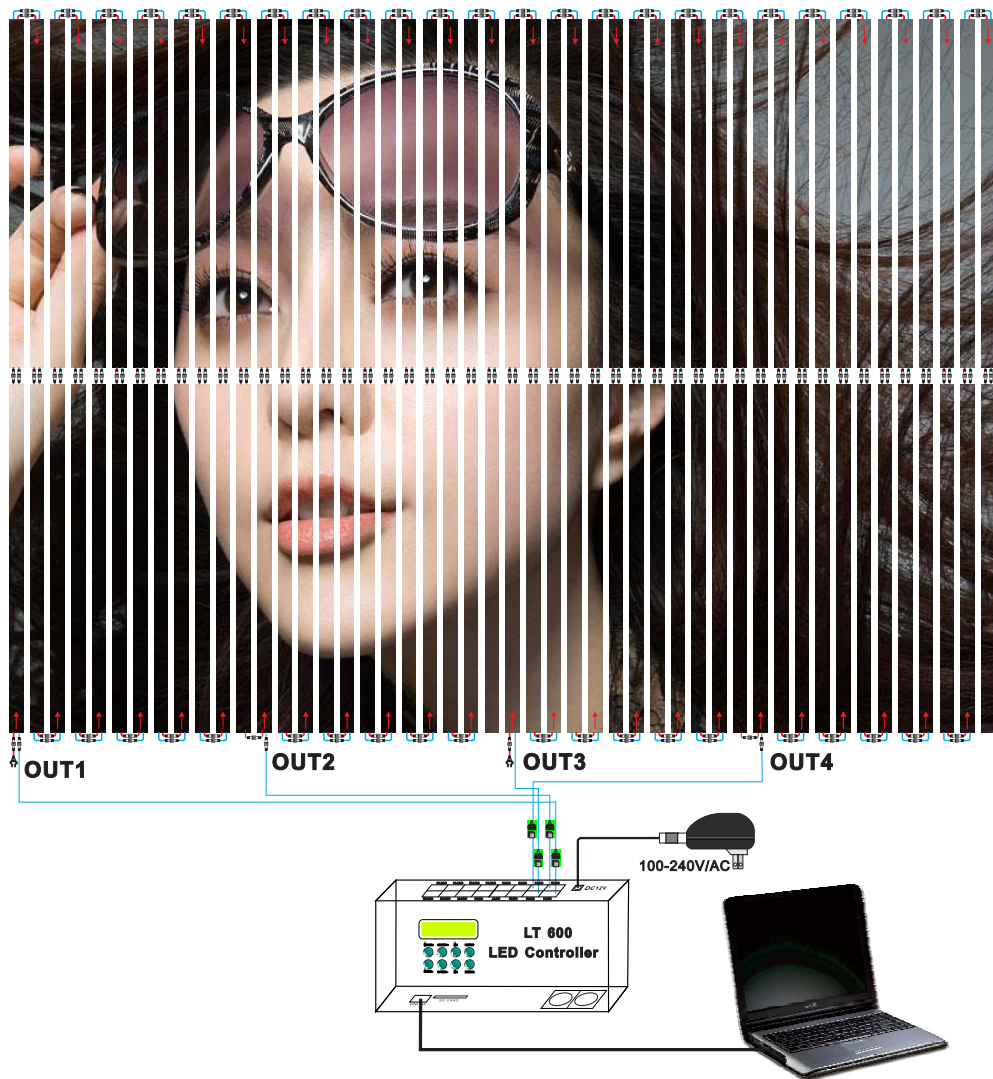
| No. | TERMINAL MARK | FUNCTION | |
|-----|---------------|-------------------|--|
| 1 | DIN | Data cable (DATA) | |
| 2 | CLK | Clock cable (CLK) | |
| 3 | LAT | Latch cable (LAT) | |
| 4 | GND | Ground wire (GND) | |

7. Compatible with Various IC:

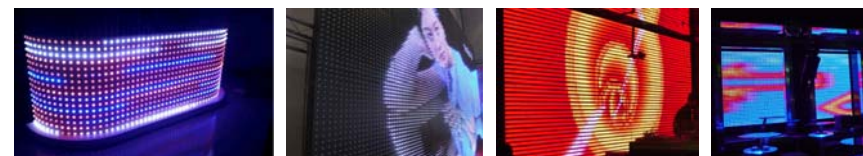
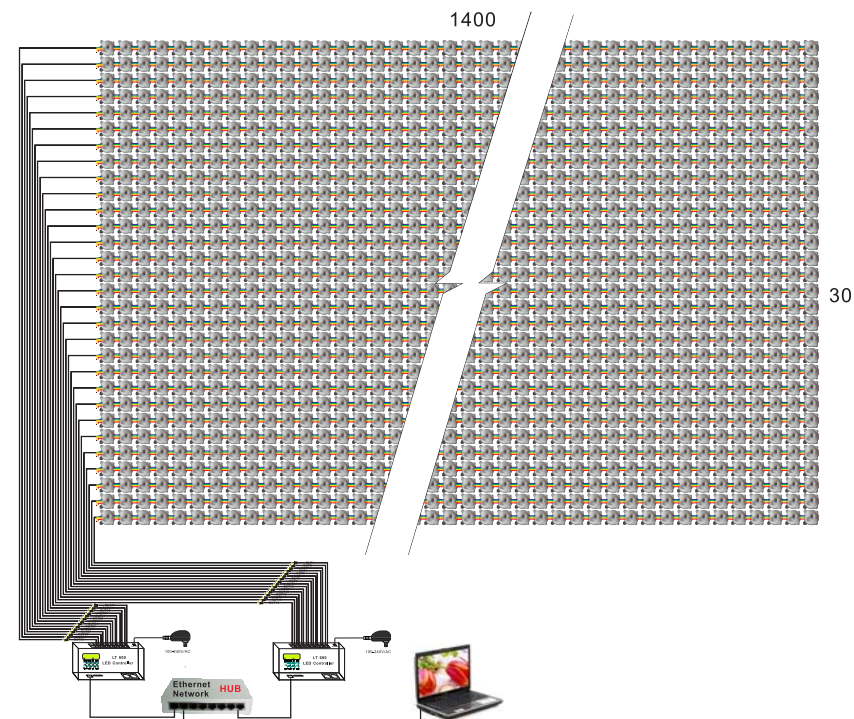
| Connection | Signal cable | Support IC Model | Software Setting Option |
|--------------------------------|--------------------------|--|---|
| | 3 cables DATA CLK LAT | 74HC595, 6B595, MBI5026DM134, ZQ9712 | RGB |
| | | 2 cables DATA CLK | LPD6803, LPD1101, D705, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912 |
| WS2801, WS2803, WS2811, WS2812 | | | 2801/2803 |
| SD600 | | | SD600 |
| P9813 | | | P9813 |
| | Single cable DATA | SM16716 | 16716 |
| | | LPD8803, LPD8806, LPD8809, LPD8812, LPD6813 | 8803/8806 |
| | | SD5128 | SD5128 |
| | | TM1803, TM1804, TM1809, TM1812 | 1804/1812 |
| | | TLS3001, TLS3002, TLS3003 | 3001/3002 |

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.