

CATALOG

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Chapter 1 Introduction

I. Overview

LEDVISION is the dedicated software used to control and play the LED screen, which takes the advanced software technology with abundant function, high performance, excellent operating interface and easy to learn and use.

LEDVISION supports the play of the media files in the video, audio, image, text, Flash and Gif format, supports the display of Word, Excel and PPT, supports the display of the clock, timing and weather information, and supports the play of the external video signal, such as TV, AV and S-Video. The software supports the multi-page and multi-section program editing, and provides abundant and flexible video switching function and section effect, as well as the 3D effect animation. This software establishes a platform that enables you to exert your innovation and present the effect of the display screen perfectly.

LEDVISION supports the RA5/RDA5F Receiving Card and the ST7 Sending Card, and supports one computer to control several LED screens, as well as support the intelligent parameters setting of the LED screen.

LEDVISION supports the point-by-point correction of the LED large screen by manual or the camera, and is compatible with the correction data acquired by other dedicated correction device.

At present, LEDVISION supports the simplified Chinese, Traditional Chinese and English.

II. Software Operating Environment

This software can operate over the Windows XP\Windows Server 2003\Vista\Windows 7 operating system.

It is suggested to configure the computer hardware as follows:

- CPU 2.0 GHZ or higher
- Memory 2GB or more
- Independent video display card with memory 512MB or more and DVI interface

Users can adjust the configuration of equipments according to the actual situation, which may be adjusted mainly by the total pixels in the LED screen, complicity of the program playing and whether the video playing is the high definition video.

Chapter 2 Installation and Un-installation

I. Software Installation


1. Open the CD-ROM, double click the  LEDVISION_Setup_x.xx.xxx.exe icon (for example, LEDVISION_Setup_1.20.188.exe), select the software installer language, and click OK.



Figure 2-1 Select Installer Language

2. Go into the Welcome Installation interface, and click Next.

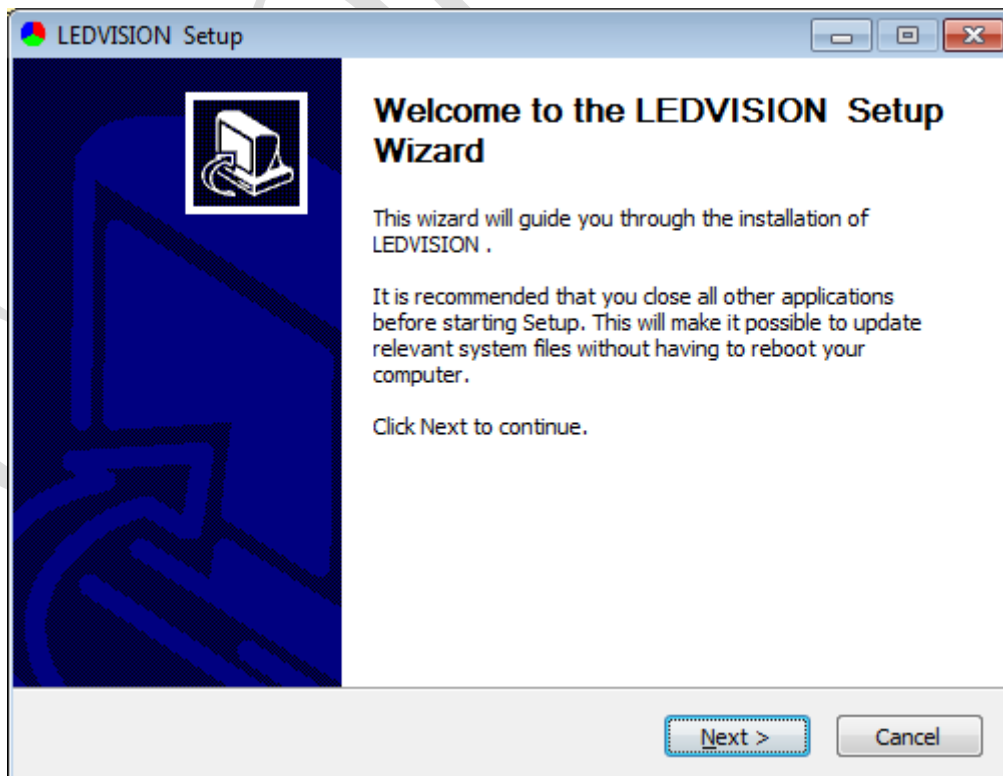
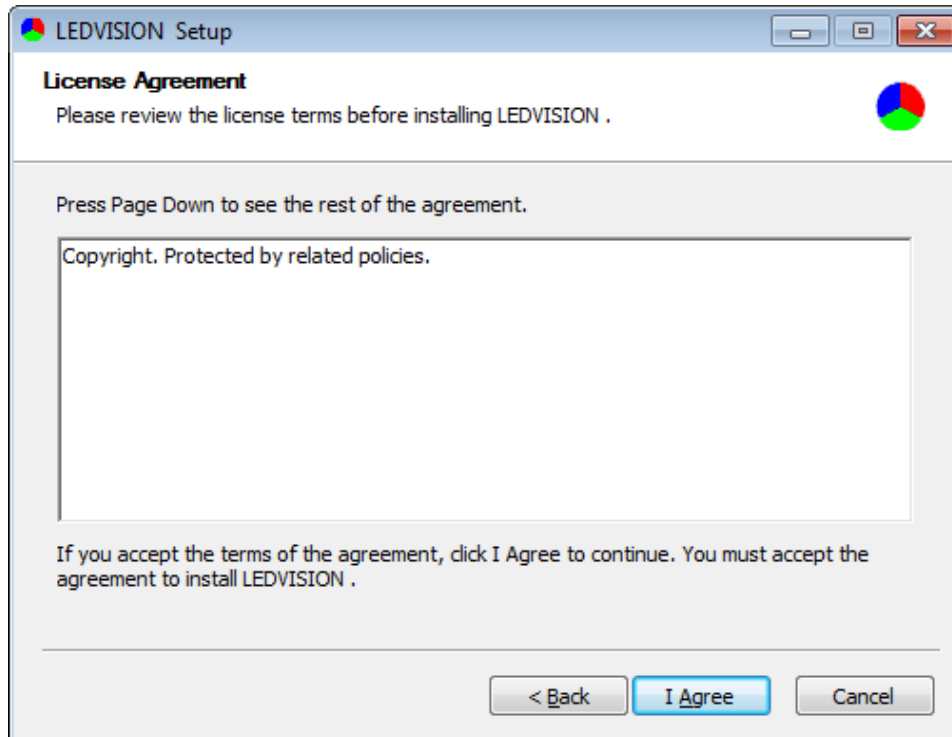


Figure 2-2 Installation Wizard

3. Confirm the license. Click I Accept.

**Figure 2-3 Authority License**

4. Select the installation directory and confirm to install. Click Install.

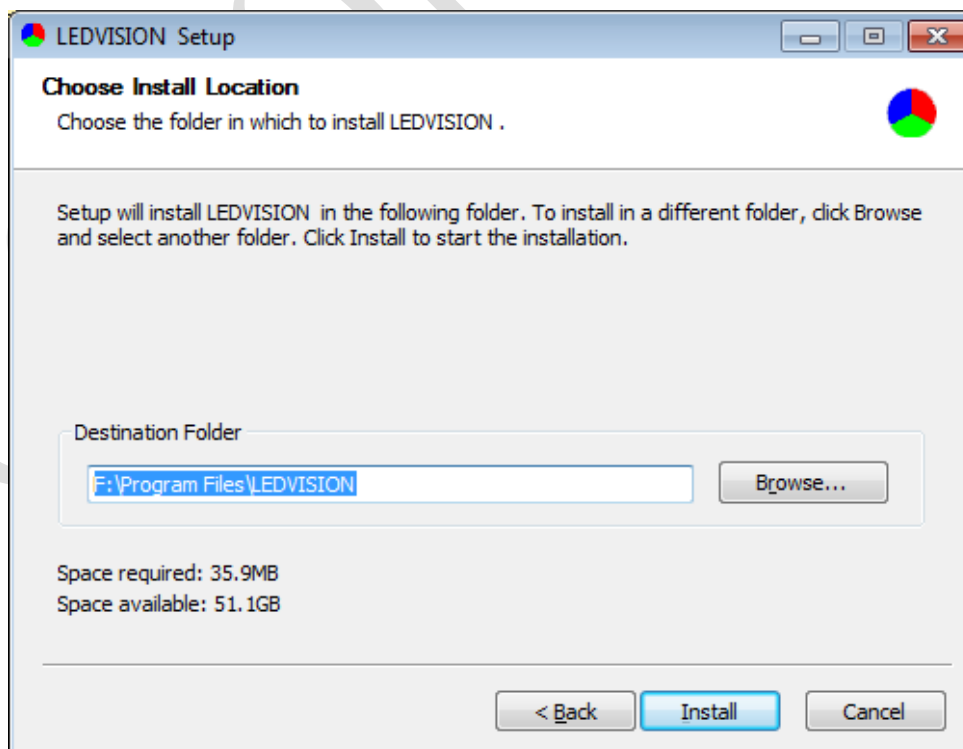
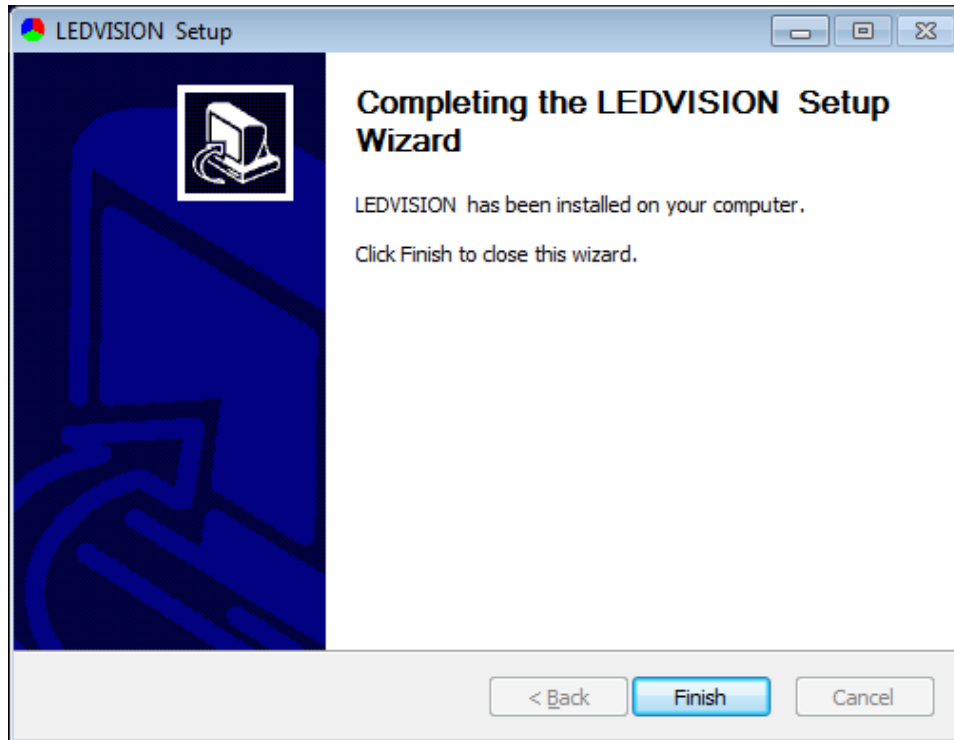



Figure 2-4 Select Installation Location

5. Confirm the installation is completed successfully. Click Finish.

**Figure 2-5 Installation Completed**

6. Upon completion of the installation, the system will generate the desktop shortcut  automatically, and double click to enable the software.

II. Software Un-installation

Select All Programs > LEDVISION > Uninstall from the Start menu in the lower right corner of the computer, to uninstall the software.

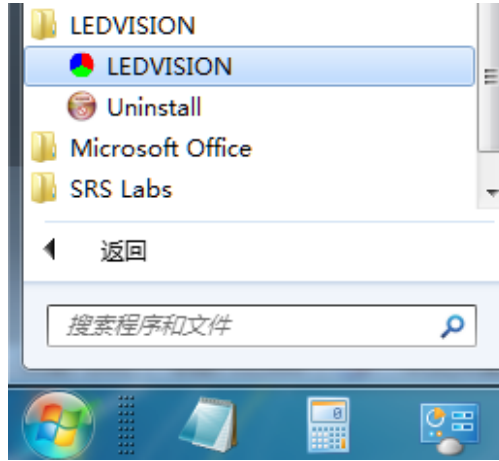


Figure 2-6 Uninstall LEDVISION

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Chapter 3 Overview of LEDVISION

I. Understanding of LEDVISION Software Interface

You can view the software interface as shown in Figure 3-1 after the software is enabled, which mainly includes two parts, such as the play window and the main interface.

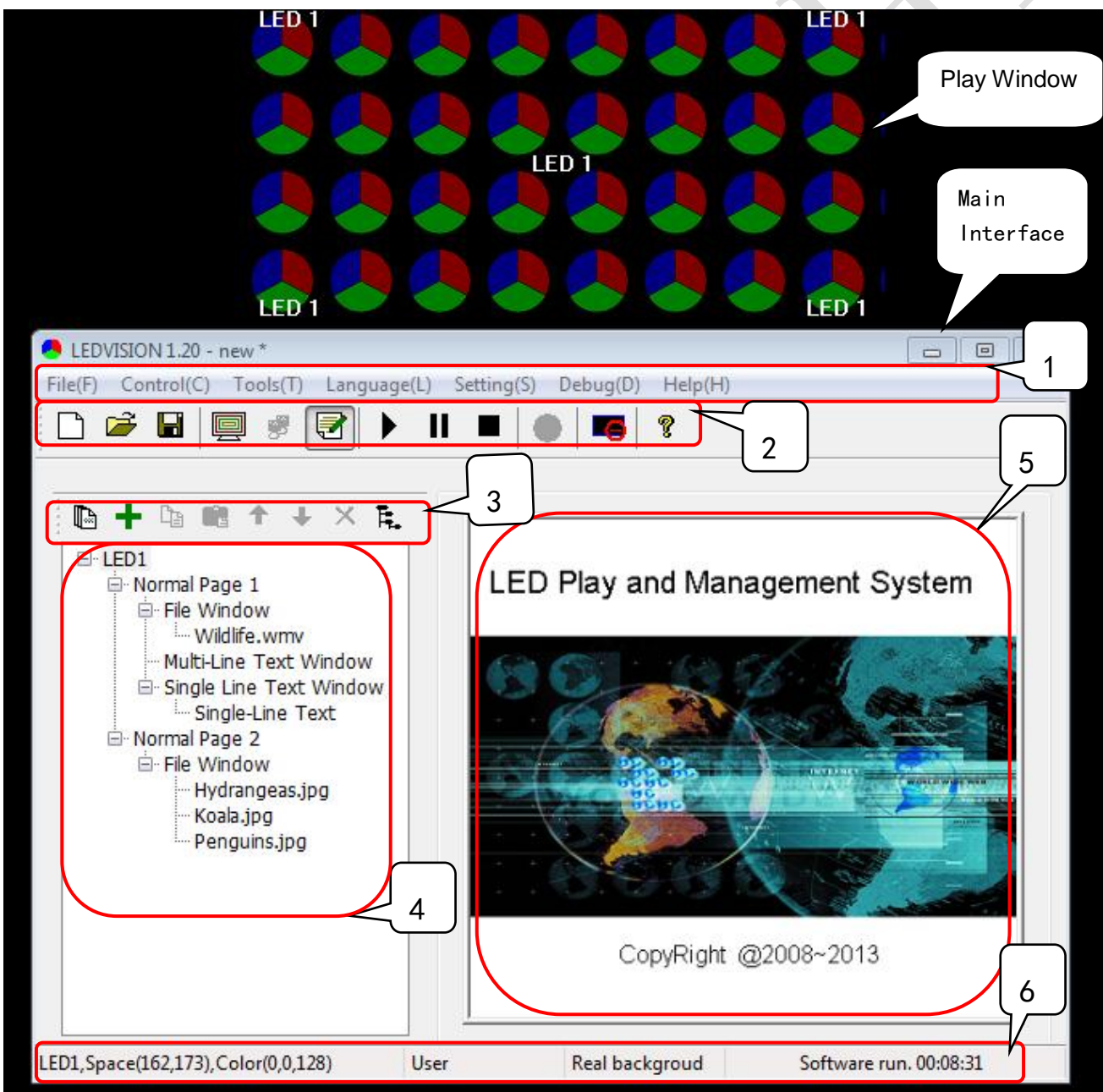


Figure 3-1 LEDVISION Software Main Interface

1. Play Window

The play window is the preview window of the LED large screen. The content viewed in the play window is the display content of the LED large screen.

2. Main Interface

The main interface is composed of six areas, which are 1. Menu, 2. Main Tool Bar, 3. Program Editing Tool Bar, 4. Program Tree Area, 5. Program Property Area, 6. Status Bar in turn.

II. Program Structure

The program tree areas of LEDVISION is composed of four levels, such as LED screen, program page, program window and play content item in turn.

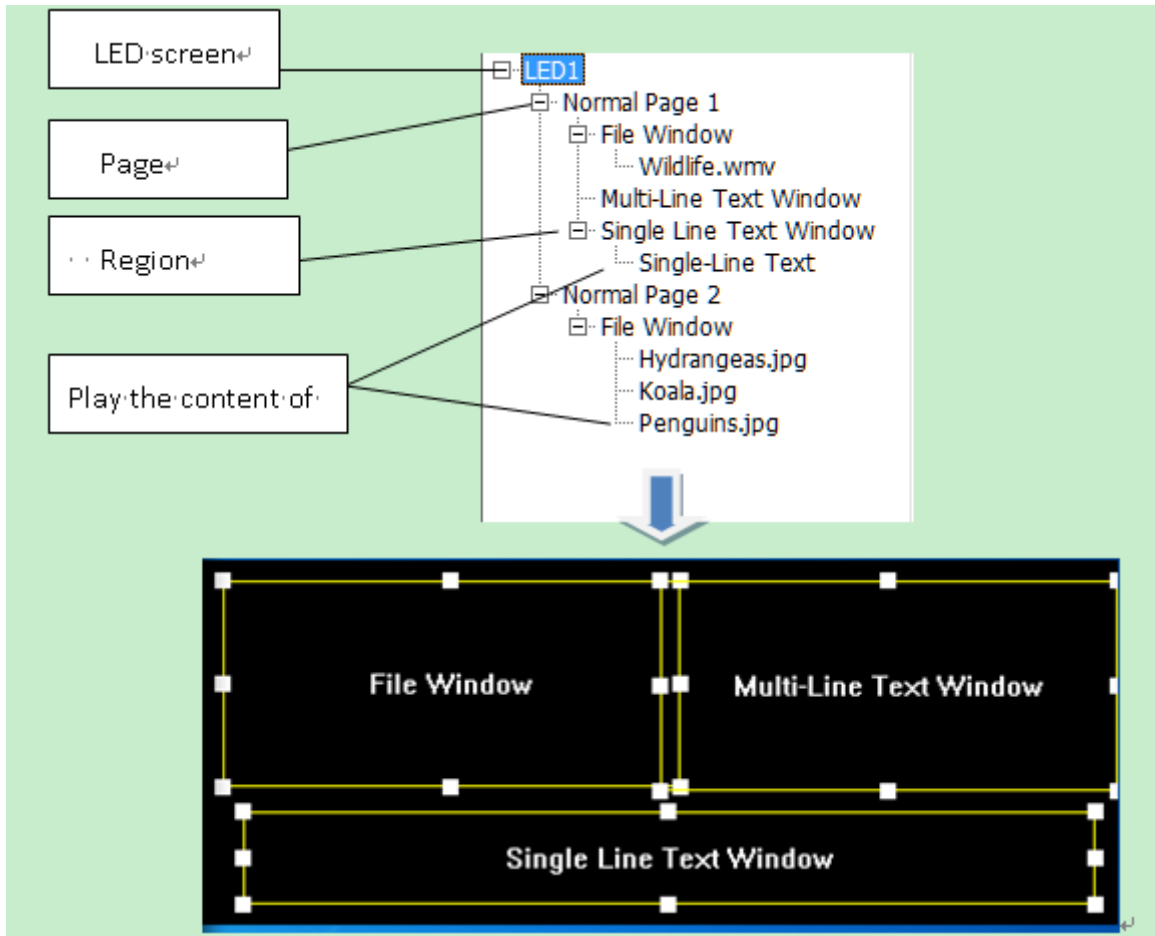


Figure 3-2 Program Component Schematic

- LED Screen: The LED large screen is used by users, by which the display content in the large screen is determined. It is the parallel relationship between two LED screens, and you can add several program pages in the LED screen.
- Program Page: The program page refers to the collection of a group of the program windows and the program contents set by users. It is the parallel and the serial play relationship between the Program Pages.

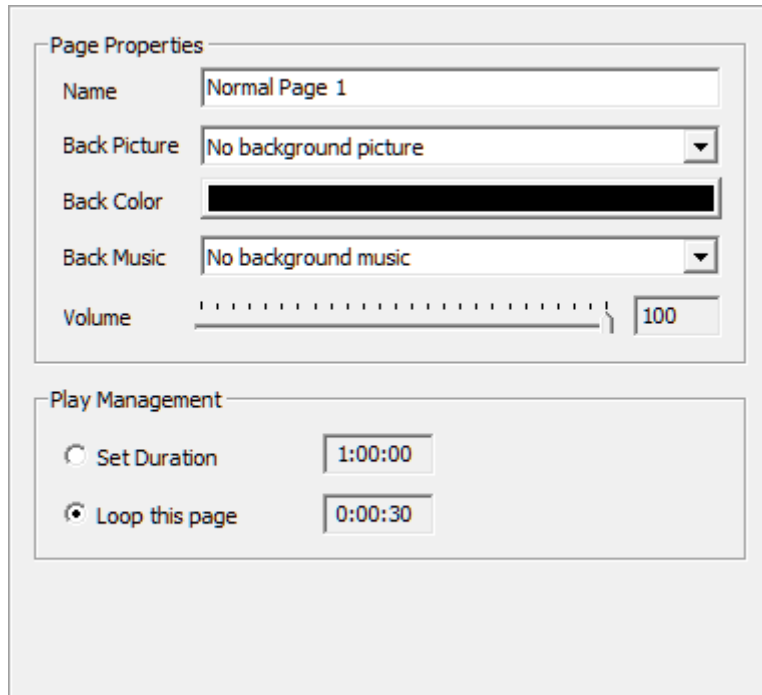


Figure 3-3 Program Page Properties

- Program Window: The Program window is the play area window of the program, which determines the layout and overlapping layer of the play content in the program page. It is the parallel and synchronous play relationship between two Program windows.

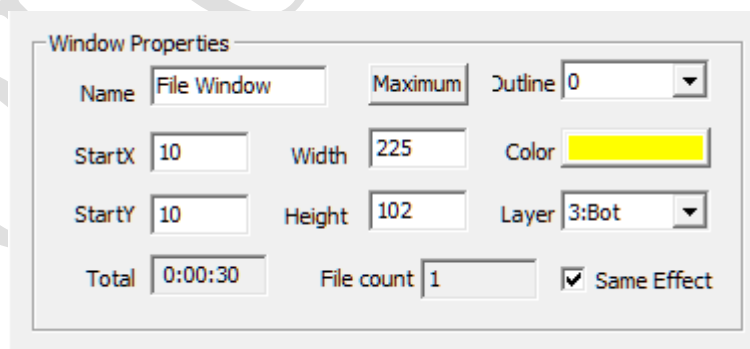


Figure 3-4 Program Window Properties

- Play Content Item: It is the concrete content displayed in the LED screen, including the video, picture, text, clock, weather forecasting and external video. It is the parallel and serial play relationship between two Play Contents.

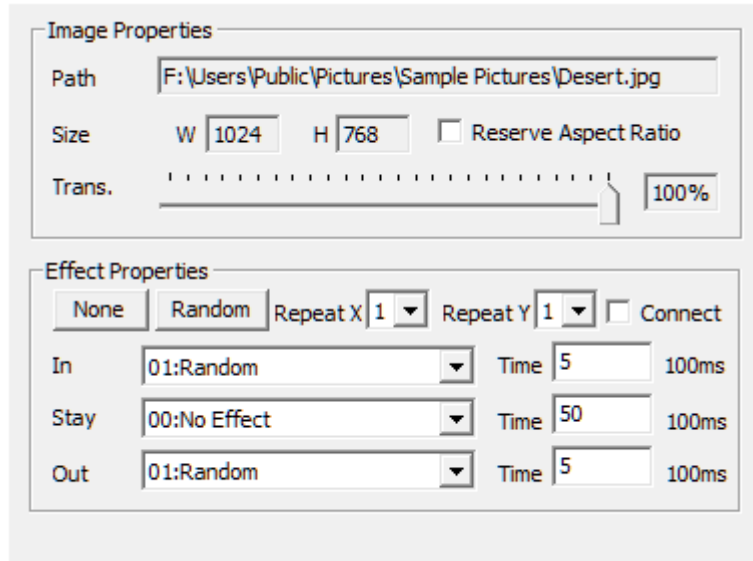


Figure 3-5 Program Content Properties

Note: For each LED screen, it is parallel and serial play relationship between the same level of the program page and the play content, and the parallel and synchronous play relationship between two program windows.

III. Menu and Toolbar Button

1. Main Menu



Figure 3-6 Main Menu Bar

i. File Menu

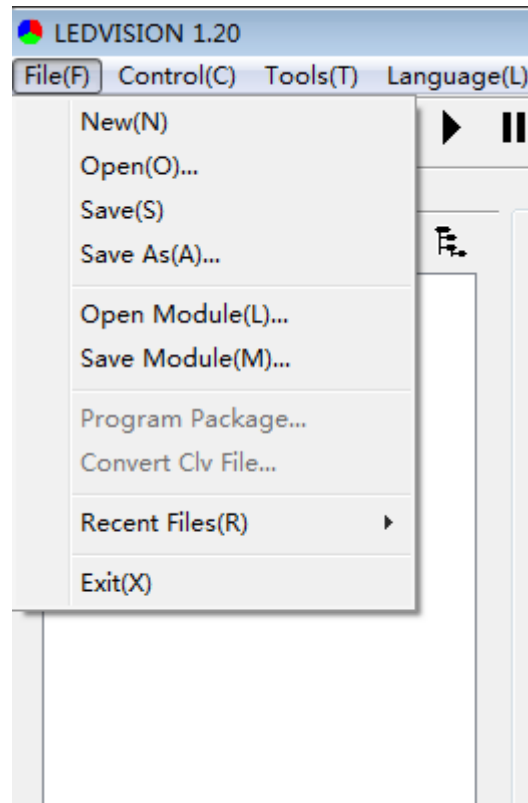


Figure 3-7 File Menu Bar

It mainly performs the basic operation of the program file (*.vsn file) and template file (*.vsnt file) in the file menu, such as the save, open, program packing and conversion to the clv file.

ii. Control Menu

Of which, Close Large-screen Display is used to close/open the display at the LED screen. The visible content in the computer display will not be sent to the LED screen for the display synchronously after the LED screen is closed. It is applicable to use when it is not expected to show the information in the computer display to the LED screen.

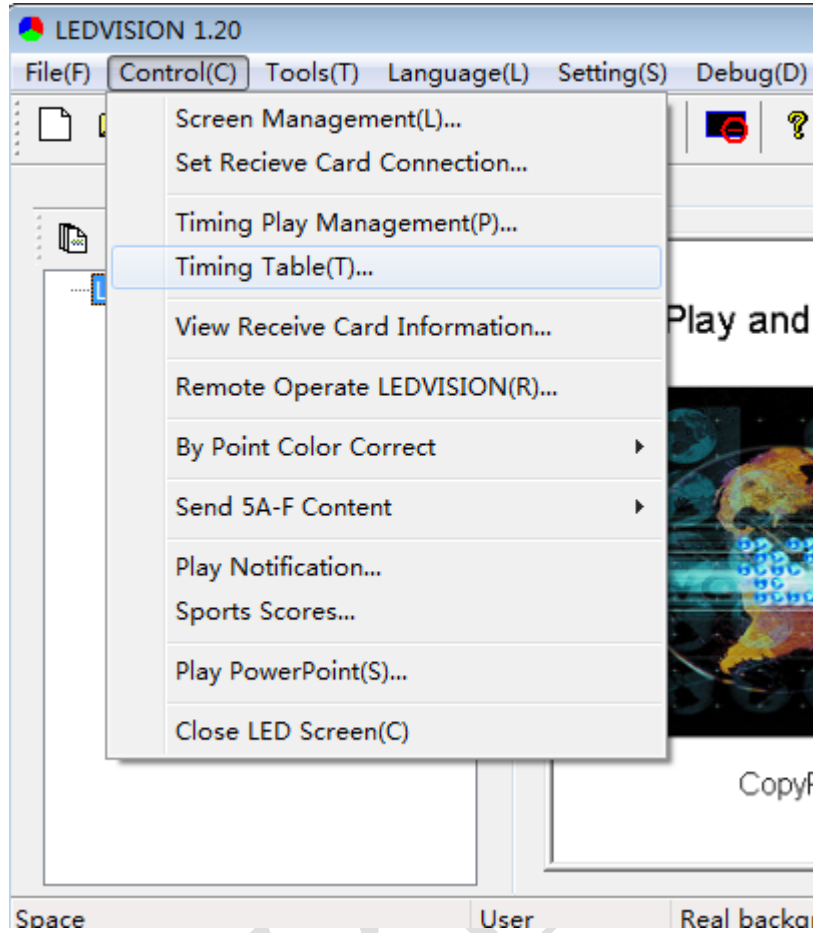


Figure 3-8 Control Screen Menu

iii. Tool Menu

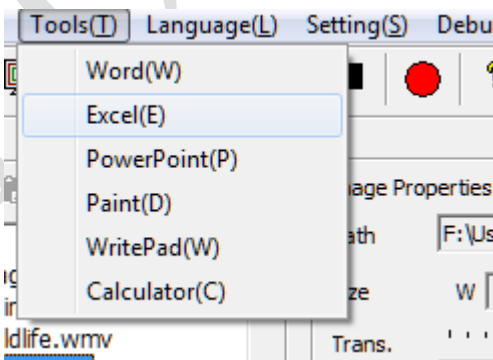


Figure 3-9 Tool Menu

Call the system software for the convenience of the program editing, such as the Word, Excel, PowerPoint, Brush and WordPad.

iv. Language Menu

It is used to change the software language upon completion of the software installation.

v. Setting Menu

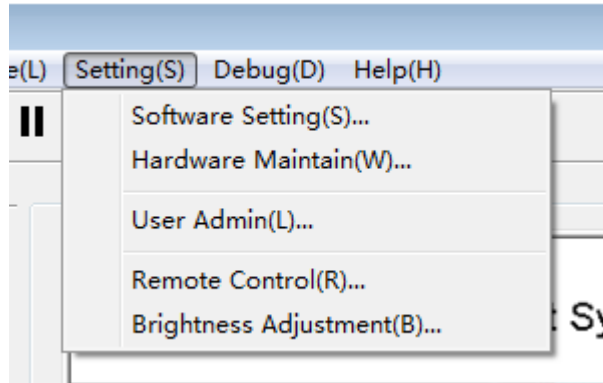


Figure 3-10 Setting Menu

- **Software Setting:** It is various settings related to the software, including three tabs, such as the automatic setting, network setting and other setting. Network settings are used for the remote operation.

- **Hardware Maintenance:** It is used to upgrade the control card and read back parameters.

- **User Management:** It is used for the remote management in LAN.

- **Remote Control:** Control the brightness and temperature of the LED screen and the switch of the power supply remotely (it is necessary to provide the multi-purpose card).

- **Brightness Adjustment:** It is the brightness adjustment and temperature adjustment of the display screen and the switch of the power supply (it is necessary to provide the multi-purpose card).

vi. Debugging Menu

They are several display modes provided in this menu for the production test and installation commissioning.

vii. Help Menu

It is used to view the software help document, version information and computer related information. Of which, you can view the CPU, memory, video display card, network interface card (NIC) and audio card from the computer information.

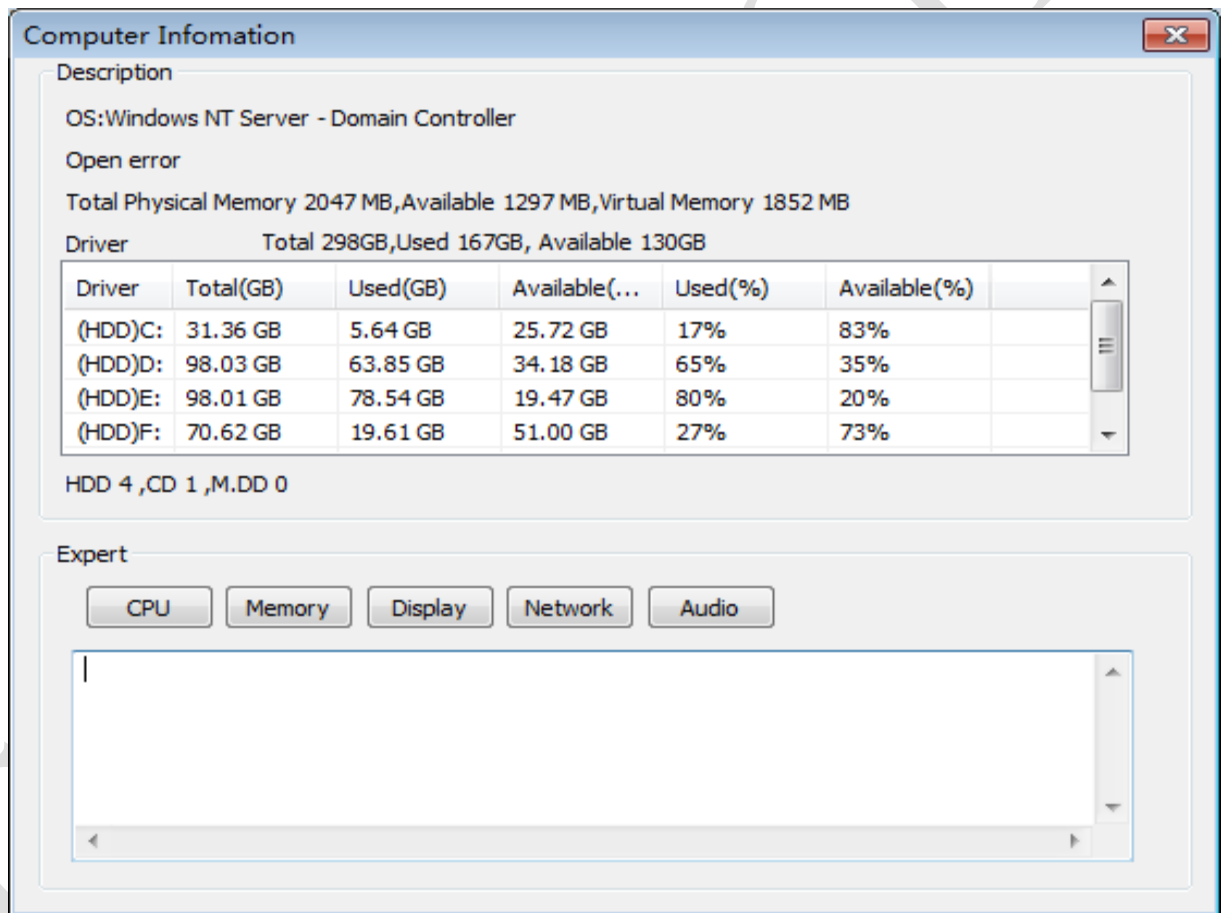


Figure 3-11 Computer Configuration Information

2. Main Toolbar

The main toolbar provides the operations of the program file, the display/hide of the play window, switching of the dual displays, the program play operation and close/display of the large screen (as shown in Figure 3-12).



Figure 3-12 Main Toolbar

3. Context Menu of Play Page

Right click the mouse in the play window, to pop up the menu (as shown in Figure 3-13). Support various operations of the program file and the page switching of the program play.

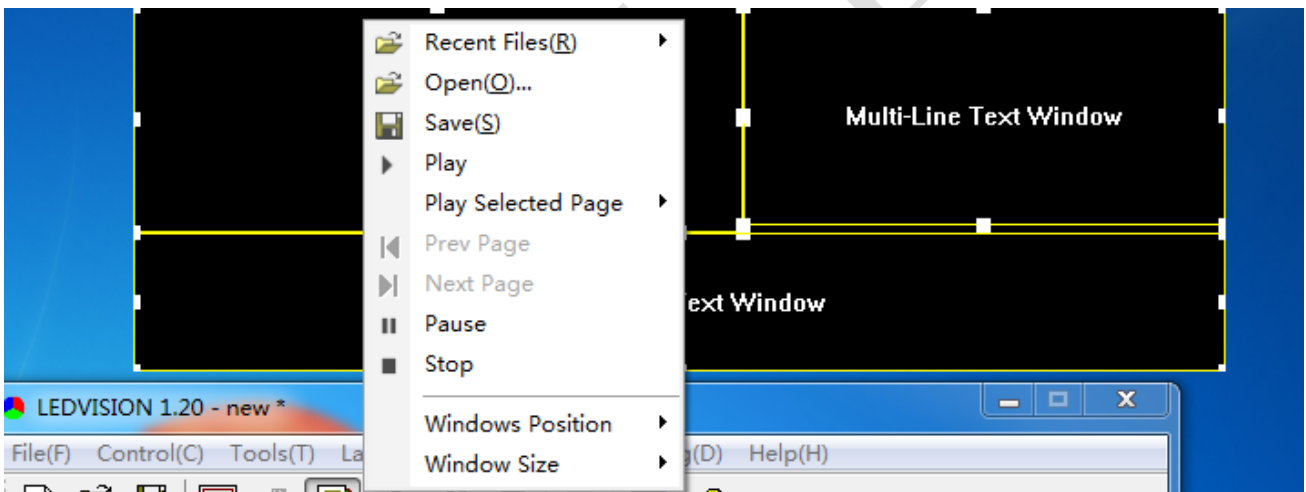


Figure 3-13 Context Menu of Play Page

4. Program Editing Toolbar



Figure 3-14 Program Editing Toolbar

It is as follows from left to right in turn:

- Add New Program Page: Add the program page under the selected play window.
- Add Window and Play Content item: Add the program window or the play content item in corresponding position.
- Copy: Copy the selected item and all content under it.
- Paste: Paste the copied content.
- Move Up: Move the selected content to the forward.
- Move Down: Move the selected content backward.
- Delete: Delete the selected item and all content under it.
- Un-expand/Expand Program Tree: Un-expand/expand all content under the selected item.

Chapter 4 Program Editing Process

I. Setting LED Screen Size

It is necessary to set the LED screen size correctly. Otherwise, it may display a part of the content or can not be displayed normally during the play after the program is made.

Setting Method: Select the main menu “Main Menu > Control Screen > Screen Management, to pop up the Screen Management window. Here set the quantity, start position and size of the LED screen (as shown in Figure 4-1).

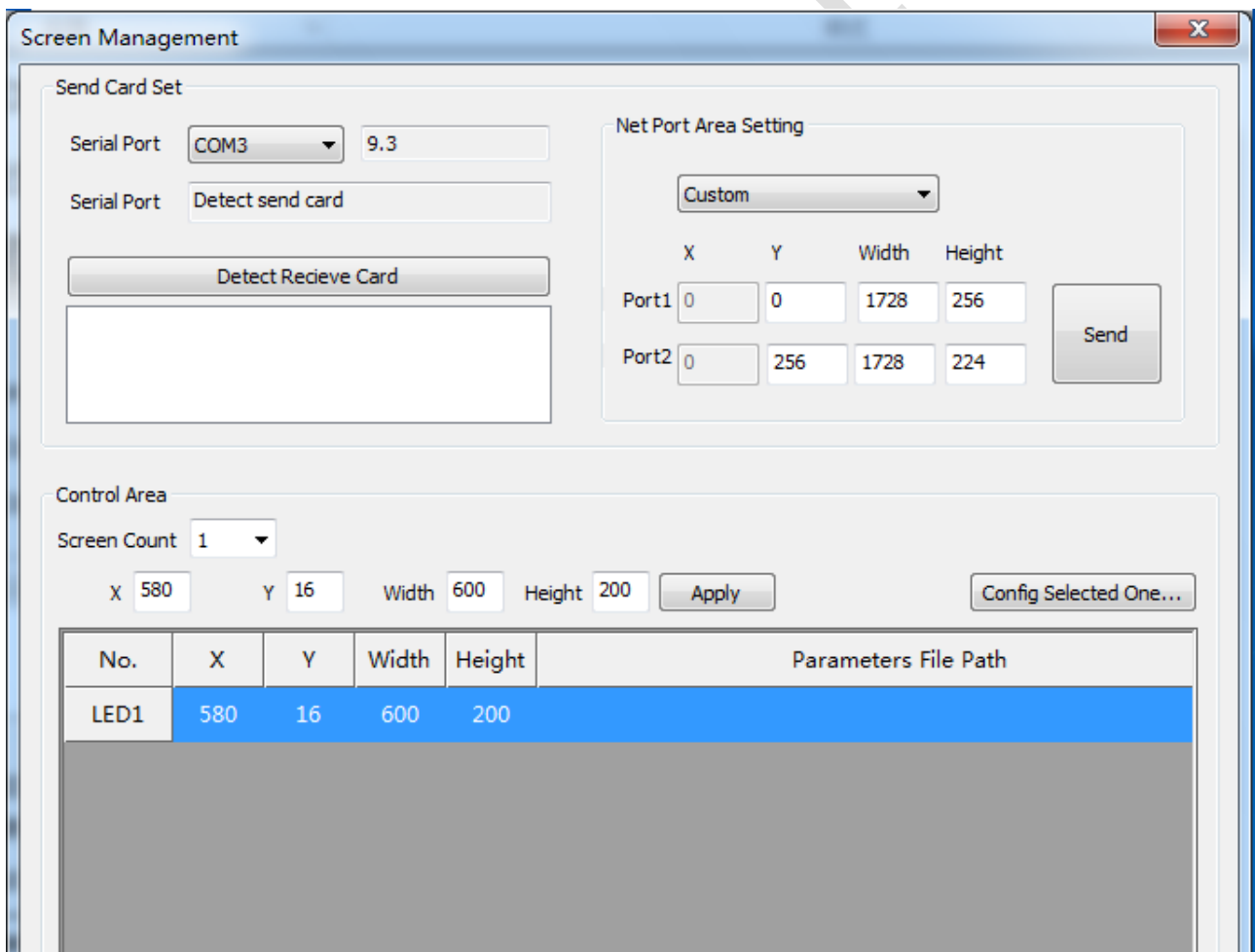




Figure 4-1 Screen Management Window

Note: Here, the size of the LED screen corresponds to the size of the actual LED screen, which is usually set to be consistent with the size of the LED large screen.

II. New Program Page

You can create the program page by clicking the button  in the program editing tool bar or clicking the  pop-up menu (as shown in Figure 4-2).

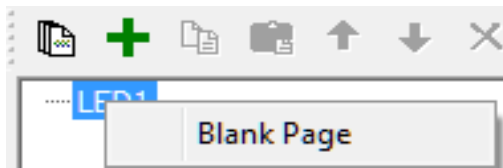


Figure 4-2 New Program Page

After the program page is created, it will display related properties of the program page on the right of the main interface (as shown in Figure 4-3). In general, you can use the default parameters.

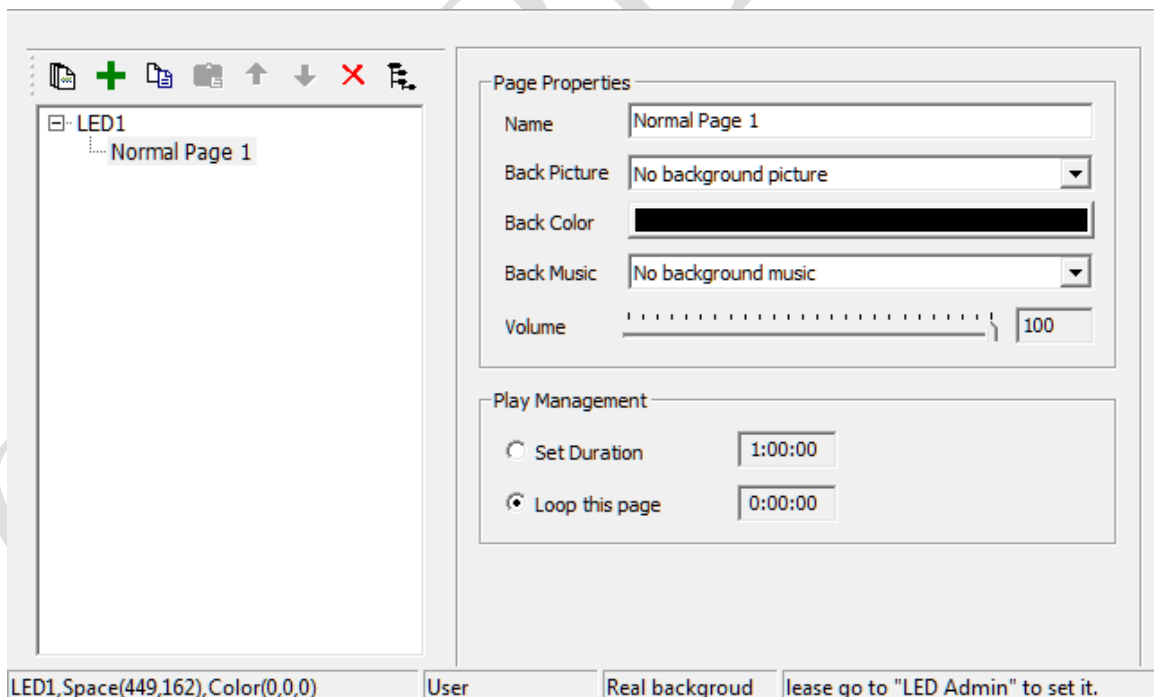


Figure 4-3 Program Page and Its Properties

You can set the following properties of the page in the attribute window of the program page.


- Name: Modify the name of this program page.
- Background Picture: You can set one picture as the background picture of this program page.
- Background Color: Click the Color Bar to select any color as the background color of this program page.
- Background Music: You can set the audio file as the background music of this program page.
- Volume: Set the volume size of the background music.
- Play Management: Set the play time of this program page.

Method 1: Specify the play duration. It will play the next program page after this program page is played for a specified time.

Method 2: Wait this program page is played completely. It will play the next program page after all content of this program page is played completely.

III. Add Program Window

1. Add Program Windows

Right click Program Page node or click the  button on the program tool bar after the program page is created, to pop up the Add Program Window menu (as shown in Figure 4-4). The position of the program window may be dragged by the mouse or set by the coordinate. One program page includes any windows, and the size and position of the window may be set at random.

It can be divided into as follow depending on the contained content of the window:

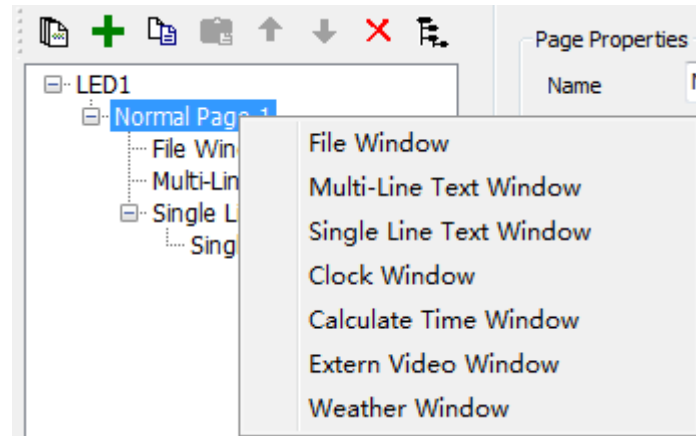


Figure 4-4 Add Program Window

- **File Window:** This window may play the video, picture, text, Word, Excel, PowerPoint, Flash and GIF.
- **Multi-line Text Window:** This window may display multi-line text in the complicated format.
- **Single-line Text Window:** This window may display one line text in the simple format.
- **Clock Window:** This window can display the analog clock or the digital clock.
- **Timing Window:** This window can display the counting time and the counting down time.
- **External Video Window:** This window can play the external video. The external video includes the input of the external video capture device, such as the video camera, Webcam, TV card and DVD.

- Weather Information Window: This window can display the weather information of the domestic and international main cities (it is necessary to connect to Internet).

2. Setting of Window Properties

All windows are equipped with common properties (as shown in Figure 4-5).

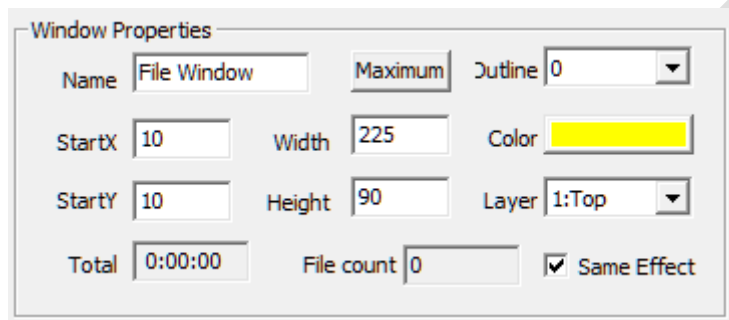


Figure 4-5 Window Properties

- Name: Facilitate users to differentiate from the name of different windows, which may be set by itself.
- Maximum: Display the window in the LED screen in the full screen mode.
- Outline: It can set the width of the outline for the window, which takes the pixel as the unit.
- Color: It may be used to select the color of the outline for the window.
- StartX: It is the position of the vertex in the upper left corner of the window corresponding to the left outline in the LED screen, which takes the pixel as the unit.
- StartY: It is the position of the vertex in the upper left corner of the window corresponding to the upper outline in the LED screen, which takes the pixel as the unit.
- Width: It is the width of the window, which takes the pixel as the unit.

- Height: It is the height of the window, which takes the pixel as the unit.
- Layer: It is the cascading position relationship of this window in this program

page, “1: Top” is the foremost.

- Total: It is the time required to play all programs in this window.
- File Count: It is the number of files to be played in this window.
- Same Effect: It sets whether all program play content items in this window

use the same effect.

IV. Add Play Content Item

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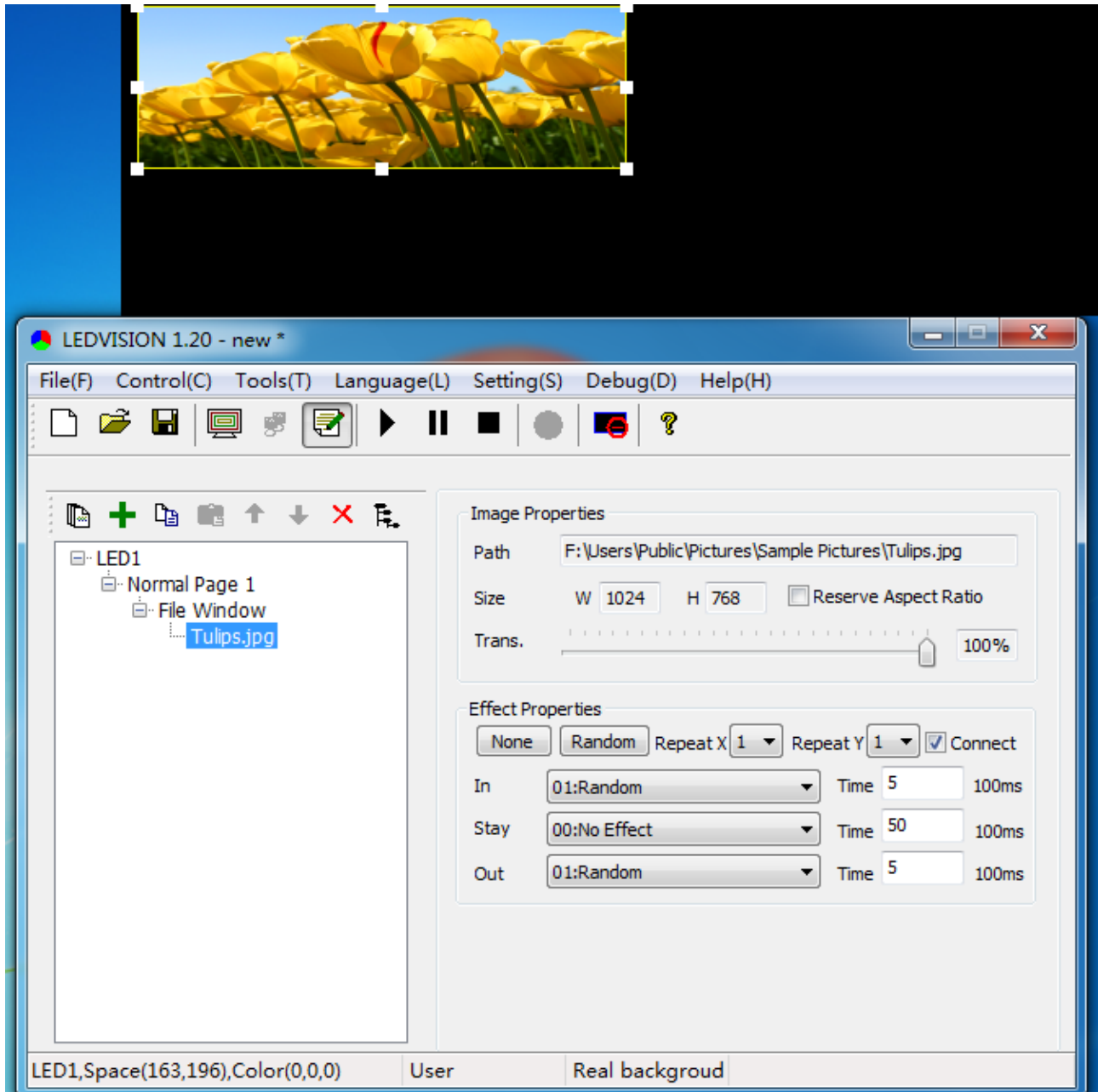



Figure 4-6 LED Window Effect

Add corresponding program play content item according to different windows after the window is added. Here will take the picture under the file window for the description. Right click the “Program Window” node or click the  button, to pop up the window. Select Add Picture, to pop up the Select File dialog box. Select Add Picture, to pop up the Select File dialog box. Select one picture file for the play. Upon

completion of the addition, the corresponding LED window and main interface is shown as follows:


Here, the whole process for the program making is completed. You can add and modify the content according to the actual requirement. The detailed operation will be described in the following chapters.

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Chapter 5 Detailed Making of Program

I. Play Image

1. Add Image

Create a new file window. Right click File Window or click the  button, pop up the menu and then click Image File, to add one or more images.

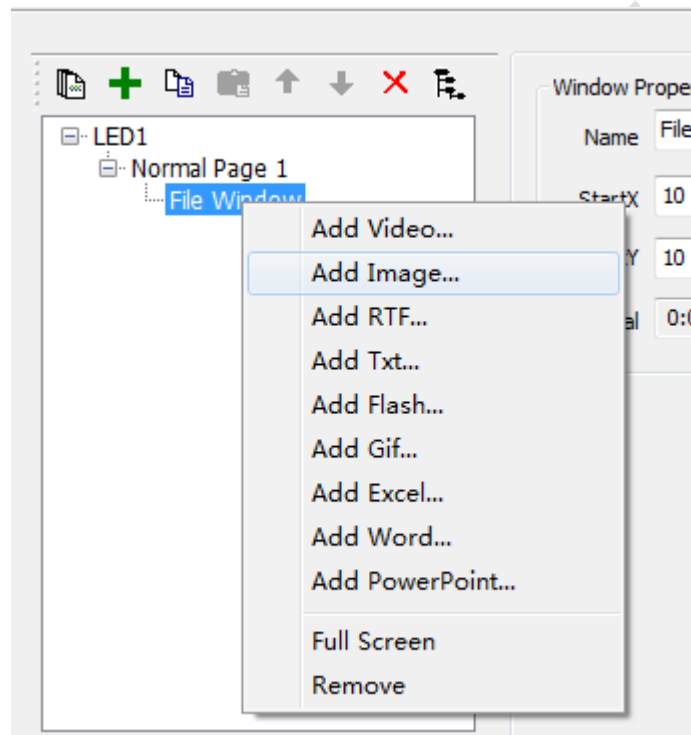


Figure 5-1 Add Image

2. Image Properties

Support all image formats (BMP/JPG/PNG...). The image file includes various properties and effects (as shown in Figure 5-2).

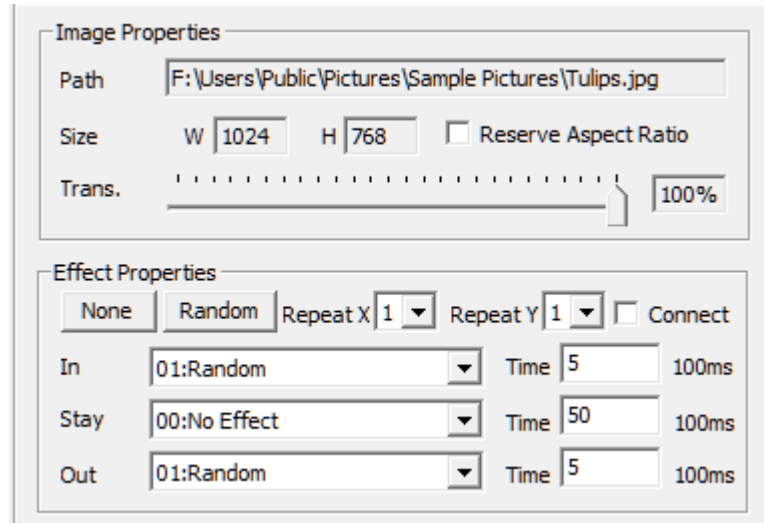


Figure 5-2 Image Properties

- Path: It is the detailed path of files in the computer.
- Size: It is the width and height of images.
- Reserve Aspect Ratio: It is shown by the proportion of images.
- Trans: It adjusts the transparent effect of images displayed freely.

3. Effect Properties

- No Effect: set none effect.
- Random: Set all effects as Random.
- Connect: The out effect of previous program file is the same as the in effect of the next program and they are identical. In this way, the play screen will not display the black after the setting.
- Repeat: You can divide the window into 16 small parts at most, so that the effect is more delicate.
- In: It is the effect type when it come in the screen.
- Out: It is the effect type when it go out screen.


- **Stay:** It is the duration between the In effect and the Out effect, whose unit is 0.1s. You can select the flash effect during the stay, so that the image is more attractive.
- **Time:** The speed unit is 0.1s, which indicates the total time to complete current effect action. The less the value, the faster the effect action is.

At present, there are the 50 effects as follows.

General	00: No Effect, 01: Random
Edge Coverage	02: Left coverage, 03: Right coverage, 04: Upper coverage, 05: Lower coverage
Diagonal Angle Coverage	06: Upper left corner, 07: Upper right corner, 08: Lower left corner, 09: Lower right corner
Straight Angle Coverage	10: Upper left corner, 11: Upper right corner, 12: Lower left corner, 13: Lower right corner
Blind	14: Horizontal blind, 15: Vertical blind
Bisect and Close	16: Left/right bisect, 17: Upper/lower bisect, 18: Left/right close, 19: Upper/lower close
Move	20: Move up, 21: Move down, 22: Move left, 23: Move right 24: Move toward upper left corner, 25: Move toward upper right corner, 26: Move toward lower left corner, 27: Move toward lower right corner
Mosaic	28: Mosaic (small), 29: Mosaic (middle), 30: Mosaic (large)
Rotation	32: Rotate right 360° , 33: Rotate left 360° , 34: Rotate right 180° 35: Rotate left 180° , 36: Rotate right 90° , 37: Rotate left 90°
From Small to Large	38: Center, 39: Upper left, 40: Upper right, 41: Lower left, 42: Lower right
From Center to Surrounding	43: Rectangle, 45: Diamond, 47: Cross
From Surrounding to Center	44: Rectangle, 46: Diamond, 48: Cross
3D	49: 3D animation 1, 50: 3D animation 2
Others	31: Gradient

II. Play Video

1. Add Video

Create one file window. Right click File Window or click the  button, pop up the menu and then click Video File, to add one or more video files. This software supports almost all video formats under the support of the decoder (it is recommended to use the ultimate decoder), such as AVI/MPEG/ASF /WMV/RM....

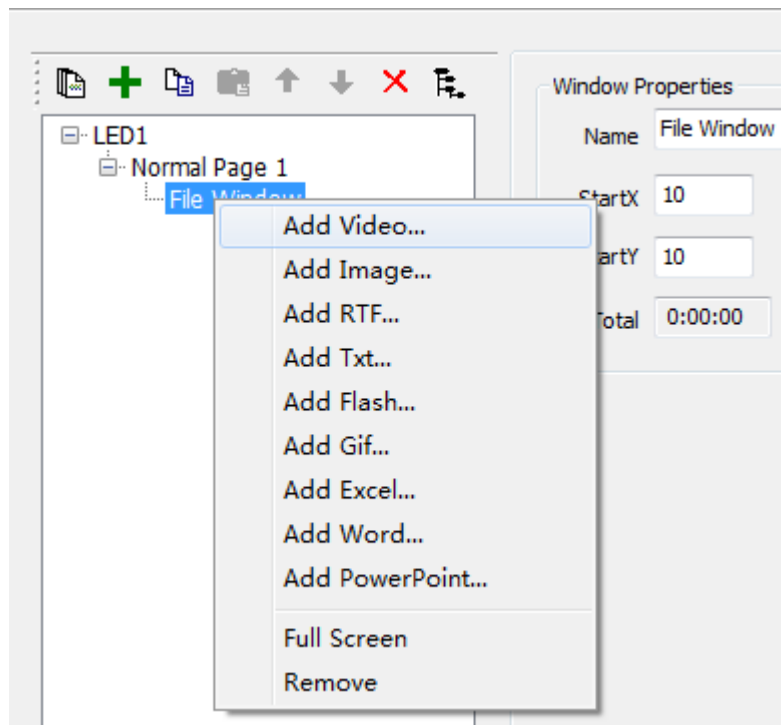


Figure 5-3 Add Video

2. Video Properties

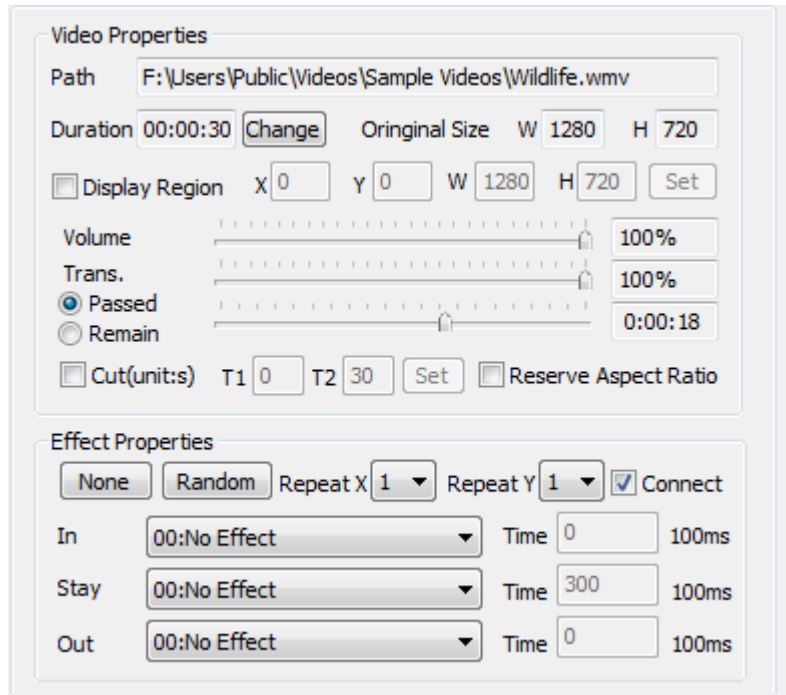


Figure 5-4 Video Properties


The video file includes various properties (as shown in Figure 5-4). Of which, the Path and Original Size are the read-only properties, and the Volume, Trans, Duration, Passed and Remain may be adjusted freely.

Furthermore, LEDVISION specially provides the function to cut the Display Region and the Display Time, to cut the content of a part of the screen and time span from the video for the display.

For the effect setting, refer to Play Picture.

III. Play Text

1. Play Single Line Text

Right click Program Page or click the  button to pop up the menu, and then click Single Line Text Window to add the single line text (as shown in Figure 5-5).

The single line text is allowed to set the display properties at random, such as the

Background Color, Font and Spacing. The display content may be From File or From Input. If it is From File, the display content may be updated automatically according to the change of the text file content.

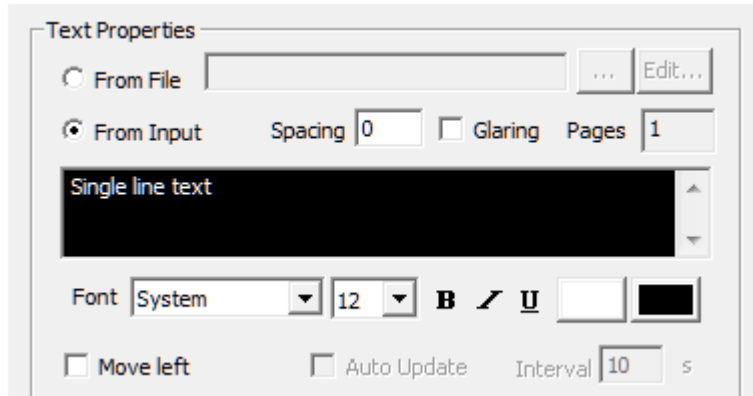


Figure 5-5 Single Line Text Properties

The single line text supports the Glaring effect (as shown in Figure 5-6).



Figure 5-6 Glaring Effect

The single line text also supports Move Left. When you select Move Left, you can control the Play Time By Count or By Time, or control the Scroll Speed by Points/Frame or Points/s (as shown in Figure 5-7).

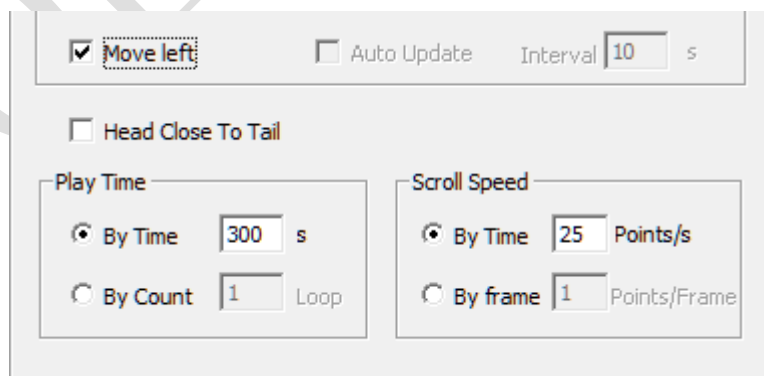



Figure 5-7 Move Left Control

For the effect setting, refer to Play Image.

2. Play Multi-line Text

To add the multi-line text, you can right click the Multi-line Text Window or click the  button to pop up the menu, and select Add RFT or TXT file or create it by creating the multi-line text. The multi-line text file from RTF and the new multi-line text may be edited by the Edit Multi-line Text dialog box (as shown in Figure 5-8).

You can input the text into the Edit dialog box directly or load the TXT, RFT and Word file. Furthermore, it is allowed to set the text effect.

Upon completion of the editing, click Save to save it as the RTF file.

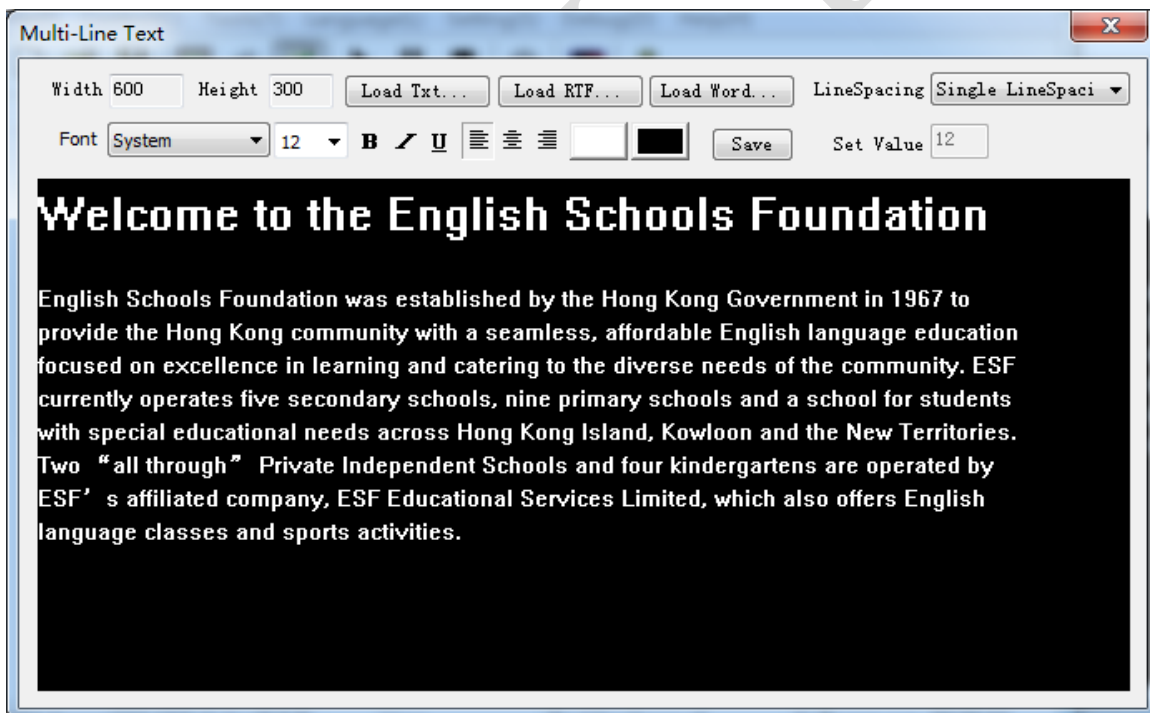


Figure 5-8 Edit Multi-line Text

The multi-line text supports Move Up. When you select Move Up, you can control the Play Time By Count or By Time, or control the Scroll Speed by setting the Points/Frame or Points/s (as shown in Figure 5-9).

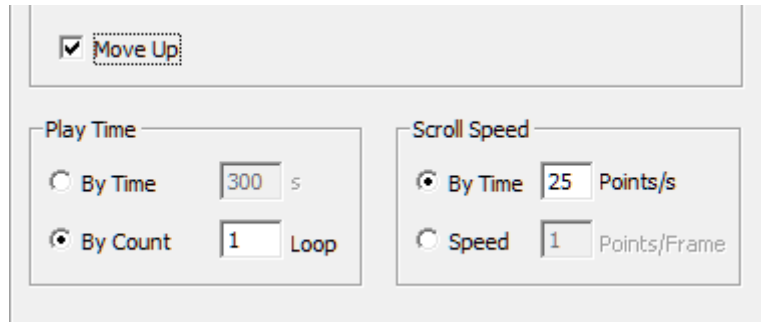


Figure 5-9 Move Up Control

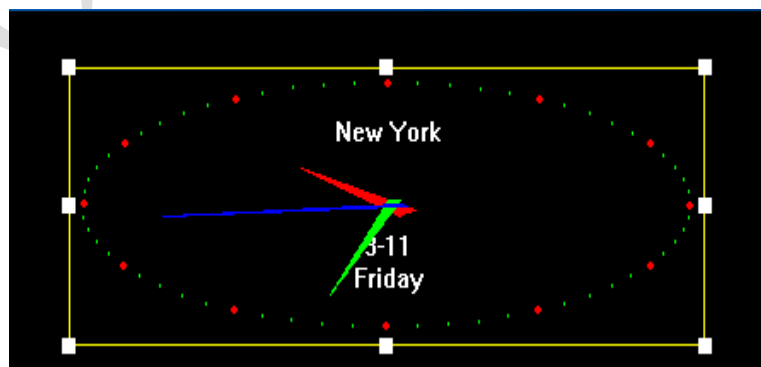
IV. Clock and Timer Display

1. Clock Display

You can select the clock display mode from the analog clock and the digital clock in the Style of Clock Properties. Furthermore, you can also set the Time Shift as Ahead or Lag in the clock properties.

2. Analog Clock Display

You can set the Clock Shape, Point Shape and Color and Scale Shape and Color, or set the Display Text, Font, and Color (as shown in Figure 5-10).



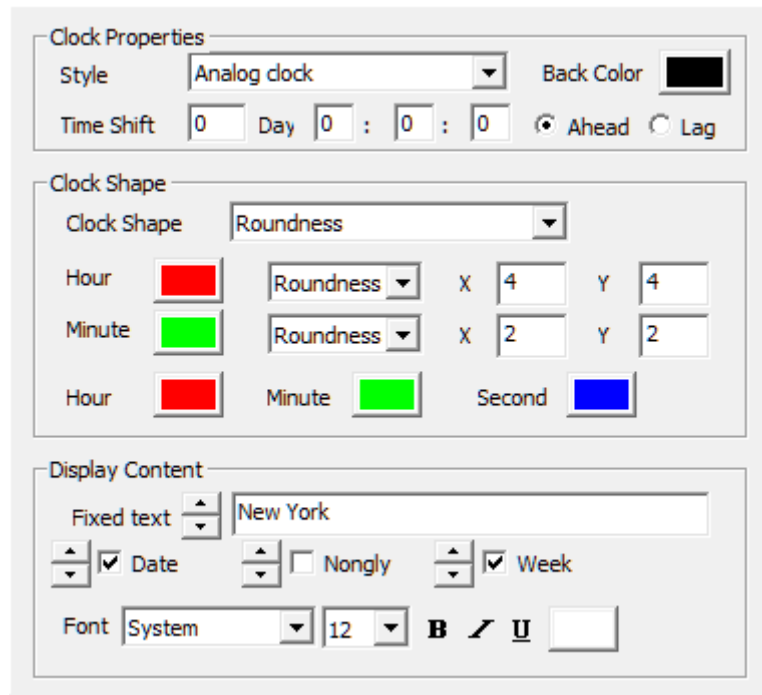


Figure 5-10 Analog Clock Effect

3. Digital Clock Display

It is the set digital clock effect as shown in Figure 5-11. You can set the Font, Fixed, Hour Style, Year Style and Multi-line and Single Line respectively. You can select three styles for the digital clocks.

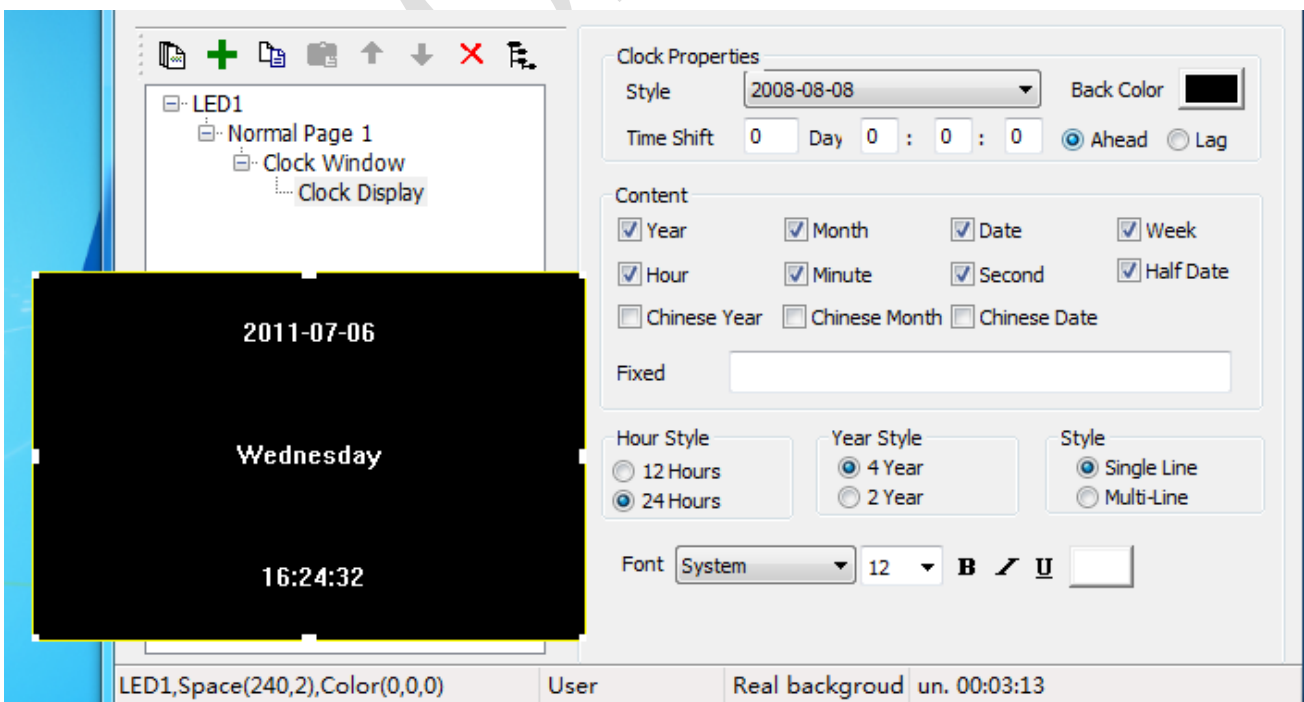


Figure 5-11 Digital Clock Effect

4. Timer Display

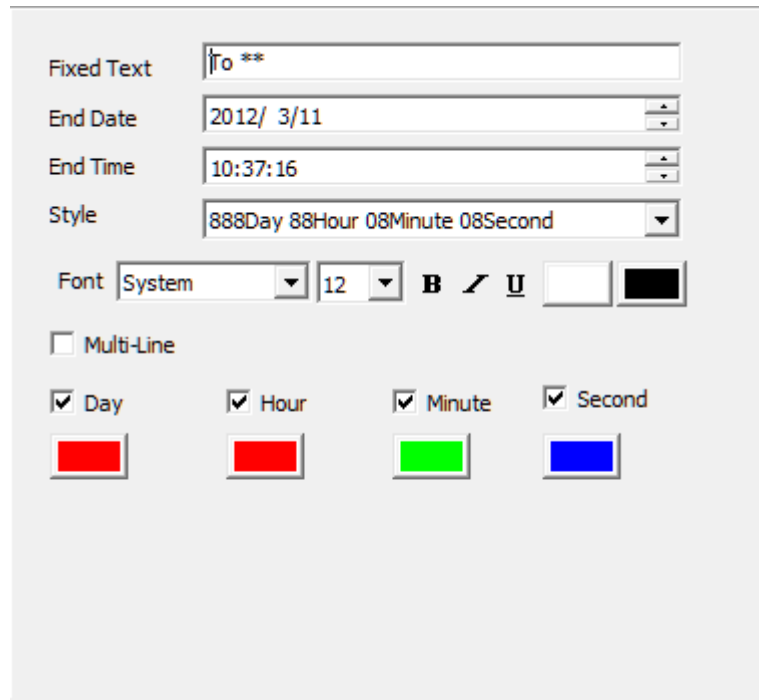


Figure 5-12 Timing Properties

It is the setting of timing properties as shown in Figure 5-12. You can set the Fixed Text, Font Effect, Font Size, Bold, Italic, Underline, Color Style, End Date and End Time, and whether it will display Day, Hour, Minute, Second and Multi-line respectively.

- **Counting Down Time:** When you set the End Date/Time as the future date/time, the software will calculate the counting down time from current time to the setting time. Display the effect (as shown in Figure 5-13).

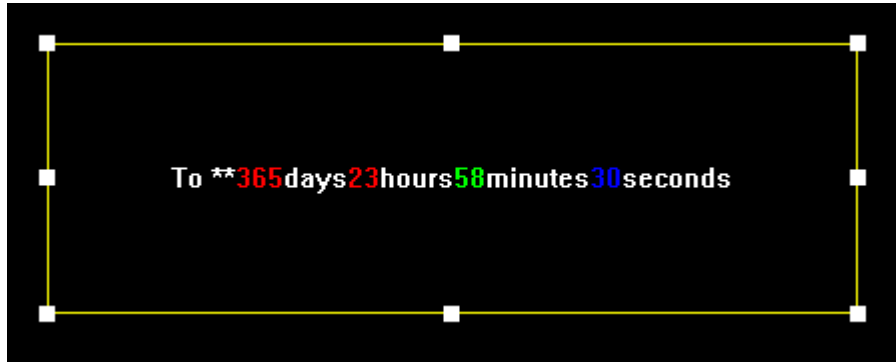


Figure 5-13 Counting Down Time Effect

- Counting Time: When you set the date/time as the previous time, the software will calculate the counting time from the setting time to current time. Display the effect (as shown in Figure 5-14).

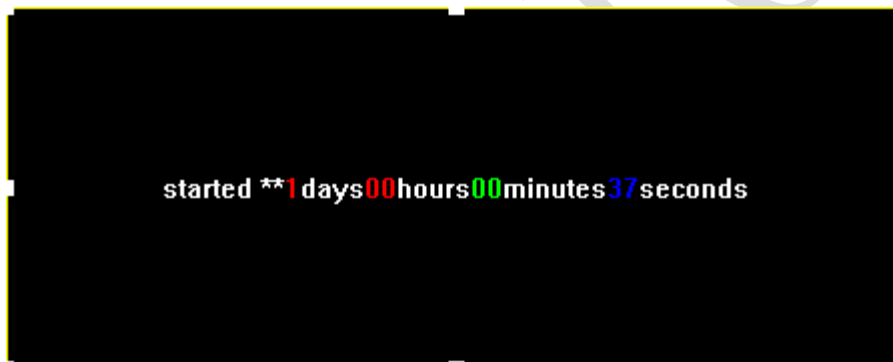


Figure 5-14 Counting Time Effect

V. Play Weather

It is the weather property as shown in Figure 5-15. Input the city name to be gotten (main domestic and foreign cities) into Region and click Get, and the system will get current weather information in this city automatically and display it (it is required to connect PC to Internet), and users can select the content to be displayed freely. Furthermore, users can set the Fixed Text, Font Size and Text Color respectively.

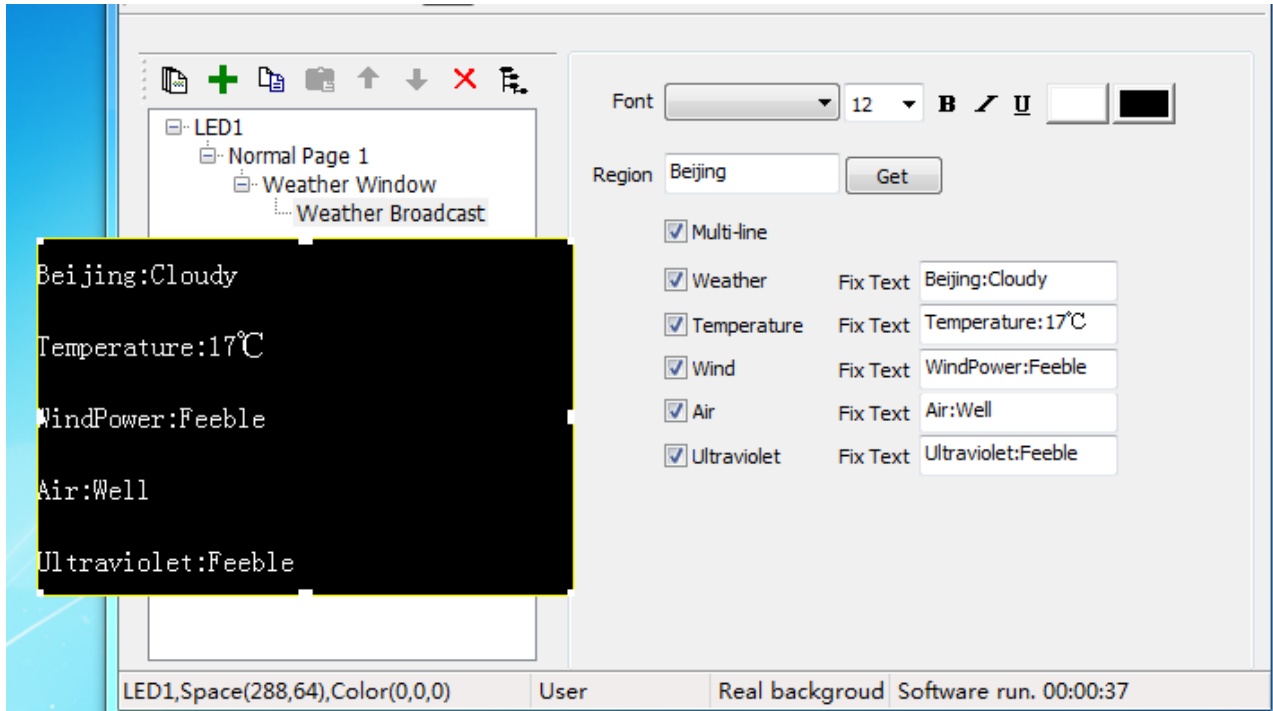


Figure 5-15 Weather Effects and Properties

VI. Play External Video

1. Installation of External Video Device

Users can use the external video window to display other external video devices, such as the camera, TV and video recorder. Firstly, it is necessary to install the external video capture devices, including the hardware connection and the installation of driver. In general, the purchased external video devices are provided with the user's manual, so you can refer to the user's manual provided by manufacturers for the installation and commissioning. The most common video capture devices are the TV card, which usually includes the following interfaces, such as AV, SV and TV and can play the video device content output by such interfaces. At present, the TV card in the market mainly consists of the PCI interface and the USB interface. You can connect it to PC in two interface modes respectively during the use. In our actual

test, the display effect of the TV card for the PCI interface is excellent than that for the USB interface. It is recommended to use the TV card of the PCI interface, such as TV Master 3 and TV Master 4.

2. Add External Video Program

Select External Video Window, and right click to select Add External Video. After you add the external video, the system will add the external video display automatically, and locate all external videos connected to PC automatically, and then list them (as shown in Figure 5-16).




Figure 5-16 External Video Properties

- Video Input: Select the video capture device.
- Audio Input: Select the audio capture device.
- Video Source: Use to select the signal type of the video source.
- TV Channel: Select the TV channel when the video source is the TV signal.

VII. Play PowerPoint, Word and Excel

The software supports to play three types of the office files, such as PowerPoint, Word and Excel. Create a new File Window. Right click File Window or click the

 button to pop up the menu, and then click Add PowerPoint, Add Word and Add Excel to play these files.

1. Play PowerPoint

The PowerPoint is the file play and supports the automatic update. When the PowerPoint file changes, the software will detect this situation automatically and update the display screen at the same time.

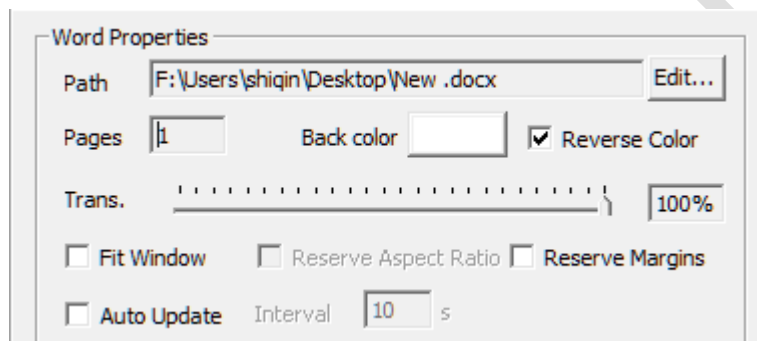


Figure 5-17 PowerPoint Properties

2. Play Word

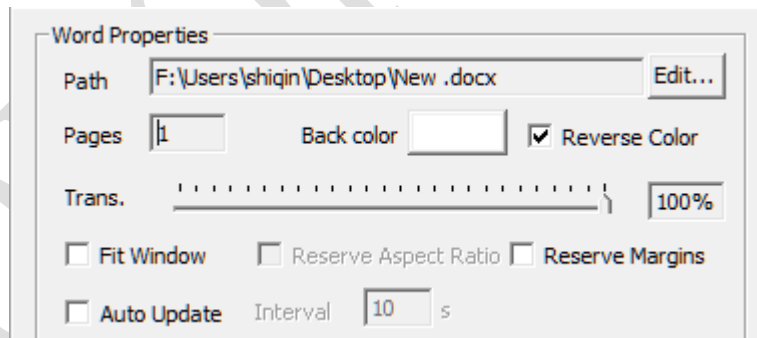


Figure 5-18 Word Properties

You can select Reverse Color for the display effect, Fit Window to fill the full page into the region and remain the original outline within Word. Word playing is also supports Auto Update.

3. Play Excel

You can set Rows/Page to change the display effect (as shown in Figure 5-19).

Word is the file play and also supports Auto Update.

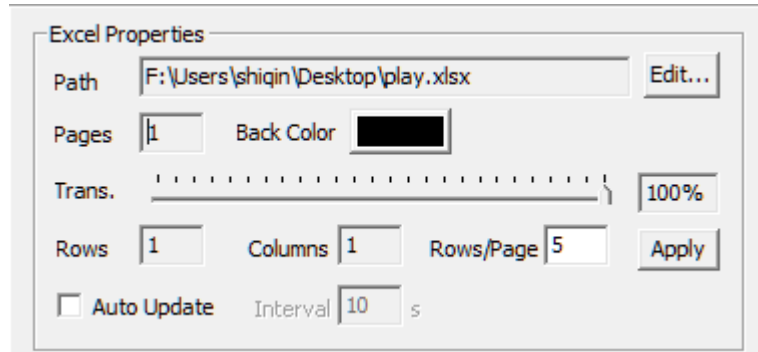



Figure 5-19 Excel Properties

VIII. Play Flash and Gif

Right click File Window or click the  button to pop up the menu, to click Add Flash and Add Gif to play these files.

1. Play Flash

You can adjust Length, and set the Show Style as ExactFit, No Border, Show All and NoScale.

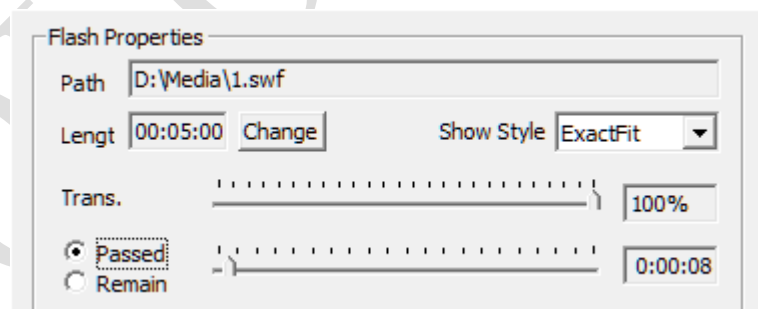


Figure 5-20 Flash Program Properties

2. Play Gif

In addition to set Trans during the Gif play, it is not necessary to set other parameters.

Chapter 6 Play Notification and Sports Score

I. Play Notification

The notification is a special single line text other than the program, which is displayed independent on the program. The notification is mainly used to play the important event temporarily. Click the main menu Control Screen > Play Notification, to go into the Notify Management interface (as shown in Figure 6-1).

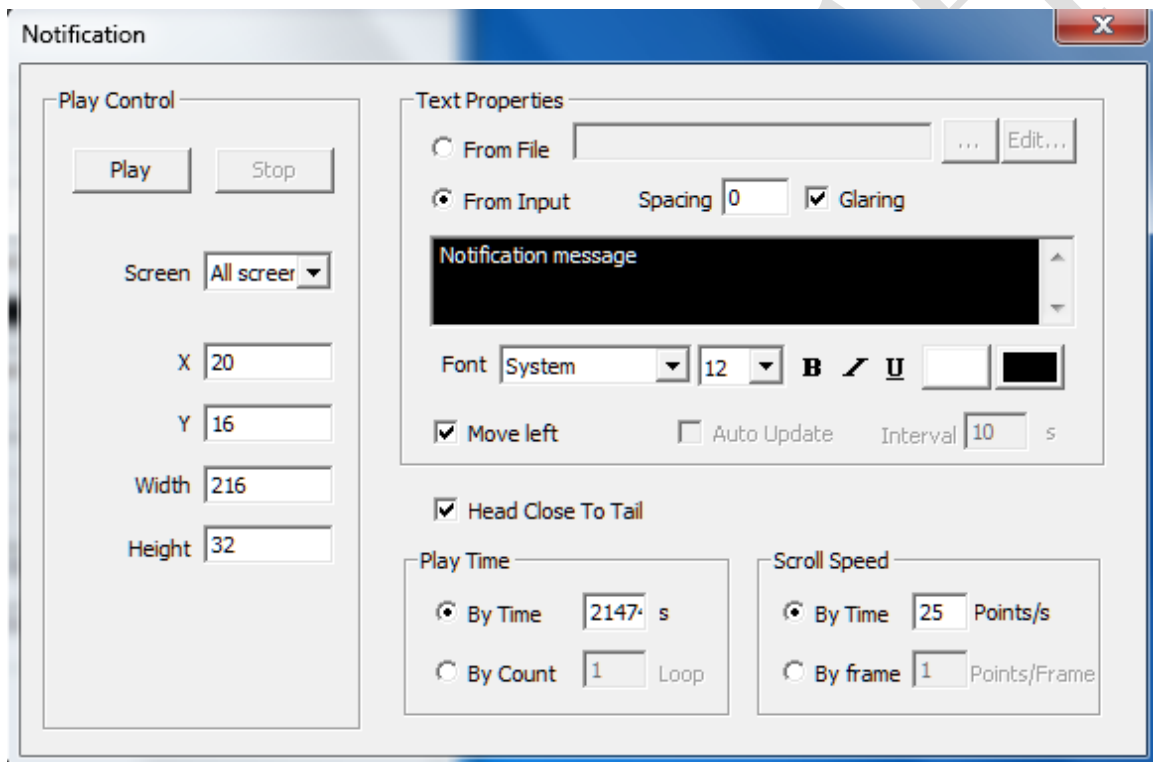


Figure 6-1 Notification Management

For the content editing of the play notification, refer to the single_line text play in Chapter 5 Play Text. For the effect setting, refer to Chapter 5 Play Image.

II. Game Score

The game score is also a special display item other than the program, which is displayed in the independent page and mainly applied for various game game. Click

the Control Screen > Game Score main menu , to go into the Game Score Management page (as shown in Figure 6-2).

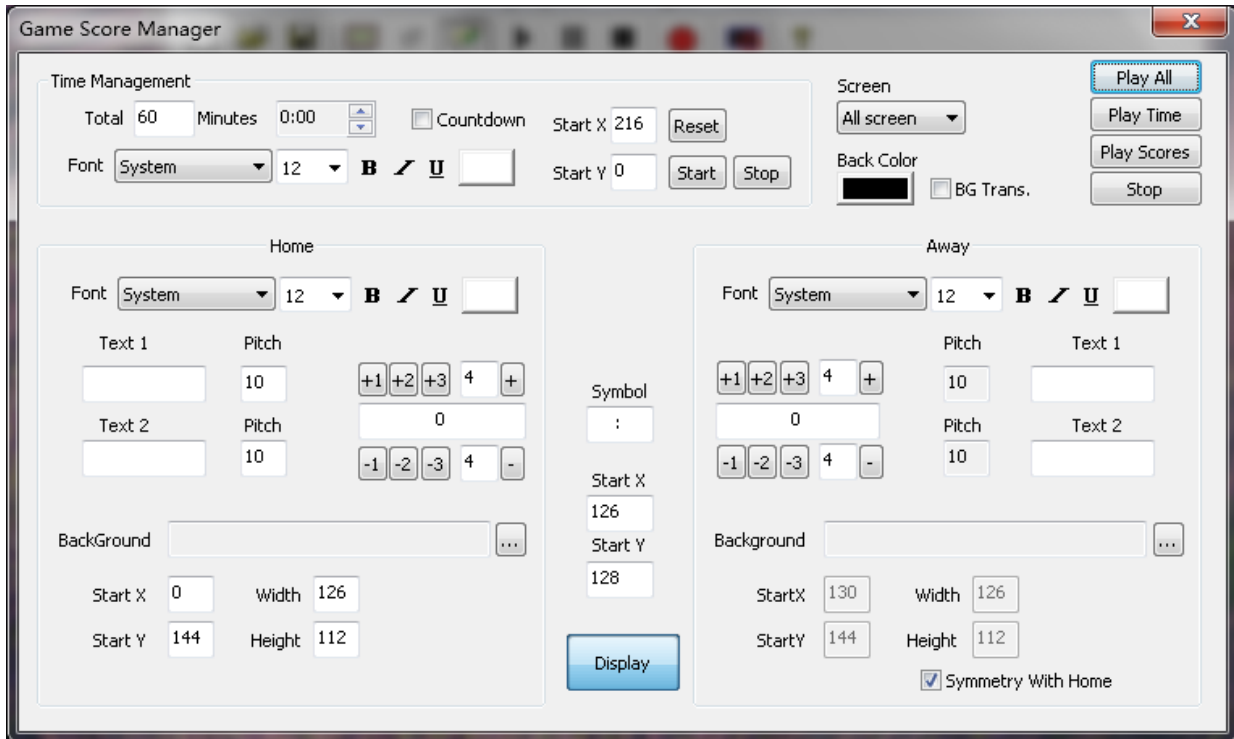


Figure 6-2 Game Score Management

Of which, it can Play Time and Play Time independently. The Time Management is used to set the game time, including Countup and Countdown. The Background can display the representative image of two teams. Display the example effect (as shown in Figure 6-3).



Figure 6-3 Score Effect

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Chapter 7 Timing Play and Control

I. Timing Play Admin

The Timing Play Admin is used to administer and play the program, and sets corresponding time span to play each file, as well as generates one program list to control the play of the program, to implement the pre-arranged program and save the human labor for the maintenance.

Click the Control Screen > Timing Play Admin menu, to go into the Timing Play Admin window (as shown in Figure 7-1).

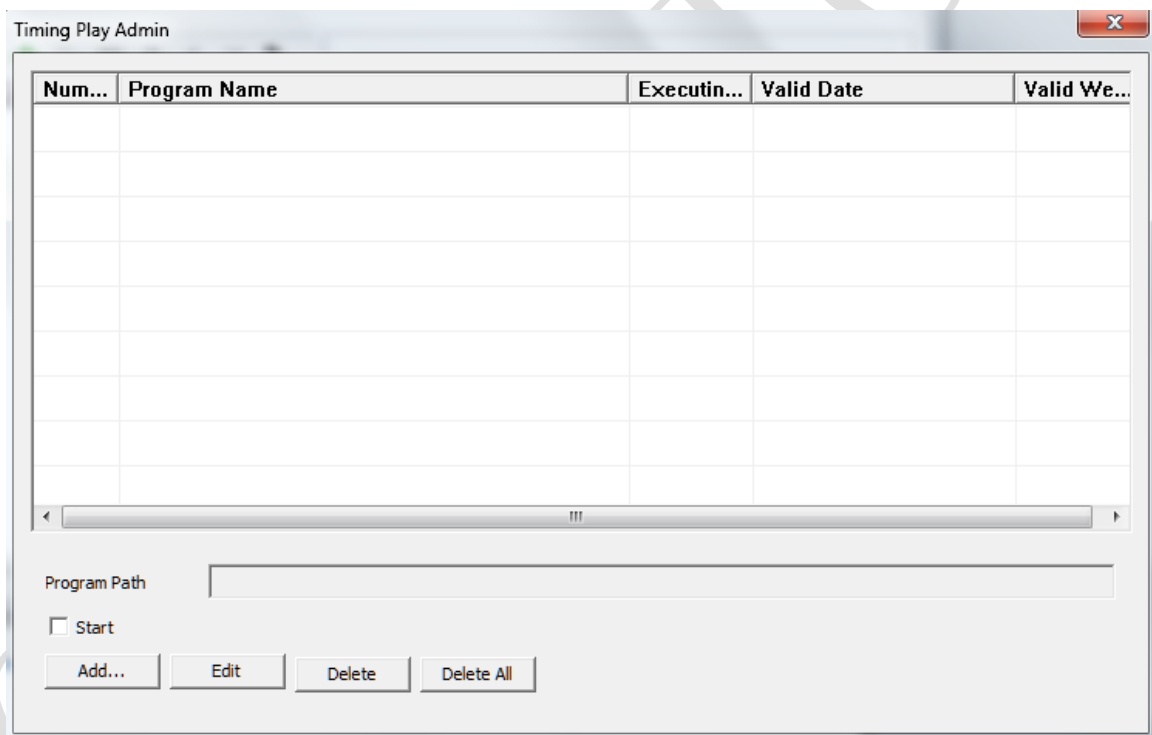


Figure 7-1 Timing Play Admin Window

Add the program item, and set the Valid Date and Valid Week of the program (as shown in Figure 7-2).

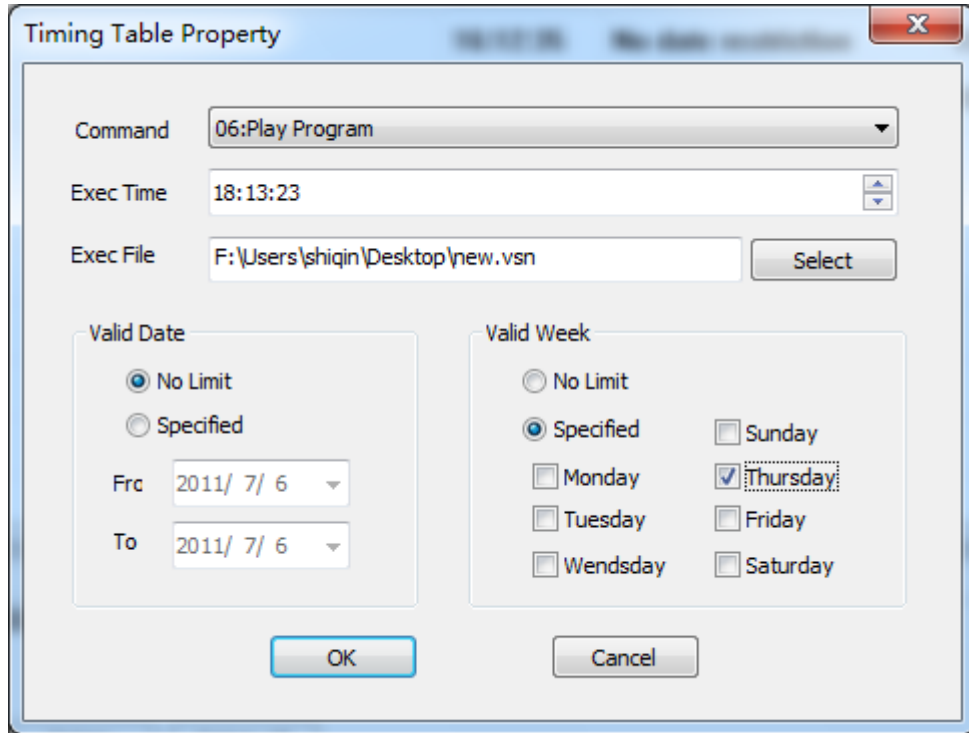


Figure 7-2 Add Program List

Add the program one by one, to form the program list. Enable the Timing Play and exit it. The software will save the program list automatically (as shown in Figure 7-3).

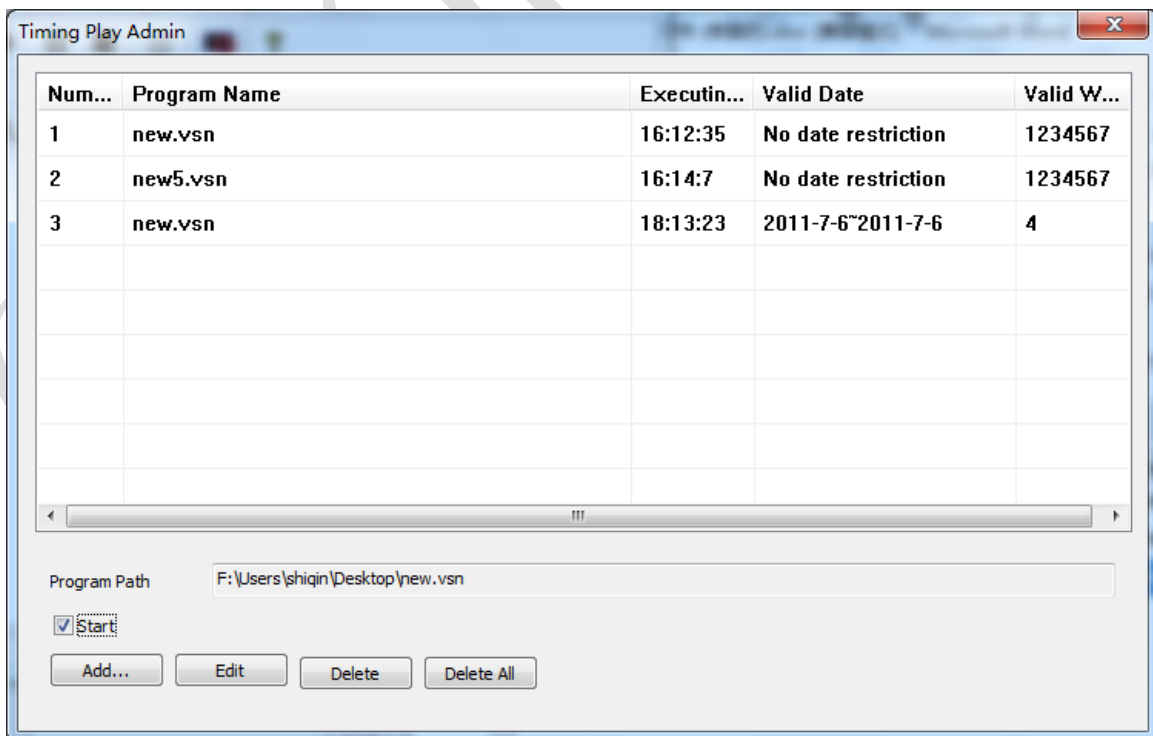


Figure 7-3 Timing Play Admin List

II. Action Table

It is used to control the peripheral equipment by the control system, and it is necessary to configure corresponding hardware equipment for the operation of this part. The users shall comply with the guide of the professional and technical personnel.

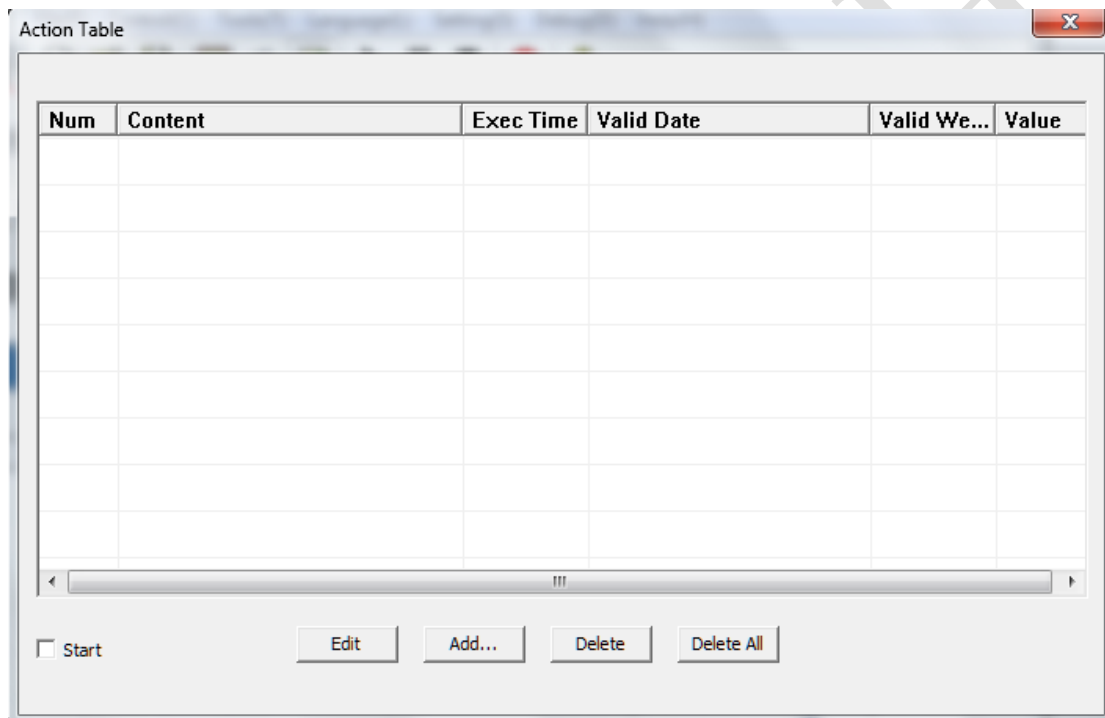


Figure 7-4 Action Table

Click the Control Screen > Timing Table menu, to go into the Timing Table window (as shown in Figure 7-4).

Add one Command, and set the Exec Time of the Command (as shown in Figure 7-5).

- Command: It is the operating function to be completed.

- **Switch on/off Large Screen Power Supply (Function Card Required):** The system will send the control Command to switch off the large screen power supply equipment periodically, to switch off the large screen power supply.

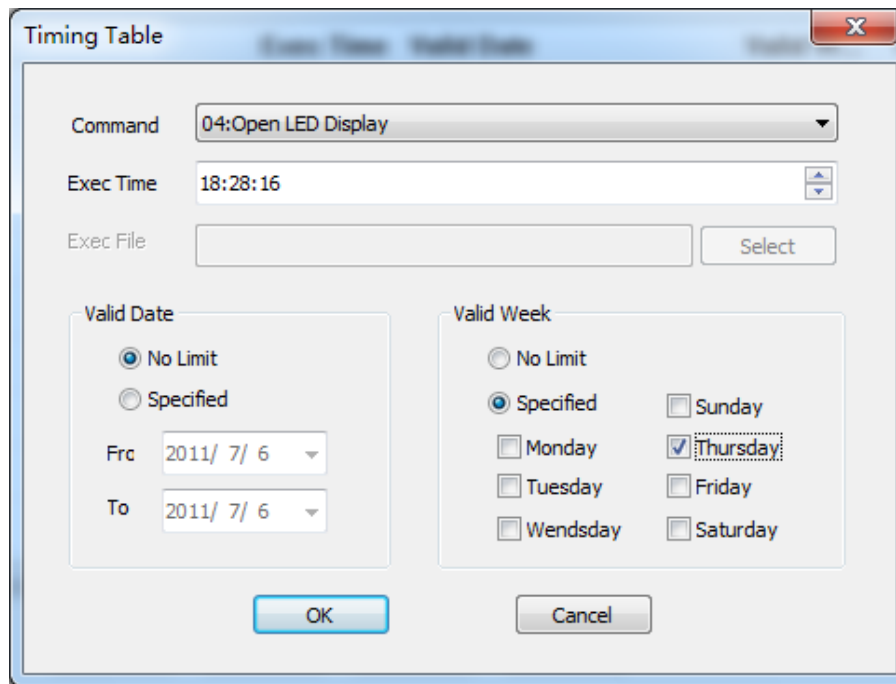


Figure 7-5 Setting of Timing Table

- **Shut Down Computer:** The system will send the control Command to shut down the computer periodically (This command is applicable to support the automatic power-on of the computer or start the computer by dedicated personnel. Please use it carefully for the unattended computer).

- **Close/Open LED Display:** Close (or open) the content displayed in the LED screen periodically.

- **Restart Computer:** Restart the computer periodically.

- **Adjust LED Brightness:** Adjust the brightness of the display screen by the period of time.

- **Exec Time:** It is the concrete time to execute the command with the time format xx:xx:xx, which is the 24hrs system. Execute the command under the constraint of the set date and the set week days.

Note: This part of the function shall match with related hardware equipment. For related engineering file, request to the technical personnel of our company.

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Chapter 8 RDA5F Asynchronous Content Admin

The RDA5F Receiving Card is the perfect combination of the synchronous mode and the asynchronous mode, which may be online used in the synchronous mode or offline used in the asynchronous mode. For the synchronous use, switch it to the offline content real time if the network cable is interrupted or any failure takes place for the computer, to ensure the display screen is played without the interruption.

I. Parameter Setting

To play the offline content automatically under the condition that the network is interrupted, it is necessary to implement the setting as follows: Click Control Screen > Screen Management > Configure Selected Screen Parameters, and select Play Offline Content in No Signal Action, as well as save and send it to the Receiving Card (as shown in Figure 8-1).

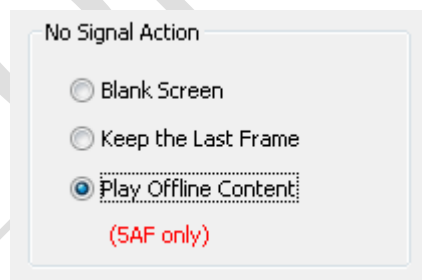


Figure 8-1 No Signal Action

II. Send Images and Videos to Receiving Card

Click the Control Screen > Send RDA5F Content > Send Videos and Images main menu under the condition that it is connected with the RDA5F Receiving Card (as shown in Figure 8-2).

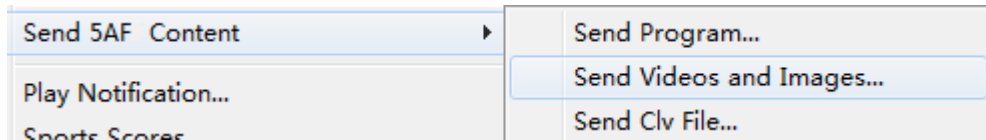



Figure 8-2 Send Videos and Images (Modify Menu Required)

Pop up the Send Videos and Images dialog box, and click  to add the video and image file. Here, you can adjust the file play sequence, delete or save the file (as shown in Figure 8-3).

- Count Can Be Sent: The count of images can be stored in the Receiving Card.
- Current Count: It is the count of images sent to the Receiving Card.
- Current Duration: It is the play time of the sent images.
- Speed Choice: You can select five speeds, and the low speed can provide the highest reliability.

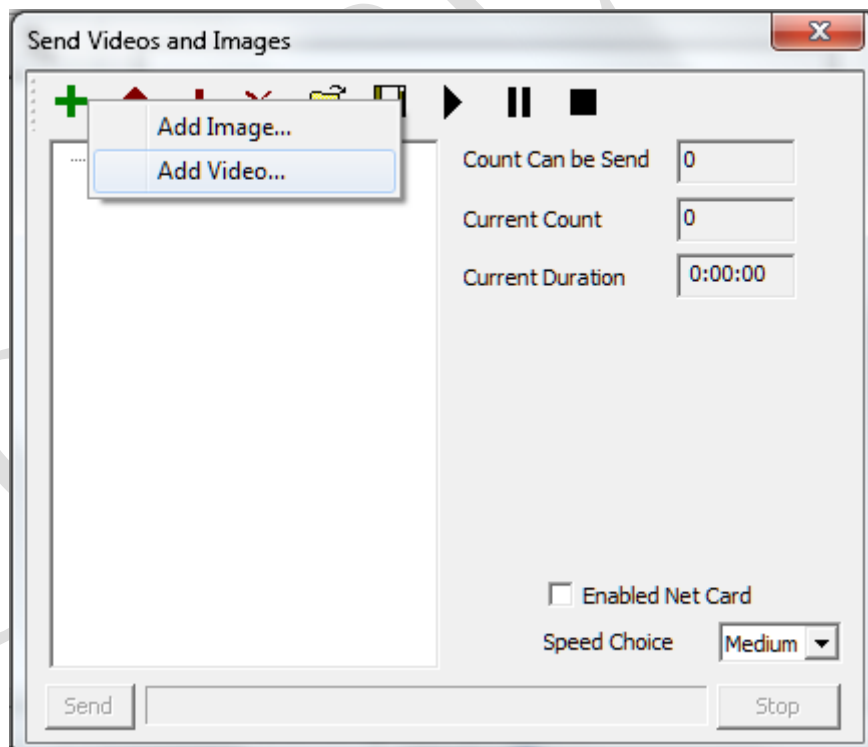


Figure 8-3 Add Videos and Images

The software will convert the videos into the images automatically after you add the video file. Click this video file, and it will display the Path, Image Count and Length on the right. Furthermore, you can select the Start Time and End Time, and intercept a part of the video to upload and play it (as shown in Figure 8-4).

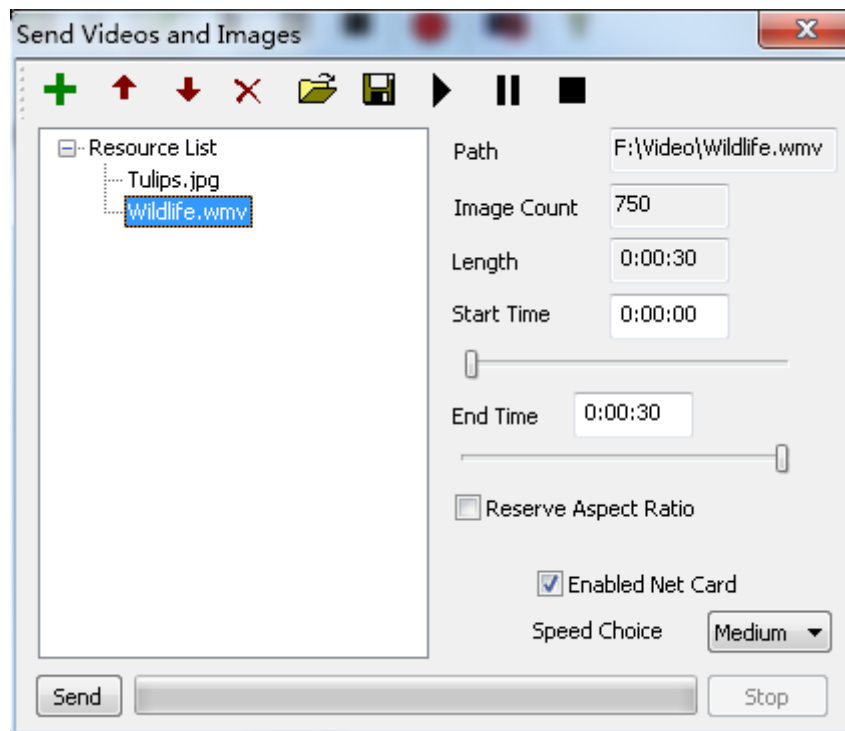


Figure 8-4 Video Properties

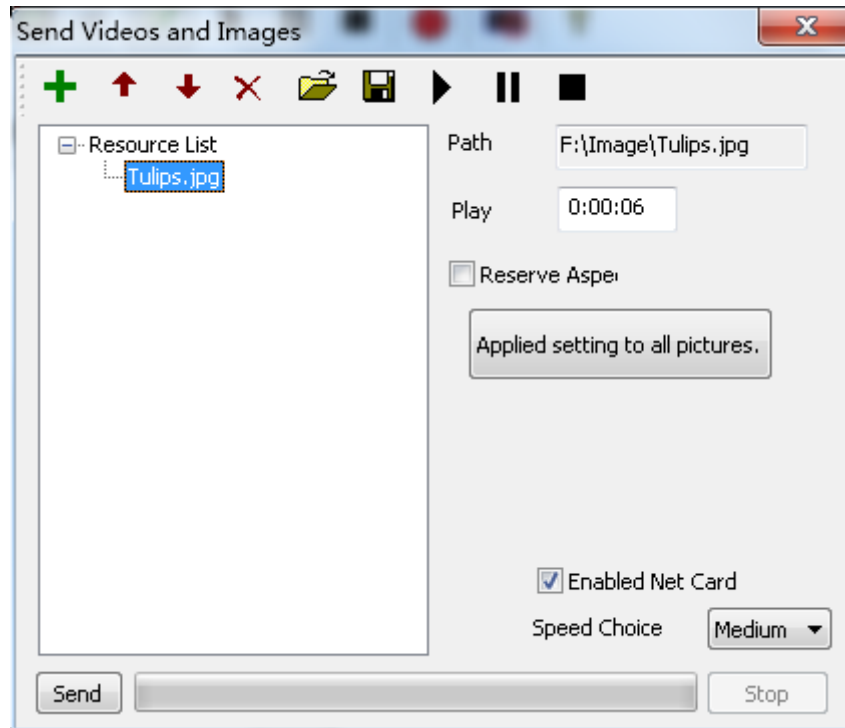



Figure 8-5 Image Properties

It will display the full path of the file on the right after you add the images file. Furthermore, you can adjust the Play of images.

Click Send after you add the file, to send the videos and images to the Receiving Card. It will prompt you to erase original content in the Receiving Card for each sending.

III. Send Program to Receiving Card

Edit the program to be played firstly. And then click Control Screen > Send Program or the  shortcut button, to pop up the Send Program dialog box, and click Send as shown in Figure 8-6.

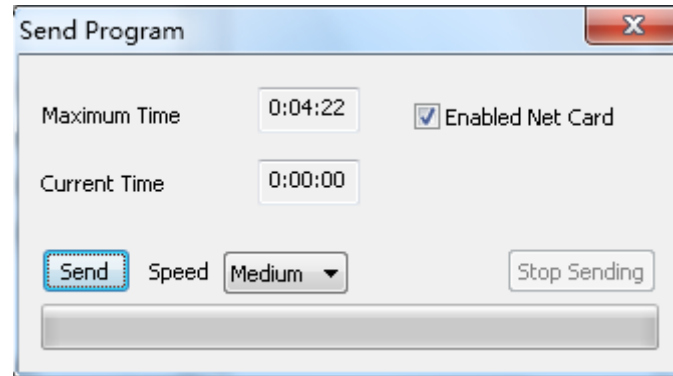


Figure 8-6 Send Program

- **Maximum Time:** It is the longest program time that may be stored in the Receiving Card, which is related to the control area of the Receiving Card and the size of the hardware storage chip. The larger the control area of the Receiving Card, the shorter the program time is, vice versa.

- **Current Time:** It is the time of the program to be sent currently.

Unplug the network cable, close the software or un-tick the Enabled Net Card

Enabled Net Card after you send the videos, images or programs, to switch it to the offline content.

Chapter 9 Power Supply and Brightness Control

The LEDVISION software can control the LED screen by the Function Card, including the LED Screen Power, Air Conditioning Power, Fan Power and Audio Power. Furthermore, it can get the temperature and brightness information of the LED screen by the sensor installed in the Function Card.

I. Power Control

Click the Setting > Remote Control main menu, to go into the Remote Control window (as shown in Figure 9 -1).

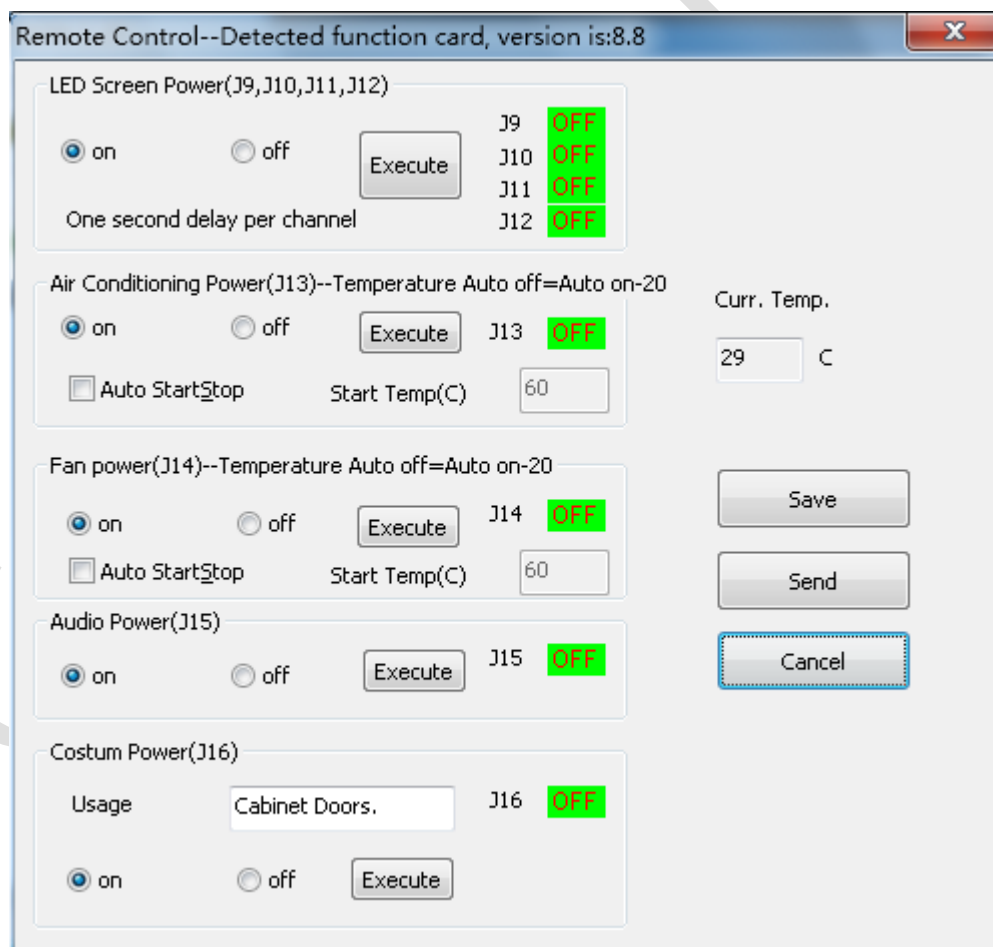


Figure 9-1 Remote Control Window

Select the trigger that controls corresponding power supply from the Function Card, select it's On/Off status as On or Off, and click Execute, to implement corresponding On/Off operation. You can also send these settings to the multifunction function.

II. Brightness Adjustment

Click the Setting > Brightness Adjustment main menu, to go into the Brightness Adjustment window (as shown in Figure 9-2).

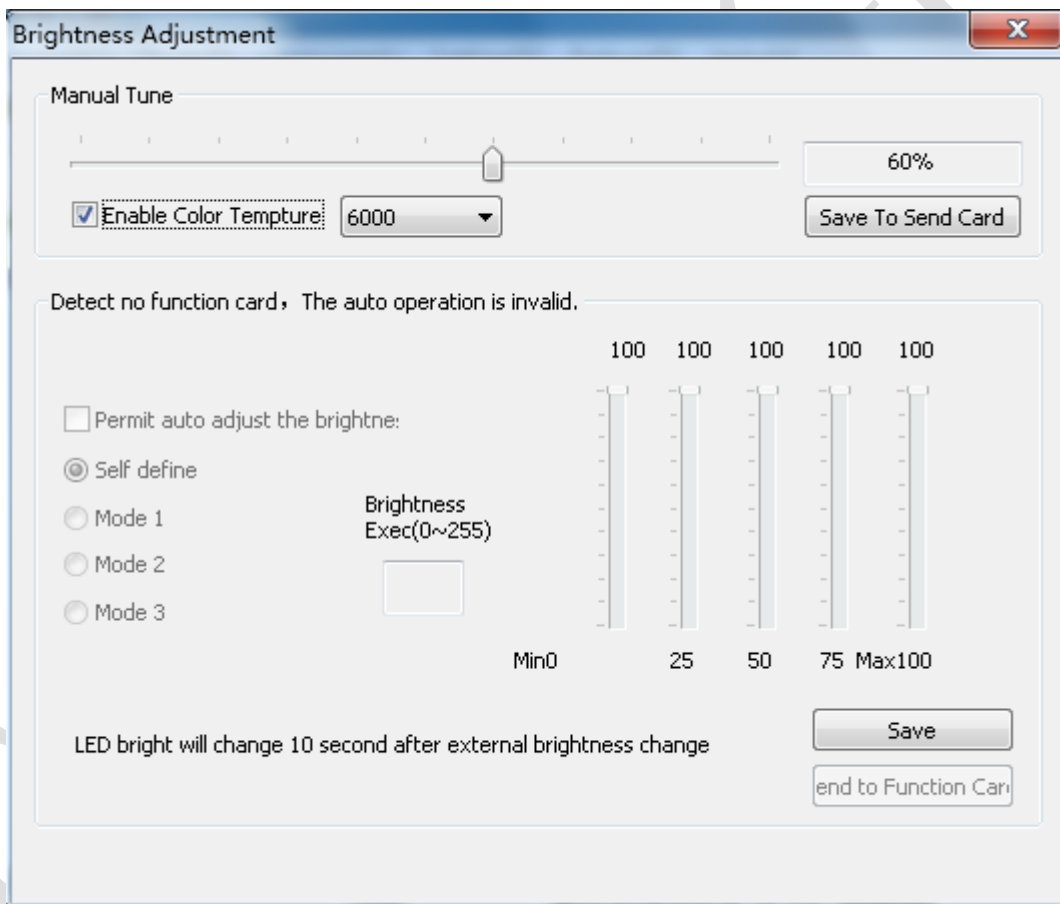


Figure 9-2 Remote Control Window

Here, you can implement the brightness adjustment by manual or automatically by the Function Card. In addition to select some brightness adjustment mode, you can also customize one brightness adjustment mode, and send this setting to the Function

Card. In this way, the Function Card can control the brightness of the LED screen automatically by the set adjustment mode.

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Chapter 10 Color Correct of LED Screen

I. Introduction to Manual Color Correct Technology

The so-called Manual Color Correct Technology is the Brightness Level Correct Technology of the LED screen. The brightness difference of LED during the production and different levels of brightness decay during the use will cause the overall brightness level of the LED screen and have a serious effect on the display effect of the LED screen. The Manual Color Correct is to provide each color of pixels with a brightness adjustment factor, and the LED screen will adjust its brightness by the factor during the display, to provide the uniform brightness display for the whole screen. The Manual Color Correct Technology is to get the correct factor for each color of pixels in the scientific way. At present, it will collect the brightness when LED displays in red, green and blue, by which to calculate the correct factor of each point by means of a certain algorithm.

II. Correct in Parameter Setting of Receiving Card

Click the Control Screen > Screen Management main menu, to go into the Screen Management window. Click Configure Parameters of Selected Screen, and input the password as 168, to pop up the Configure Parameter window (as shown in Figure 10-1).

Select Allow Correction from the screen parameters, and send the parameters to the Receiving Card.

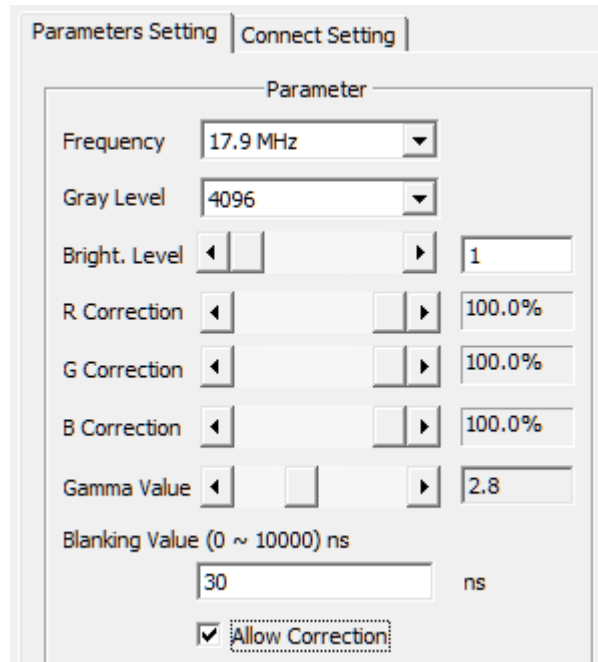


Figure 10-1 Parameter Setting of Receiving Card

III. Correction Action

1. Manual Correction

Click the Control Screen > Manual Color Correct > Manual Correction main menu, and input the password as 168, and then click OK, to go into the Manual Correction window (as shown in Figure 10-2).

It will display the coefficient at the lower part of the window, which will display the coefficient of various points in red, green and blue respectively. Double click some coefficient to modify its value. It will display various operations of the coefficient at the upper part of the window. The following will explain it in details:

- Import/Export: The import is to import the coefficient from the file, which supports the .ccCoef file generated by this software and the .vu3 file generated by the VU correction system, and the export is to export the coefficient as the .ccCoef file.

- Import/Export by Card and Area: It can support the operation of the local data and have no effect on the data out of the area. The area is the control area of some card or any set area value.

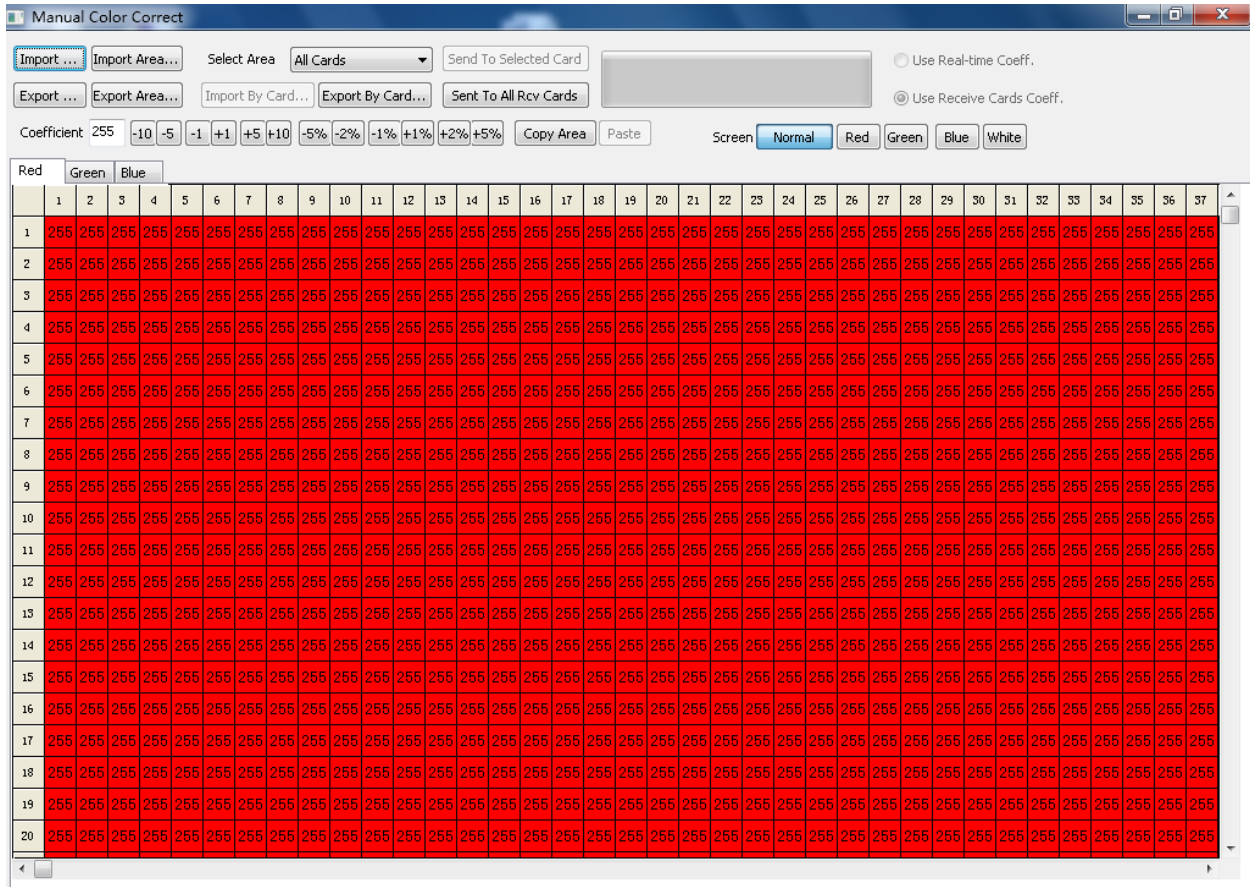


Figure 10-2 Manual Color Correct

- Send to Selected Card/All Receiving Cards: Save the coefficient file to the Receiving Card.
- Select Card Area: Select the area controlled by some Receiving Card.
- Modify Coefficient: It will modify the value of the selected part in the table when you modify the value in the edit box, and the button -10, -5, -1, +1, +5 and +10 will increase and decrease the selected part by the factor -10, -5, -1, +1, +5, +10 and the percent value.

- **Modify Screen:** Here are five options. If you select Normal, it will not modify the screen, if you select Red, it will display red in the full screen. In this way, it will display corresponding color if you select Green, Blue and White.

2. Camera Assisted Color Correction

i. Selection of Camera

The software only support the Canon EOS single lens reflex camera currently, and the models supported include as follows:

- **EOS-1D Mark II, EOS 20D, EOS-1Ds Mark II**
- **EOS Kiss Digital N/350D/REBEL XT**
- **EOS 5D (EOS 5D cannot be used with Mac OS X 10.5.)**
- **EOS-1D Mark II N, EOS 30D**
- **EOS Kiss Digital X/400D/REBEL XTi**
- **EOS-1D Mark III, EOS 40D, EOS-1Ds Mark III**
- **EOS DIGITAL REBEL Xsi/450D/Kiss X2**
- **EOS DIGITAL REBEL XS/1000D/KISS F**
- **EOS 50D, EOS 5D Mark II**
- **EOS Kiss X3/EOS REBEL T1i /EOS 500D**
- **EOS-1D Mark IV**
- **EOS 7D**
- **EOS 550D**

ii. Deployment of Camera

- 1) The camera is placed over the PTZ, and the PTZ is placed about 10 – 15m in the right front of the LED screen, and the camera faces to the LED screen, to ensure the display screen is within the shooting range of the

camera and the height of the camera is of the same height for the LED screen center roughly.

- 2) Click the LED Photo Taking button (see the figure below to select the button), so that the camera is in the Photo Taking state, and judge whether it is set successfully by observing whether it displays the real-time screen of the camera in the LED screen (you can close the Photo Taking when you use the software for Photo Taking). It is taken successfully when it displays the real-time screen (as shown in Figure 10-3).



Figure 10-3 Shooting

- 3) Select the Photo Taking mode as the manual mode (M pointed to by the arrow in the figure), and rotate the switch to align M with the white “-” of the circle in the figure below (as shown in Figure 10-4).
- 4) Adjust the focus, so that the whole LED screen fills with the shooting area of the camera as much as possible.

5) Connect the camera to PC by the data cable.



Figure 10-4 Mode Selection

iii. Camera Assisted Color Correction Procedure

Click the Control Screen > Manual Color Correct > **Camera Assisted Color Correction** main menu to pop up the following dialog box, and input the password as 168, to go into the **Camera Assisted Color Correction** main interface. Click **Camera Assisted Color Correction** in the main interface to connect with the camera, and you can configure various parameters of the camera, and get the real-time photo taking of the camera (as shown in Figure 1-5).

Step 1: Camera Adjustment

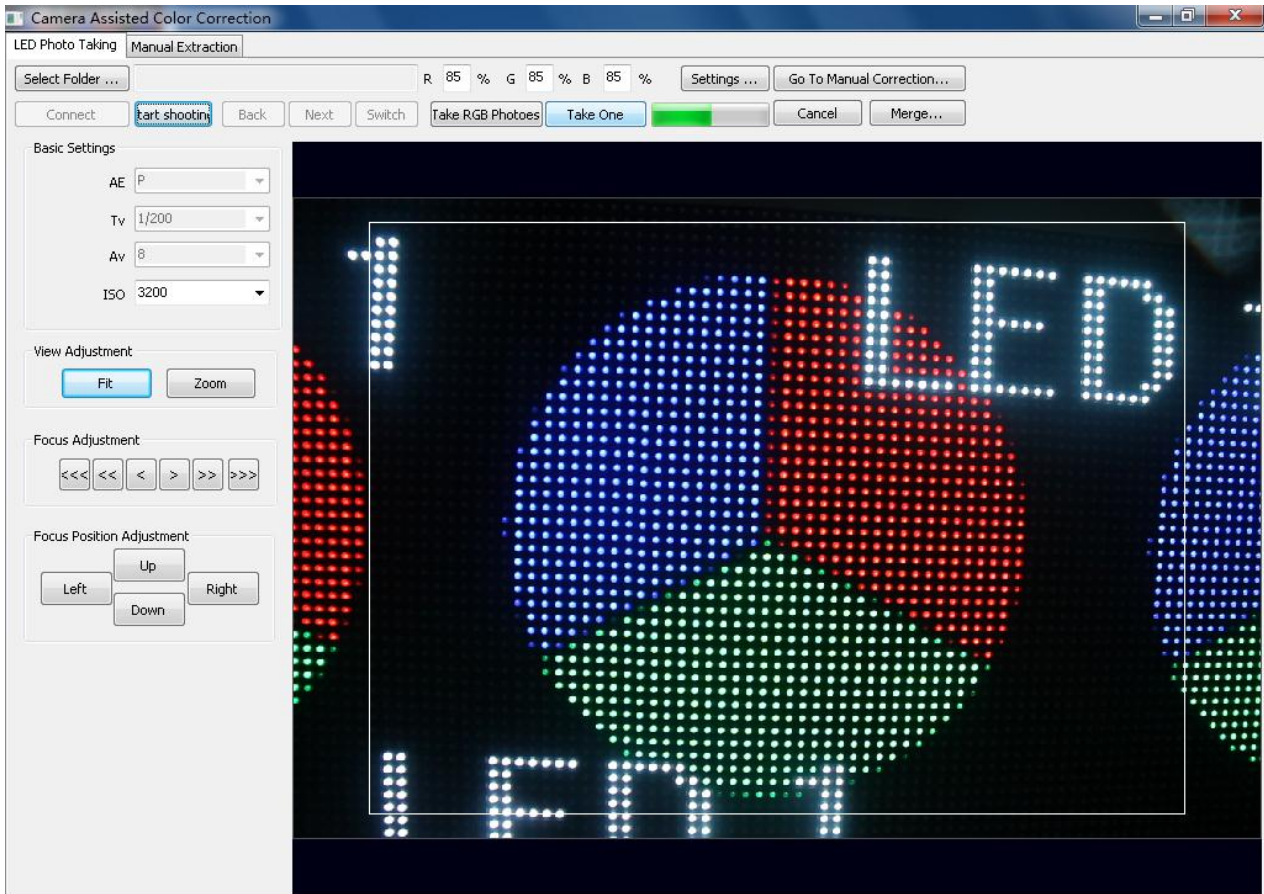


Figure 10-5 Camera Assisted Color Correction

To take the clear photo properly, you can adjust the parameters of the camera as follows:

- **AE (Automatic Exposure) Mode:** It is determined when you set the photo taking mode. Here, it shall be the manual mode (namely, M).
- **Tv (Shuttle):** It is the exposure time. The less the value, the shorter the exposure time is and the darker the photo is.
- **Av (Aperture):** It is the aperture size. The less the value, the larger the aperture size is and the brighter the photo is.
- **ISO (Sensitivity):** The lower the ISO, the darker the photo is and the more delicate the quality of screen is.

- View Adjustment: Click Zoom to zoom in the photo in the photo taking area, so as to view the photo clearly.
- Focus Adjustment: Adjust the focus of the camera, so that the photo is clearer.
- Focus Position Adjustment: Adjust the the position of focus frame for the camera, so that the focus frame is located at the right center of the LED screen.

Step 2: Preparation for Photo Taking

If the LED screen is large, the photo will be taken by area. Click Setting to set the width and height of one photo taking in the capture area.

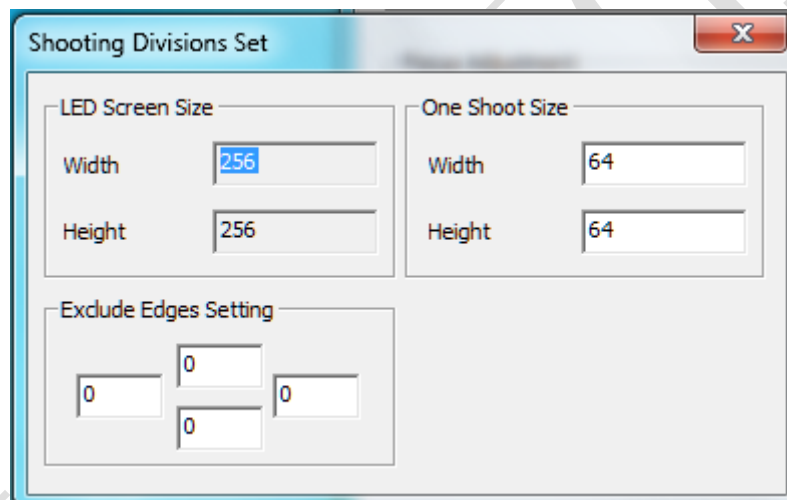


Figure 10-6 Setting of Photo Taking Area

Select one folder to store the photo (the postfix is cr2) and the intermediate file generated for the coefficient (the postfix is ccc).

Step 3: Photo Taking

Click Start to Take, and select Take RGB Photo to display the continuous photos in red, green and blue and generate the intermediate file of the coefficient automatically. After the photo is taken, it will generate four photo files (.CR2) and three intermediate files of the coefficient (.ccc) in the folder automatically. Select

Take to take the single color, and then generate the intermediate file of the coefficient (.ccc) by the manual extraction.

After one area is taken, click Previous and Next to switch the Photo Taking area, and click Switch to switch the Photo Taking color. After all areas are taken, it will generate a large number of the photo files and the coefficient files in the folder automatically, such as:

B_c0_r0_x0_y0_w128_h96.CR2

b_c1_r1_x128_y96_w128_h96.ccc

The generated file name corresponds to the photo taken from various areas. The detailed definition is shown as in the table below.

File Name	B	c0	r0	x0	y0	w32	h64
Definiton	Color	Column Number	Row Number	Start Horizontal Coordinate	Start Vertical Coordinate	Width	Height

Step 4: Merge

Click Merge, and select all intermediate file of the coefficient (.ccc) to generate the file format .ccCoef required by the final Receiving Card.

Step 5: Application of Coefficient

Click Go into Manual Color Correct, to open the ccCoef file generate at just, and send it to the Receiving Card. For the details, refer to the description of Manual Color Correct.

iv. Manual Extraction of Intermediate File ccc for Coefficient

If it prompts you fail, you can go into the Manual Extraction (as show in Figure 10-7).

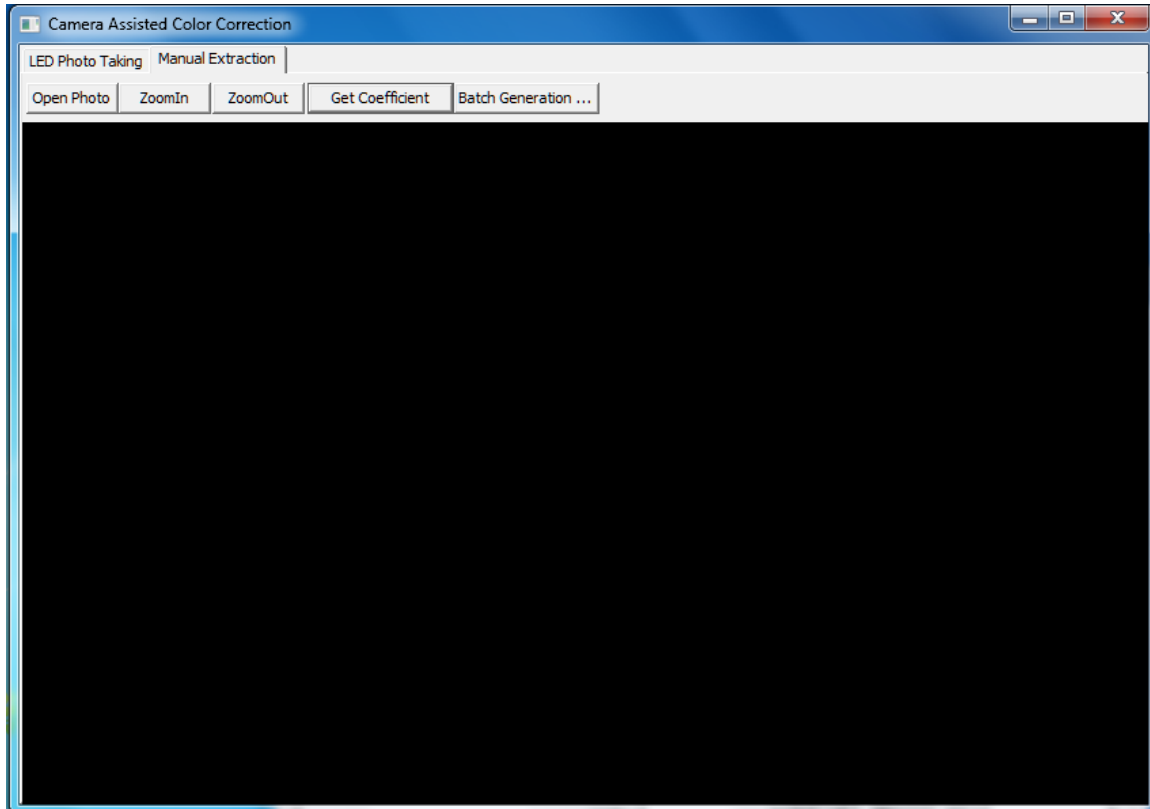


Figure 10-7 Manual Extraction

Open the photo to observe whether the taken photo is complete and the taken pixel is too dark or bright by clicking Zoom In and Zoom Out or dragging the mouse directly. If the effect is poor, it is suggested to return the Photo Taking interface to take it again. Click Get Coefficient, to extract the response coefficient of each pixel, and save it into the photo folder as the .ccc file. At the same time, it will display the effect diagram of corresponding Get Coefficient in the interface (as shown in Figure 10-8).

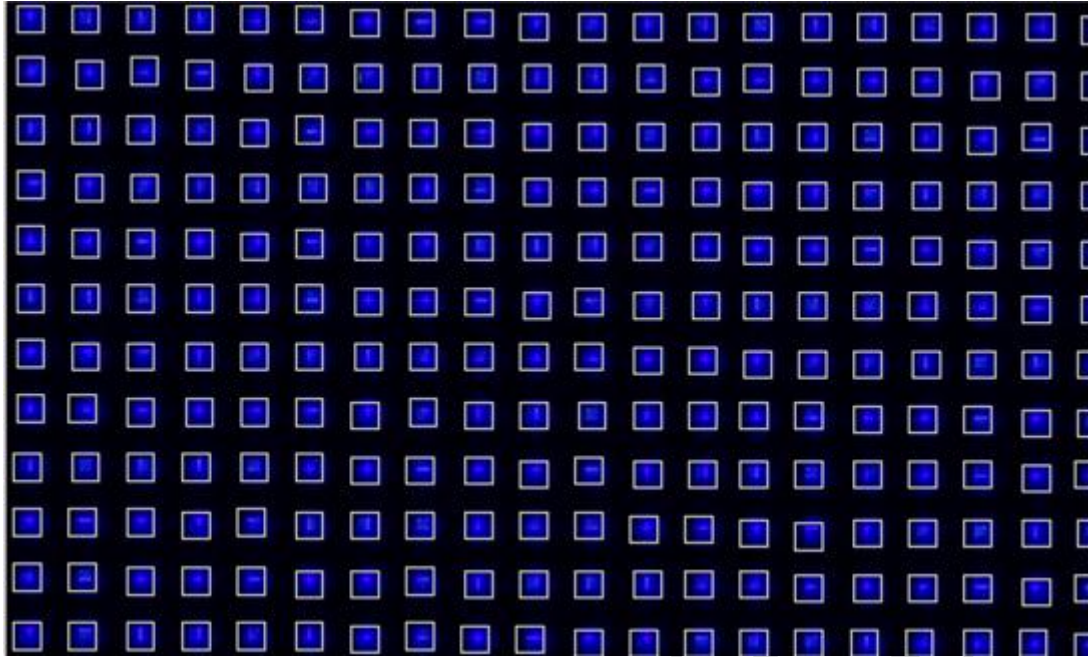


Figure 10-8 Effect of Get Coefficient

Of which, the pixels limited by the white frame indicate the coefficient of this point is gotten successfully. Click Batch Generation, to get the coefficient of several CR2 files for one time.

Chapter 11 Remote Operation

If you want to control it remotely by LAN, it is necessary to set the main control PC which controls the LED screen as the remote control server and other PC for the remote operation as the client. The remote control server may be controlled by all customers within the network, and the client may control all remote servers within the network.

I. Setting of Remote Control Server

Click the Setting > Software Setting menu, to go into the Software Setting window (as shown in Figure 11-1).

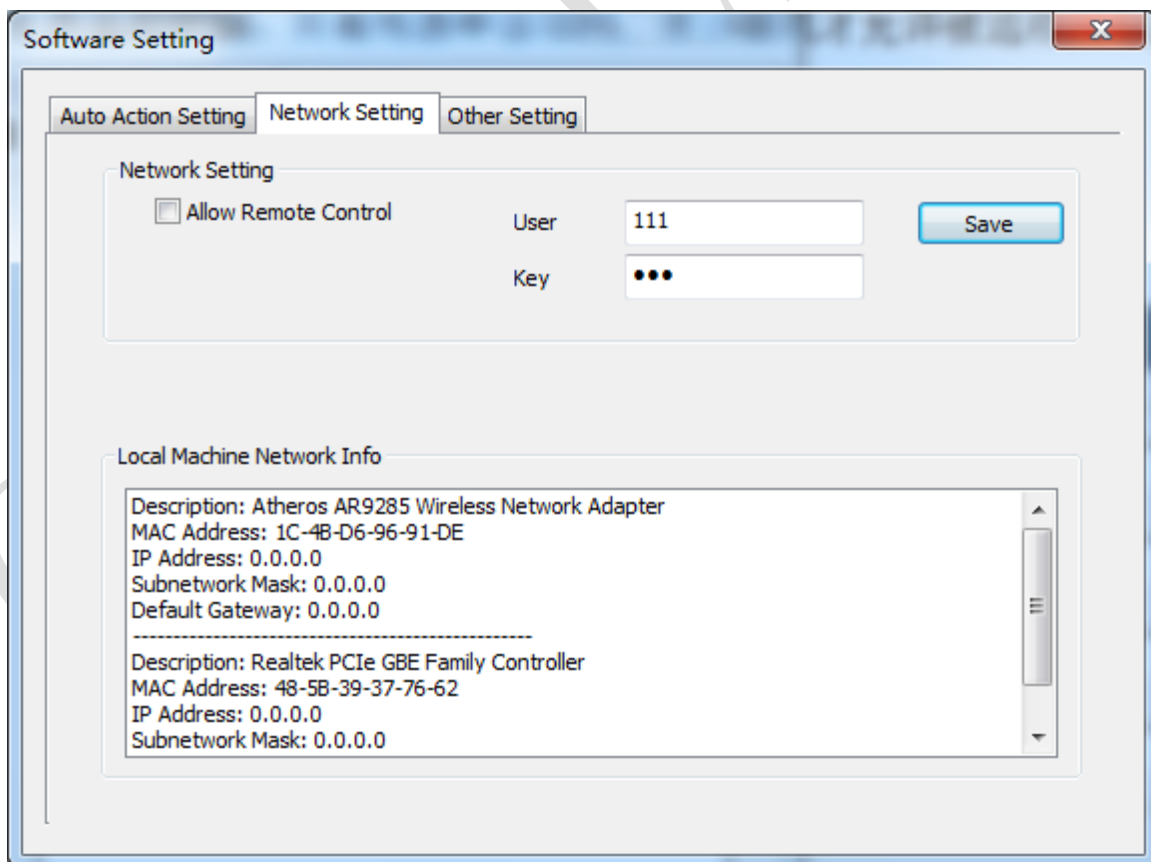


Figure 11-1 Setting Interface of Remote Control Server

- User/Key: It is necessary to input this User and Key to connect to this server during the remote control.
- Allow Remote Control: This computer will be allowed for the remote control and become the remote control server only when you select this option.

II. LED Screen of Client Remote Control

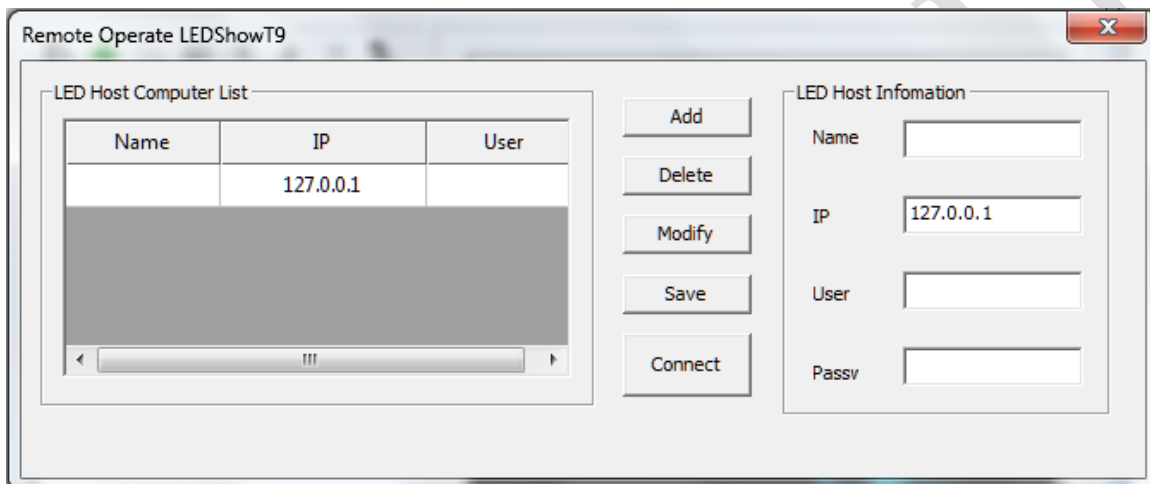


Figure 11-2 Management Interface of Remote Control

1. Add related information of the LED screen server to be managed.
 - Name: It is used to differentiate from the name of the LED screen at the management terminal and may be set at random.
 - IP: It is the IP address of the remote display screen server to be managed.
 - User: It is the user name set for the remote server to be managed.
 - Password: It is the password set for the remote display screen server to be managed.

Of which, all of the IP address, port, user name and password shall be input correctly, to connect it to the remote display screen server.

2. Select the display screen to be controlled from the screen list, and click Connect.

At this time, the display screen will connect to the remote display screen server for the authentication automatically. After it is connected successfully, log in the remote server, to open corresponding remote operation interface.

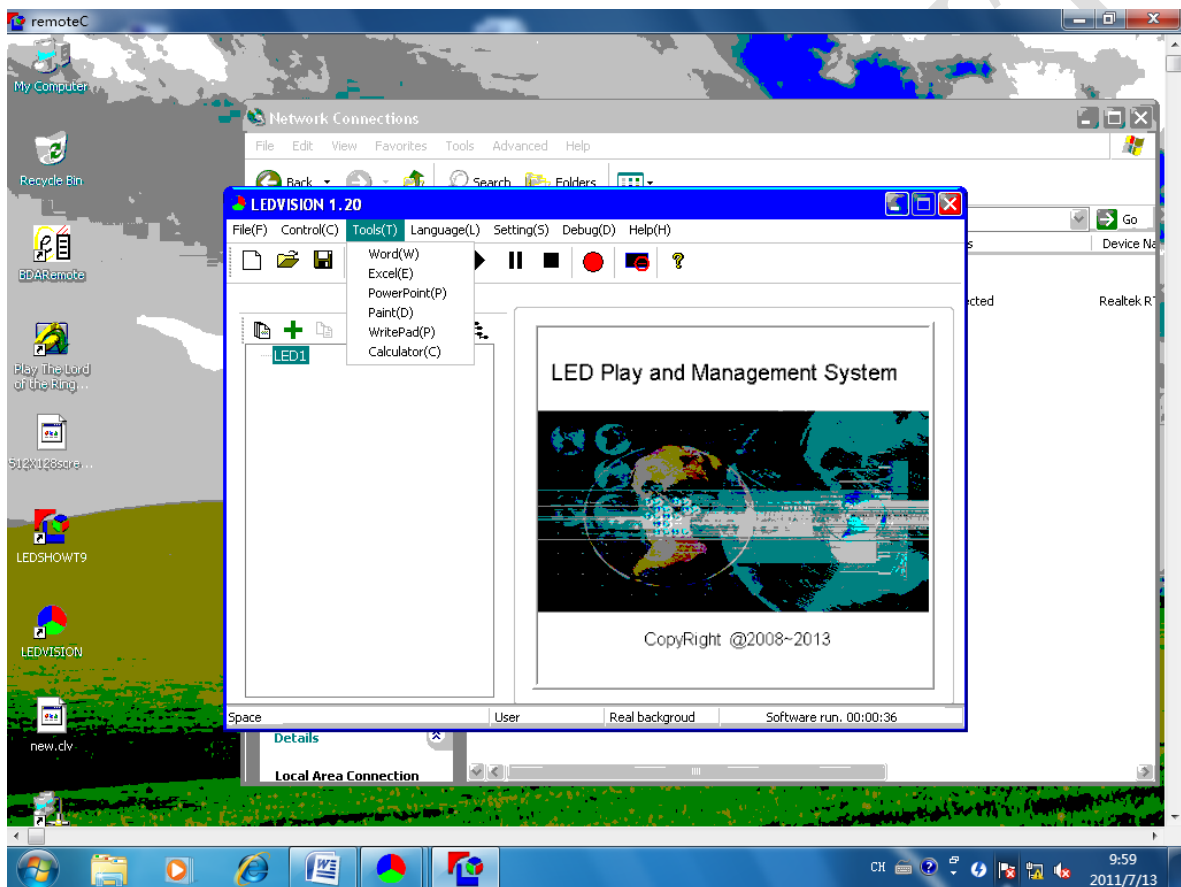


Figure 11-3 Remote Operation Interface

3. Operate the display screen remotely in the pop-up control interface. Of which, the operating mode is the same as the LEDVISION for the local operation.

Chapter 12 Software Setting

They are various settings related to the software, including three tabs, such as Auto Action setting, Network Setting and Other Setting. Of which, the Network Setting is used for the remote operation. For related description, refer to Chapter 19.

I. Auto Action Setting

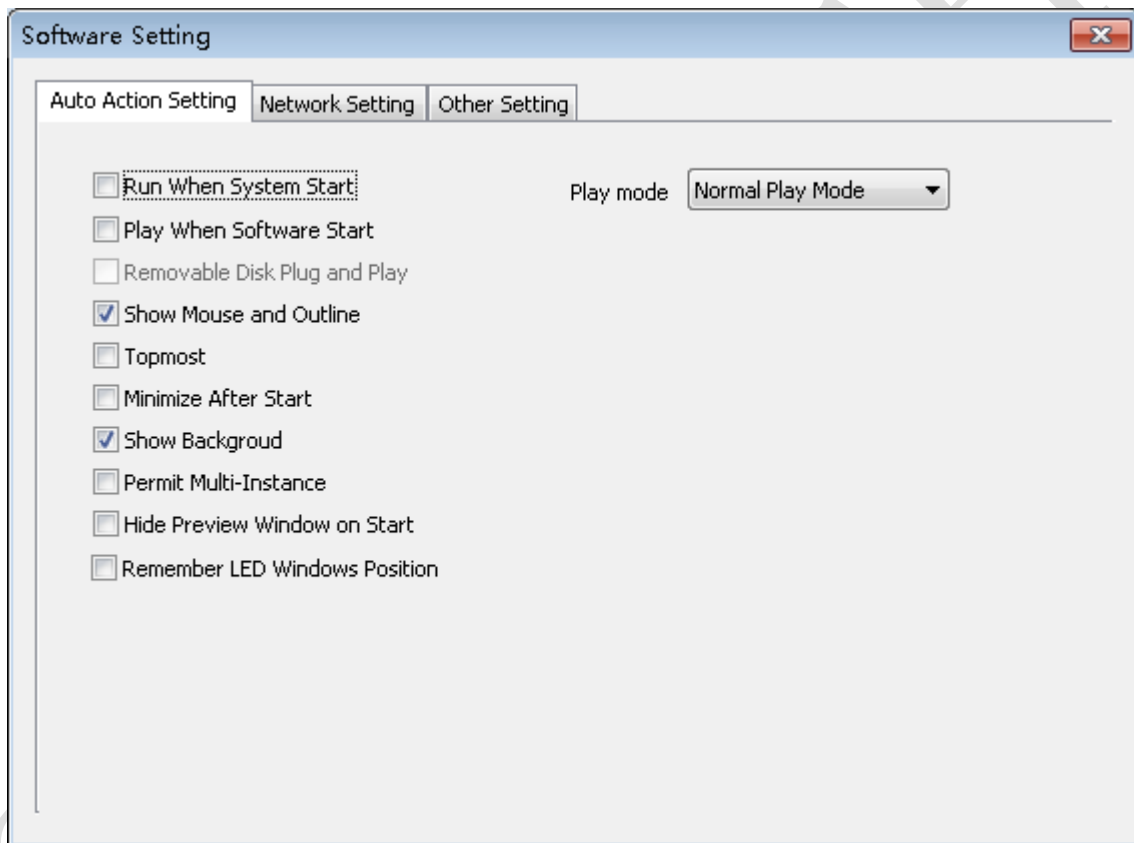


Figure 12-1 Auto Action Setting

- **Run When System Start:** Run the software automatically when you start the Windows system.
- **Play When Software Start:** Play the last open program automatically after the software is started.

- **Show Mouse and Outline:** Whether it will display the preview outline and mouse when you edit the program.
- **Topmost:** You can place the play window topost after you select it.
- **Minimize After Start:** Minimize the operating window automatically after the software is started.
- **Show Background:** Hide/display the play window.
- **Permit Multi-instance:** Allow to open more than one software at the same time.
- **Hide Preview Window On Start:** Hide the play window to the background after you start the software.
- **Remember LED Windows Position:** It is the position of the background when you start the software every time.
- **Play Mode:** It is composed of the normal mode (Play the content of the LED window), screen capture mode (match with the Hide/Display shortcut button, and play the content of the computer desktop at the LED window position) and play while capture mode (play the combined content of the LED window and the computer desktop).

II. Other Setting

- **Auto Reboot on Exception:** It will restart this software automatically after it exits for the software failure.
- **Start/Quit Everyday At:** Start/quit this software at the setting time.
- **Backup:** Backup the program periodically.

- Record Play Info: Record the time to play the file and save it into corresponding file under the installation directory.

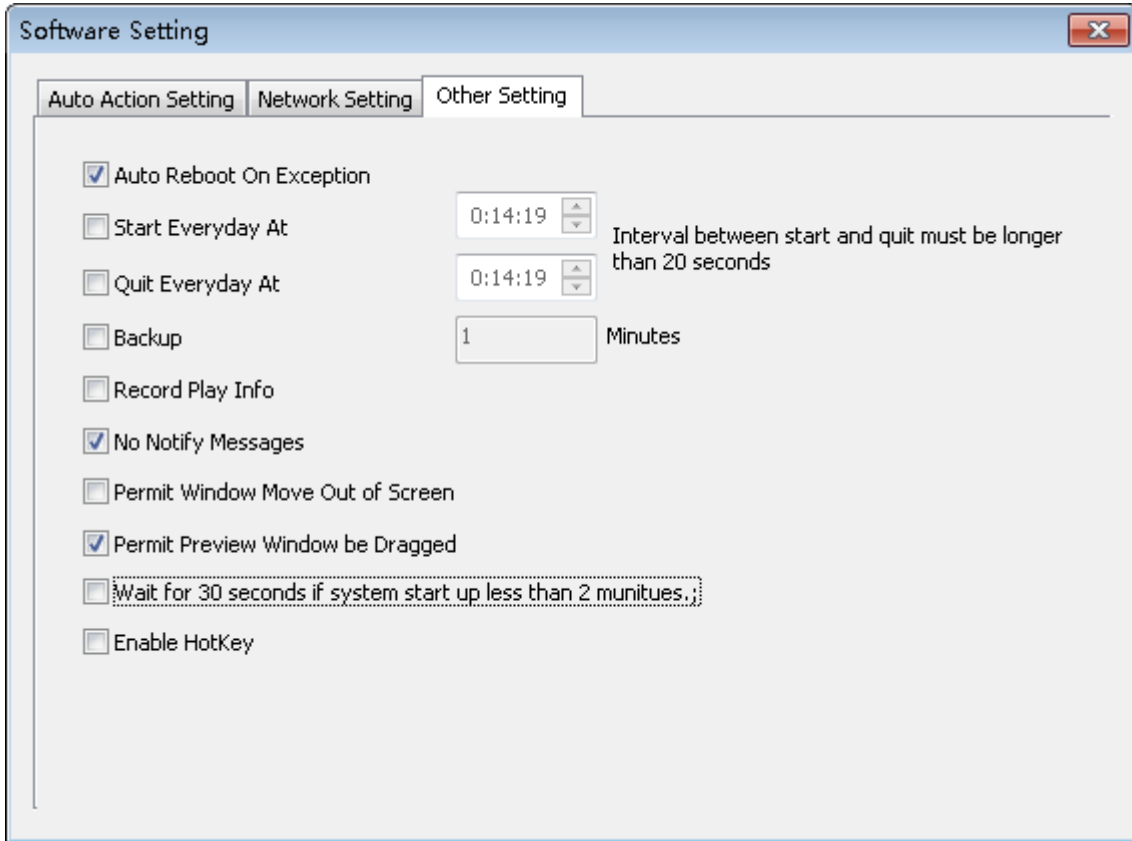


Figure 12-2 Other Setting

- No Notify Message: Don't notify the operating result if there is nobody.
- Permit Window Move Out of Screen: Allow the program window is out of the background outline.
- Permit Preview Window Be Dragged: Allow the background window is dragged by the mouse.
- Wait for 30 Seconds If System Start Up Less Than 2 Minutes: It is will wait for 30s when you start up the software less than 2 minutes.
- Enable HotKey: Enable the function of the hotkey.

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Chapter 13 User Admin

The User Admin is mainly used to create the administrator and normal user to assign different use privileges. Click the Setting > User Admin menu, to go into the User Admin window (as shown in Figure 13-1).

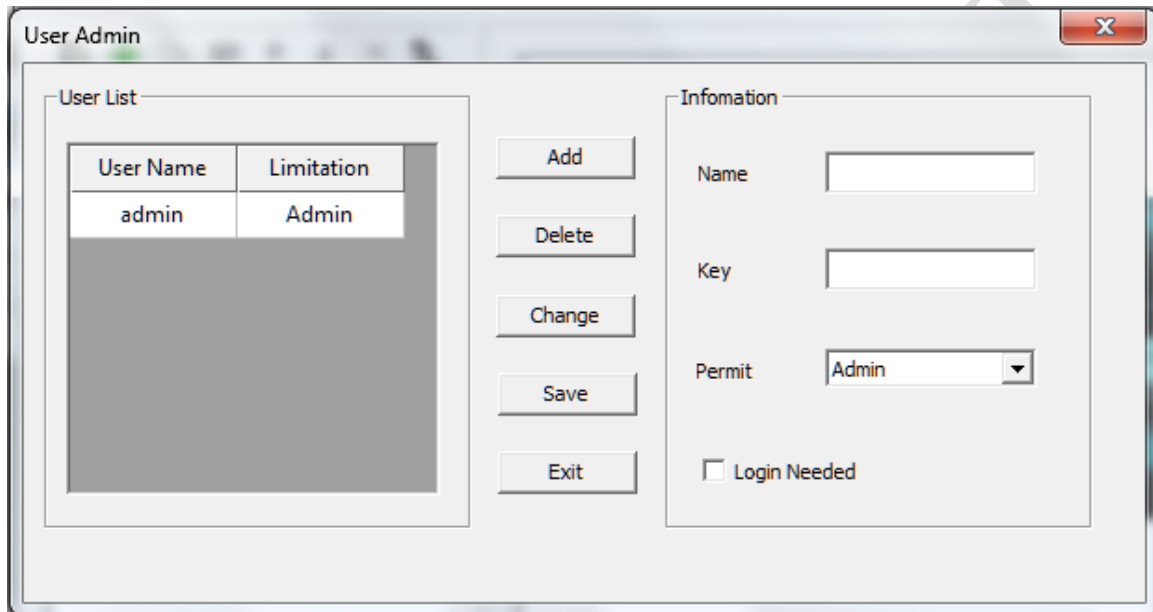


Figure 13-1 User Admin

I. Information

Name/Key: It is the name and key that users use to log in the software.

II. Permit

- Administrator: It can execute all operations and set users and corresponding privileges.
- Normal User: It can execute all operation about the play and display, but cannot set the hardware parameters of the display screen and implement the user management.
- Limited Users: It can only load and play the prepared program.

- Login Needed: It is necessary for users to log in the system when they start the software.

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