Ver: 1.2

User Manual - LC Net Pro

LC Net Pro

Ver: 1.2

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1 Overview

Sun Net Pro is powerful software, professionally designed for the LED display media play application. The features of Sun Net Pro are as follows:

Control multiple LED displays

Sun Net Pro is capable of sending media (video/text) to multiple LED displays at the same time with each display having its own playlist and mapping (area for showing the media data)

—

Multiple playlist

Play different playlists at various dates and time；

Playlists with multiple pages

A playlist can have multiple pages on which the layouts of the windows are different from each other. Refer to **2.1.2 Playlist Configuration**

Pages with multiple windows

Each page of a playlist can have multiple windows for media display. The positions and sizes of these windows can be set individually.

—

Wide variety of media types supported

Media types supported include videos, audios, pictures, Flash, text, analog clocks, digital clocks, countdown timers, weather info, video devices, web pages and more.

—

Complete media property settings

The media properties can be set include the background color, background picture, transparency, volume setting, display scale, animation for entrance/exit(in/out), animation speed and color, effects, font, style, transparency for texts.

—

Many onboard display effects for text and pictures

There are more than 40 effects for displaying text/pictures. Our special data processing design provides efficient and smooth display.

—

Ant-Freeze Function

Due to problems from decoders or computers videos at times can become frozen during play.

Sun Net Pro can identify and begin playing the next media in the play list when the video or sound is suck for more than 10 seconds).

—

The effect of transparency

Media sources of the types of clock, countdown timer, text, office file, weather info can be shown with transparency effect.

Web page supported

PPT files supported

Security– computer locking

Sun Net Pro can lock the computer for security. The key board and the mouse will not work after locking.

SunNet Pro will self-recover from severe error

Software can auto run media play and auto start

High efficiency video format supported with embedded decoder

The embedded decoder is extremely durable and can be updated for better performance.

Easy log management

Play log can be recorded, checked and exported to Microsoft Excel files, which makes log management easy and very flexible.

—

Playlist/Schedule backup

Store a copy of playlist/schedule files and media files on a flash drive or hard disk for quick and easy recovery.

1.1Functions

Playlists creation; opening; saving; backup and application.

— Schedule files (files for multiple playlists dispatching) creation, opening, saving, saving as, backup and application.

—Play, pause and stop playlists and schedules.

— Add, delete, edit, move p a g e s up or down in the playlist schedule, windows and media sources of a playlist.

— Page property settings. The properties include the background color, background picture, showing modes (show the picture periodically, according to time duration or by times), displaying scale, transparency, color and effects for text etc.
— Property setting and previewing of media sources.
— Quick video preview.
— Media sources finding, moving and properties setting for all.
— Schedules dispatching info checking.
— Opening of the newly accessed playlist and schedule files.
— Sun Net Pro auto run after the computer startup.
— Set the playlists or schedules to be launched when the software starts.
— Backstage media playing.
— Set the days for play log storage.
— Delete the out of date play log files automatically.
— Computer locking
— Convert PPT files to pictures.
— Tool management.
— Multiple languages are supported.

1.2 Run Environment

— Tests passed on the OSs of Windows XP \ Windows2000\ Windows7(32-bit)

	Notes: The OS of Windows XP (32-bit) is recommended as on it the Sun Net Pro was developed.

— CPU Frequency >= 1.6GHZ，Host Memory >= 1G, Graphic Card Memory > 512M

	Notes: Using a computer other than Windows XP \ Windows2000\ Windows7 (32-bit), Sun Net Pro may work properly. Problems include playing or loading speed. Text may jitter if the graphic card memory is less than 512M.

— To open and show .doc or excel files, Microsoft Office should be installed first.

	Notes: .doc or excel files cannot be loaded if Microsoft Office is not installed.

— To open and show flash files, Flash OCX should be installed first.

— To open and play video files, a ¾DirectX9 graphic card is required.

	Notes: Sun Net Pro cannot play videos without a graphic card supporting DirectX9.

¾ DirectX features are activated

To activate DirectX features, open DirectX Diagnostic Tool (type in **dxdiag** in the Run dialog and click OK, as shown in Fig.1.1) and enable all DirectX features on the Display page, as shown in Fig.1.2.

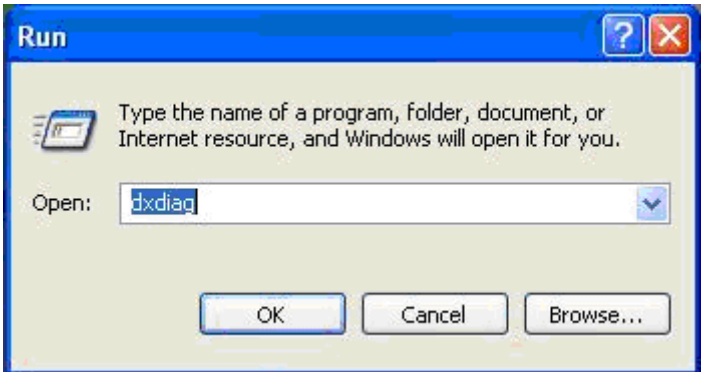

Fig.1.1 Run dialog

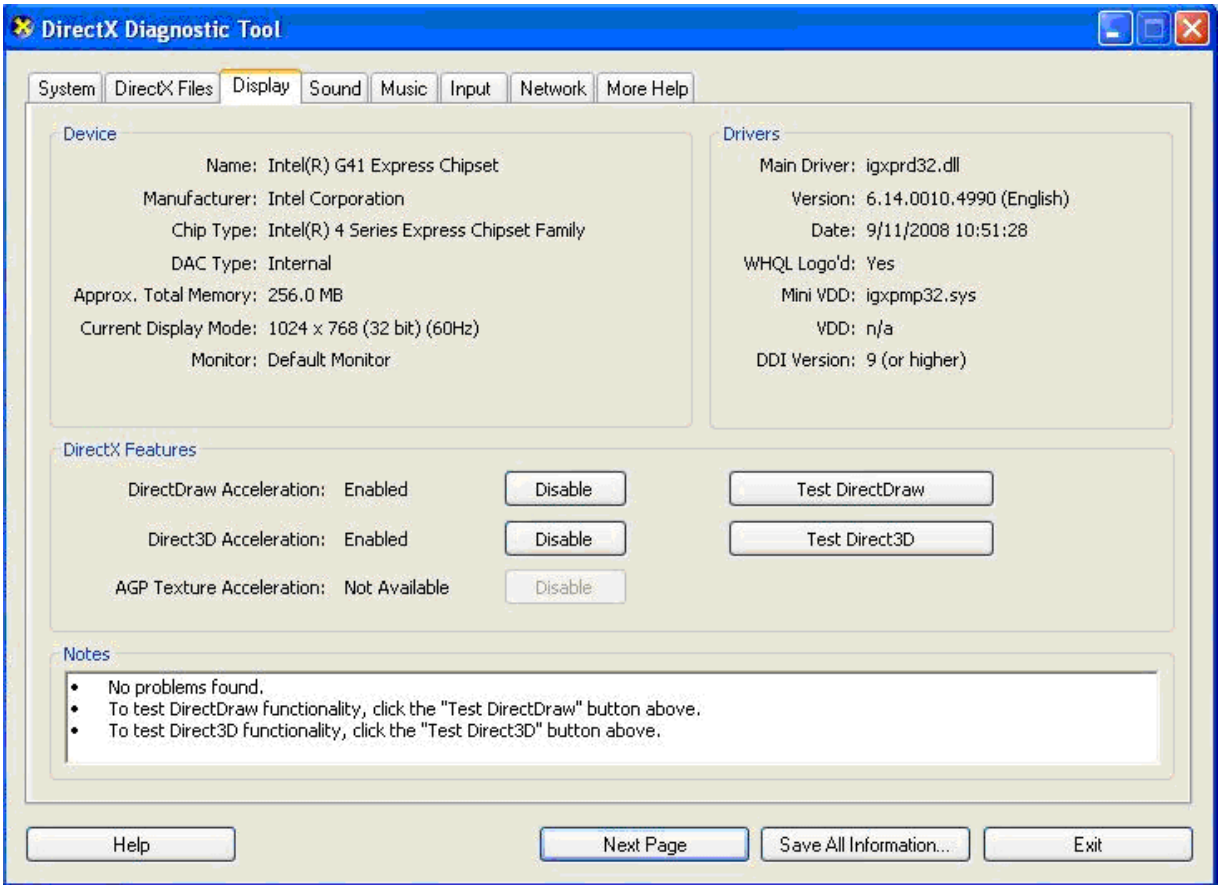

Fig.1.2 Display page

⚠	**Attention:** Do not install universal decoders or decoder packages similar to the universal decoder. Conflicts between the decoders within these packages may cause failure in media playing. Please contact us for special media formats.

1.3 Media Types Supported

Media	**Format or Definition**	**Display Properties**
Picture	bmp, jpeg, ico, png, gif	background color, background picture, background music, transparency, entrance/exit animation, animation speed, displaying scale, displaying duration

Video	wmv, asx, asf, mpeg1, mpeg2, mpeg4, h.264, DVD, VCD, xvid, divx, mov, mp4, rmvb、avc1、QTRLE	background color, background picture, sound volume, displaying scale
Flash	swf	background color, background picture, transparency, displaying scale
Office files	docx, doc, xls, xlsx, txt	displaying scale, displaying duration, transparency, color inversion, duration for each screen content
Audio	mp3, wma	background color, background picture, sound volume, transparency
Complex Text	Text with customized content, font, color and style. Size, background color, foreground color and style for each character are settable.	background color, background picture, transparency, entrance/exit animation, animation speed, duration for one screen of content
Static Text	Text for static display	background color, background picture, transparency, font, font color, line spacing, character spacing, font style, align, display duration
Single Line Text	Text that is arranged in one line and can be de divided into parts to shown on the display at different frames with specified effects.	background color, background picture, transparency, font, font color, font style, entrance/exit effects, duration for one screen of content
Scrolling Text	Text that is shown repeatedly.	background color, background picture, transparency, font, font color, font style, repeating speed, duration
Analog Clock	Clock with panel and hands of hour, minute and second.	background color, background picture, transparency, time mark style and color, date, weekday, lunar calendar, label, duration

Digital Clock	Clock that gives time information of year, month, date, hour, minute and second in digital number.	background color, background picture, transparency, font, font color, font style, year, month, date, am/pm, lunar calendar, hour, minute, second, weekday, duration
Countdown Timer	Clock that gives the remaining time digitally to a specified time point.	background color, background picture, transparency, font, font color, font style, end time point, duration
Weather Info	Weather information including weather, temperature, wind, humidity, air quality, UV	background color, background picture, transparency, font, font color, font style, label, options for weather information, duration
Web Pages	Web pages at world wide web of given website address or local web pages of given path.	Website address, area of a web page to be shown, transparency, duration
External Devices	Standard steam media devices such as USB camera, TV boxes	Video device, audio device, video in, channel, display scale, duration

2 Playlist

In Sun Net Pro, a playlist is the segment of the media to be played on a LED display. Each LED display has one corresponding playlist at one time.

2.1 Edit Playlist

Select **Playlist Mode** from the main interface of Sun Net Pro to accessing the page for playlist editing, as shown in Fig.2.1.1.

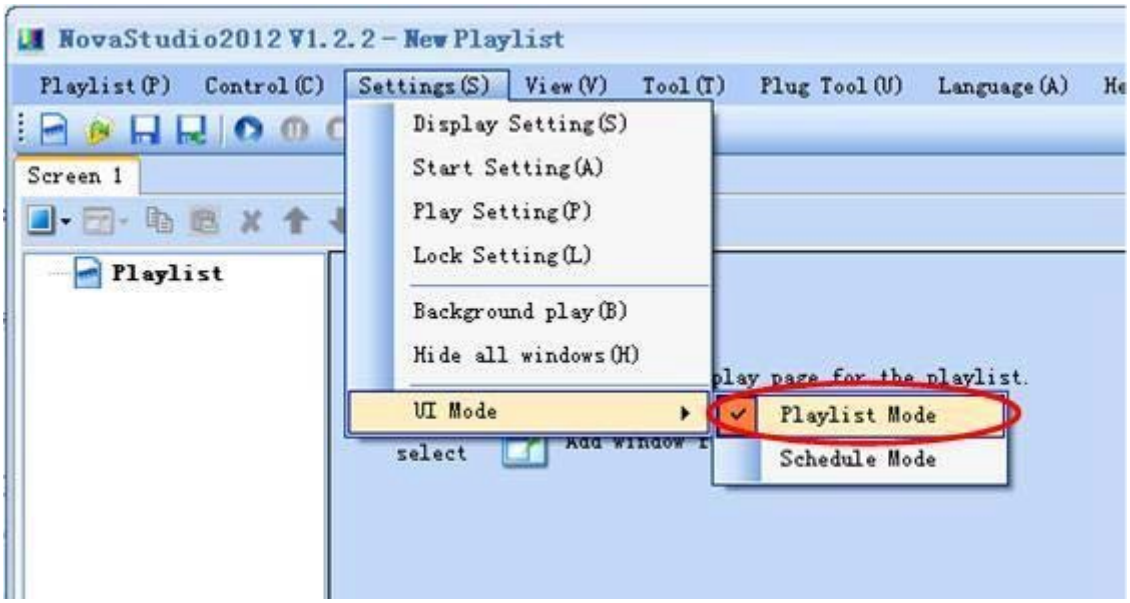

Fig.2.1.1 playlist mode option

Select **Playlist(P)** -> **New** from the main menu to create a new playlist. This can also be done by click the circled button at the toolbar, as shown in Fig.2.1.2.

Note that Sun Net Pro creates an empty playlist when it starts.

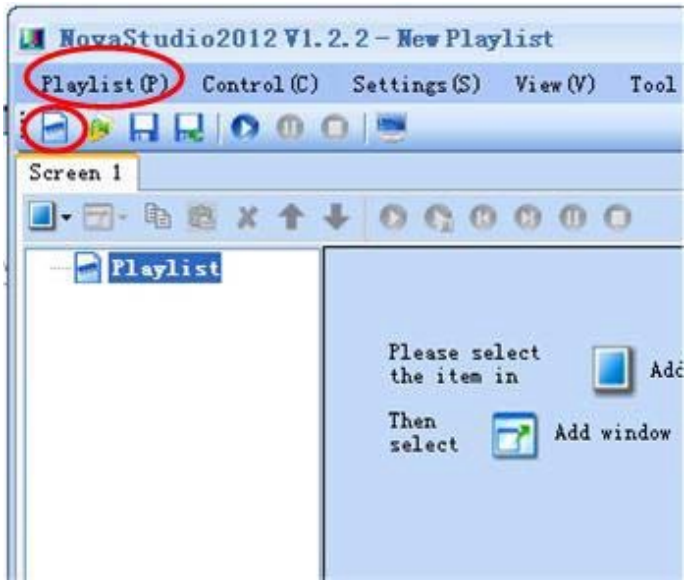

Fig.2.1.2 create a new playlist

2.1.1 Display Window Setting

Before editing a playlist, the mapping area of the current physical LED display on the computer display should be specified first. The position and size of the mapping area can be set through the Display Window Setting dialog shown in Fig.2.1.1.1. To open the Display Window Setting dialog, select **Settings** -> **Display Window** form the main menu.

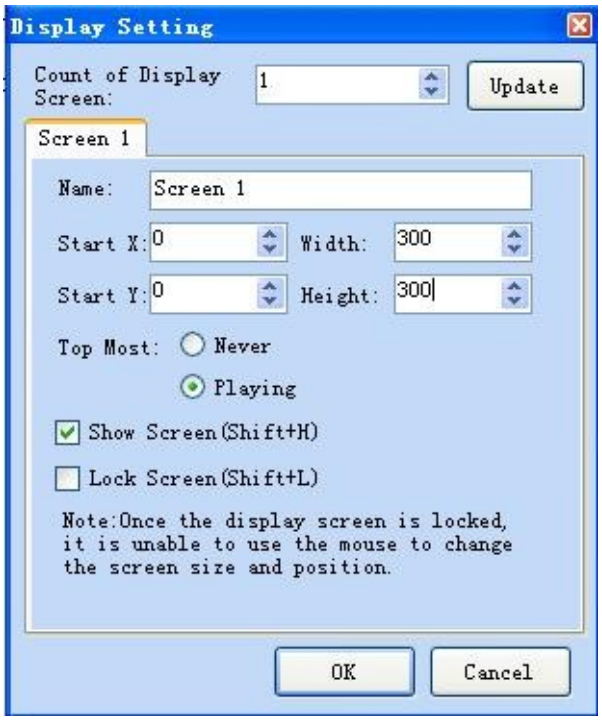

Fig.2.1.1.1 the Display Window Setting dialog

To show the display window (the mapping area) on the computer display, select **Show Screen** on the

Display Window Setting dialog. Cancel the selection to hide the display window. The display window can also be hidden by click on it (set focus on it) and then press Shift+H.

The position and size of the display window can be adjusted by mouse (dragging, pulling and squeezing). But if **Lock Screen** item is selected, this function will be disabled.

For the case of multiple LED displays, enter the number of LED displays in the **Count of Display Screen** box and click **Update**. Property pages will be generated for every LED display. Shown in Fig.2.1.1.2 is the **Display Setting** dialog for three LED displays. Finish the display window setting for the LED displays through these property pages.

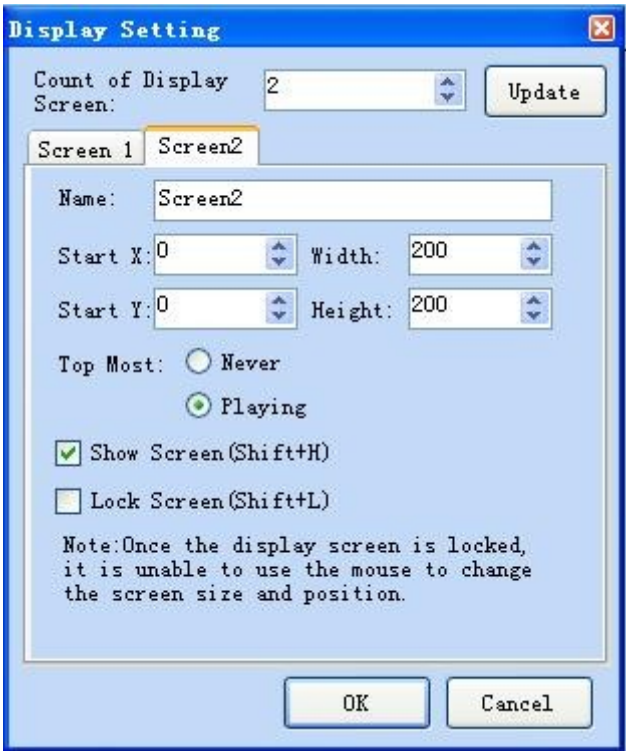

Fig.2.1.1.2 the Display Window Setting dialog for multiple LED displays

2.1.2 Playlist Editing

Definitions and explanation

— **Page**

A page is an area on the computer display screen that is mapped to a LED display for showing visible media sources (such as videos, pictures and text) on the LED display.

— **Window**

A window, also named a play window, is an area of a page in which visible media sources will be show. Note that any window must be affiliated to a page.

— **Basic page**

A basic page can have multiple windows and the layout of the windows can be customized. A playlist can have multiple pages. And of course, the window layouts of these basic pages can be different from each other. The basic pages will be shown in the order they are listed in the playlist. Normally, one basic page is enough for a playlist.

— **Global page**

Global page is a special basic page that it always stays on the front of all other basic pages. In the case that basic pages of different window layout are needed while a window at a fix position is also required (such like that for clock, weather info or scrolling text), putting the fix position window in a global page is the best way for the window layout design of a playlist. But if only one basic page is needed for the playlist, a global page may not be necessary as the fix position window can be set directly to the position required.

— **Common window**

A common window could have its own media sources list and thus different types of media sources can be played in it in the list order.

— **Scrolling Text window**

A window that is only for showing scrolling text.

— **Clock window**

A window that is only for analog or digital clocks.

— **Countdown timer window**

A window that is only for showing information from a time meter.

— **Video device window**

A window that is used only for showing videos from an external video device.

— **Weather window**

A window that is only for showing weather information.

Content of Editing

¾ Page Editing

(1) Create a new page

Click on the circled button in Fig.2.1.2.1 and select the corresponding item from the drop-down menu to add a new basic or global page to a playlist. As show in Fig.2.1.2.1, a basic page is added.

Fig.2.1.2.1 adding a new basic page to a playlist

(2) Properties Setting

The properties of the added basic page can be set through the property panel. Shown in Fig.2.1.2.2 is the property panel.

Fig.2.1.2.2 page property panel

There are three options for Play Type, **Cycle**, **Specific Times** and **Specific Duration**. If Play Type is set to be **Cycle**, this page will be shown repeatedly; if **Specific Duration**, Sun Net Pro will shift to the next page after showing this page for the time specified by **Play Duration**; if **Specific Times**, Sun Net Pro will shift to the next page after all the play windows finish playing their media sources repeatedly for N times (N is specified by **Play Times**).

Area of the page that is not covered by windows will show the background picture or color, as shown in Fig.2.1.2.3.

Fig.2.1.2.3 background with background picture

(3) Delete a page

To delete a specified page, click the circled **Delete** button, as shown in Fig.2.1.2.4.

Fig.2.1.2.4 delete button

Note that if a page is deleted, all windows contained by it will also be deleted.

(4) Move a page

The basic pages of a playlist will be played according to the order they are list (from up to down). The arrow buttons (as circled in Fig.2.1.2.5) can be used to modify the list order, and thus change the play order or the basic pages.

Fig.2.1.2.5 arrow buttons for changing the basic pages list order

(5) Duplicate a page

To duplicate a page, specify the page to be duplicated and click **Copy** button, and then paste it to the list position as required. The **Copy** button and **Paste** button are circled in Fig.2.1.2.6.

Fig.2.1.2.6 the **Copy** button and the **Paste** button

¾ Window Editing

(1) Create a new window

To add a new window into a page, click the circled button in Fig.2.1.2.7 and select an item from the drop-down menu. As shown in Fig.2.1.2.7, a common window will be added to the page after the add operation.

Fig.2.1.2.7 add a new common window to a page

The newly added window will be on focus and also shown on the computer display after the add operation, as shown in Fig.2.1.2.8.

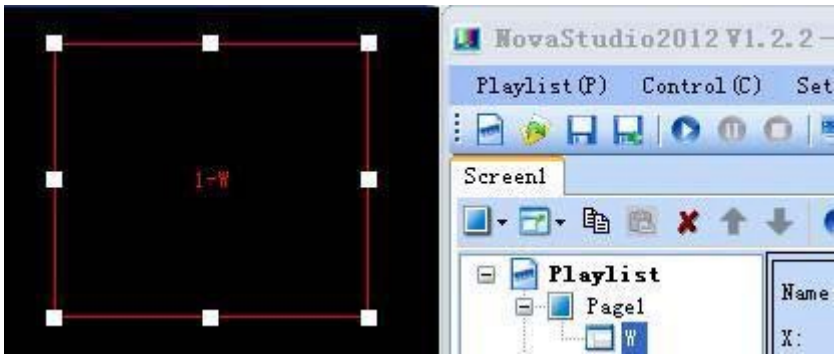

Fig.2.1.2.8 newly added common window

(2) Window position and size setting

The position and size of a newly added window may need to be reset as the default values are unlikely to meet the requirements. These values can be reset directly by using the tool provided in Sun Net Pro, as shown in Fig.2.1.2.9. A more intuitive way to reset these values is to use the mouse. Click on the window to put focus on it and then set its position and size by drawing, pulling and squeezing, as shown in Fig.2.1.2.10. The arrow keys and their combination with Shift keys can also be used for the position and size setting of a window.

Fig.2.1.2.9 tools for window position and size setting

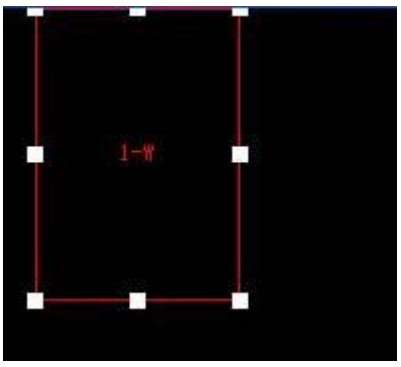

Fig.2.1.2.10 a focused common window

To show all the windows of a page, just select the page from the page list. This could be very helpful for windows layout adjustment.

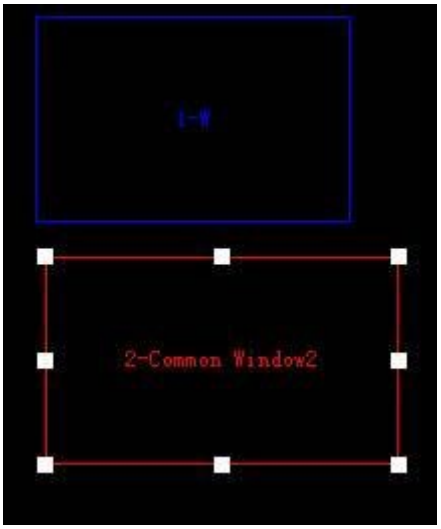

Fig.2.1.2.11 showing all windows of a page

(3) Delete a window

To delete a specified window, click the circled **Delete** button, as shown in Fig.2.1.2.12.

Fig.2.1.2.12 deletes a window

(4) Move a window

For overlapped windows in the same page, the one at front will cover those under it.

Suppose a common window and a clock window is added to a page at the same position of (0, 0, 200, 200). The common window will cover the clock window when this page is on shown if the common window is in front of the clock window in the window list. To avoid the clock window being covered by the common window, move it to the front of the common window or move the common window to the back of it. The circled arrow buttons in Fig.2.1.2.13 are use to move a window forward or backward.

Fig.2.1.2.13 arrow buttons for moving a window forward or backward

The result of a transparent clock window on top of a common window (showing a picture) is as Fig.2.1.2.14.

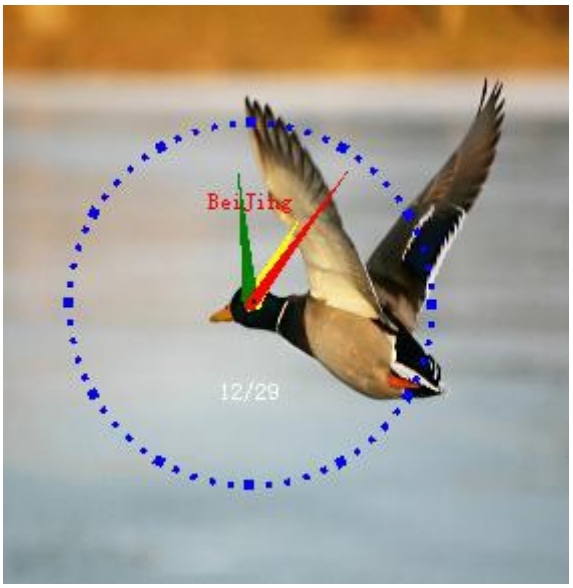

Fig.2.1.2.14 result of a overlapping transparent clock window on a common window

(5) Duplicate a window

To duplicate a window, select the source window, click the Copy button and then click the Paste. Circled in Fig.2.1.2.15 are the Copy button and the Paste button.

Fig.2.1.2.15 the Copy button and the Paste button

¾ **Media Source Editing**

Media source editing will be illustrated with a common window as an example.

(1) Add a media source

Media sources of a media type that is supported by Sun Net Pro can be added to a common window for showing. Refer to **1.3 Media Types Supported** for information about the supported media types. Click the circled button in Fig.2.1.2.16 to access the drop-down menu of media types. Select the corresponding item to add a media source of that type to the common window.

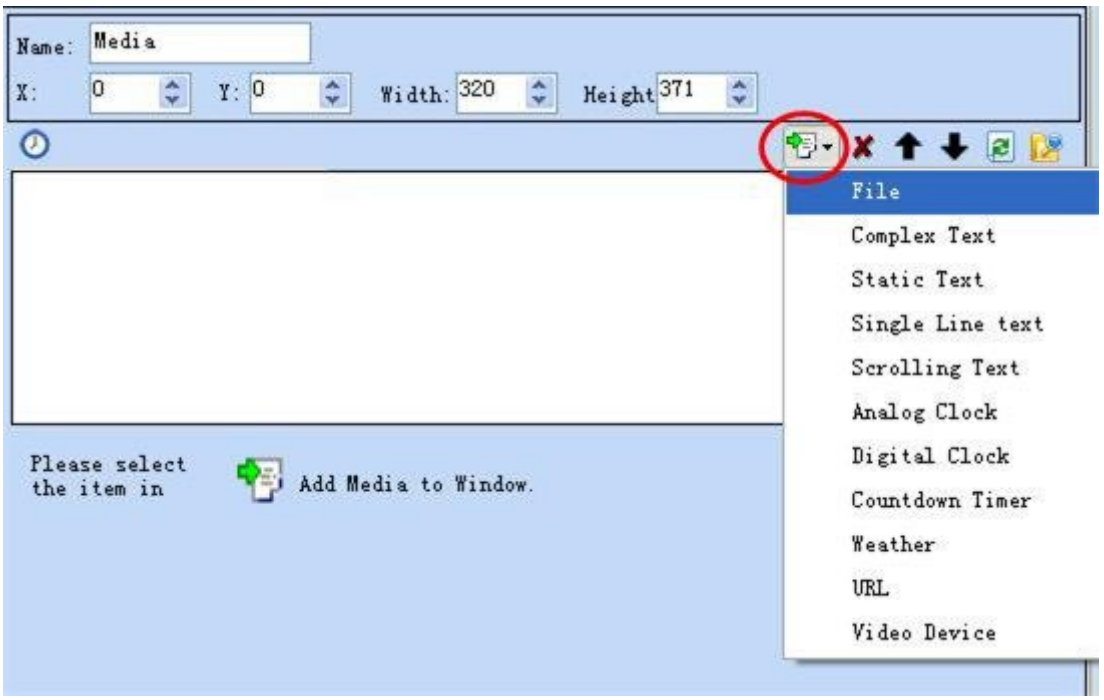

Fig.2.1.2.16 the drop-down menu of media types

(2) Media source properties setting

Properties of a media source can be set is related to the type of the media source. Refer to **1.3 Media Types Supported** for information about the settable properties of a certain type of media. Settable properties of the selected media item in the media source list will be shown on the property panel, as shown in Fig.2.1.2.17. Modify the property settings of a media item through the property panel if required.

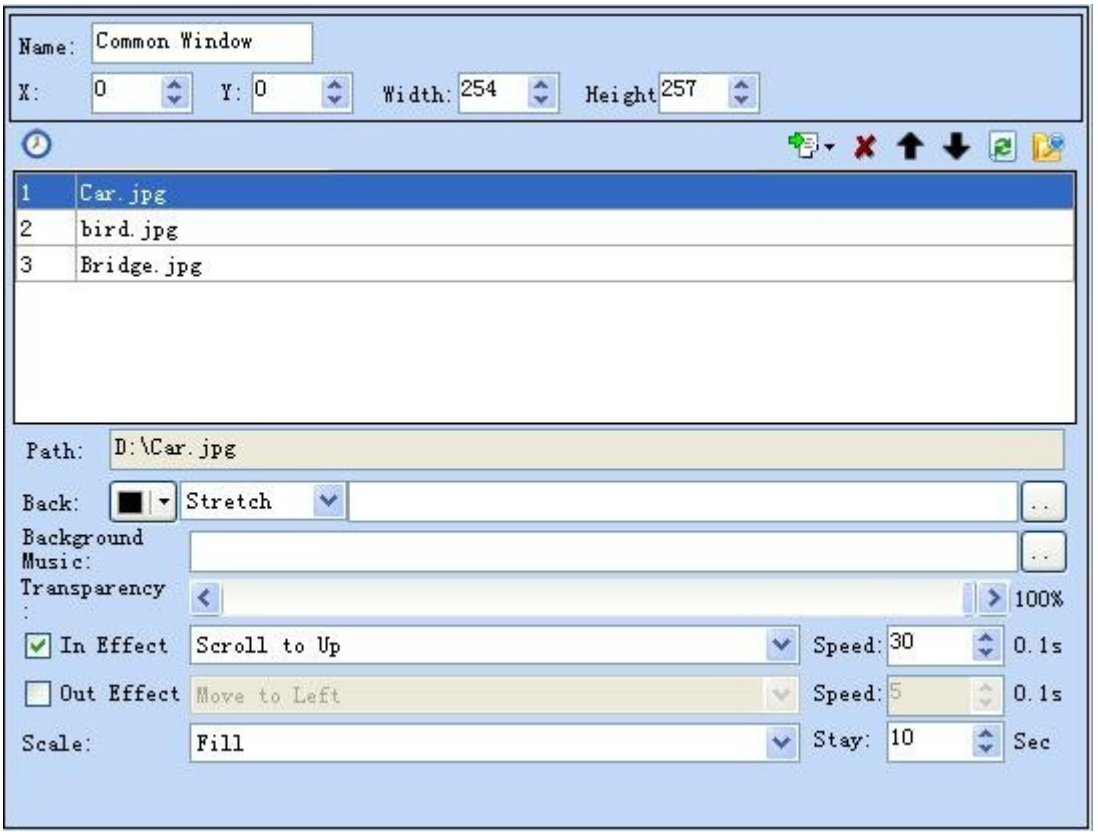

Fig.2.1.2.17 properties of the selected media item

(3) Preview a media source

Click a media item in the media list to preview it in the current window (in this case, the current window is a common window). Previewing will be automatically stopped after the media source is played for once. New property settings will take effect immediately even they are set during the previewing. The first media source in the media list of a window will be automatically previewed when the window is selected.

¾ **Move a media item**

Use the buttons to move a media item in the media list forward or backward and thus change the play order of the media sources. Mouse can also be used to move media items. The red line in Fig.2.1.2.18 indicates the new position of the mouse item dragged by the mouse.

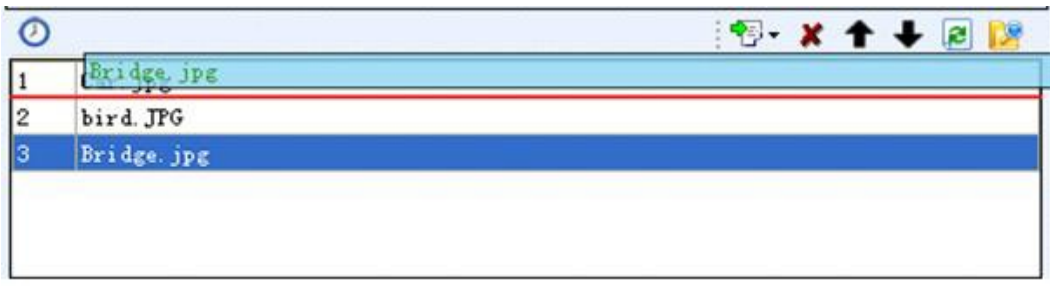

Fig.2.1.2.18 move a media item by mouse

¾ **Save and backup**

Use the **Save** or **Save as** button to save the current playlist to a hard disk. These two buttons are circled in Fig.2.1.2.19.

Fig.2.1.2.19 the Save and Save as buttons

Select **Playlist** -> **Backup** in the main menu to make a copy for the playlist and all the media sources related to the playlist. The dialog for playlist backup setting is as Fig.2.1.2.20.

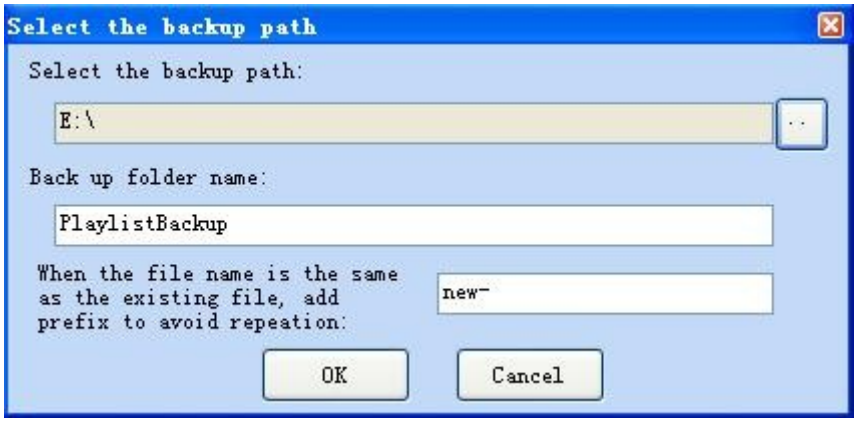

Fig.2.1.2.20 playlist backup setting dialog

The backup operation will generate a copy of the current playlist and all related media sources to the specified folder. An progress indicator will be shown during the backup operation, as shown in Fig.2.1.2.21.

Fig.2.1.2.21 backup operation progress

¾ **Other operations**

Click button to apply the property settings of the current media source to all other media sources of the same media type.

Use buttons to change the media sources play order of the current window.

Use to seach for media sourses of which the names contan the search terms.

Get the total time of selected media.

2.1.3 Shortcut Menu

1. Shortcut menu of screen

Click the right mouse button on the **screen Node**, a shortcut menu would be shown, as shown in Fig.2.1.3.1.

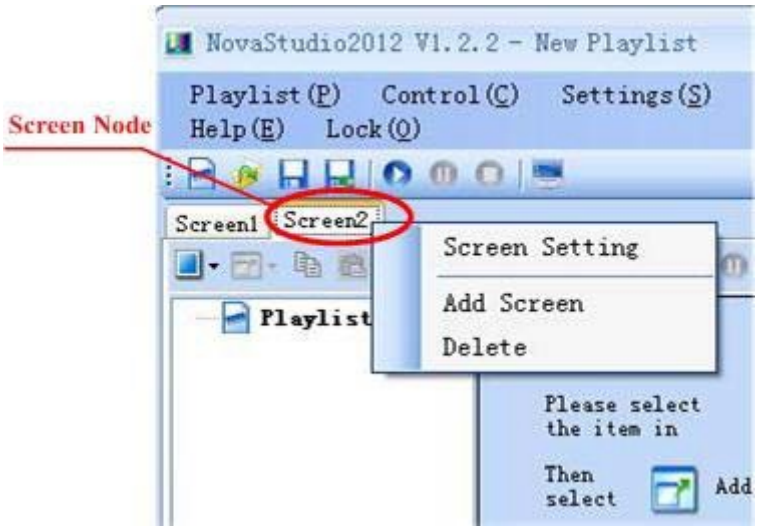

Fig.2.1.3.1 shortcut menu of screen

— **Screen Setting:** Show the "Display Setting" dialog to set the location, size and other parameters of screen;

— **Add Screen:** Add one new screen after the current screen;

— **Delete:** Delete the current screen. If there is only one screen, this item is not visible.

2. Shortcut menu of playlist

Click the right mouse button on the playlist node, or click on the screen when the playlist node is selected, a shortcut menu would be shown, as Fig.2.1.3.2 and Fig. 2.1.3.3.

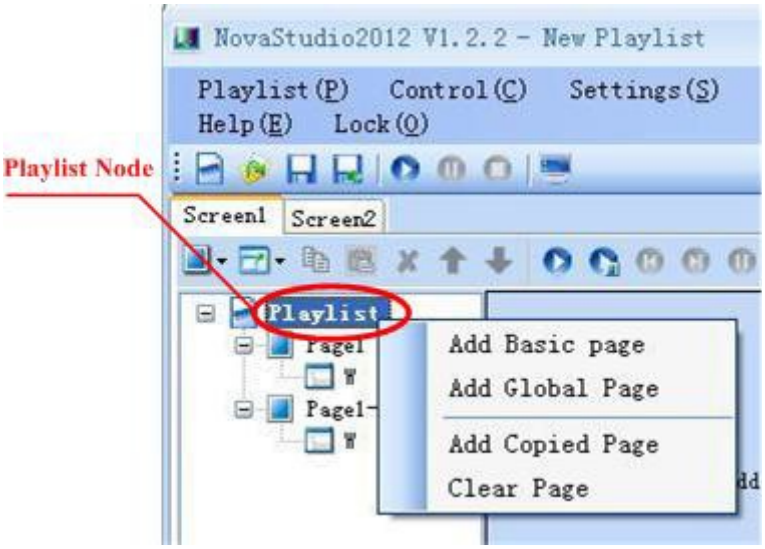

Fig.2.1.3.2 shortcut menu of playlist

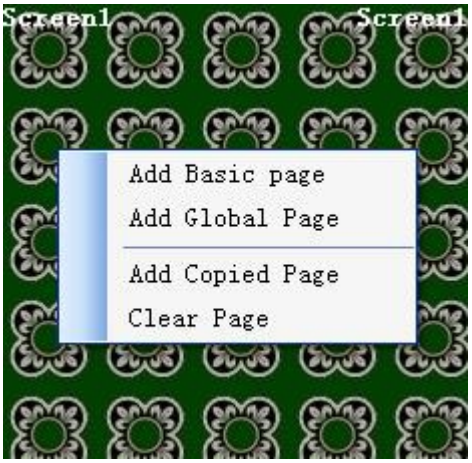

Fig.2.1.3.3 shortcut menu of playlist

Each menu item functions as follows:

— **Add Basic Page**: Add one basic page to playlist;

— **Add Global Page:** Add one global page to playlist;

— **Add Copied Page**: If has copied one existing page, click this item, you can add one page to playlist which is as same as the copied one;

— **Clear Page**: Delete all the pages(including windows and media).

3. Shortcut menu of page

Click the right mouse button on the **page node,** or click on the **Non-window area** of screen when the **playlist node** or **window node** is selected, a shortcut menu would be shown, as Fig.2.1.3.4 and Fig. 2.1.3.5.

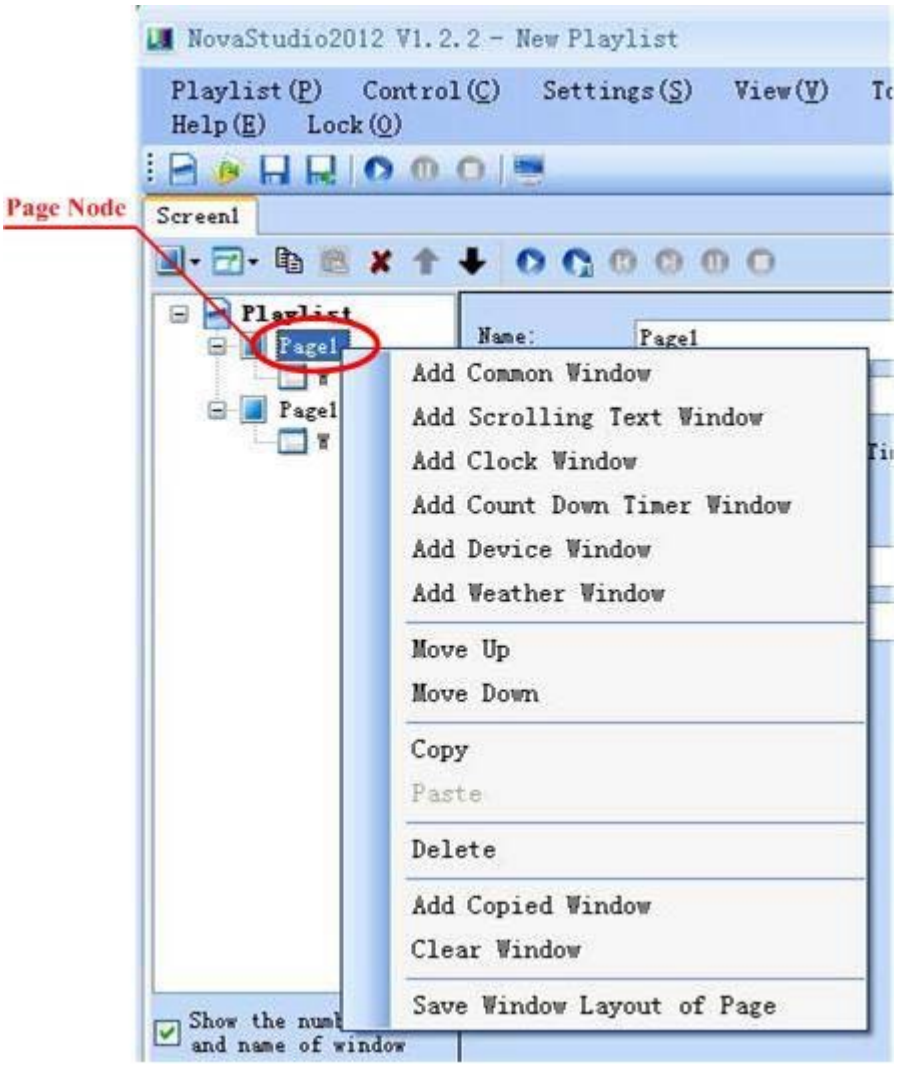

Fig. 2.1.3.4 shortcut menu of page

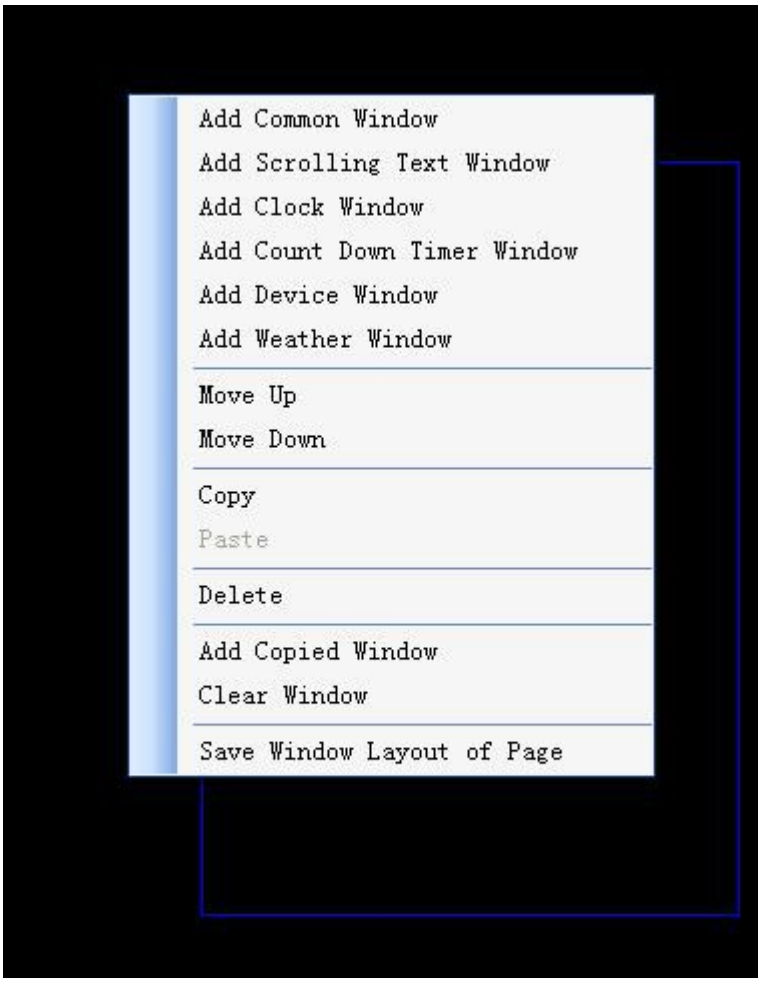

Fig. 2.1.3.5 shortcut menu of page

Each menu item functions as follows:

- **Add Common Window:** Add a common window to the current page;
- **Add Scrolling Text Window:** Add a scrolling text window to the current page;
- **Add Clock Window:** Add a clock window to the current page;
- **Add Count Down Timer Window:** Add a count down timer window to the current page;
- **Add Device Window:** Add a device window to the current page;
- **Add Weather Window:** Add a weather window to the current page;
- **Move Up:** Move up the current selected page;
- **Move Down:** Move Down the current selected page:
- **Copy:** Copy the current page(including windows and media);
- **Paste:** If has copied an existing page, this item is enabled. Click it, you can add one page which is as same as the copied one after the current page;
- **Delete:** Delete the current page including windows and media;

— **Add Copied Window:** If has copied an existing window, this item is enabled. Click it, you can add one window which is as same as the copied one to the current page;

— **Clear Window:** Delete all the windows of the current page;

— **Save Window Layout of Page:** Save the window layout of the current page. If saved, when you add a new page, you can select the saved layout.

4. Shortcut menu of window

Click the right mouse button on the **window node,** or click on the window on the screen, a shortcut menu would be shown, as Fig.2.1.3.6 and Fig. 2.1.3.7.

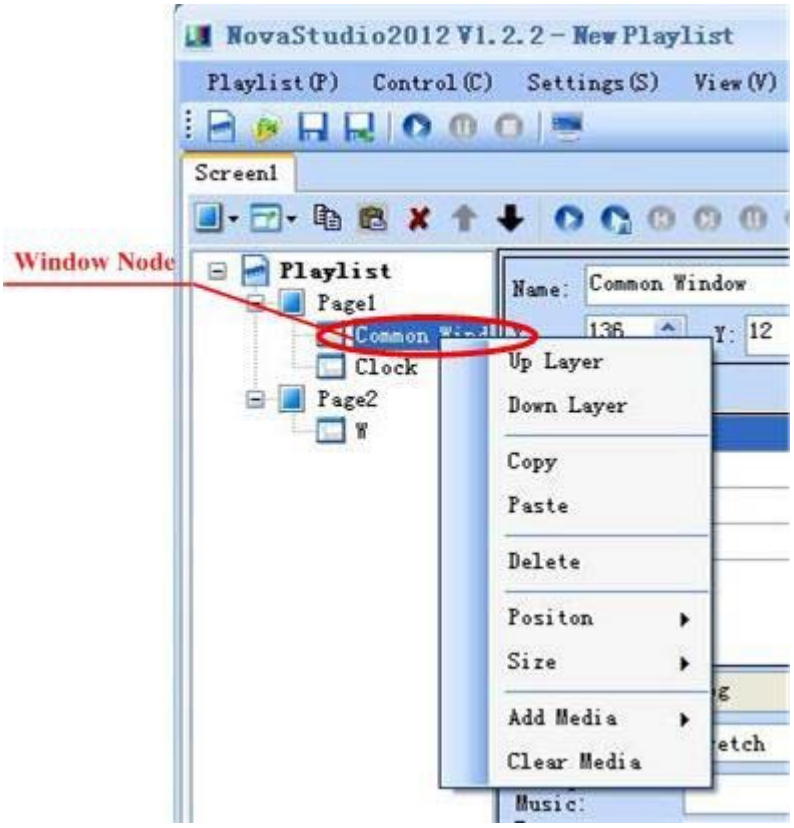

Fig. 2.1.3.6 shortcut menu of window

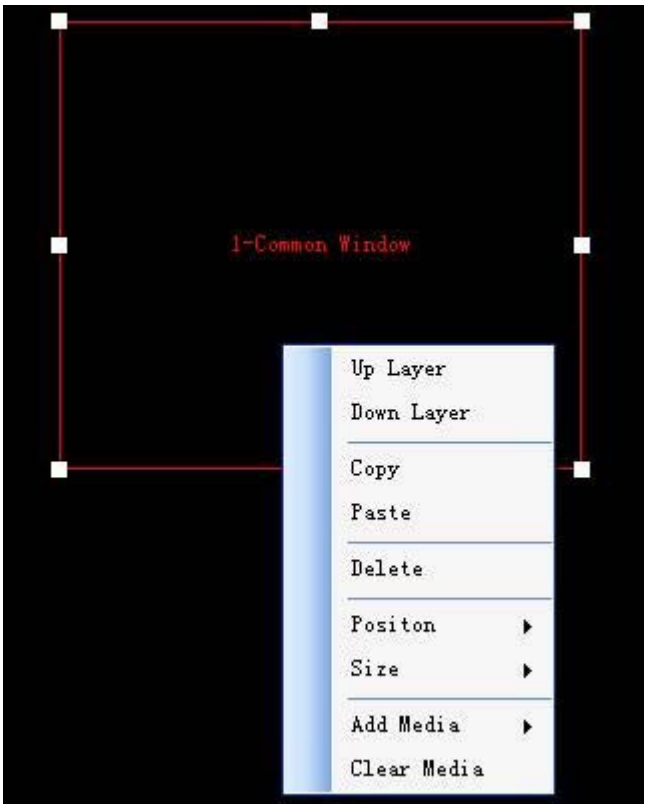

Fig. 2.1.3.7 shortcut menu of window

Each menu item functions as follows:

— **Up Layer:** Move forward the display position of the current window;

— **Down Layer:** Move backward the display position of the current window;

— **Copy:** Copy the current window(including media);

— **Paste:** If has copied an existing window, this item is enabled. Click it, you can add one window which is as same as the copied one after the current window;

— **Position:** Adjust the x and y position of the current window;

— **Size:** Adjust the width and height of the current window;

— **Add Media:** Add new media to the media list of the current window. If the current window is not common window, it is not visible;

— **Clear Window:** Delete all the media of the current window. If the current window is not common window, it is disabled.

5. Shortcut menu of media list

Click the right mouse button on the black area of the media list, a shortcut menu would be shown, as Fig.2.1.3.8.

"Add Copied Media" is used to add copied media to the media list.

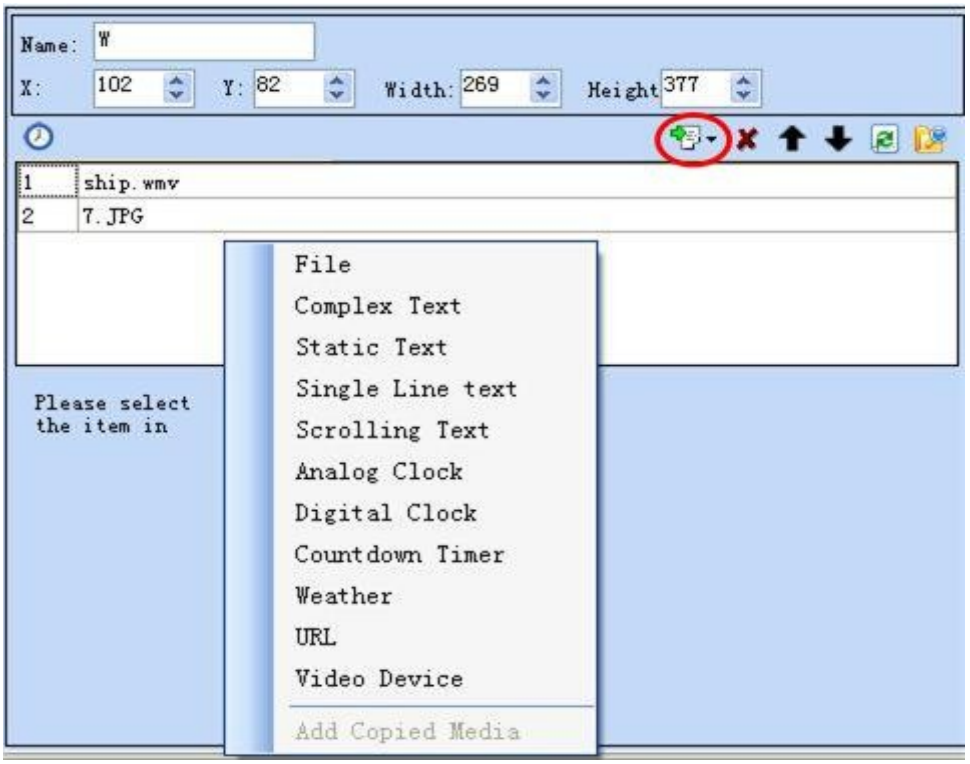

Fig.2.1.3.8 shortcut menu of media list

Click the right mouse button on the selected media, a shortcut menu would be shown, as Fig. 2.1.3.9.

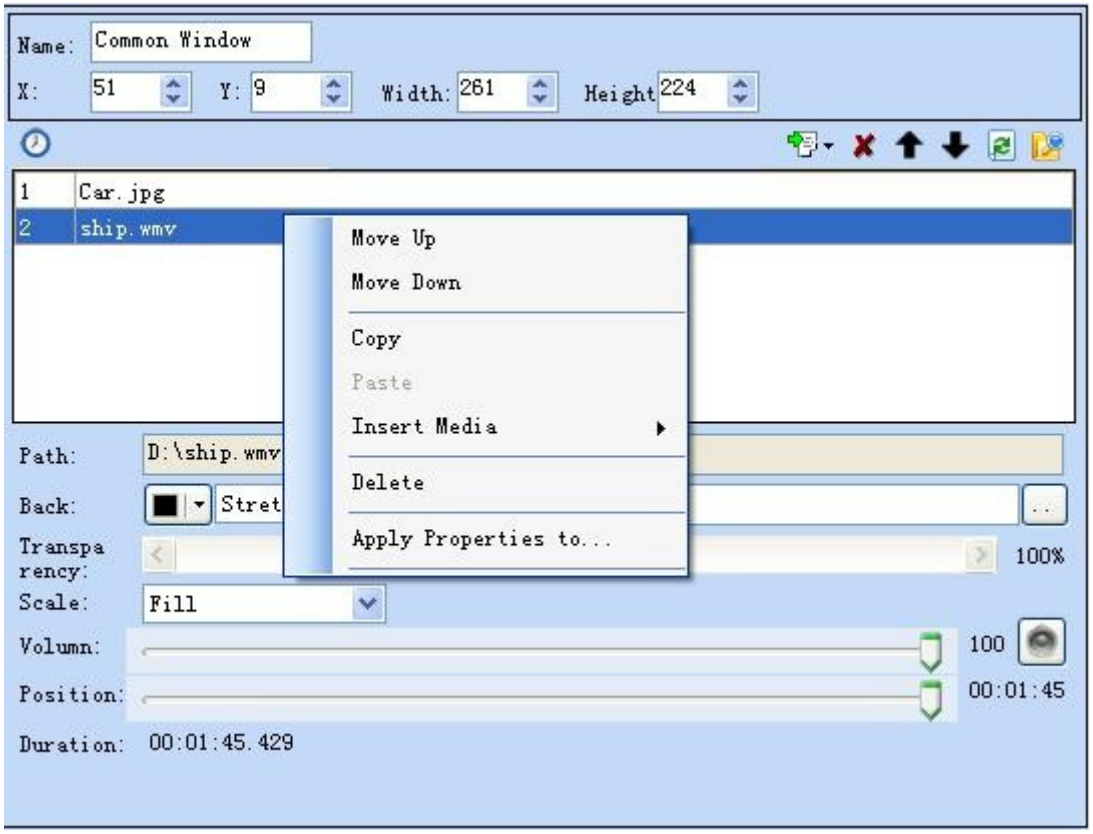

Fig.2.1.3.9 shortcut menu of media

Each menu item functions as follows:

Move Up: Move up the selected media;

Move Down: Move down the selected media;

Copy: Copy the selected media;

Paste: Insert the copied media after the selected media position;

Insert Media: Insert new media after the selected media position;

Delete: Delete the selected media;

Apply Properties to…: apply the property settings of the current media source to all other media sources of the same media type.

2.2 Play Playlist

After editing, the playlist is ready for use. Use the play, pause and stop buttons at the toolbar, as circled in Fig.2.2.1, for play control of all the playlists for all LED displays connected to Sun Net Pro.

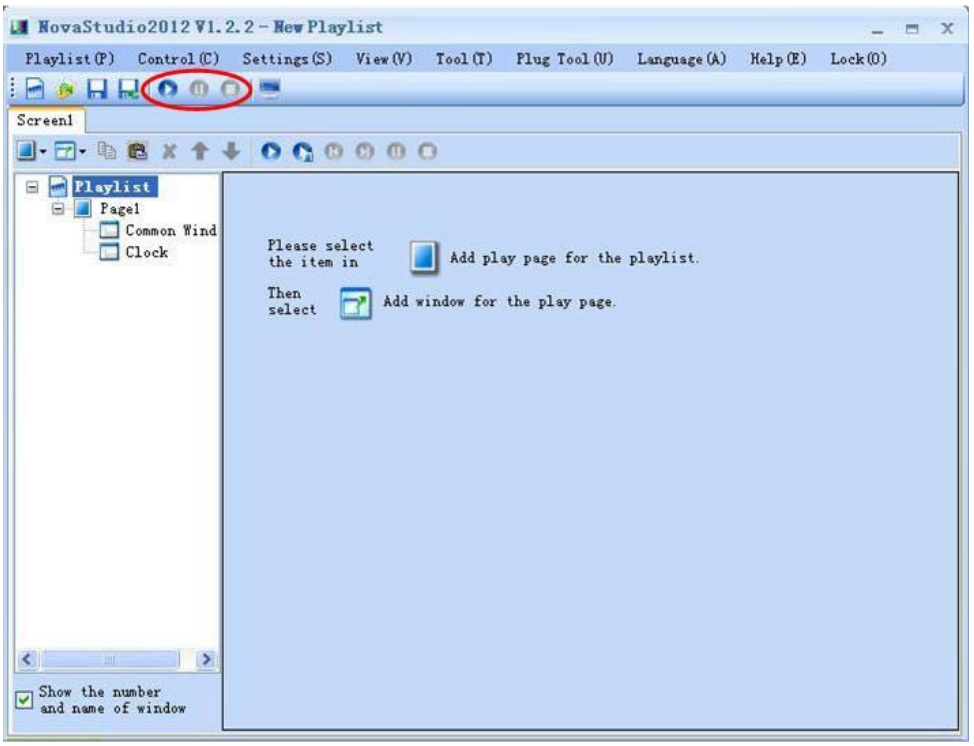

Fig.2.2.1 play control buttons that control all playlists

On playlist editing page of every LED display, there is also a set of playlist play control buttons, as shown in Fig.2.2.2. It is for the playlist of the corresponding LED display only.

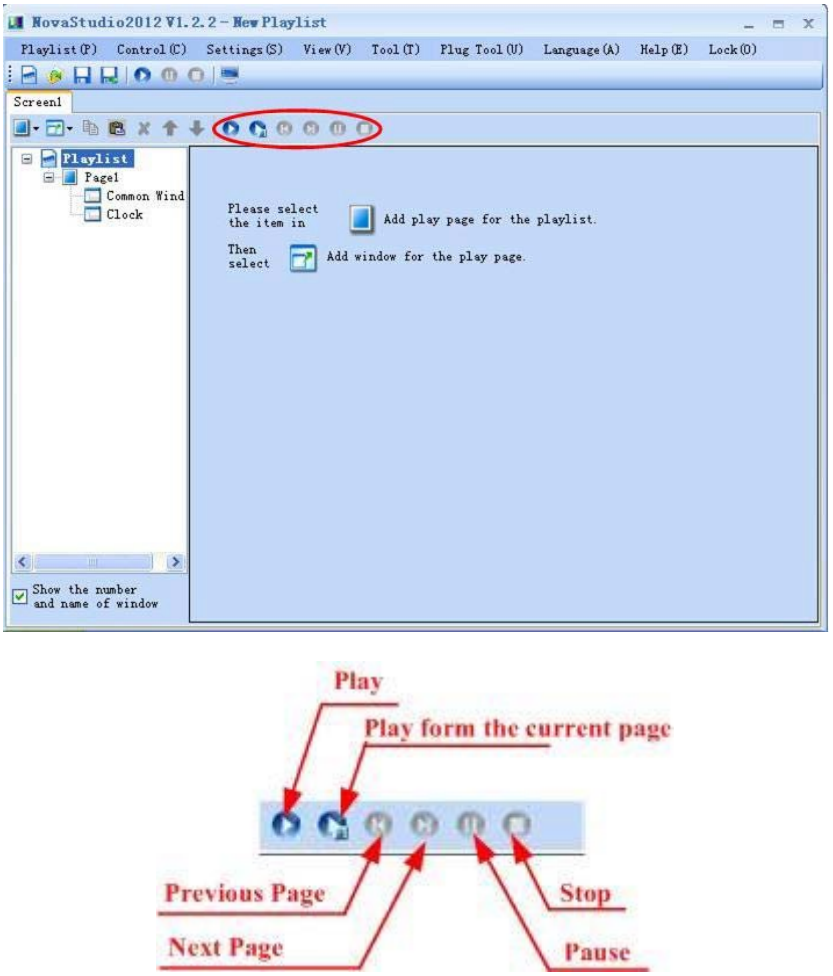

Fig.2.2.2 playlist play control buttons for the current LED display

After a playlist is being played, Sun Net Pro will switch the editing page to the play control page, as shown in Fig.2.2.3. The play control page includes three sub-pages, the Play Information sub-page, the Immediate Notification sub-page and the Emergency Play sub-page. The introduction of these three sub-pages will be given in the following sections.

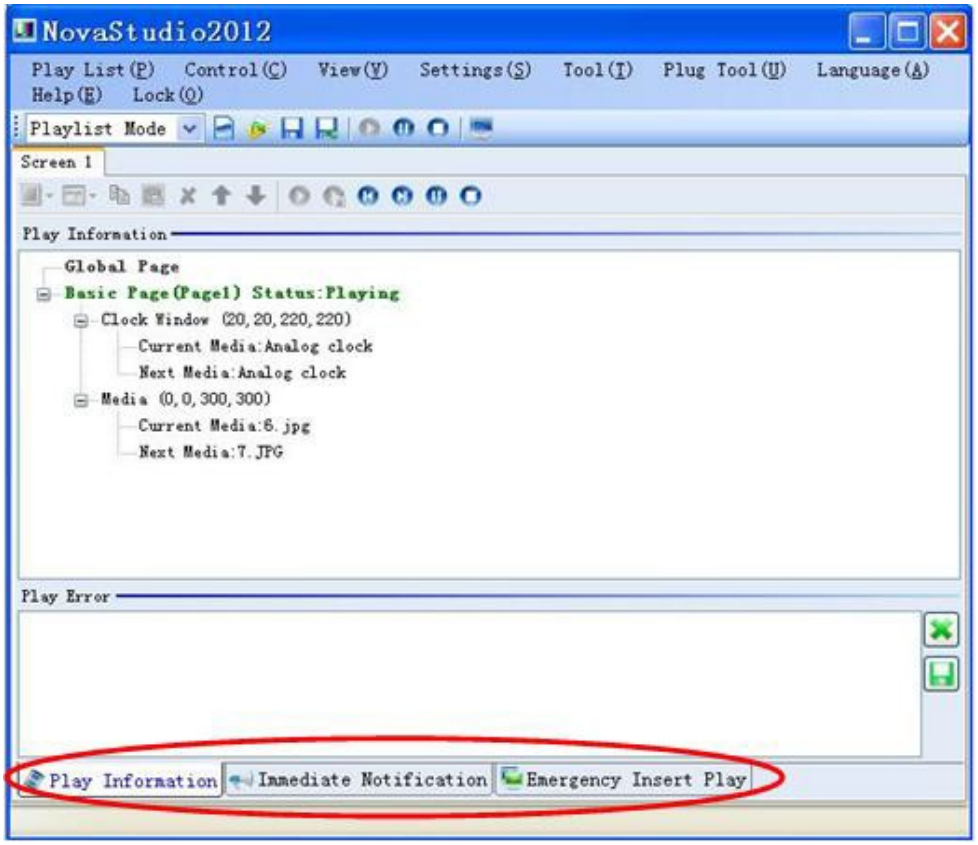

Fig.2.2.3 the play control page

2.2.1 Play Information Sub-page

A Play Information sub-page contains two panels, the Play Information panel and the Play Error panel.

Information about the current media play operation will be shown in the Play Information Panel, as shown in Fig.2.2.1.1. This includes the page info, window info and the current and next media sources of each window. In this case, there are two pages included in the playlist, a global page and a basic page named Page 1. The basic page is being played. In the basic page, there are two windows, a clock window, a and a common window name Media. The clock window is at position (20, 20) and of size (220, 220). It is showing an analog clock. Its next media is also an analog clock. The Media window is showing a picture named 7.jpg and it will show 6.jpg next.

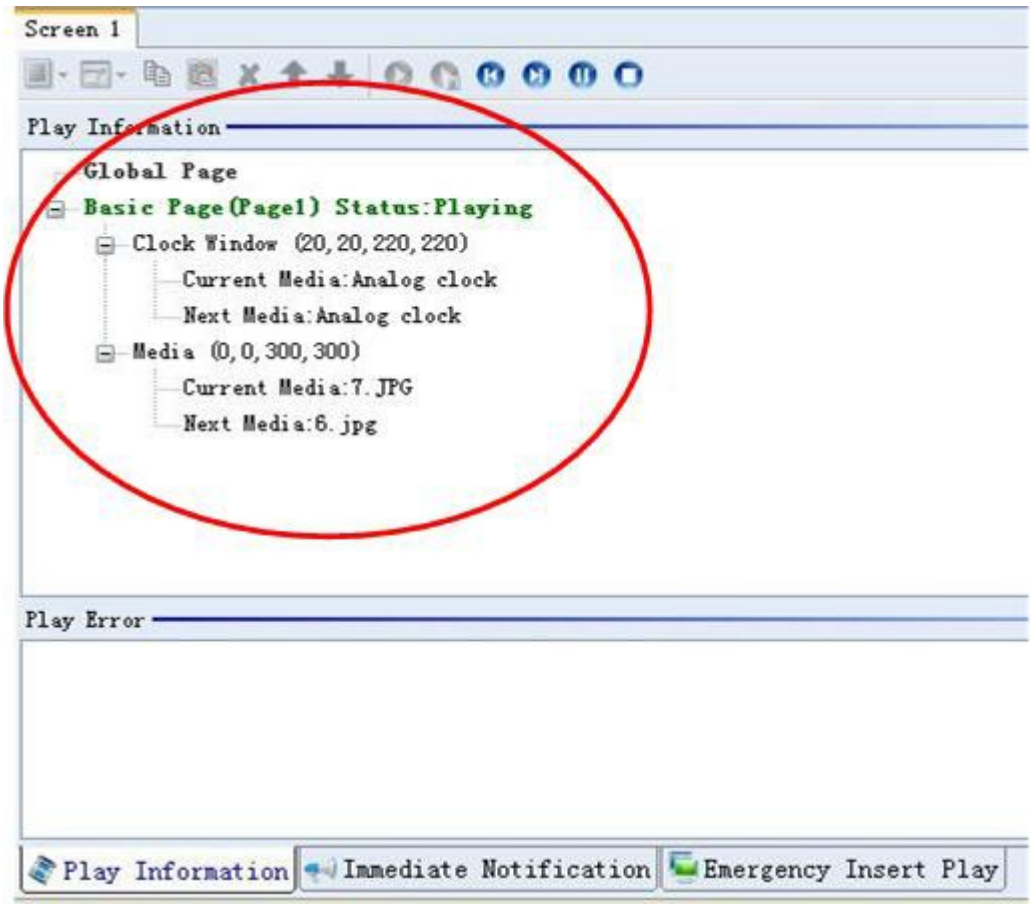

Fig.2.2.1.1 media play information

If any error occurs during the process of playlist play, messages will be shown in the Play Error panel in red. For example, if 6.jpg and 7.jpg do not exist, the messages will be like those shown in Fig.2.2.1.2.

Fig.2.2.1.2 error messages shown in the Play Error panel

2.2.2 Immediate Notification Sub-page

The Immediate Notification sub-page is for publishing notifications during the play process of a playlist. Shown in Fig.2.2.2.1 is the interface of the Immediate Notification sub-page. It contains a Notification List panel, a Notification Error panel and functional buttons for Notification editing and play control.

Fig.2.2.2.1 the Immediate Notification sub-page

¾ **Add a notification**

A notification needs to be added to the notification list before it is played. Click **Add** button to access the Add Notification dialog as shown in Fig.2.2.2.2.

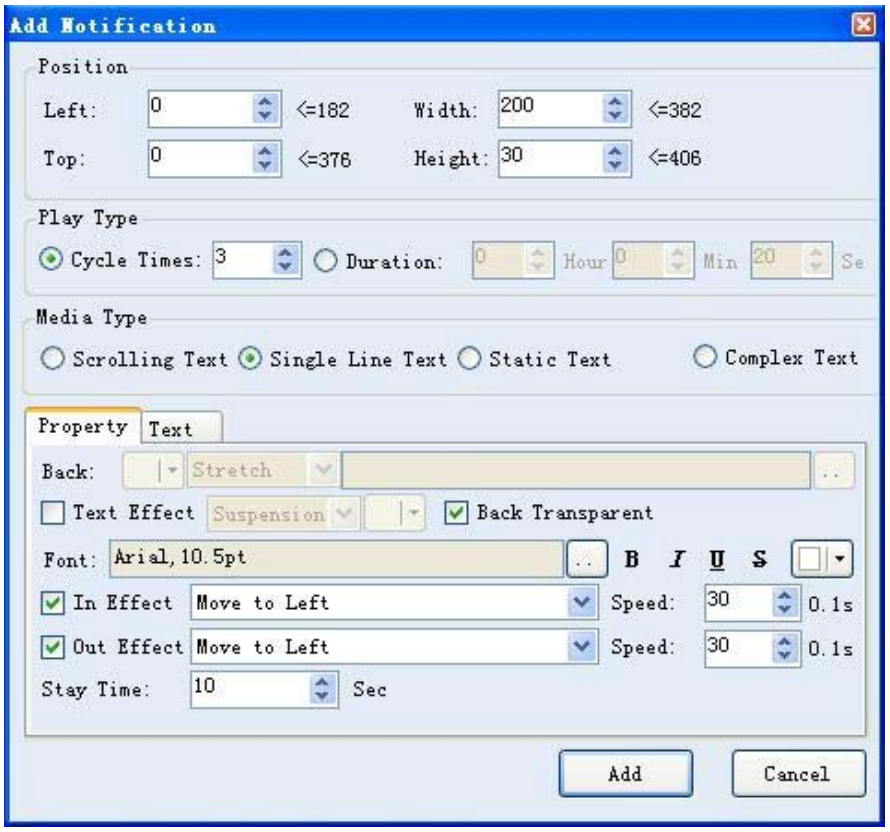

Fig.2.2.2.2 Add Notification dialog

Properties of a notification such as position, play type, media type and content can be set through this Add Notification page. Click Add to add the edited notification to the list. Shown in Fig.2.2.2.3 is a notification in the notification list.

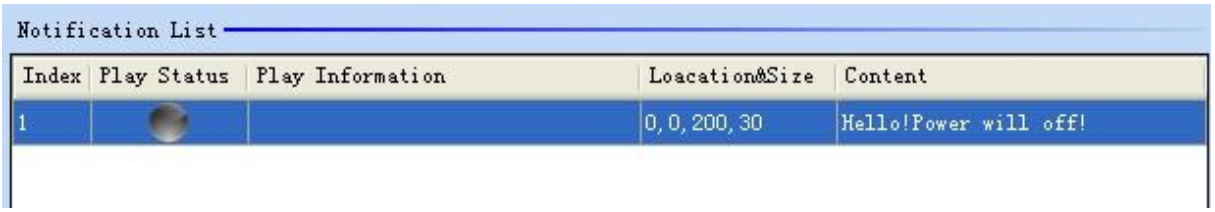

Fig.2.2.2.3 the notification list

¾ **Show Notifications**

To show a notification on the LED display, select it form the notification list and click **Play** button. The play status of this notification will became green from gray. And the play information of this notification will also be shown in the Notification List panel. Shown in Fig.2.2.2.4 and Fig.2.2.2.5 is an example for notifications being played.

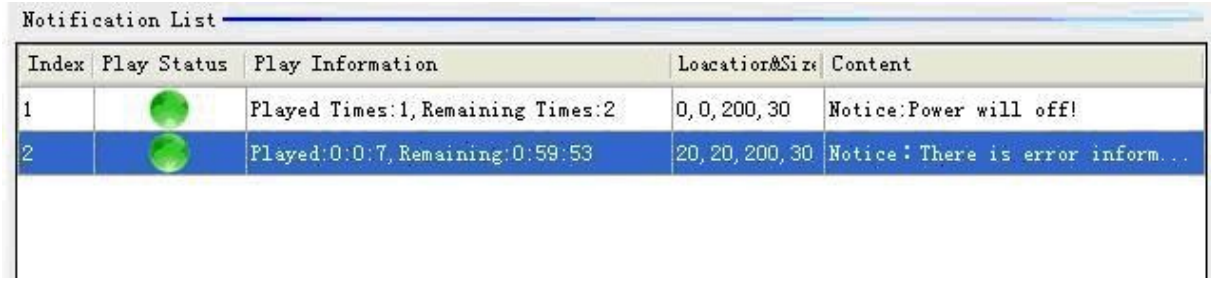

Fig.2.2.2.4 notifications in the list

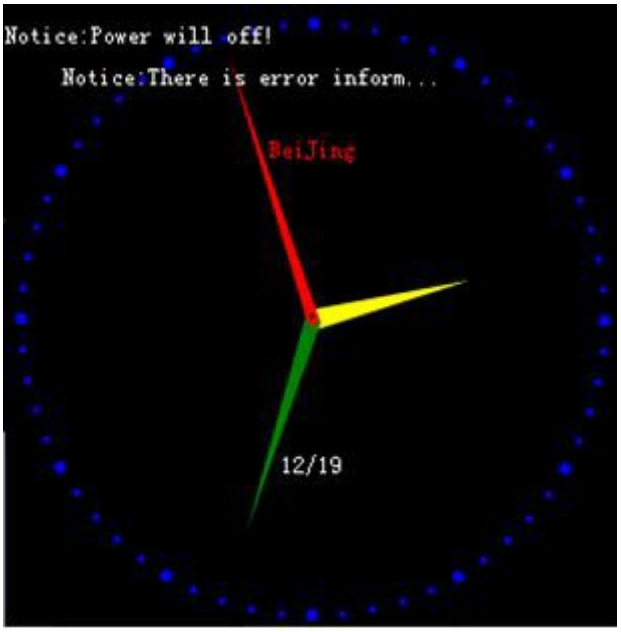

Fig.2.2.2.5 notifications shown on the LED display

Use the **Stop** button to stop showing the selected notification. The **Stop All** button is for stopping all the notifications being shown.

To modify a notification in the list, select it and click Modify. **Note that notifications being shown are not modifiable.**

Use the Delete button to delete a selected monification.

Note that the maximum count of notifications is 6 in the notification list.

Messages will be shown in the Notification Error panel if any error occurs during the play process of the notifications.

2.2.3 Emergency Play Sub-page

In the situation that certain media or playlist needs to be shown or play urgently, use the Emergency Play sub-page to stop the current playing of playlists and start the urgent media/playlist play. Shown in Fig.2.2.3.1 is the interface of the Emergency Play sub-page.

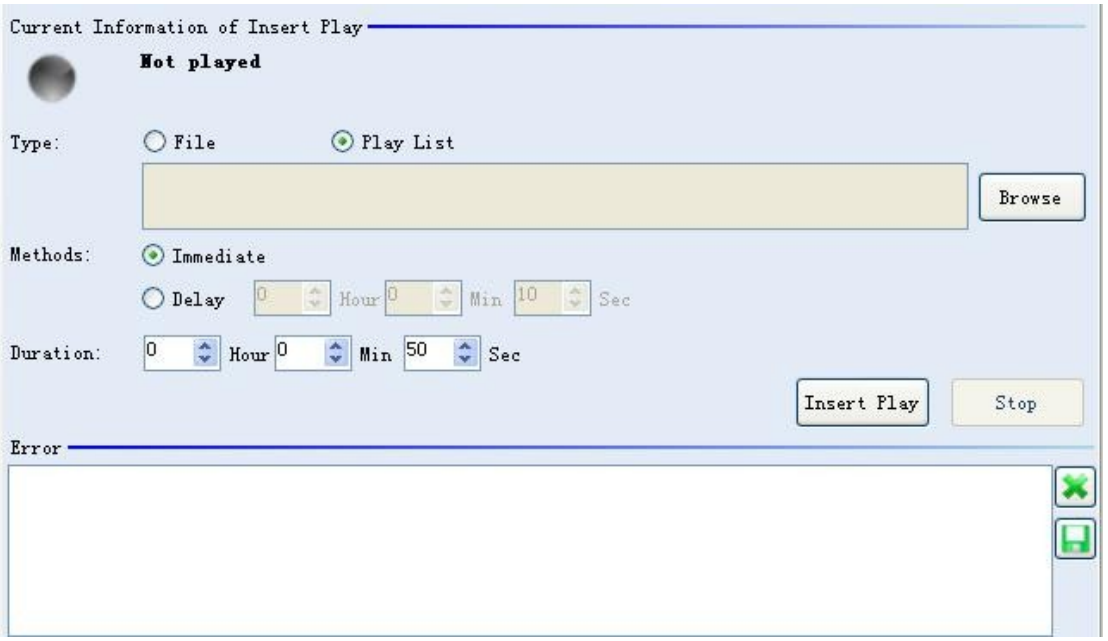

Fig.2.2.3.1 the Emergency Play sub-page

¾ **Emergency play of media files**

Select **File** from the Emergency Play sub-page interface as shown in Fig.2.2.3.1 and click **Browse**. On the pup up dialog, as shown in Fig.2.2.3.2, select the media file to be played. It could be a file of media type of video, Flash, audio, picture or any other type supported by Sun Net Pro. Properties of playing that is how the selected files are to be played should be set as well, such as background color, background

picture, transparency, scale, volume, position and duration. After all these settings, click **Ok** to finish setting.

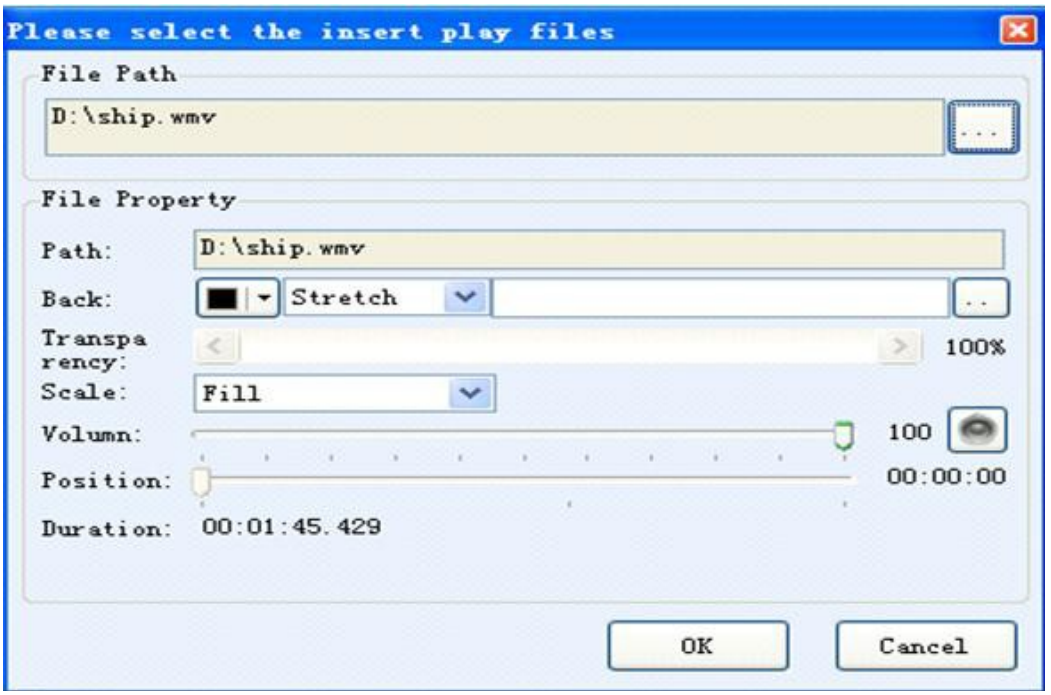

Fig.2.2.3.2 file setting dialog for Emergency Play

Before begins the emergency play, Methods of playing need to be specified. Select Immediate to start emergency play immediately. And emergency play will be postponed for the time set for duration if **Duration** is selected. Click **Insert Play** to active emergency play. Examples for immediate and postponed emergency play are shown in Fig.2.2.3.3 and Fig.2.2.3.4.

Fig.2.2.3.3 immediate emergency play

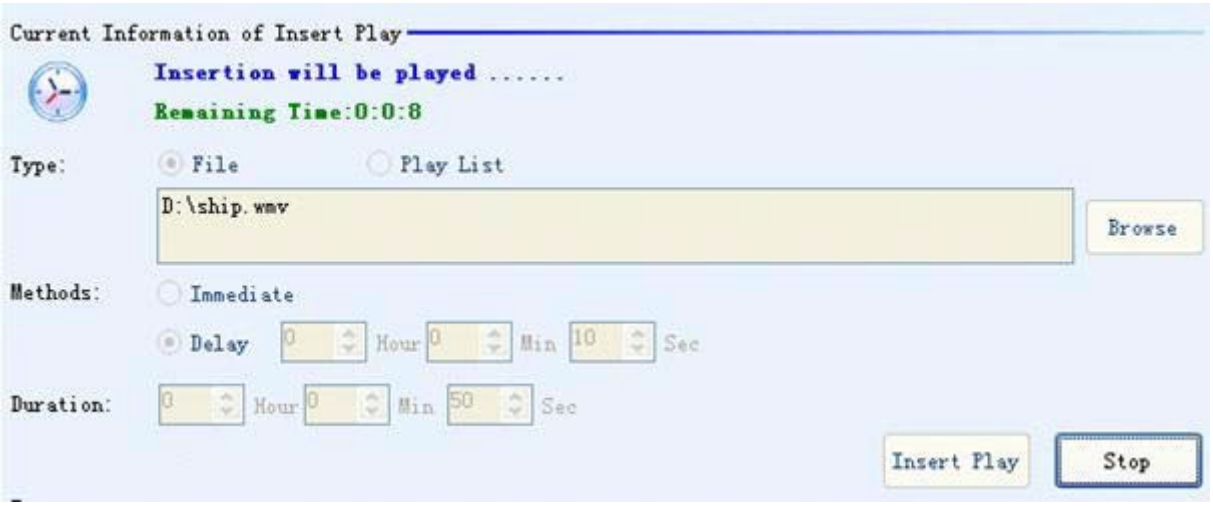

Fig.2.2.3.4 postponed emergency play

¾ **Emergency of playlists**

Select **Play List** from the Emergency Play sub-page and the follow the steps for media files. Settings and operations are similar.

2.2.4 Shortcut Menu

Click the right mouse button on the screen when playing the playlist, the shortcut menu would be shown, as Fig.2.2.4.1.

Fig.2.2.4.1 shortcut menu when playing playlist

Each menu item functions as follows:

Play（Shift+S）: Resume play if paused;

Last Page (Shift+B): Switch to the previous page to play;

Next Page (Shift+N): Switch to the next page to play;

Pause (Shift+P): Pause play;

Stop (Shift+T): Stop Play;

Hide (Shift+H): Hide the screen.

Note: In the actual operation, use the left mouse button click to active screen, then use keyboard to do the above operation.

3 Schedule

3.1 Edit Schedule

Select **Schedule Mode**,from the main interface of Sun Net Pro to accessing the page for schedule editing, as shown in Fig.3.1.1.

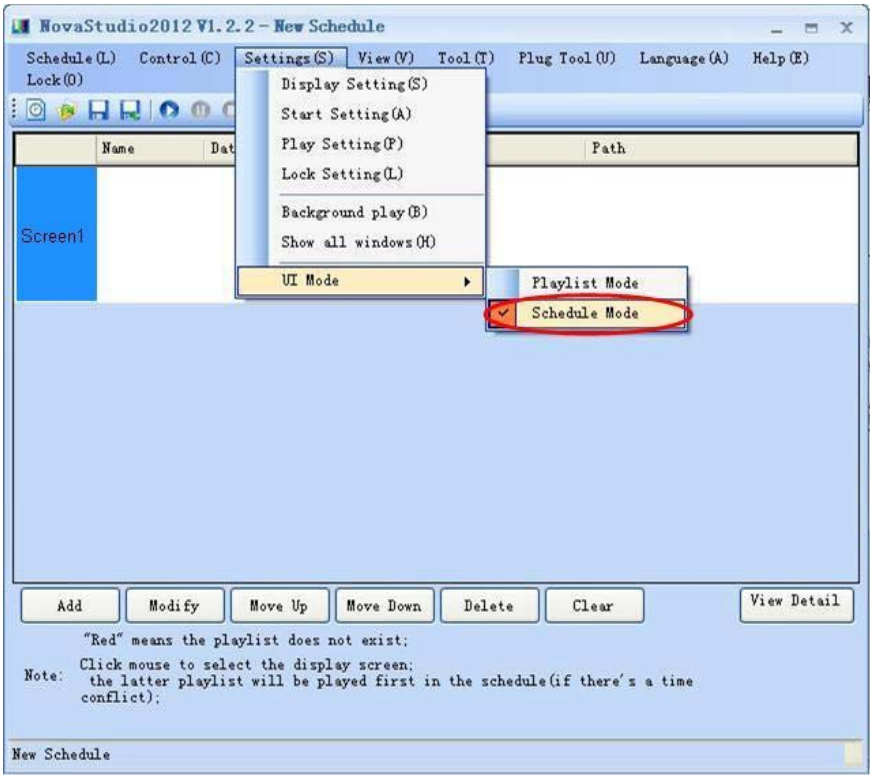

Fig.3.1.1 schedule editing page

To create a new schedule, select Schedule List -> New from the main menu or just click the New button at the toolbar, as shown in Fig.3.1.2. and Fig.3.1.3.

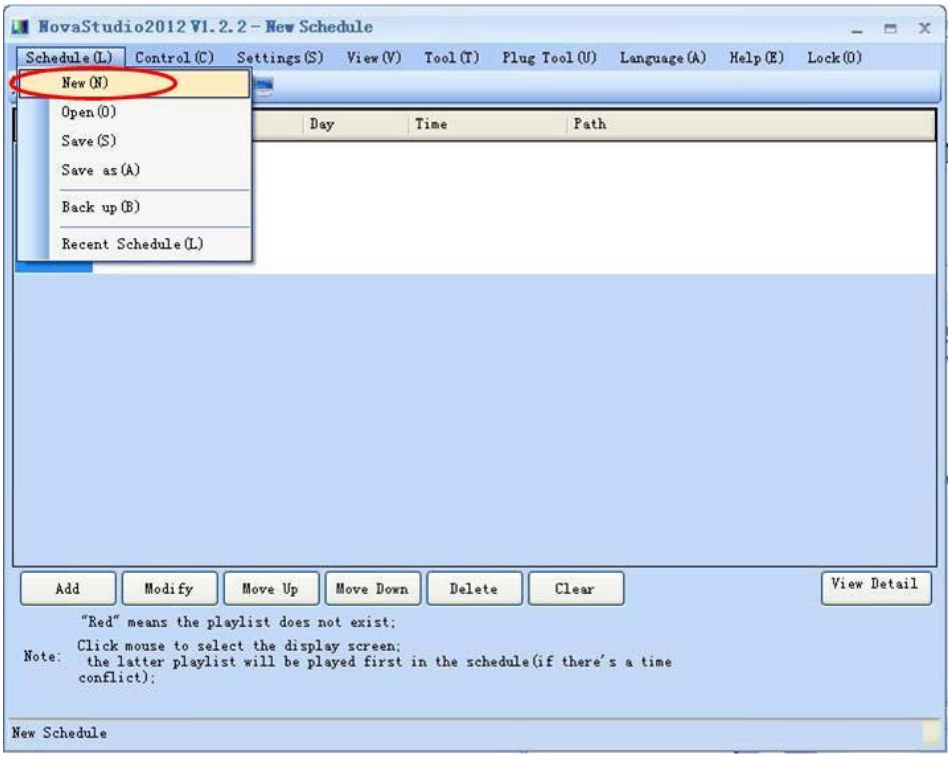

Fig.3.1.2 create a new schedule by menu item

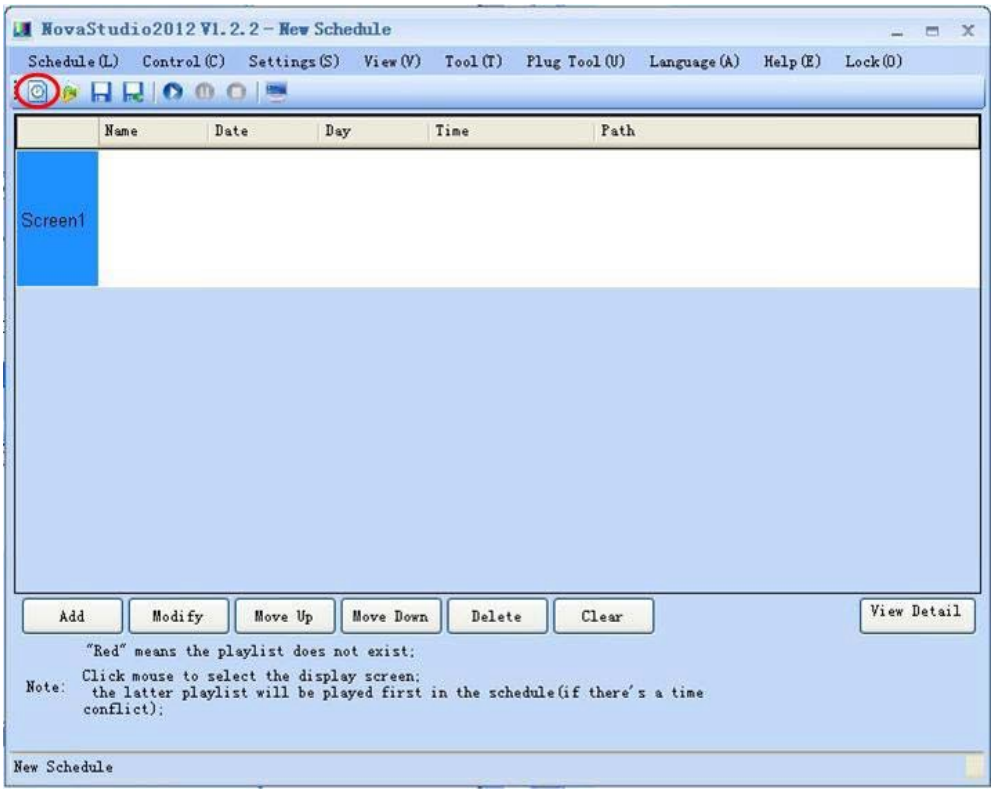

Fig.3.1.3 create a new schedule by the New button

3.1.1 Schedule Structure

A schedule is for dispatching playlists for LED displays. A schedule can contain multiple schedule

lists and each schedule list can contain multiple playlists. Note that each schedule list corresponds to one LED display. The number of schedule lists in a schedule is determined by the LED display count set in the Display Setting dialog. Shown in Fig.3.1.1.1 is a schedule. The schedule contains two schedule lists for two LED displays, Screen 1 and Screen 2. The schedule list for Screen 1 contains two playlists, 123.pgst and 456.pgst. And the schedule list for Screen 2 has only one playlist, 123.pgst. Other information of the schedule lists is also shown, such as time to activate the playlists and the path of the playlists.

Fig.3.1.1.1 an example of schedule

To edit a schedule list, select it (a selected schedule list is **Dodger Blue**) and use the buttons circled in Fig.3.1.1.2 to perform editing on the playlists of the schedule list.

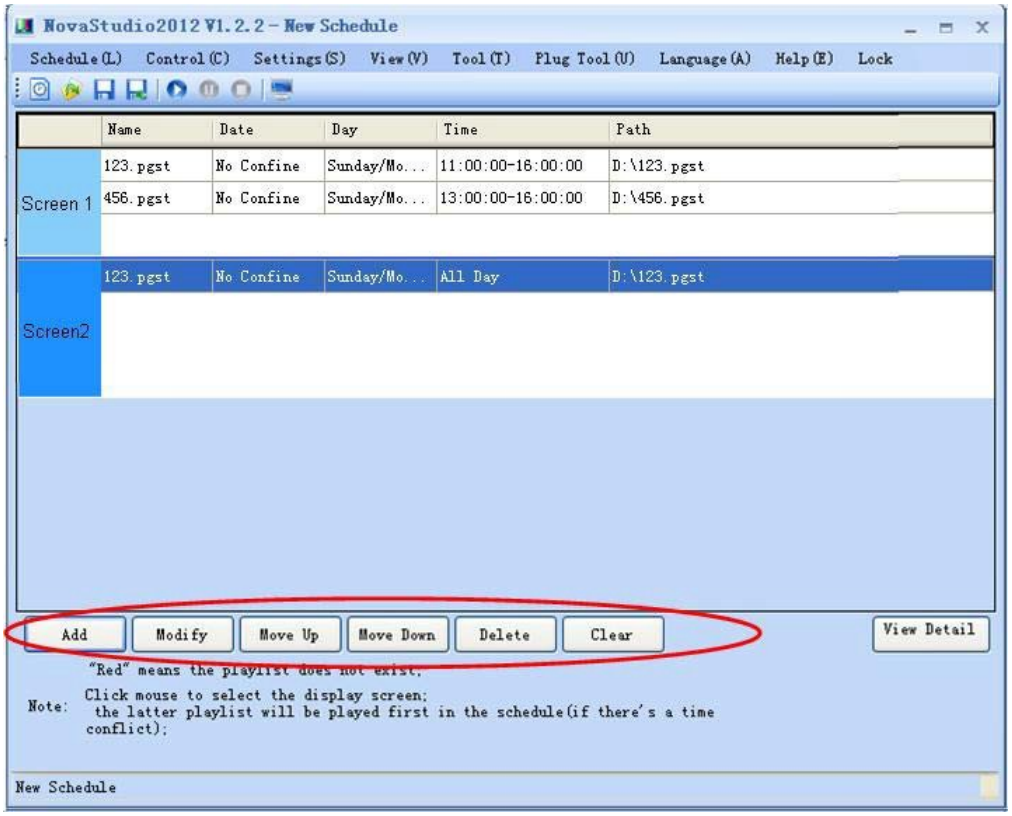

Fig.3.1.1.2 buttons for schedule list editing

3.1.2 Playlists Time Properties

When a playlist is being added to a schedule list, its time properties need to be set, as shown in Fig.3.1.2.1 is the dialog for time properties setting.

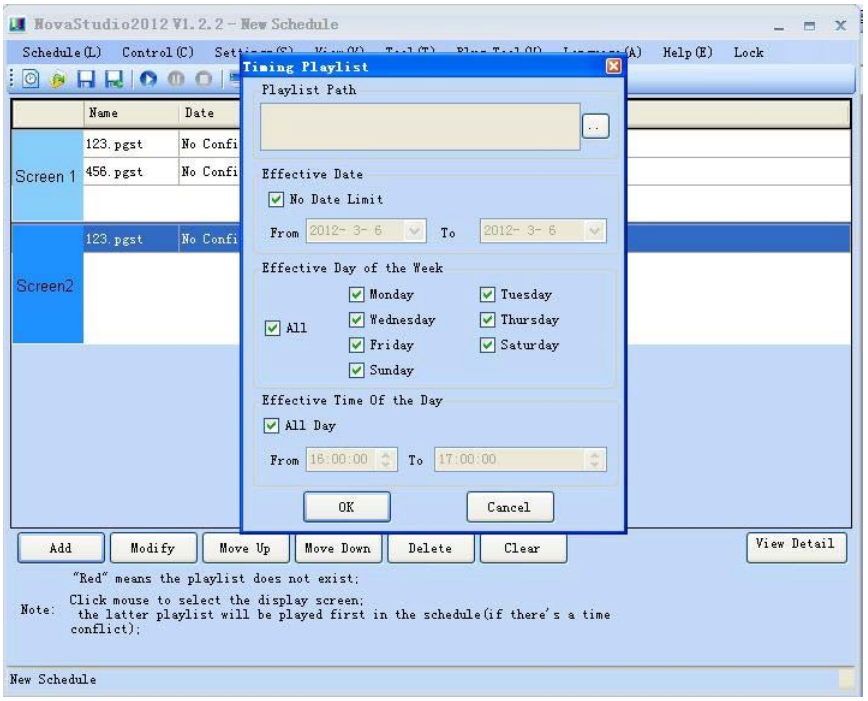

Fig.3.1.2.1 dialog for playlist time properties setting

Time properties of a playlist in a schedule include **Effective Date**, **Effective Day of Per Wee**k and **Effective Time of Per Day**. The meaning of these time properties and

Effective Date

This is used to specify the date for playing the playlist. If it is set to be **No Limit for Date**, the playlist will be played every day. The panel for **Effective Date** setting is as follow.

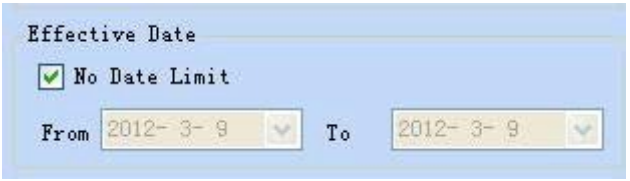

Fig.3.1.2.2 The panel for **Effective Date** setting

Effective Day of Per Week

This is used to specify the days in a week for playing the playlist. The panel for **Effective Day of Per Week** setting is as follow.

Fig.3.1.2.3 The panel for **Effective Day of Per Wee**k setting

Effective Time of Per Day

This is used to specify the time in a day for playing the playlist. Note that if the beginning time is "larger" than the ending time, the playlist will be played across two days. For example, if it is set to be "From 8:00:00 To 6:00:00", the playlist will be played from 8 o'clock of the day to 6 o'clock of the next day (24-hour time system is used in Sun Net Pro.). The panel for **Effective Time of Per Day** setting is as follow.

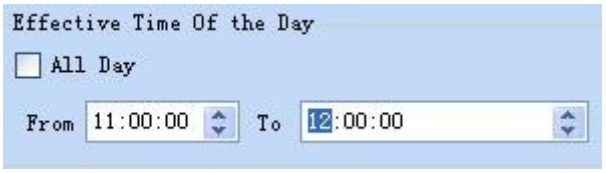

Fig.3.1.2.4 The panel for **Effective Time of Per Day** setting

3.1.3 Playlist Dispatching Rule

Play order of the playlists in a schedule list is determined according to the time properties of the playlists. The playlist at the back of a schedule list has the priority of being played if there are conflicts between the playing times of playlists in a schedule list.

For example, suppose time properties of Playlist A and Playlist B are set as follow:

Playlist A	**Playlist B**
From October 1st 2011 to November 1st 2011	From October 1st 2011 to November 1st 2011
Every day in a week	Every day in a week
From 8:00:00 to 15:00:00 in each day	From 8:00:00 to 12:00:00 in each day

If Playlist B is at the back of Playlist A in the schedule list, then Playlist B has the priority to be played on time confliction. The dispatching results will be as follow

Playlist A	**Playlist B**
From October 1st 2011 to November 1st 2011	From October 1st 2011 to November 1st 2011
Every day in a week	Every day in a week

From **12:00:00 to 15:00:00** in each day	From 8:00:00 to 12:00:00 in each day

Otherwise, if Playlist A is at the back of Playlist B in the schedule list, then Playlist A has the priority to be played on time confliction. The dispatching results will be as follow

Playlist A	**Playlist B**
From October 1st 2011 to November 1st 2011	-
Every day in a week	-
From 8:00:00 to 15:00:00 in each day	-

Detail information of the playlists dispatching of a schedule list can be check

Select a schedule list and click **View Detail** button to check the detail information of the playlist dispatching of the selected schedule list. Circled in Fig.3.1.3.1 is the **View Detail** button.

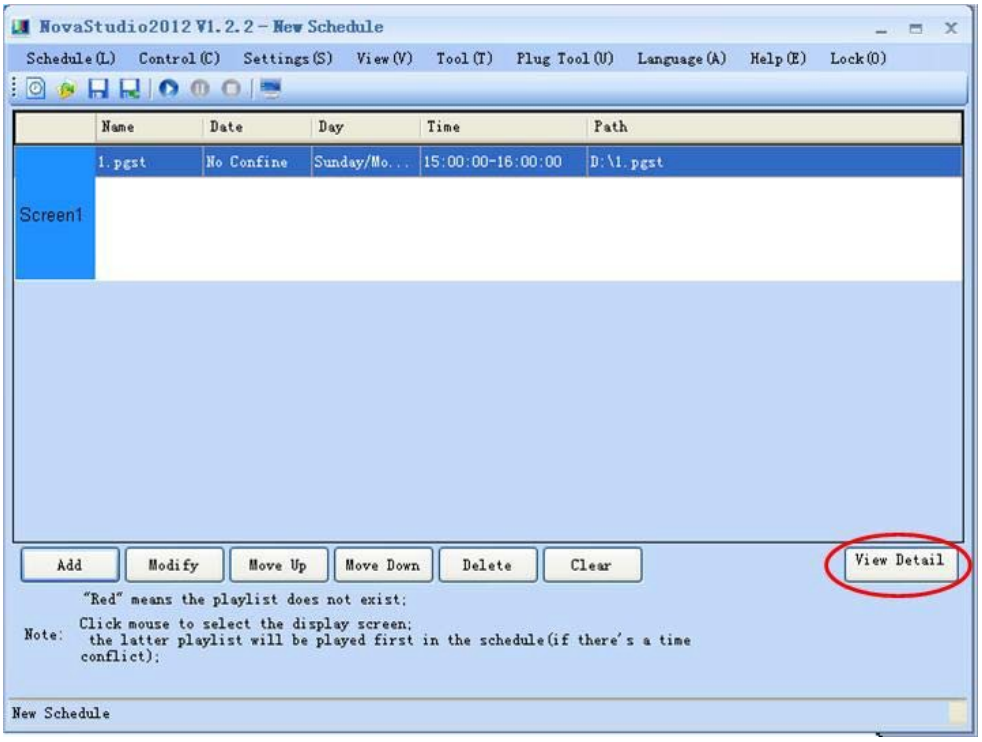

Fig.3.1.3.1 the **View Detail** button

The dialog for dispatching information checking is as Fig.3.1.3 2.

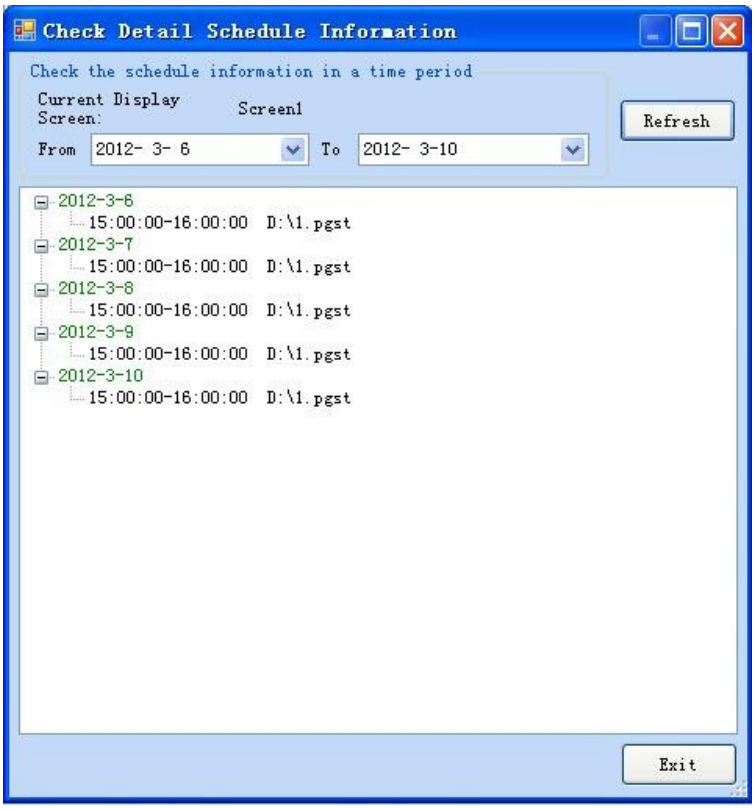

Fig.3.1.3.2 playlists dispatching information checking dialog

3.1.4 Shortcut Menu

Click the right mouse button at the black area of schedule, one shortcut menu would be shown, as Fig.3.1.4.1.

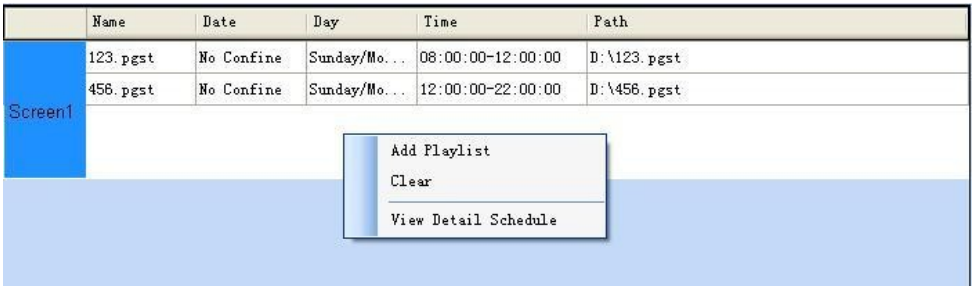

Fig. 3.1.4.1 shortcut menu of schedule

Click the right mouse button on the selected playlist, one shortcut menu would be shown, as Fig.3.1.4.2. You can modify, move up, move down or delete the selected playlist.

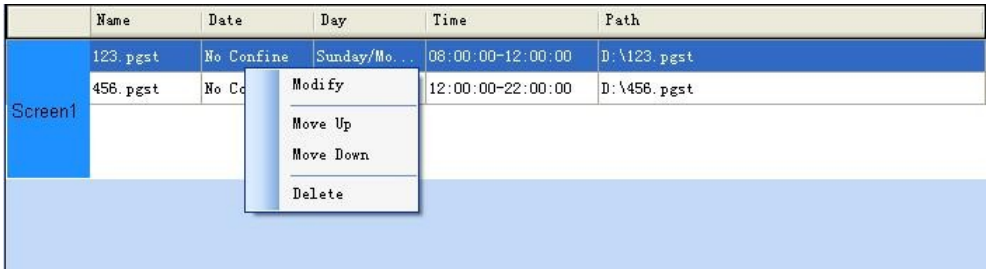

Fig. 3.1.4.2 shortcut menu of playlist

Double click the left mouse button on the selected playlist to open the playlist and turn to the playlist mode.

3.2 Apply Schedule

Use the control button in the toolbar to control the application of the current schedule. The control buttons are circled in Fig.3.2.1. They can be used to active, pause or stop a schedule (all schedule lists). In a multiple LED display case, Sun Net Pro will generate a play control page for every LED display. As shown in Fig.3.2.1, this is a two LED display case and there are two play control pages on the Sun Net Pro interface, labeled with Screen 1 and Screen 2. Play information of the LED displays will be shown in the corresponding play control page. Immediate notification and emergency play can also be done through the play control pages.

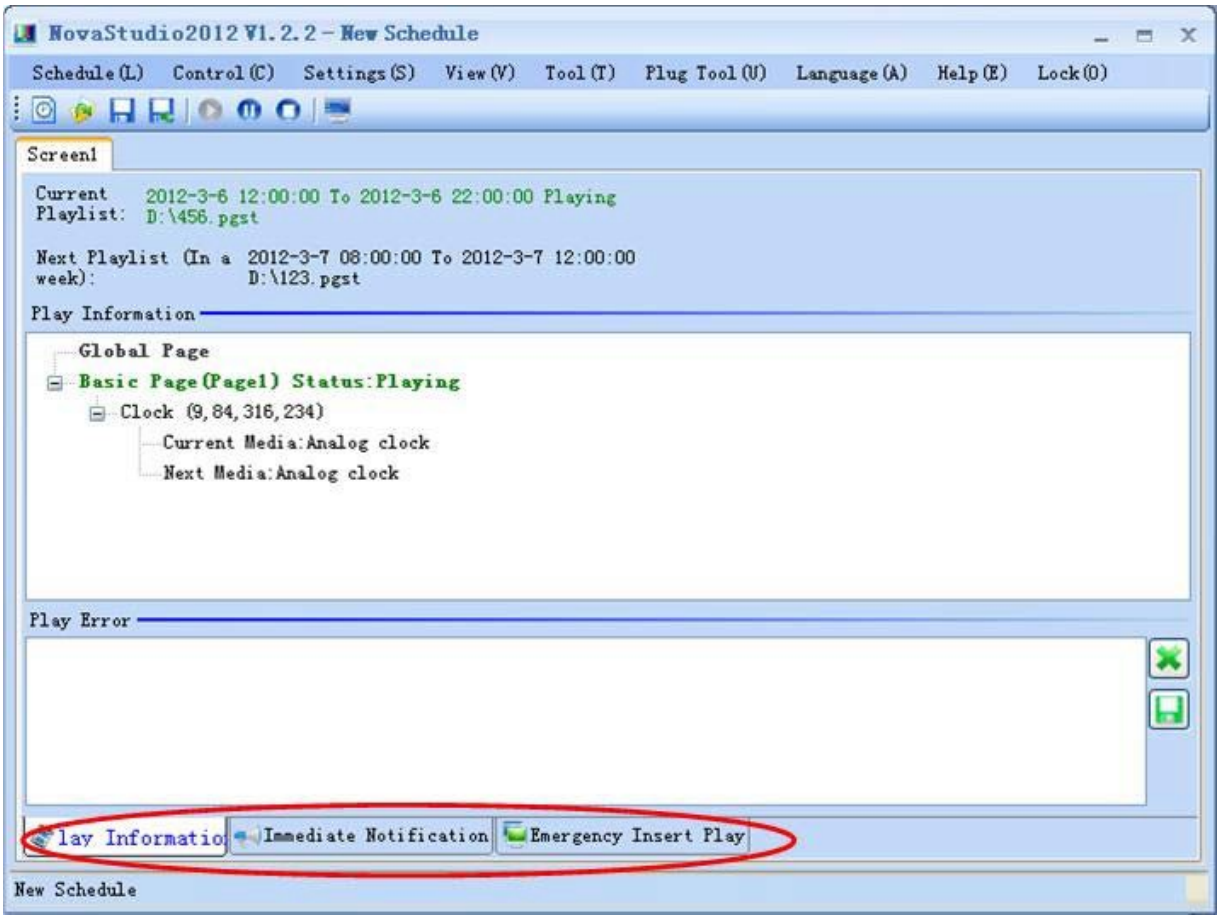

Fig.3.2.1 the play control page

3.2.1 Play Information

Play information of a LED display will be shown on the Play Information sub-page of the corresponding play control page. This includes the play information of the current and the next playlist. Note that only the next playlist is activated within a week from present will its information be shown on the page.

3.2.2 Immediate Notification

The same as that of a playlist. Refer to **2.2.2 Immediate Notification Sub-page** for details.

3.2.3 Emergency Play

The same as that of a playlist. Refer to **2.2.3 Emergency Play Sub-page** for details.

3.2.4 Shortcut Menu

Click the right mouse button on the screen when playing the schedule, the shortcut menu would be shown, as Fig.3.2.4.1. You can pause or stop play or hide the screen.

Note: In the actual operation, use the left mouse button click to active screen, then use keyboard to do the above operation.

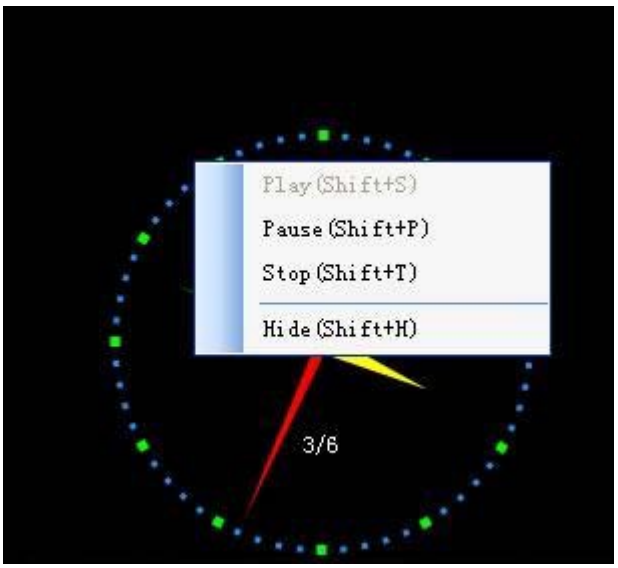

Fig. 4.2.4.1 shortcut menu when playing schedule

4 Settings

4.1 Display Window Setting

Display window setting is used to set the mapping relation between the control computer (display) and the LED displays that is managed by Sun Net Pro. Select **Setting** -> **Display Setting** from the main menu of Sun Net Pro to access the Display Window Setting dialog which is as in Fig.4.1.1. Display window showing/locking can also be enable/disabled through this dialog.

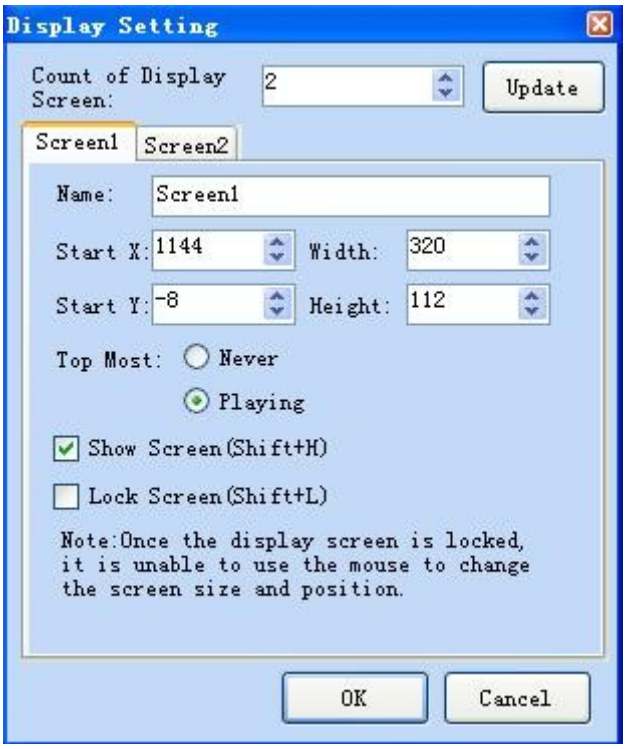

Fig.4.1.1 the Display Window Setting dislog

To add or delete LED displays to/from Sun Net Pro, enter the new LED display count and then click the **Update** button. Sun Net Pro will regenerate the display windows according to the new count. (Note that the physical relation between the control computer and the LED displays are set by NovaLCT or other similar software applications.) Set the parameters for the display windows according to the LED displays parameters and then click **OK** to complete display window setting.

LED display count will not be available for modifying if playlists are being played, as shown in Fig.4.1.2.

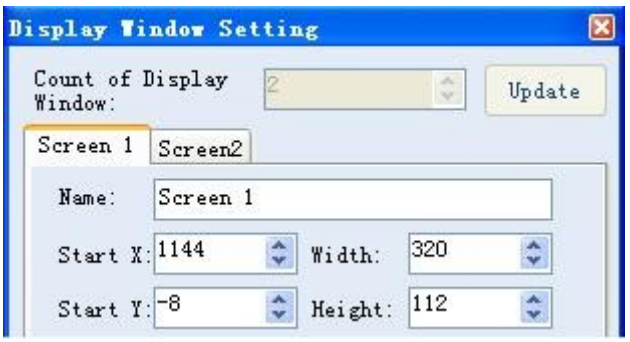

Fig.4.1.2 display window account modifying disabled

4.2 Start Setting

Start setting is for Sun Net Pro to start up automatically and begin playing certain playlist or activate certain schedule after the computer starts up. To access the Start Setting dialog, Select **Setting** -> **Start Setting** from the main menu of Sun Net Pro. The Start Setting dialog is as shown in Fig.4.2.1.

Fig.4.2.1 the Start Setting dialog

If **Auto Run** is selected, Sun Net Pro will start automatically after the computer starts up.

If **Restart Software on Time is selected** and time for restart is set, Sun Net Pro will restart automatically when the computer time reaches the set restart time. And Sun Net Pro will also recover the status what it was in before the restart. The restart function is useful in helping Sun Net Pro to run stably for long time. In some cases, the computers are not allow to shut down, thus Sun Net Pro may become less stable due to problems from the OS, decoders or others in long term running. Restarting NovaStudo2012 when it is idle can keep Sun Net Pro in good status.

If **Auto Play** is selected, Sun Net Pro will activate the specified playlists or schedule automatically after it starts up.

Shown in Fig4.2.2 is the example for playlist auto play. Note that playlist needs to be specified for every LED display.

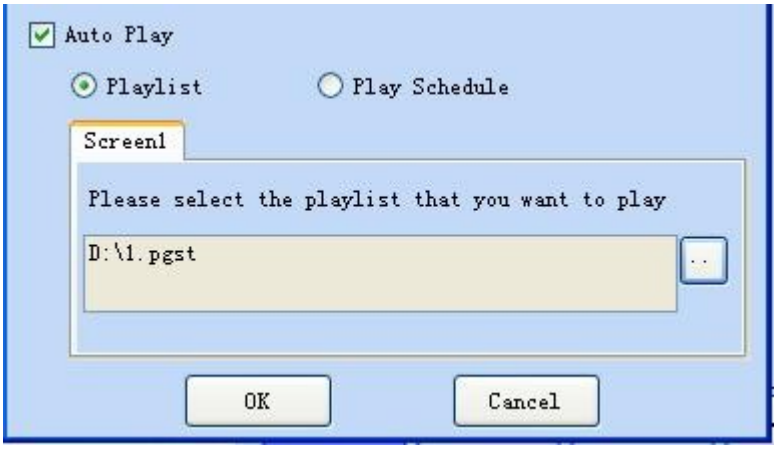

Fig.4.2.2 settings for playlist auto play

Fig.4.2.3 shows an example for schedule auto play setting. One schedule file is enough since it contains all information required for all LED displays managed by Sun Net Pro.

Fig.4.2.3 settings for schedule auto play

Note that **OK** should be clicked after setting to activate all settings.

4.3 Play Setting

Select **Setting** -> **Play Setting** form the main menu of Sun Net Pro to open the Play Setting dialog. The Play Setting dialog is as shown in Fig.4.3.1.

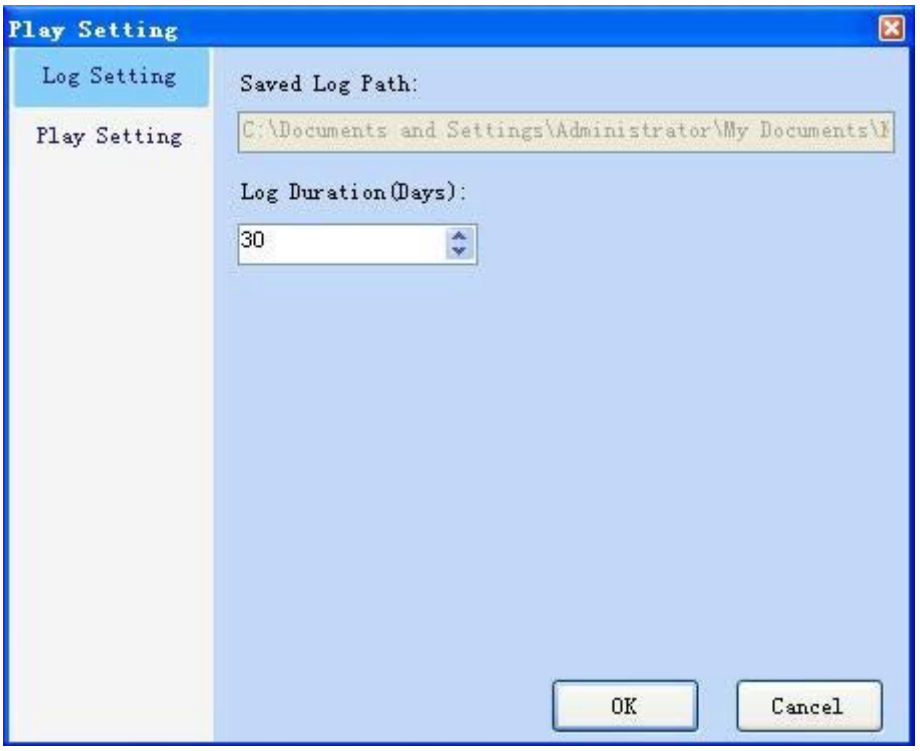

Fig.4.3.1 the Play Setting dialog (Log Setting page)

4.3.1 Log Setting

Sun Net Pro saves the play information of each media source in play log. And the play log files are saved in “My Documents\ Sun Net Pro\Log\PlayLog” of the current computer user. Each LED display has its own folder. The folder name for the Nth LED display in the LED display list is “ScreenN”.

Note that Sun Net Pro deletes log files that are stored in the hard disk longer the number of days specified by **Count of Effective Days of Log**.

4.3.2 Play Setting

The Play Setting page in the Play Setting dialog is as shown in Fig.4.3.2.1.

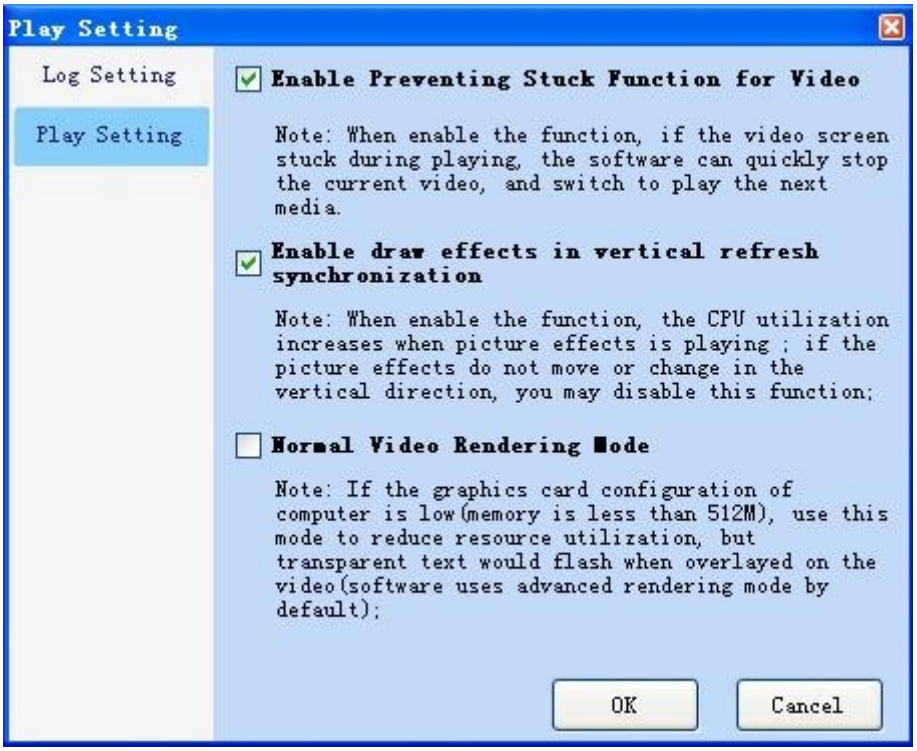

Fig.4.3.2.1 the Play Setting page

— **Video Stuck Prevention**

Due to problems from decoders or computers, video could be stuck during being played. Sun Net Pro monitors the video when it is being played. If a frame is being shown for too long, Sun Net Pro will stop playing this video and switch to the next media source.

— **Draw Effects in Vertical Refresh Synchronization**

Vertical effects for pictures, such as wiping in horizontal (from left to right or from right to left), may encounter the problem of slit and dislocation when they are applied on large pictures, as shown in Fig.4.3.2.2. The function of Draw Effects in Vertical Refresh Synchronization helps to prevent slit and dislocation and also smooth the vertical effects. However, this function increases the CPU utilization. Choice of whether to enable this function or not should be made based of the situation. Normally, this function need not to be enabled if the picture is not large or the effect does not involve vertical synchronization, such as wiping in vertical and fading.

Fig.4.3.2.2 a slit and dislocated picture

— **Normal Video Rendering Mode**

Sun Net Pro adopts the advanced rendering mode for video rendering as default. If the computer is relatively low in performance, enable the Normal Video Rending Mode. Normal video rending mode also helps to prevent the problem of slit and dislocation in quick motion pictures。

5 Computer Locking

To prevent unauthorized operations on Sun Net Pro, Sun Net Pro is capable of locking the computer by disable the keyboard and the mouse.

— **Set/Reset the password**

Select **Set** -> **Password Setting** from the main menu of Sun Net Pro to access the dialog for password setting, as shown in Fig.5.1.

Fig.5.1 Password Setting dialog

	Notes: The initial password is NULL. That is there is no initial password!

— **Lock the computer**

Select Lock(O) at the main menu of Sun Net Pro to open the confirm dialog for computer locking, as shown in Fig.5.2 and Fig.5.3.

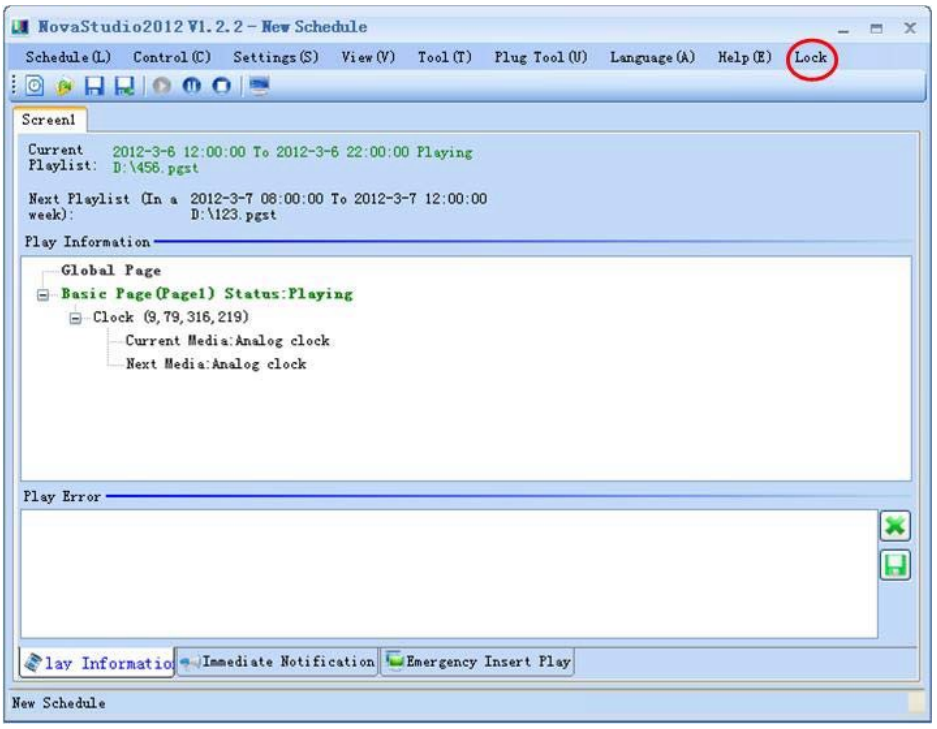

Fig.5.2 **Lock(O)** in the main menu

Fig.5.3 confirm dialog for computer locking

- Read the messages in the confirm dialog for computer locking carefully before lock the computer.
- Click **OK** to lock the computer. All keys except for the **ESC** key will be disabled.
- Press **ESC** to access the unlock dialog. Password is required for unlocking the computer.
- A message as shown in Fig.5.4 will be shown when the mouse is moved.

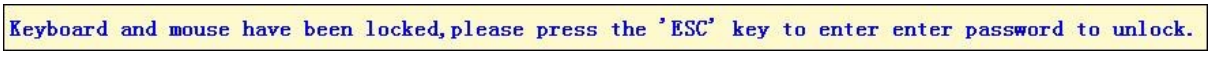

Fig.5.4 message shown when the computer is locked

- The **Lock(O)** item at the main menu of Sun Net Pro is red when the computer is locked.

	Notes: The computer will always be in the lock status after it is locked, even Sun Net Pro is restarted (auto starts or by double clicking the .exe) by computer restarting by force. Password is the only way to unlock it!

— **Unlock the computer**

Press **ESC** to open the **Unlock Window** for unlocking. The Unlock Window is as shown in Fig.5.5.

Fig.5.5 the dialog for unlocking

Type in the password and press **Enter** to unlock the computer. Press **ESC** to exit unlock process.

	Notes: If the password is never set or is set to be NULL, press Enter key directly to unlock the computer. Please contact us if the password is lost.

6 Other Functions

6.1 Resume from fault

Sun Net Pro can restart when serious fault happened. Sometime, Sun Net Pro would not work normally because of decoder unstable, if error happened, Sun Net Pro would restart itself and resume the play status.

6.2 PPT Showing

Sun Net Pro does not support adding Microsoft PPT files as media sources into playlist, but it does provide a tool to convert PPT files into pictures and thus the pictures can be added into playlists for showing.

Select **Plug Tool** -> **PPT To Bitmap** to open the PPT to Bitmap dialog for converting, as shown in Fig.6.2.1. The PPT to Bitmap dialog is as shown in Fig.6.2.2. Select the PPT file to be converted, set the path for the result bitmaps and click **Convert** button to perform conversion.

Fig.6.2.1 PPT to Bitmap menu item

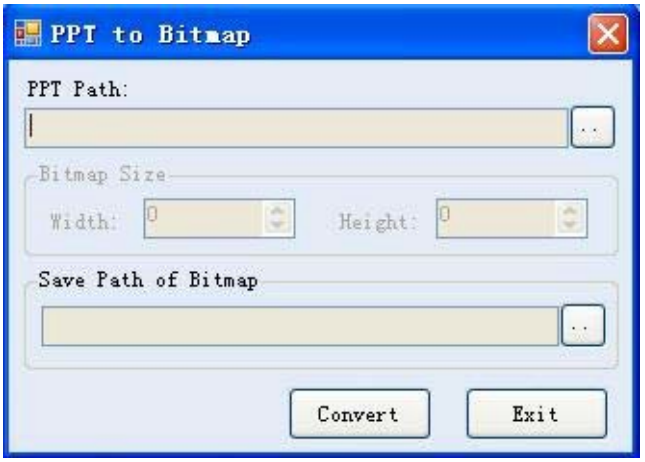

Fig.6.2.2 the PPT to Bitmap conversion dialog

If the size of the play window does not match that of the converted pictures, there would be compression and distortion when showing the pictures in the play window. Sun Net Pro can create PPT files of which the page size can be customized. By setting the page size the same as that of the play window, compression and distortion can be avoid. To open the dialog for page size setting and PPT file creating, select **Tool** -> **PPT** from the main menu, as shown in Fig.6.2.3. Shown in Fig.6.2.4 is the dialog. The page size can be set the same as a play window (select **Same as the display window size** and then specify a display window) or directly (select **Custom Size** and enter the values for **Width** and **Height**). Microsoft PPT will be started when Click OK. Opened in Microsoft PPT is a PPT file with page size the same as the set values.

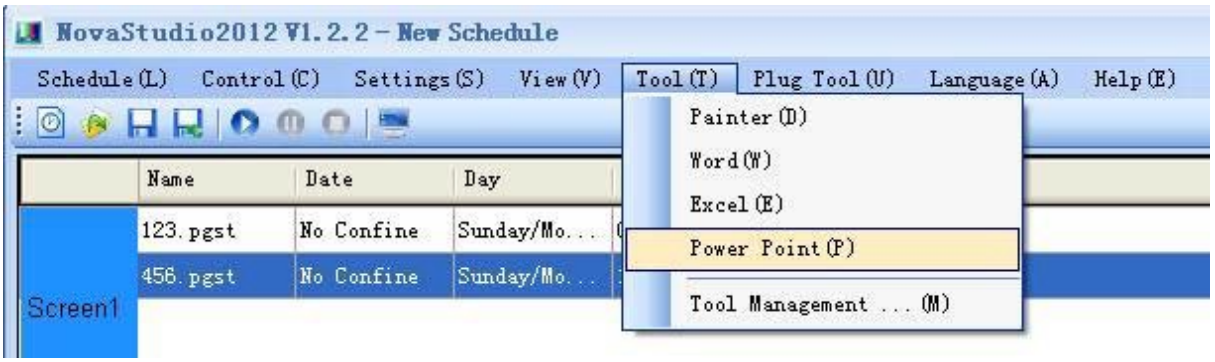

Fig.6.2.3 the PPT item in Tool drop-down menu

Fig.6.2.4 dialog for PPT page size setting and PPT file creating

Microsoft Word files of certain page size can also be generated in this way. Select **Tool** -> **Word** to open the dialog for Word files.

6.3 Tool Management

The function of tool management is provided is Sun Net Pro. Users can link their usually used tools to Sun Net Pro and thus open the tools through Sun Net Pro.

Select **Tool** -> **Tool Management** to open the Add Tool dialog, as shown in Fig.6.3.1. Shown in Fig.6.3.2 is the Add Tool dialog.

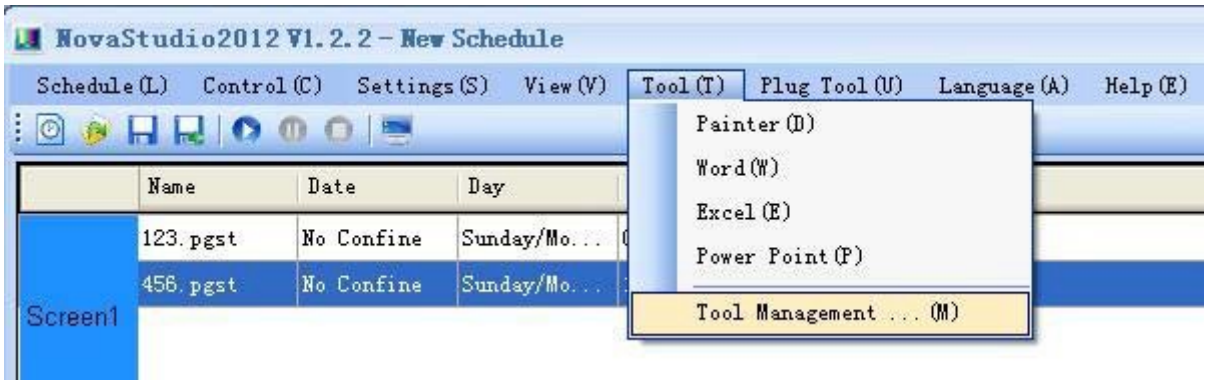

Fig.6.3.1 the Tool Management item in the Tool drop-down menu

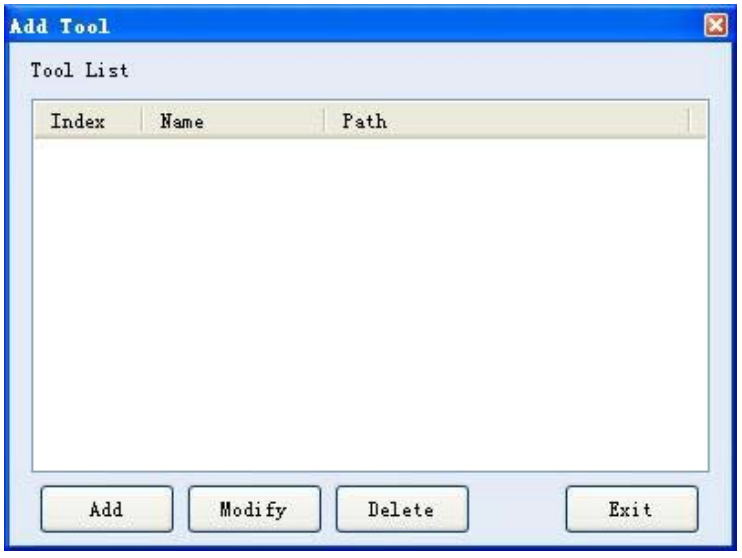

Fig.6.3.2 the Tool Management dialog

Click **Add** on the **Add Tool** dialog and in the pup up **Tool Operation** dialog, specify the tool to be added (set the path of the .exe file) and set its name for shown in Sun Net Pro. After that, click **Add** to perform adding operation.

Fig.6.3.3 the Tool Operation dialog

After added, the name of the new added tool will be in the drop-down menu of Tool, as shown in Fig.6.3.4. Select this item to open the tool when needed.

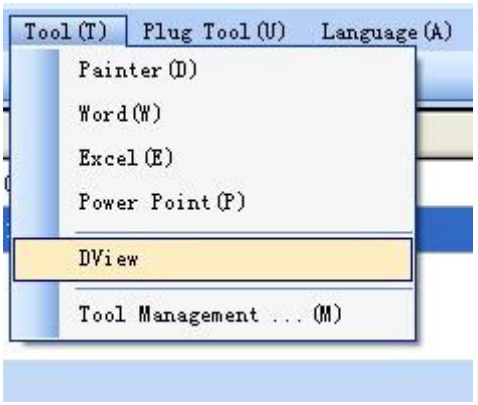

Fig.6.3.4 tools added

6.4 Log Checking

Select **View** -> **Play Log** to open the LogPlat for media play log checking, as shown in Fig.6.4.1. The LogPlat dialog is as shown in Fig.6.4.2.

Fig.6.4.1 the Play Log menu item

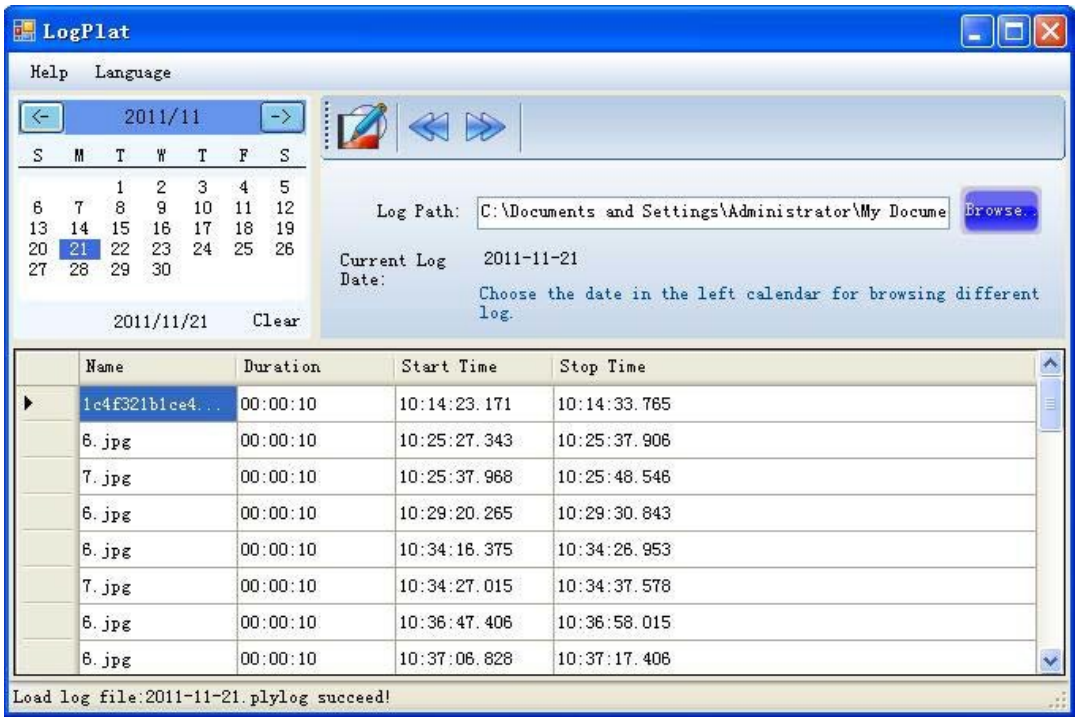

Fig.6.4.2 the LogPlat dialog

Select a date from the calendar and the media play log of that day will be shown. Note the log of the first LED display (Screen 1) will be shown as default. To check the log of the other LED displays, click Browse, return to the PlayLog folder and select a folder with name ScreenN (N=1,2,3…). In the ScreenN is the play log of the Nth LED display.

6.5 Backstage Media Playing

6.5.1 Activate Backstage Media Playing

Following will take the OS of Windows XP as an example to illustrate how to active backstage media playing.

Connect the computer video card DVI output interface with the DVI input interface of the LED display control system. Right click on the desktop and select **Properties** form the pup up menu, as shown in Fig.6.5.1.

Fig.6.5.1 desktop properites

Select **Setting** page form the **Display Properties** dialog, as shown in Fig.6.5.2.

Fig.6.5.2 the Setting page

Select Monitor 2 and "**Extend my Windows desktop onto this monitor**", as shown in Fig.6.5.3. Click **OK** when finish.

Fig.6.5.3 activate Monitor 2

After the settings for Monitor 2, select **Setting** -> **Backstage Playing** from the main menu of Sun Net Pro to apply backstage media playing. Note that media playing can not be seen from the computer display when backstage media playing is applied. To check media playing, select **Setting** -> **Forestage Playing** of Sun Net Pro. Reapply backstage playing after checking.

6.5.2 Cancel Backstage Media Playing

Cancel the selection of "**Extend my Windows desktop onto this monitor**" on the **Setting** page of **Display Properties** dialog, and select **Setting** -> **Forestage Playing** of Sun Net Pro.

7 Quick Start

7.1 Example 1

Goal:

To create a playlist; play video and/or scrolling text. For display window size 640*500; mapping position (0,0); video play window size 640*480; scrolling text play window size 640*20.

Steps:

(1) Set the display window size and mapping position:

Select **Setting** -> **Display Setting** form the main menu in Sun Net Pro to open Display Window Setting dialog. Set both **Start X** and **Start Y** to be 0 for the mapping position (0,0). And set **Width** 640 and **Height** 500 for the display window size 640*500. Click OK to finish/save the setting.

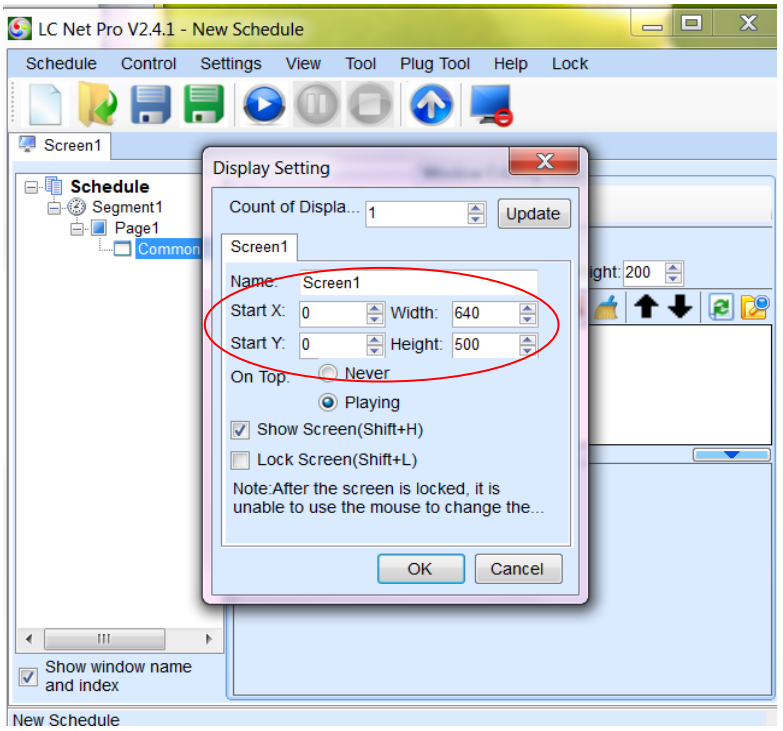

Fig.7.1.1 settings for the display window

(2) Switch Sun Net Pro to Playlist Mode.

Fig.7.1.2 playlist mode

(3) Add pages and play windows

— Add a basic page

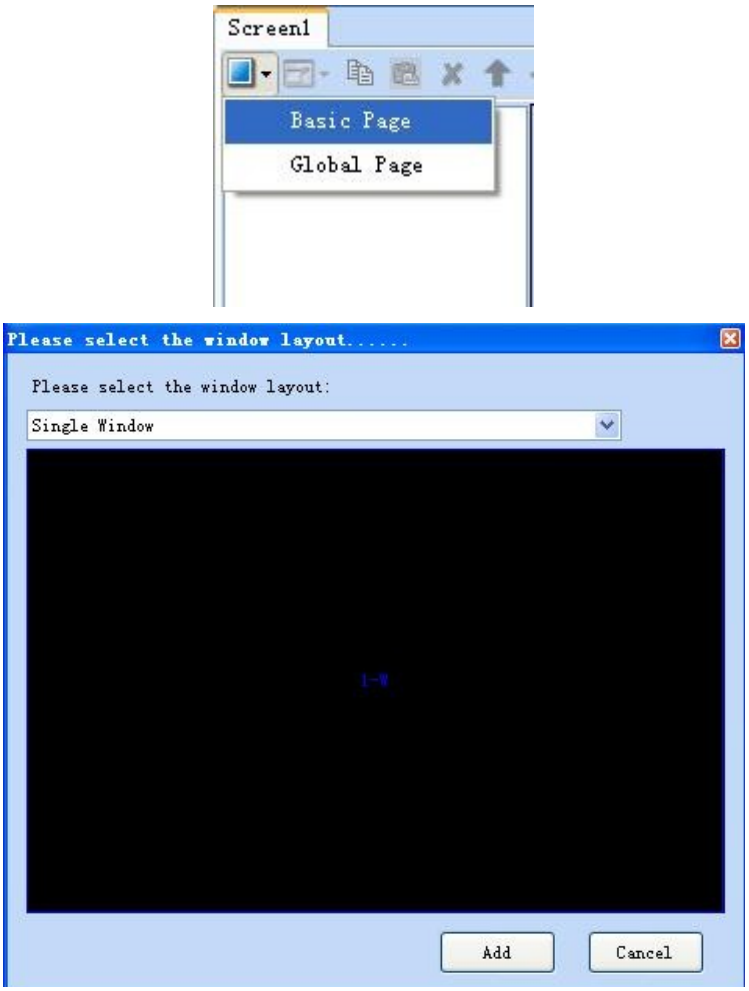

Fig.7.1.3 basic page adding

— Add a common window to the basic page with position (0,0) and size 640*480.

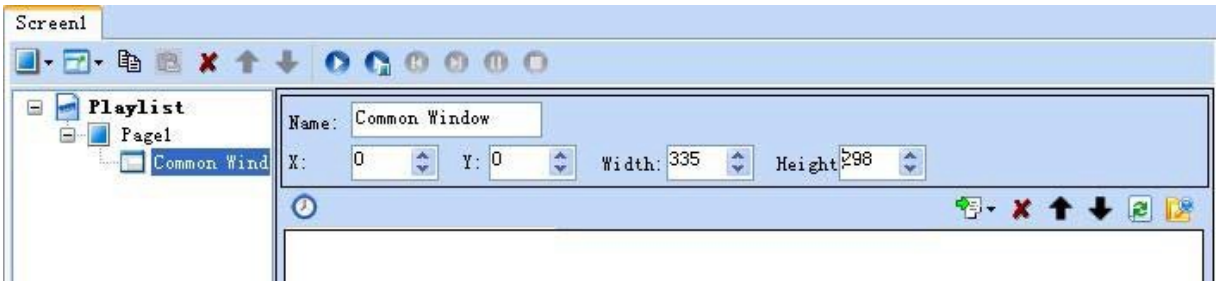

Fig.7.1.4 common window adding

— Add videos to the common window. The media sources list can be edit through the circled buttons in Fig.7.1.5.

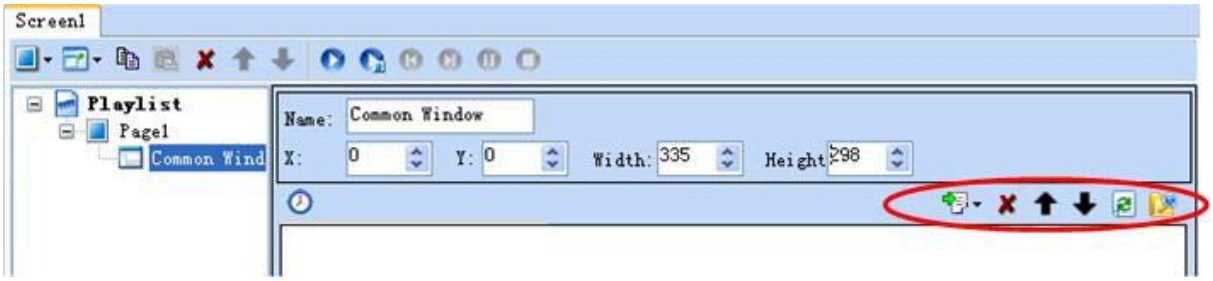

Fig.7.1.5 edit the media sources of the play window

— Add a scrolling text window to the basic page with position (0,480) and size 640*20.

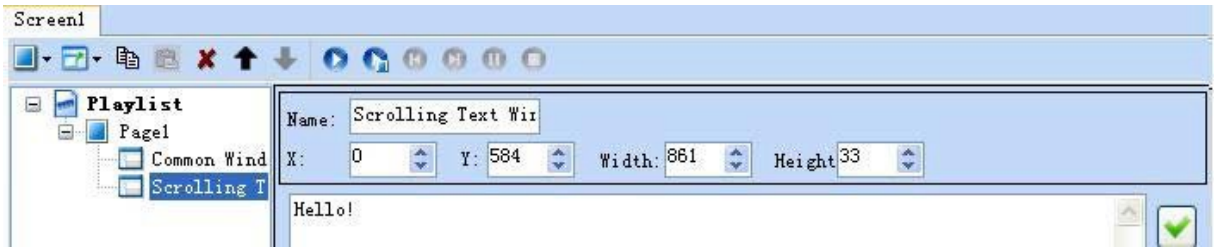

Fig.7.1.6 scrolling text window adding

— Edit the text content and set the properties for scrolling text.

(4) Save the playlist

Select **Play List** -> **Save** form the main menu of Sun Net Pro or just click the **Save** button on the toolbar to save the playlist.

Notice：If the scrolling text must be transparent overlay on the video, you should move up the scrolling text window and select the transparent property of scrolling text. As Fig.7.1.1.

Fig. 7.1.7 Transparent property of scrolling text

(5) Allow Sun Net Pro auto start and play the playlist

Select **Setting** -> **Start Setting** from the main menu of Sun Net Pro to open Start Setting dialog. Select **Auto Run** and **Auto play**. Select **Play List** and set the path of the playlist (suppose the playlist saving path is E:\23.pgst). Then click OK to finish setting.

Fig.7.1.8 Start setting

7.2 Example 2

Goal:

Allow Sun Net Pro play different media sources for different time intervals.

Time Interval 1 (11:00–12:00)

Time Interval 2 (12:00-22:00)

Steps:

(1) Create playlists

— Switch Sun Net Pro to Play List Mode.

— Create two playlists for the two time interval, and save them as T1.pgst and T2.pgst.

(2) Create a schedule

— Switch Sun Net Pro to Schedule Mode.

— Add T1 to the schedule list and set its Effective Time Of Per Day as “From 11:00:00 to 12:00:00”, as shown in Fig.7.2.1. Set the other time properties as required.

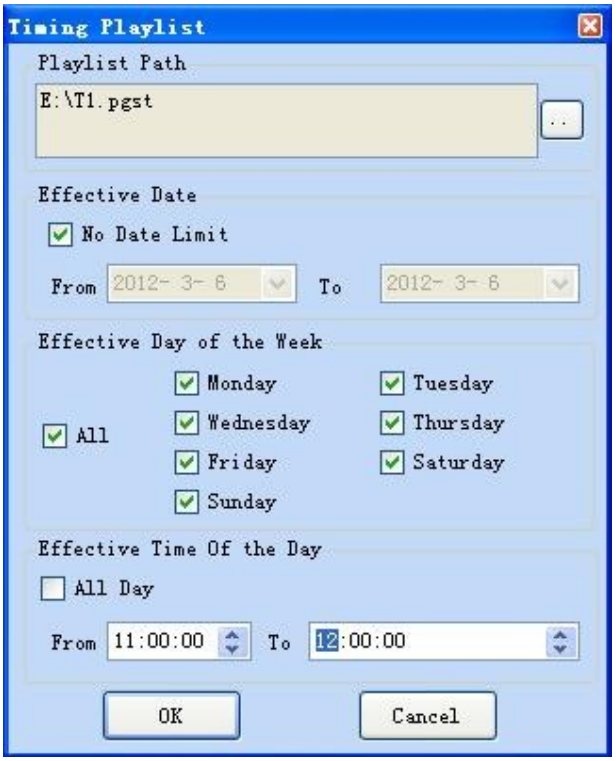

Fig.7.2.1 time properties for T1.pgst

— Add T2 to the schedule list and set its Effective Time Of Per Day as “From 12:00:00 to 22:00:00”, as shown in Fig.7.2.2. Set the other time properties as required.

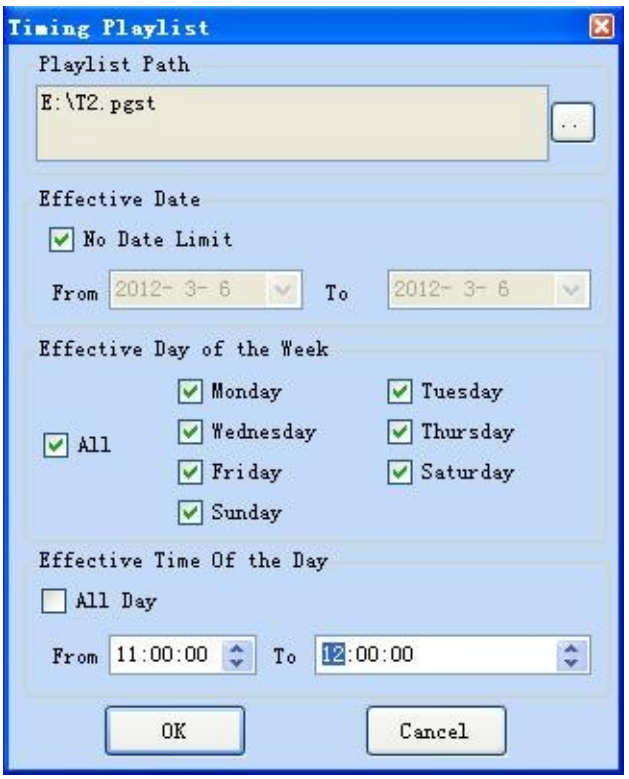

Fig.7.2.2 time properties for T2.pgst

The schedule list after editing is as shown in Fig.7.2.3.

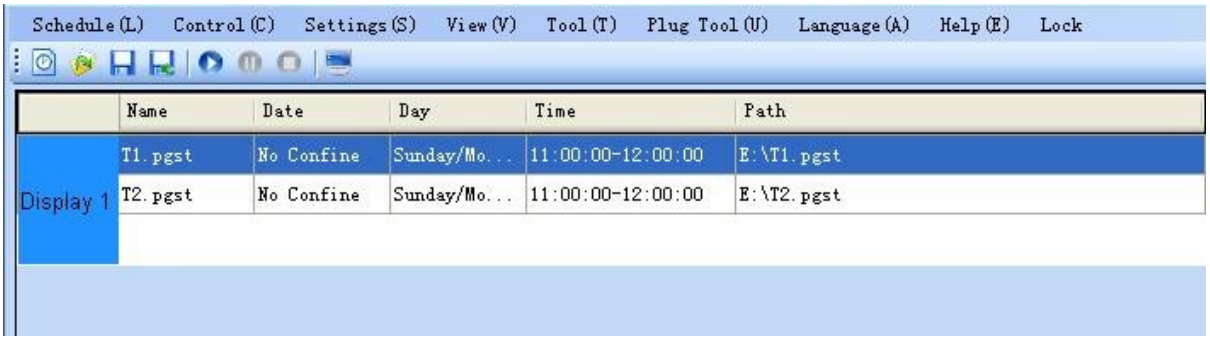

Fig.7.2.3 The schedule list after editing

— Save the schedule to file.

(3) Allow Sun Net Pro auto start and apply the schedule

Set the options in the Start Setting dialog as follow (suppose the schedule file is saved as E:\Schedule.sch).

Fig.7.2.4 Start Setting

8 Notes and FAQ

(1) Conflicts between decoders may cause media play error.

Do not install decoders or media players arbitrary. They may conflict with each other and thus cause errors when Sun Net Pro is playing videos.

Please clean up the decoding environment by uninstall the third part decoders and media players if Sun Net Pro does not response when playing videos. **Do not uninstall Windows Media Player!!**

Please contact us if the problem still exists.

(2) Do not use low performance computers for running Sun Net Pro.

Please use a computer meeting the requirements listed in 1.2 Run Environment for running Sun Net Pro. The computer should have a higher performance CPU and larger memory if NSun Net Pro is going to run on it with multiple display windows. Note that the higher the computer performance is, the better the media play results will be.

(3) Sun Net Pro launch error due to the language support of the operation system.

If the path of the Sun Net Pro.exe contains characters that are not belonged to the default language of the operation system, it may not be able to launch. Messages as follow may be shown. To solve this problem, please change the path and run again.

Fig.8.1 error message

(4) Unable to play files of Microsoft Word and Excel

Make sure Microsoft Word and Excel have been installed correctly, otherwise, Sun Net Pro is not able to support files for Microsoft Word and Excel.

Please allow the operation if any firewall blocks the operation of adding Excel file. There no virus risk as it is just Excel starting a library.

(5) What to do if characters in a table of a Microsoft Word file are slit?

Try a Microsoft Excel table.

(6) Why Sun Net Pro does not run?

Please make sure that Microsoft.NET Framework 2.0 has been installed in the computer if the error message in Fig.8.2 shows up when running Sun Net Pro. Microsoft.NET Framework 2.0 is required for running Sun Net Pro.

Fig.8.2 error message

(7) Why Sun Net Pro does not run in the OSs of Microsoft Vista / Windows 7?

Sun Net Pro needs to be run as administrator in these two OS. Right-click NovaStudio.exe or its shortcut and select **Run As Administrator**, as shown in Fig.8.3.

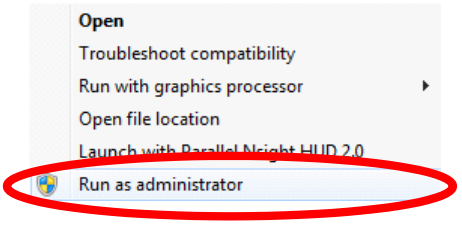

Fig.8.3 run as administor

(8) Why Flash files cannot be added?

Make sure Flash OCX plug-in has been correctly installed. Copy install_flash_player_ax.exe to the same folder of Sun Net Pro.exe and when performing installation.

(9) Error message as below is shown when running Sun Net Pro.

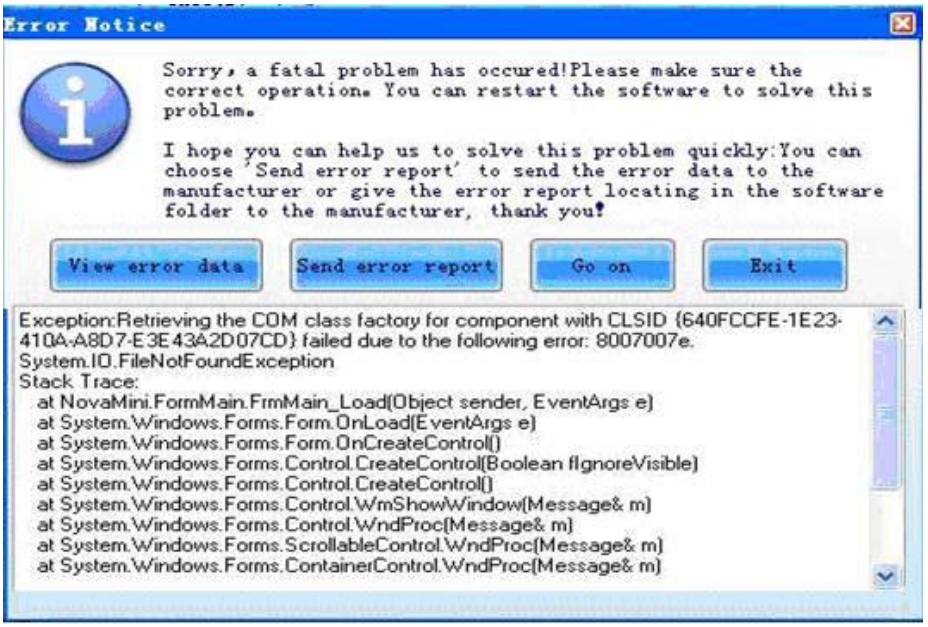

Fig.8.4 error message

Please contact us for technique support. And please click Send Error Report if internet is available for the computer. If internet is not available, please click View Error Data and copy all the data to a .txt file.

(10) Why Sun Net Pro can not load media sources which it can before?

Select **Help** -> **Reregister Decoder** from the main menu of Sun Net Pro. Allow all operations if they are blocked by OS or firewall.