Multi-Media Publishing System

Software Manual
1. Introduce

This is common information publishing software, it can help you easily edit and distribute media to all types of display devices. It will manage several devices with the same interface, which will help user edit and playback the media information easily. This system also supports network operation, automatic scheduling, shortcuts control, and external control interface, etc.

1.1 System Architecture

This system is composed by two parts, “editor” and “player”. All the device management and the media editing functions are on the “editor” module, the “player” is unattended. The “player” could be installed on multi-computer in the LAN, then connect the display device through video port or serial ports. End users can manage all these devices through the “editor” in the LAN.

System architecture as shown below:

1.2 Glossary

The media information in this system is organized by “Script”, and its hierarchy:

Script—> Device—> Program—> Window—> Play Item
(1) Script: As a file, it’s a document which defined the devices and the media information. The schedule task, and other functions are based on the script file.

(2) Device: It defined through “Device Configuration” dialog. You could define difference kinds of media content for each device, and they will also be played on different physical devices through the “player” module.

(3) Program: The definition of the layout of the windows in one device. Some devices could separate the whole view rectangle into several windows, so with the different layout definition, there could be several program for one device. These programs will be playback one by one.

(4) Window: Define a media playback area on the device. It belongs to the “program”. All play items belong to this window will be shown in this area on the physical device.

(5) Play Item: Definition the media item in the window, which could be all kinds of video, image and text files. It could also be a database view or the clock.
2. Editor

Open the “Editor” and the main interface as follows:

![Main Interface]

2.1 Device Configuration

After the system is installed, the first thing to do is to change the configuration of devices. Choose menu “Tools”->“Device Configuration”, the following dialog will be shown:

![Device Configuration]

Left side is the list of all machines (player module) and devices. You could use the “New Machine”
button to add a new machine. Use the “New Device” button to add a new device into the selected machine.

In right side, you can set the “Name” and “Address” for the machine. The “Address” is the IP address of the machine, system will communicate with the device through this IP address.

In the standalone system, you could only use one machine (the Local Machine). So you needn’t set this “Address”.

You can define the device caption in the “Caption” textbox, and set the device ID in the “Unique ID” textbox.

Select the “General” tab, there will be shown the info as follows:

Playback window show on monitor: when you use several monitors on one computer, you can select which one should the playback window be shown.
Playback window stay on top: the window will stay on top of the desktop when displaying contents.
Hide screen cursor: check this option will hide the screen cursor when displaying.
Hide background window: when playback the media files, there will be only shown the actual playback window on the device, and the background window will be hidden.

The system supports all types of display devices. You could add different devices to the selected machine according the actual conditions. Against the video device (LCD, PDP, Projector and Synchronous LED), you only need to set up the display window’s regional; against the asynchronous LED device, you need to set up the communications parameter, such as serial port,
and so on.

The system also supports the Power Management for the device. You just need set up the communicate parameters for power control device. So it will be easy to control the power and enable devices through the software remotely.

<table>
<thead>
<tr>
<th>General</th>
<th>Hardware</th>
<th>LED Controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Power Control (Require power control device)</td>
<td>Port: 1</td>
<td></td>
</tr>
<tr>
<td>Enable Temperature / Humidity / Brightness sensor. (Require dev)</td>
<td>Port: 1</td>
<td></td>
</tr>
</tbody>
</table>

After configuring the LED controller, you will be able to control the brightness of the LED screen with the software.

The Power Management depends on the power controller produced by our company. You can contact us for the detail of it.

When complete the configuration of devices, press “OK” button to return the main interface. The software will apply the new configuration immediately.

2.2 Editing media information

The left side of the main interface is “program” and “window” tree. You can view and select all devices from it, as well as the program or a window.
Press the “+” button could append a new program to the device. When selected a particular program, press the “-” button to delete it. At the same time, you can press the “↑” or “↓” button to change the sequence of program.

The top side of the main interface is the “window” select area. You can see the visualization “Window” of the current “Program”. And adjust the window’s size directly.

Press the “+” button to add a new window to the current program. You can select and move the window directly, or adjust its size by drag the small rectangle around the window.

At the right side of the main interface, you can modify the parameters of the selected “Program” and “Window”.

After selected a “Program”, click the “Details” button will open the “Program Properties” dialog:

The “Program” has two types of play method: indicate the repeat times or the play time. It will
flip to the next program automatically when the specified repeat times or the play time reached.

When there are several “Windows” in the program, the program will not increase the repeat count until all “Windows” have finished display. So for some cases, the “Window” with less information will loop itself automatically.

You also could set a period to play, such as 9 a.m to 5 p.m on workdays in December, 2012.

Each “Programs” will be played one by one as its defined sequence. When there are only one “Program” be defined, the contents in this “Program” will be looped automatically, until the user stop displaying current “Script”.

After selected the “Window”, the bottom side of main interface will list all “Play Items” belong to this window, as shown below:

You could press the “” or “” button to add the different format items into current window. Now the system could support many formats, they are: video file, video signal, flash, image file, image list, text file, and text, excel file, power point file, database, clock, timer and website.

Press the “” button and choose the “Video File”, there will be shown the dialog as follow:

(01) Video File
Click the icon to add a video file, the caption text will be the same as the file name, and you can modify it. And it’s a drop-down list mark beside of the icon, there are another two function to select.

“Edit File”: It’ll open the video file with the video editor of your system.
“Show In Folder”: It’ll show you the file in which folder.

Checkbox “Overlay Text”, enable this function, it will overlay a text on the video. Input text in the blank, click “Modify Font” pops up a dialog box to modify font, and you can also select the align type and move type.

(02) Video Stream
It is used to broadcast the tv live or any other live.
Before using, you need to build a stream media server and relevant hardwares, such as the video capture card, the tv set-top box, etc...
Caption: The title of the video stream.
URL: Input the IP address and port number of your stream media server.
Stay Time: Duration of the media displays.

(03) Video Signal
It’s also used to broadcast the tv live.
You should equip each player terminal with the video signal source, the tv set-top box, the video capture card.

Video Source: To select the type, it must be matched with the enabled video capture card port.
Type for select: Tuner, Composite and S-video, click the drop-down list to select.

(04) Flash File
Add the flash file you need and select the layout in the “Layout” dropdown list and press the “OK” button.

(05) Image File

Entry/Exit Effect: The effect of the images entrance and leave. Such as fade in, fly in from top, etc... for select.  
Speed: Two scroll bars to adjust the entry and exit speed.

(06) Image List
If you want to add several image files at one time, you could add all files' pathname together in one list file. So you will avoid adding the new image file again and again. Press the “View file format of Image List”, then you will see the sample of the image list file:

```
This is an sample file of imagelist for LYPREIRD.
You could add several image file's full path name into the imagelist, LYPREIRD will display these files one by one.
The empty line or lines starting with "." will be ignored.
Copyright(C) 2010 Kazo Vision (http://www.kazovision.com)

C:\picture1.bmp
C:\picture2.jpg
C:\picture3.png
```

(07) Text File
File Name: You can add files as “RTF”, “DOC”, “TXT” format.
Font: Modify the font, size and color of the text.
Background: You can select a pure color as the background.

(08) Text
Instead of add text through a text file, you also could input the text in the software directly. The text here could be set to different font or colors.

(09) Pixel Text
Perform the text with pixel, you can set the pixel size, color and zoom, the other is similar to (08) Text.

(10) RSS Text

Load a URL of RSS directly to display the text.
(11) Excel File

You can add an excel file, and choose any sheet to display.

(12) Csv File

Add a csv file, and set the play form to display it aesthetically.
(13) PowerPoint File

Add a PowerPoint file to display, and you can modify the flip delay.

(14) Database

This function could help you display data from different database engines. So the software could be used to display the real time data from database.

After the database connection string be set, all available tables of current database will be shown in the “Query SQL” dropdown list. You can choose the table you want to display from it, or just
input the query SQL here. You can use any standard SQL queries in the software, to filter out the data you want.

When you finished the query SQL, all available fields will be listed in the “columns” list. You can select each field, and set its display caption or the column width.

Select one field and press the “Advanced” button will appear a “Database Field” dialog. You can set the visual effect for each field, as well as let the software do some data conversion through this dialog.
(15) Web Site

Input the web site, then click the OK. It will embed a browser in the window and display the website.
Embed a simulation clock to display the time info.
There are two kinds of clock type in this system, one is “Text”, and the other is “LED”.

(17) Timer
You can use this program in the case which need count down time.

(18) Sensor

Configure the content, it will receive the data from the sensor automatically.

(19) Weather
Server: The website to provide the weather information. We provide you a default server.  
http://weather.kazovision.com
You can input the city and region, then check it in advance.

(20) Program
Choose an executable file, and input the necessary parameter.

If you want to modify the created play item, you can select it and press the "button, or right click the item and select “Modify Item” option. This will open the item edit dialog for modify.

And there are other buttons above the item list, they are “”,”,”,”, and their meaning is delete, move the item up and down.

2.3 Save and Playback the Script
After edit a script, you could click the “” button to save the script to a file. The script file could be read back easily.

After opened a script file, press the “” button to play all contents defined in the script. All “player” will start playback automatically.

In network edition, you should make sure all clients opened the “player” program before start play.

2.4 Play and Stop
After open a script in the “editor”, press the “” button to publish the contents to the “players”. Beside the normal play functions, you also could publish temporary information on the screen. The temporary information will be covered on the normal media screen. You can press the “Play (Temporary Notify)” and “Stop (Temporary Notify)” item in the “Control” menu to use this function.

The temporary info is also a script; the creation of the temporary info is as same as the normal script. It’s different only when you select a different publish type.
For example, if you have create two scripts A and B. The A was published with normal play method, and B was published with “Play (Temporary Notify)”. You will see the contents of B be overlaying on the A.

2.5 Schedule Task
You can set the schedule task in this system, and the schedule item will automatically start to play a script or open the power at specified time.
Select “Tools” —> “Schedule” in the menu, following dialog will appear:
Press the “New Item” and appear the “Schedule Item” dialog:

There are several schedule types for the automatic scheduling item: Indicated time, every day, every week, or every month.

The type of schedule item includes: Play, Stop, Play (Temporary Notify), Stop (Temporary Notify), Power On, and Power Off.

When you select the “Play” or “Play (Temporary Notify)” for the type, you will also need to select a script file for use.

The system could become an automatic playback system through the scheduling function.
2.6 Statistics of Display
Select the “Tools” -> “Statistics”, and appear the following dialog:

You can set the statistics method and the filter, select the device and caption that you need. Then press the “Update” button to get all statistics information which meet the filter condition.

Press the “Export” button to save the information into the local PC.

2.7 LED Screen
This module could import the LED parameters into our system automatically, and then you can use our software to display multimedia information on your LED screen without any configuration.

Press the “LED Screen” menu:
The software will list all detected LED systems. You can select the system type and import its settings:

The software will detect the current LED system automatically; you should choose the one that you are using. And press the “Import” to import the specified LED parameters into software.

If you check “LED Screen Test”, it will show a LED test software, which will help you adjust and test the LED screen.

2.8 Special function of the Program
2.8.1 Program Dispatch
You can equip the hardware device according to our software protocol and press the “Option” button on the “player”. Then you can see the “Comm Control” and “Network Control” options, set the parameter for the method you will use. After that, you could use the external device to dispatch the program.

2.8.2 Advanced Function
Select one item and right click, choose the “Advanced Function” option:

This function is for the case that information needs to update regularly. You can make a program which will update the contents that used to be display. The player will run this program each time before it going to display the contents. So you can make this contents be refreshed itself.

Check the “Run program before show this item” and add the pathname of executable file to “Program” textbox to use this function.

2.10.3 File Transfer Rule
Right click one item and select the “File Transfer Rule” on the pop-up list:
If you check the “Use local file for playback” on the dialog, you should ensure the item you want to play has been copied to the same path on the player.

**2.8.4 Group Edit Mode**

Press the “…” button could edit the contents for all devices in the same time, so if several devices will play the same contents, you only need to edit it once. You could abstract many devices which have similar size, and then edit program on this device.

⚠️ This function will not take effect if there is only one device be defined.

The program editing, windows adding and items adding are the same with commonly mode.
3. Player

“Player” is the software which will communicate with display device. Generally, what you need to do is just open the “player” program on each computer, and set the system’s firewall to allow it communicate through network. The “editor” will communicate with all “players” through automatically when you start playback the script.

Click “Options” button will open the options dialog:

You can set if the “player” needs to be startup with the system automatically here, and the temp file’s path, etc.
### 4. Supported Media Formats

<table>
<thead>
<tr>
<th>Media Type</th>
<th>File Formats</th>
<th>Notice</th>
</tr>
</thead>
</table>
| Video           | AVI, MPEG, MOV, WMV, ASF, MKV | Some video formats are not supported by the new installed Windows System. You should also install the codec for it. There is some codec pack link you may install to get all favorite codec.  
**Windows XP:** XPCodc ([http://www.xpcodecpack.com/](http://www.xpcodecpack.com/))  
**Windows Vista:** VistaCodec  
**Windows 7:** Shark007’s FREE Codec: ([http://www.shark007.net/](http://www.shark007.net/)) |
| Video Stream    | MMS              | MMS video stream can be provided by Microsoft Media Encoder.  |
| Video Signal    |                  | Compatible with all video capture devices, include USB Cam.  |
| Flash           | SWF              | Need the flash player component. ([http://get.adobe.com/flashplayer/](http://get.adobe.com/flashplayer/))  
Notice: Do not support FLV format, but you can create an html file which embed the FLV file, and play it with WEB Site method.  |
| Animation       | GIF              |  |
| Image           | BMP, JPG, PNG,TIF|  |
| Format Text     | DOC, RTF         | You need to install the “Microsoft Office” to support the DOC file.  |
| Plain Text      | TXT              |  |
| Excel           | XLS              | You need to install the “Microsoft Office” to support the XLS file.  |
| Power Point     | PPT              | You need to install the “Microsoft Office” to support the PPT file.  
Notice: Just install the “PowerPoint Viewer” is not enough.  |
| Database        | MDB (Access), SQL Server, Oracle, DB2, MySQL, PostgreSQL | We use the ADO database interface, to support all kinds of database.  
You should install the Database Driver or Client Application.  |
| Web Site        |                  | Use the Trident (IE) engine to display the web content.  |
| Program         | EXE              | Run the third party executable file.  |