

LIGHTCRAFT MASTERCONTROL

Function Introduction of Controller

I. System Features

1. The system may support 150,000 points in offline.
2. The system supports automatic, regular, preset programs play.
3. The controller is equipped with keys and External Remote Control; the episode selection, overall brightness adjustment, white balance adjustment and playback speed adjustment etc.
4. Support offline one key fixed; clearing sub-controller ID number.
5. Support switch parallel program; reduce system cascade chain length; improve stability.
6. Support dual backup; Failure of one controller and net wire broken will not influence operation.
7. Tricolor independent brightness control may adjust white balance precisely, simple and effectively.
8. Support four-color lighting: energy saving, environmental and pure color.
9. Adopt Ethernet interface and UDP network protocol, the maximum transmission distance is 100 meters.
10. The LCD display module timely display the controller parameters and status.
11. SD card storage, support maximum 32G, preset maximum 255 program files.
12. Support remote online download and offline program update of multiple offline host controllers.
13. The built-in animation test program may help customer to debug and apply in project.
14. Support mixture of different type lamps and different protocols lamps (including DMX512 lamps)

II. Design concept

1. The system signal is dual redundant with doubled stability.
2. Four-color design: energy saving, environmental and pure color.
3. Synchronous with asynchronous integrated control: online priority; it will be shifted to offline effects when without online signal, achieve the video source backup.
4. Large self-development and design video editing, playback and layout design software: greater adaptability, more support languages, greater openness. It is applicable for various complicated applications of shaped screen, multi-screen, building screen, pixel light screen etc.
5. Support mainstream 32, 64-bit operating system: Windows 2000, Windows XP, Windows 7, Windows 8 etc.

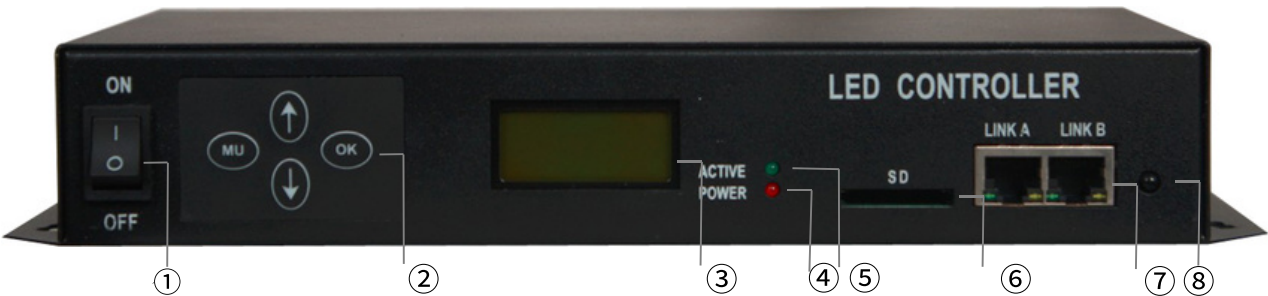
III. Extensibility

1. It allows installing all Windows operating systems and supporting for international languages.
2. The player software has adequate interfaces so that to compatible with other internationally accepted protocols. It supports personalized design requirements of customers.

Chapter II Controller Appearance and Size

I. Product Image

Front View:



Rear View:



- ①: Power Switch ②: Key ③: LCDDisplay ④: Power/CommunicationIndicator
- ⑤: Operation Indicator ⑥: SD Slot ⑦: AdaptiveNetworkInterface
- ⑧: Remote Control Infrared Indicator ⑨: PowerInterface

II. Controller Basic Parameters Table:

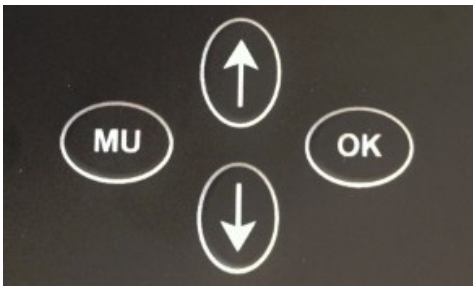
Input Voltage	AC 100V~240V
Maximum Power	15W
Length	28.6cm
Width	13.6cm
Height	4.5cm
Fixed Hole Spacing	26.8cm； 6.8cm

III. Remote Control Panel Appearanceand Description



- | | |
|--------------------|---------------------|
| : Set Menu | : Plus |
| : Self Test | : Minus |
| : Confirm and save | : Previous Fragment |
| : Exit Setup | : Next Fragment |
| : Play and Pause | : Numeric Key |

IV. Controller Key Panel Appearance and Description



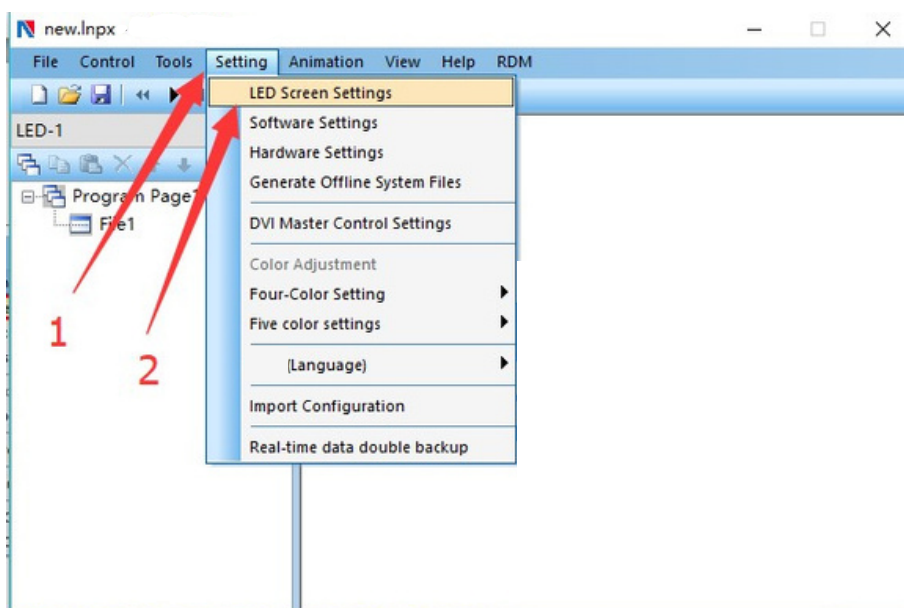
- | | |
|------------|-----------|
| : Set Menu | : Confirm |
| : Plus | : Minus |

Chapter III Offline File Preparation and Timing Play Setting

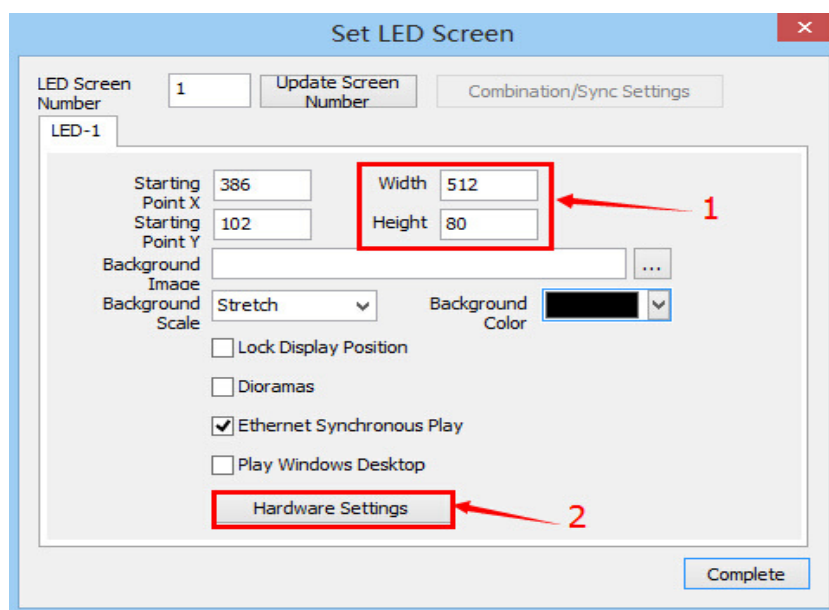
I. Offline Files Preparation Mode

- 1 Install Mr Player software such as MP_XXXX.exe
- 2 LED screen and wiring setting:

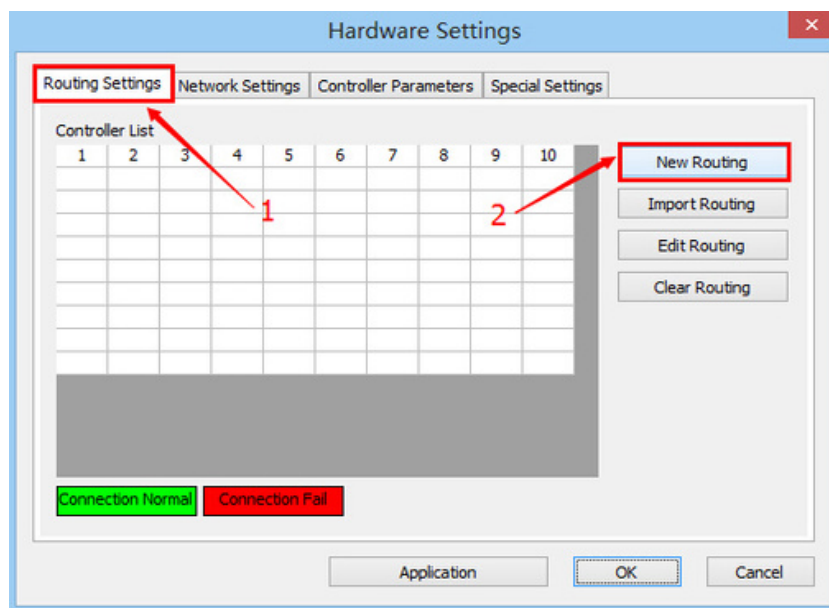
2.1 Start Mr Player software,click“Setting” to enter “LED Screen Settings” interface.



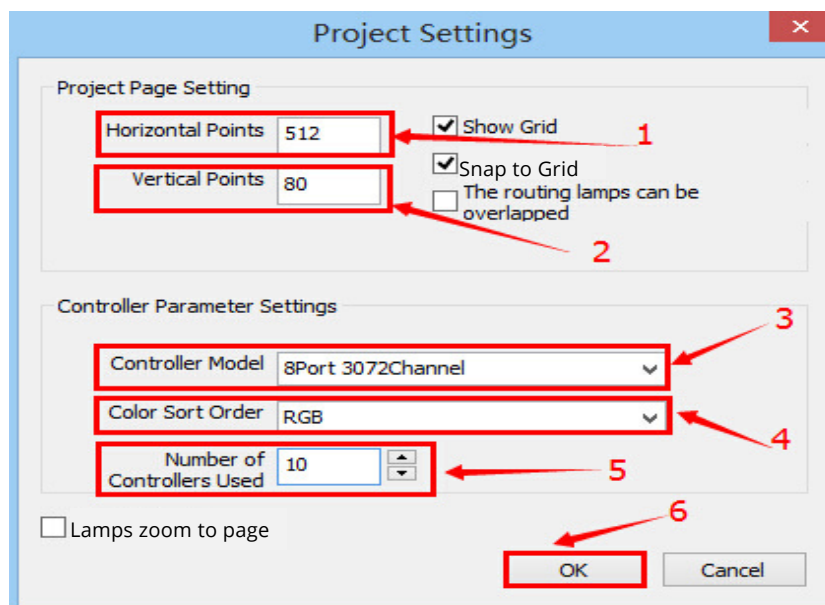
2.2 Set width and height of items (Special items shall refer to the maximum width and height). In case of setting 10 controllers of 512 width and 80 height: then enter “Hardware Settings” as figure below! The passord of hardware setting shall be “mr” of either uppercase or lowercase.



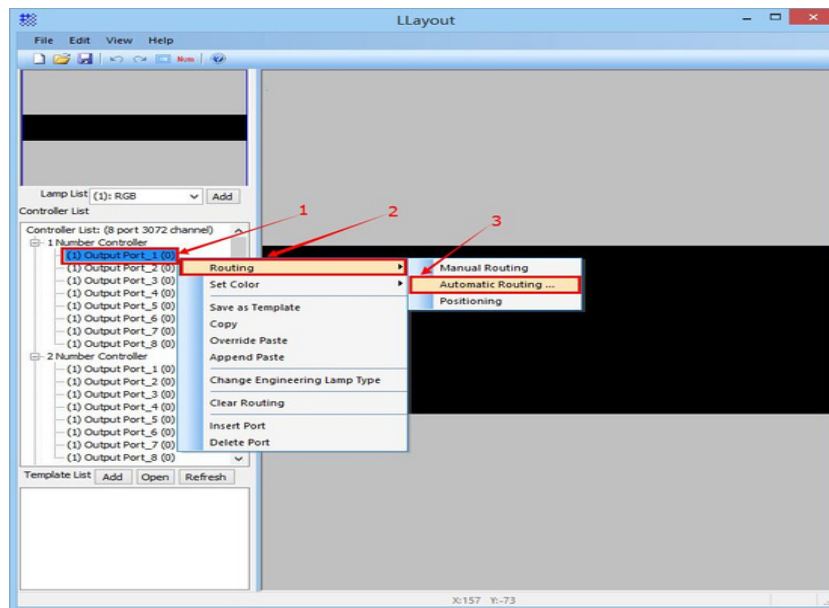
2.3 Click “Routing Settings”option, select “New Routing”



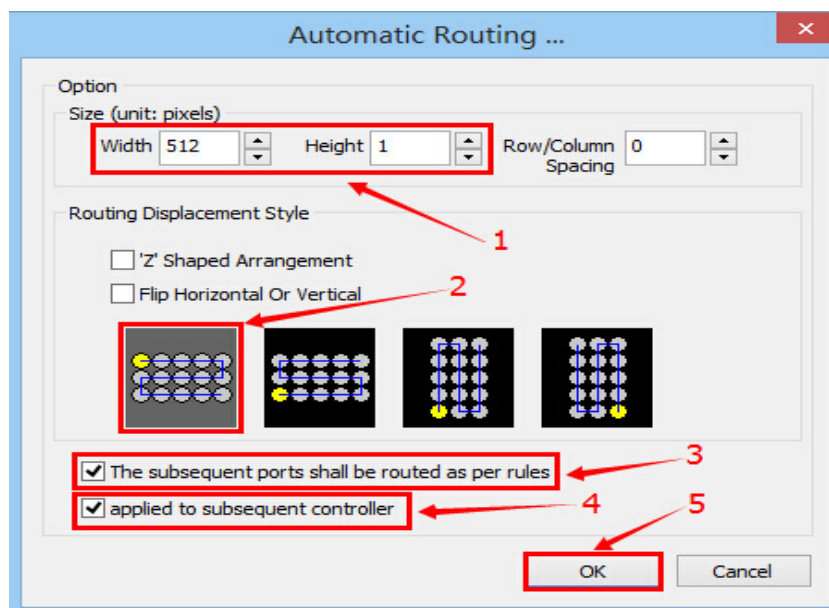
2.4 Set related parameters on “Project Settings” interface. For example each port load 512 points, the lamp color shall be RGB arrangement rules, use 10 controllers; Click “OK” after finish setting:



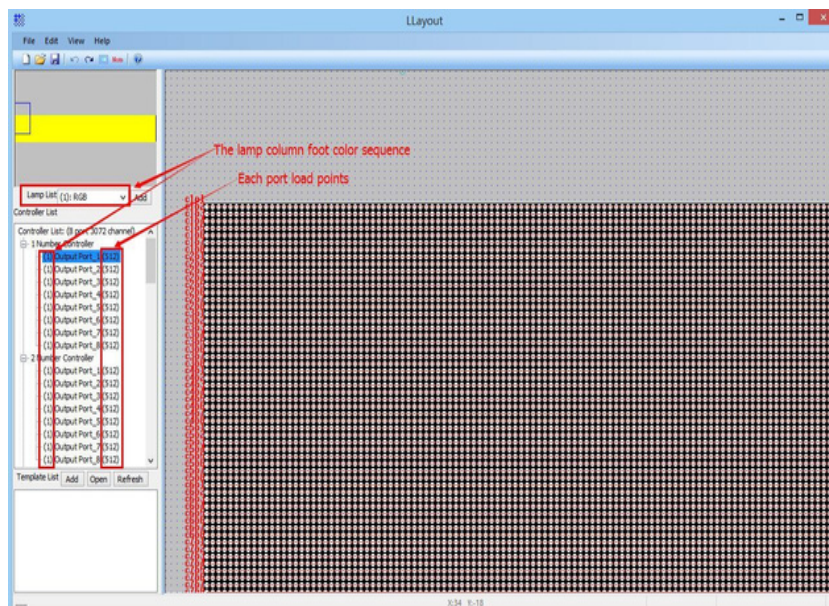
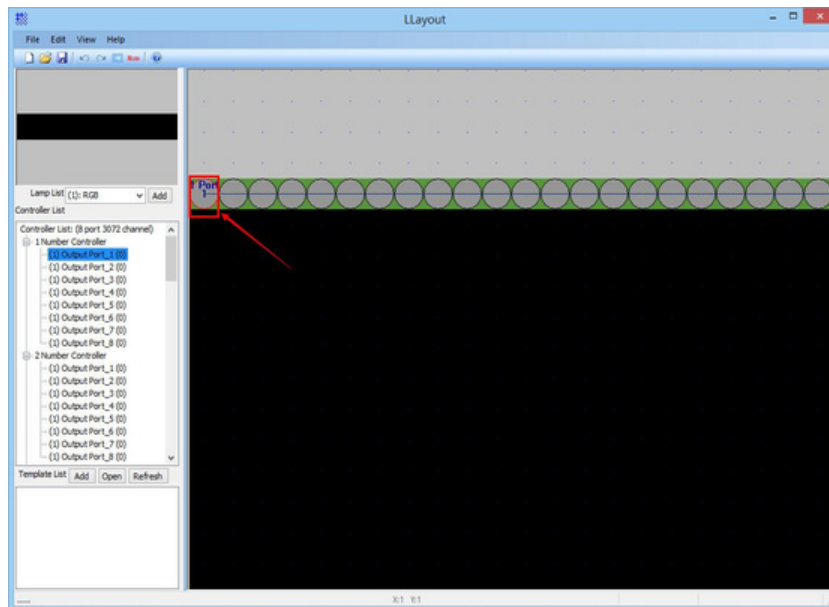
2.5 After enter LLayout wiring module, click in "Controller List" successively as below: "1 Number Controller" ---- "Output Port _1" ----- right click ----- click on the "Routing" ----- "Automatic Routing":



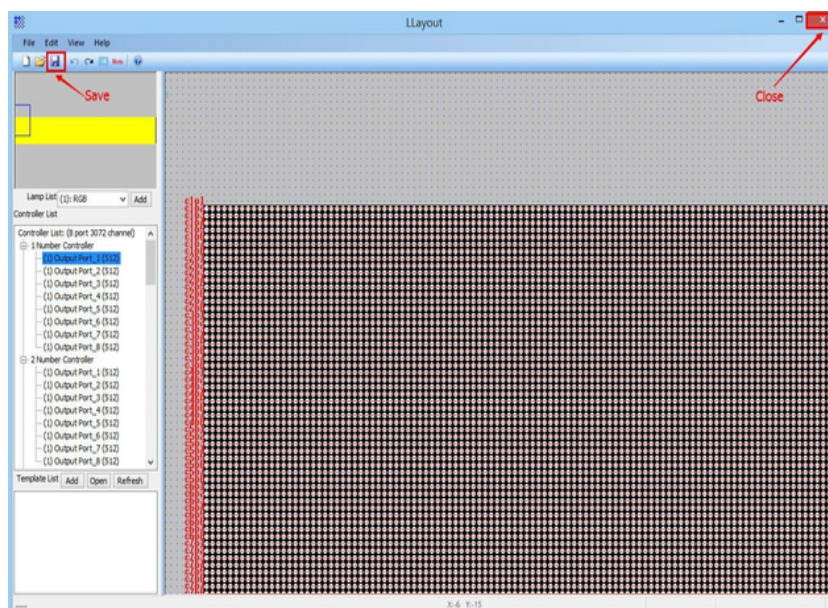
2.6 After entering "Automatic Routing" interface, set "Width", "Height" and Routing Displacement Options, then click to confirm as follows:



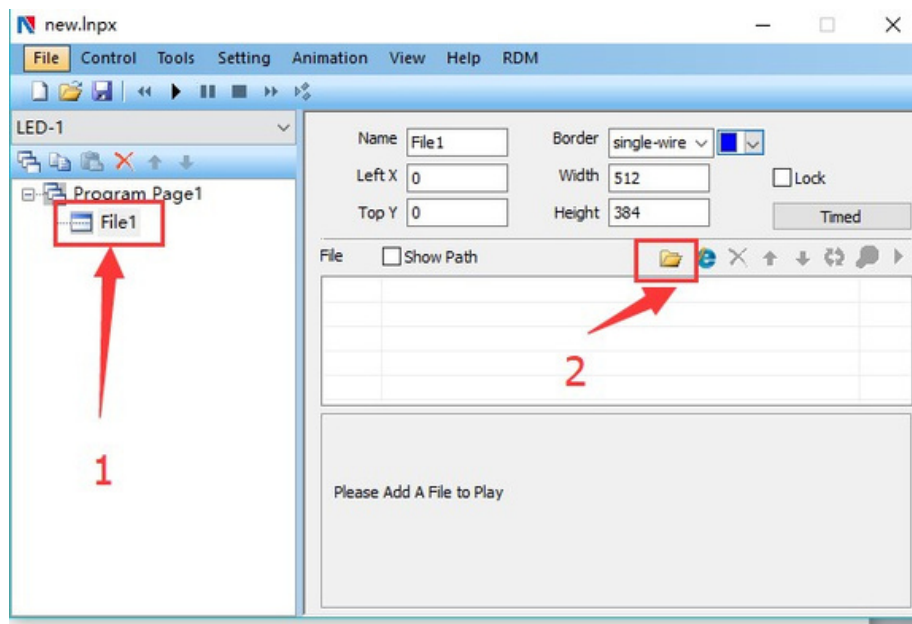
2.7 Then, when the mouse moves in middle area of Layout software, a horizontal light string will move with mouse; then move mouse and scroll the mouse wheel (zoom in and out as mouse center or click PgUp and PgDn on keyboard; hold on the mouse right to move wiring area); then left click on the upper left corner (Coordinates 1,1) to put down the light string; then other lamps will wire to wiring area automatically; observe controller lists of wiring area and controller; the list will show the wiring points on each port and each controller.

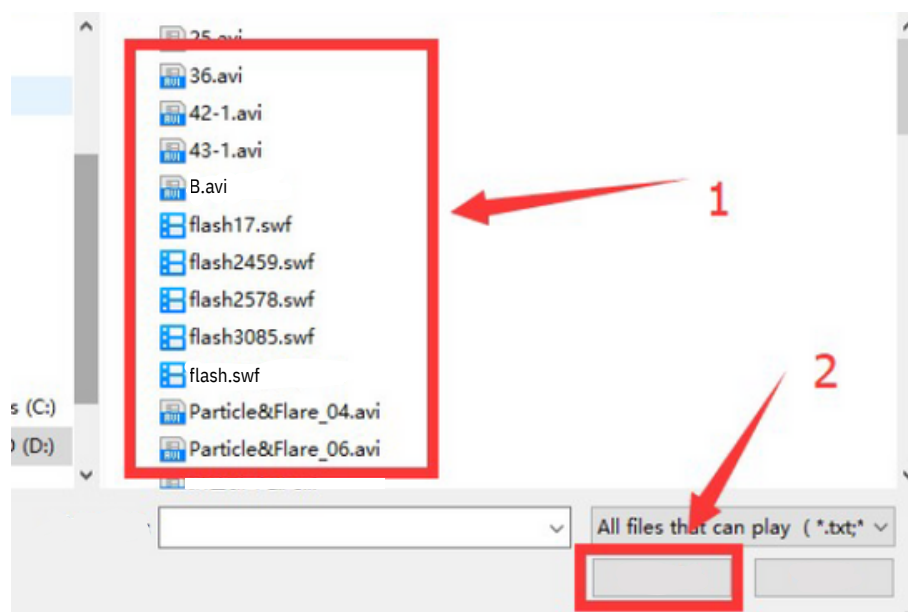


2.8 When above setting is incorrect, click “Save” key then exit, as figure below:

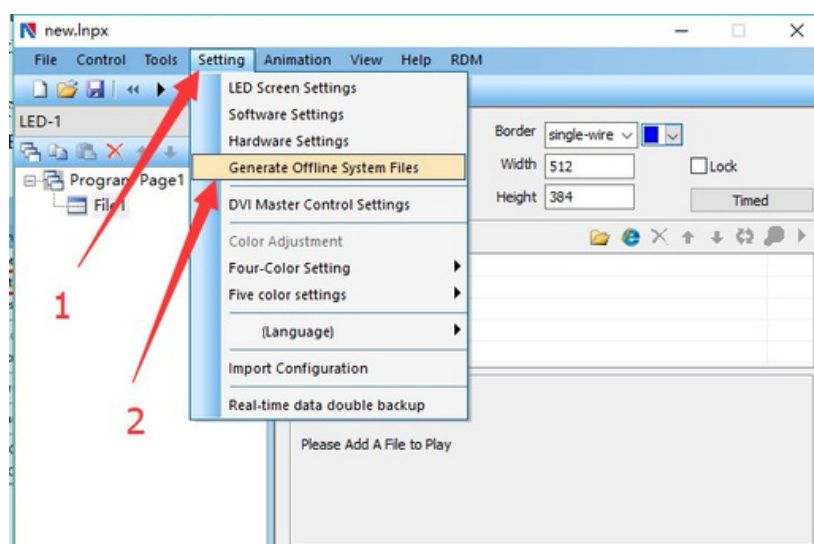


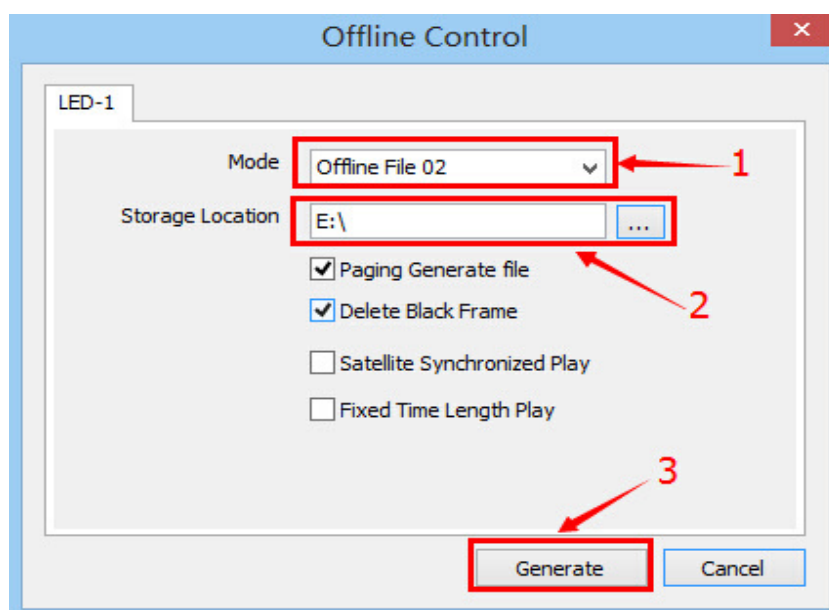
2.9 After exit wiring module; then back to “RoutingSetting” card of “Hardware Setting”; then close “Hardware Setting” interface. Click left “Program Page1”---“File 1”; add the playing file on the right; double click the added files to preview.



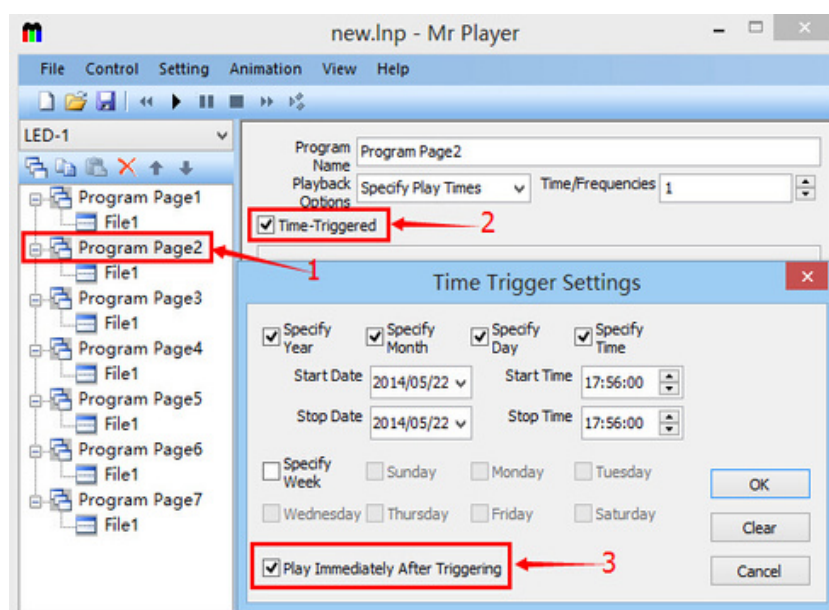


2.10 Select “Generate Offline System File” in “Setting”;select “offline file 2” in the popup record window; select the offline file saving path then click ”Generate”.The generated file format is “offline.arm”. Then copy the generated files to SD card of host controller. (Note: the saved offline files in the same catalog shall be different. Before record, other files under the catalog shall be deleted or saved to other places. Before using SD card, the format shall be FAT32. When first use the host controller, the time shall be set to current time.)





II. Multiple fragments offline files timing play setting:



Create wiring files and import materials in Mr Player software; adjust the time trigger of program page to actual requirements which include specified date, week and time. It shall be noted to check “Trigger to Play Immediately”. As figure above:

I. LCD main interface after powers on

42501015

← Product model

PLAY 001

← Current playing program fragment number

II. remote control setting parameters

1、 In main interface, press  to enter fragment selection setting interface. As figure below:

INDEX

←Catalog

= Loop

←Loop (when displayed number is selected fragment number)

In the interface, press   to adjust loop mode. In the digital mode, press   to adjust program number; then press  to exit with saving; press  to exit without saving.

2、 Press  again to enter playback speed selection interface, as figure below:

SPEED

← Playback speed

= 25 FPS

← Frame count in each second

In the interface, press   to set playback speed; then press  to exit with saving; press  to exit without saving.

3、 Press  again to enter date and time setting interface. As figure below:

2014

← Year

— — 01 — — 10

← Month — Day

TIME

← Time

12 : 24 : 48

← Hour—Minute —Second

In the interface, press   to adjust position; press   to adjust related value; then press  to exit with saving; press  to exit without saving.

4、 Press  again to enter brightness adjustment settings interface. As figure below:

BRIGHT

←Brightness

=100%

←Brightnesspercentage

COLORA/B/C/D

←A/B/C/D four-color channel

=100%

←Brightness percentage

In the interface, press  to set brightness; press  to adjust channel position of A, B, C, D; press  again to set brightness of the four channels; then press  to exit with saving; press  to exit without saving.

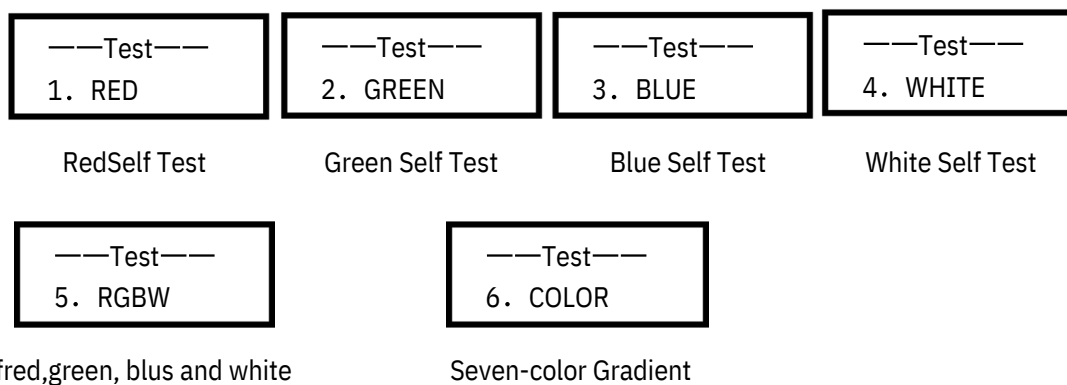
5、 Press  of main interface to enter sub-controller fixed ID number setting interface. As figure below:



In the interface, press  to modify adjusted number position. The number may be modified by pressing number key. The previous number shall be initial controller number. The rear number shall be ended controller number (When there are ten controllers which the previous number of “002” and the rear number of “008”, then only 002-008 control shall be controlled. Others shall be not fixed). After modify the number, press  to finish ID number fixing.

III. Self Test Setting

In main interface, press  to enter self test playing interface. As figure below:



Note: during self test, press to  shift various self test modes.

IV. WAIT Play Mode Setting

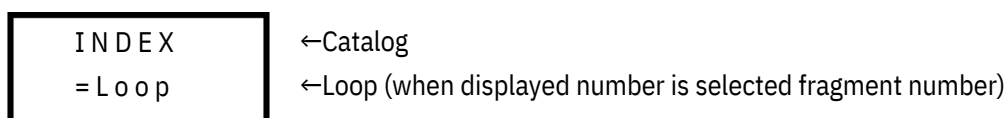
Power on the device to enter multi-loop or single play mode. However, the offline player shall not play any fragment automatically after power on; the remote control shall be used to select the play fragment. The play mode described above is WAIT mode.

After power is on, press “Menu” to enter fragment selection interface. Press “ ” keys repeatedly until select INDEX=WAIT. As figure below:



V. Controller Key Setting Parameter:

1、 In main interface, press **MU** to enter fragment selection setting interface. As figure below:



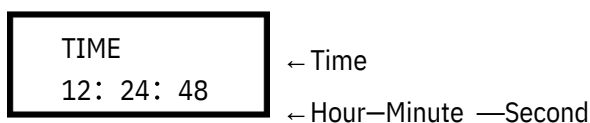
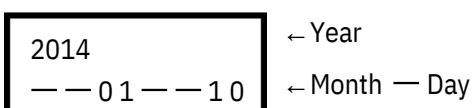
In the interface, press **OK** to adjust loop mode. When in the digital mode, press **↑**、**↓** to adjust program number; Press and hold **OK** 3-5 seconds to save and exit setting.

2、 Press **MU** again to enter playback speed selection interface. As figure below:



In the interface, press **↑** **↓** to set playback speed. Press and hold **OK** 3-5 seconds to save and exit setting.

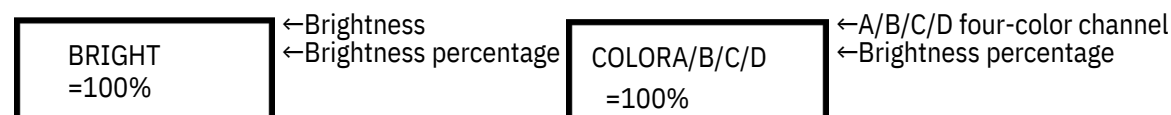
3、 Press **MU** again to enter date and time setting interface. As figure below:



In the interface, press **OK** to select to adjust position; press **↑** **↓** to adjust related values.

Press and hold **OK** 3-5 seconds to save and exit setting.

4、 Press **MU** again to enter brightness adjustments setting interface. As figure below:



In the interface, press   to set brightness; press  to adjust A, B, C, D channels positions; press   again to set brightness of the four channels. Press and hold  3-5 seconds to save and exit setting.

V. Remote Control Operation in Play

1. Shut Down

In playback interface, press  to close host controller playback; the LED screen will display “NOPLAY”; the light will get black; press  again to continue playing.

2. Pause Playback

In playback interface, press  to pause host controller playback; the LED screen will display “PAUSE”; the lamp color will be the frame before stop playback. Press  again to play again.

3. Adjust Program Fragment

When it host controller, the fragment playback shall be adjusted by   key, remote control   and number key.

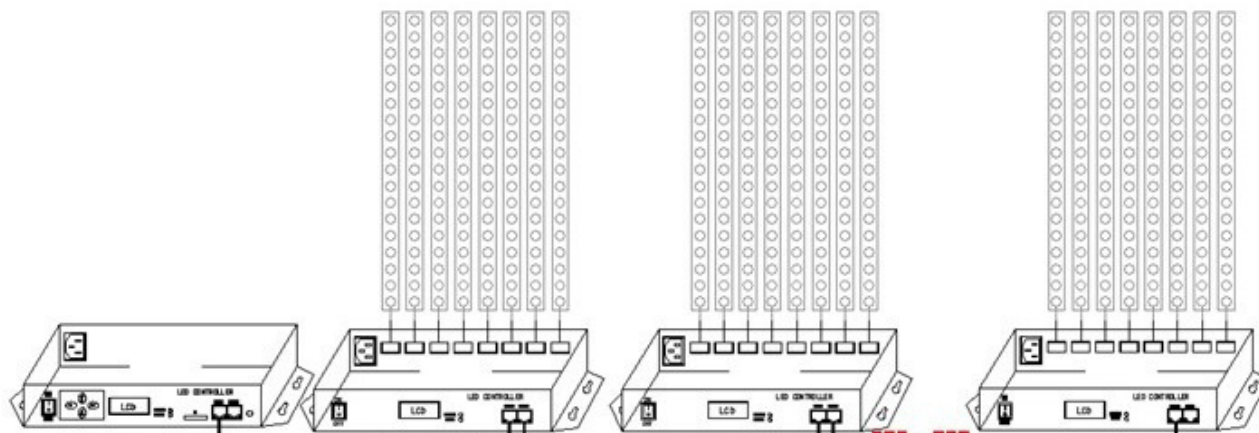
4. View Master Controller Current Fragment

In master controller playback interface, press  to show current host controller time on LCD display, continue press  to back to playback interface.

Chapter V Controller Installation Instruction

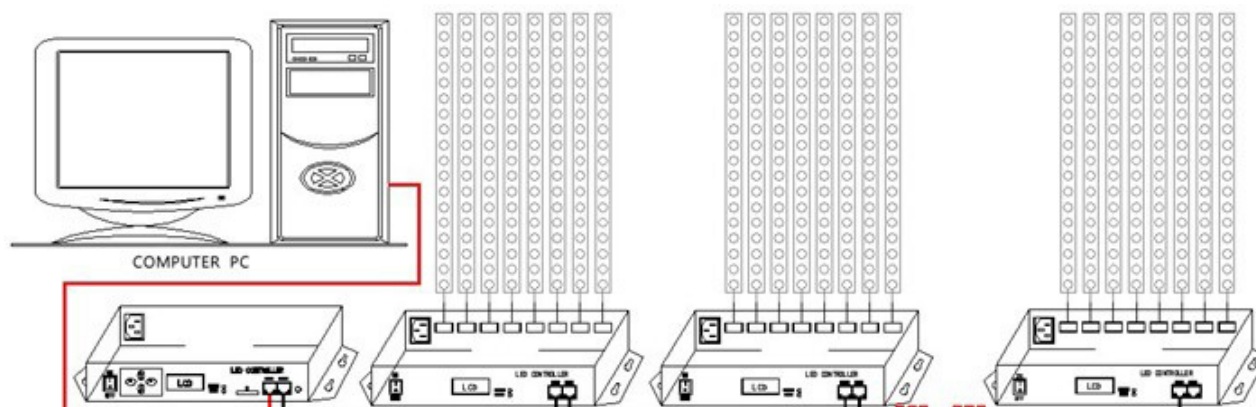
I. Offline Mode

Connect with sub-controller:



II. Online and Offline Mode

Connect with computer and Master controller (in the mode, computer and offline Master controller shall not work at the same time)



Chapter IV Precautions

Network Cable Sequence:

568B: orange-white orange green-white blue blue-white green brown-white brown

568A: green-white green orange-white blue blue-white orange brown-white brown

Controller, offline players and switch shall be connected by crossover cable. One port is 568B, the other is 568A. Network cables between above equipments and computers shall be use through line. Both of the ports are 568B or 568A. Cable sequence shall be not defined by self.