

# Digital Media Signage Organizer

## User Guide V1.09a



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### **IMPORTANT SAFETY INSTRUCTIONS**

1. Please read these instructions carefully before using the product and save for later reference.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Clean the product with a damp soft cloth. Do not use liquid or aerosol cleaners as it may cause permanent damage to the screen.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table.  
The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.  
The openings should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet.  
Do not defeat the purpose of the grounding-type plug.
9. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
10. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord does not exceed the extension cord ampere rating. Also make sure that the total of all products plugged into the wall outlet does not exceed 15 amps.
11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
12. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks and will void the warranty. Refer all servicing to qualified service personnel.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

14. When the power cord or plug is damaged or frayed.
15. If liquid has been spilled into the product.
16. If the product has been exposed to rain or water.
17. If the product does not operate normally when the operating instructions are followed.  
Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
18. If the product has been dropped or the cabinet has been damaged.
19. If the product exhibits a distinct change in performance, indicating a need for service.

## Revision History

REVISION	DATE	DESCRIPTION
1.00	Dec 20, 2005	1. Initial draft.
1.01	Mar 23, 2006	1. Added pictures on RS232 description.
1.02	Apr 06, 2006	1. Added OSD control 2. Modified password setting 3. Added remote control description 4. Added WMV9 limitation
1.03	Apr 25, 2006	1. Revised user interface 2. Added get client status feature
1.04	June 12, 2006	1. Revised user interface 2. Added get group log feature 3. Added Clock feature 4. Added update message mode 5. Added media format supported 6. Added output resolution V.S banner size
1.06	July 7, 2006	1. Revised user interface 2. Deleted TV mode transfer 3. Added MS BOX with add-on TV function 4. Added troubleshooting section 5. Firmware update guide
1.07	Aug 10, 2006	1. Added zone size in each resolution 2. Added USB firmware update section 3. Take out Dolby support 4. Added Client Status detailed info

1.08	Sep 15, 2006	<ol style="list-style-type: none"> <li>1. Added limitation of picture size in Picture Zone.</li> <li>2. Added Clock Display description</li> <li>3. Added Security Key setup</li> <li>4. Added client configuration export to USB description</li> <li>5. Added transition effect in picture property</li> <li>6. Added appearance style in scrollable message</li> <li>7. Added get codec information description</li> <li>8. Added the limitation description in Play List Edition section</li> <li>9. Added warning message to restrict any modification from users</li> </ol>
1.09	Sep 29, 2006	<ol style="list-style-type: none"> <li>1. Added NAT description</li> </ol>
1.09a	Nov 10, 2006	<ol style="list-style-type: none"> <li>1. Modified software specification</li> <li>2. Added port forwarding in NAT section</li> </ol>

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## 1. Introduction

This user guide provides an overview of the Digital Signage Technology and instructions for using the Media Signage Organizer (MSO). Media Signage is the powerful engine that drives revenue-generating Digital Signage solution. MSO is equipped to handle high-quality media of video and graphics. Using LAN or WLAN, MSO transmits and receives data over wired or wireless connections.

Overall, we hope this document is helpful to give users a clear view on the Media Signage Organizer and a better understanding of Digital Signage Technology.

### 1.1 About the product

Media Signage is a powerful engine that drives revenue-generating Digital Signage solution. MSO is equipped to handle high-quality media of video and graphics. Using LAN or WLAN, MSO transmits and receives data over wired or wireless connections.

#### Media Signage BOX\*<sup>1</sup>



#### Integrated Display (7")



---

<sup>1</sup> The LED in the front side of Media Signage BOX turns to red when power cable is connected and the system is booting up. The LED turns to yellow when the system finishes boot-up process and starts playing media contents.

### Integrated Display (above 7")



**Warning: Please contact our technical support if you encounter any abnormal situation. DO NOT open the unit and do any modification to components of any kind.**

### 1.2 Summarized Product Features

- Program/playlist control
- Program Scheduling
- Content control (volume, duration, repeat)
- File transferring
- Client IP setup
- Client billing log
- Output resolution setting
- Output selection (DVI, S-video)
- Picture rotation
- Media Preview
- Administrator password protection
- Group exporting
- Multiple zones display
- Scrollable text message

### 1.3 Minimum Requirements

To install the Media Signage Organizer, the minimum requirements are:

- OS: Windows XP/2000
- System Requirement: Pentium III 1GHz or better, 128 MB RAM or better

### 1.4 Notice

- Do not use abrasive cleaners, waxes or solvents for cleaning, use only a dry or damp, soft cloth.

- Use only with a high quality, safety-approved, AC/DC power adapter.

## 1.5 Checklist

Before using this media player, please make sure that all the items listed below are present in your package.

Accessory	Quantity
Power Cord	1
DC Adapter	1
DVI-VGA Cable	1
User Manual CD	1
AV-RCA Cable (optional)	1
S-Video Cable (optional)	1
RS232 Cable (optional)	1
Audio Cable (optional)	1
Remote Control with 3V battery (optional)	1

## 2. Media Signage Specification

### 2.1 Hardware Specification

#### Media Signage BOX / Integrated Display above 7”

<b>Core Processor</b>	RISC based media processor	
<b>Media Decoding</b>	H/W MPEG decoding Engine	
<b>Internal Storage</b>	Compact Flash -512MB (bigger size or HDD as optional)	
<b>USB Port</b>	USB 2.0 port for Flash Drive storage device	
<b>Operating Temp</b>	0 to 50°C, Humidity 5-85% @ 50°C	
<b>Network</b>	10/100 Base T Ethernet (RJ-45) 802.11b/g miniPCI for wireless LAN (optional)	
<b>Video Outputs</b>	Media Signage BOX	Integrated Display
	DVI-I (can be converted into VGA) S-Video Composite	DVI-I
<b>Audio</b>	Media Signage BOX	Integrated Display
	N/A	Stereo 2W Speaker
<b>Power Supply</b>	Media Signage BOX	Integrated Display
	12V DC input	12V DC input
<b>Power Consumption</b>	Media Signage BOX	Integrated Display
	Approx. 5W	Varies

## Integrated Display (7")

<b>Core Processor</b>	RISC based media processor
<b>Media Decoding</b>	H/W MPEG decoding Engine
<b>Internal Storage</b>	Compact Flash - 512MB (bigger size as optional)
<b>Audio</b>	Stereo 2W x2 Speaker
<b>Network</b>	10/100 Base T Ethernet (RJ-45) 802.11b/g miniPCI for wireless LAN (optional)
<b>Power Supply</b>	12V DC input
<b>Power Consumption</b>	15 W typical, normal operation
<b>Operating Temp</b>	0 to 50°C, Humidity 5-85% @ 50°C

## 2.2 Software Specification

Network Protocol Support: HTTP, TCP/IP

WLAN: IEEE 802.11b/g

## 2.3 Media Format Supported

Text message/Picture Format

Type	Support Format	File extension
Graphics/ Pictures	JPEG file	.jpg
	24bit-Bitmap file	.bmp
Message/ Text* <sup>2</sup>	ASCII Text file	.txt
		.jpg

<sup>2</sup> Depends on the size of font, the number of characters can be displayed in scrollable text area may vary. However, the message length should be less than 8000 pixels.

## Video

Type	Support Format	File extension
Video (16:9 & 4:3)	MPEG1 (VCD file)	.mpg
	Support Format	.dat
	Video Data rate* <sup>3</sup>	Up to 10.0 Mbps
	Audio codec	Max. audio data rate: 384 Kbps MPEG1-Audio-Layers II and III(mp3) <b>*PCM not supported</b>
	MPEG2 MP@HL Multi-frames: Max. 480p or 576p	.vob .mpg
Video (16:9 & 4:3)	Support Format	.mpeg
	Video Data rate	Up to 6.0 Mbps
	Audio codec	Max. audio data rate: 384 Kbps MPEG1-Audio-Layers II and III(mp3) <b>*PCM not supported</b>
	MPEG4 Multi-frames: Max. 480p or 576p	.vob .mpg .avi
	Support Format* <sup>4</sup>	.divx
Video (16:9 & 4:3)	Video Data rate	Up to 4.0 Mbps
	Audio codec	Max. audio data rate: 384 Kbps MPEG1-Audio-Layers II and III(mp3) <b>*PCM not supported</b>
	DivX 3.11/4.x/5.x	.xvid

<sup>3</sup> If data rate is higher than limitation, a lag might happen when playing video

<sup>4</sup> It does not support the codec of RealMedia (.rm, .rmvb) or Apple QuickTime (.mov)

### 3. MSO Installation

Note that once you update firmware to XXX version, you **MUST** use the same version of MSO for management.

1. Load the **MSO Setup** from CD-ROM into your computer.
2. If you have installed earlier version of MSO, please uninstall before you continue the following steps<sup>5</sup>.



3. Double click the “**setup.exe**” icon and the setup utility will start with the welcome screen, click “**Next**” button to continue.



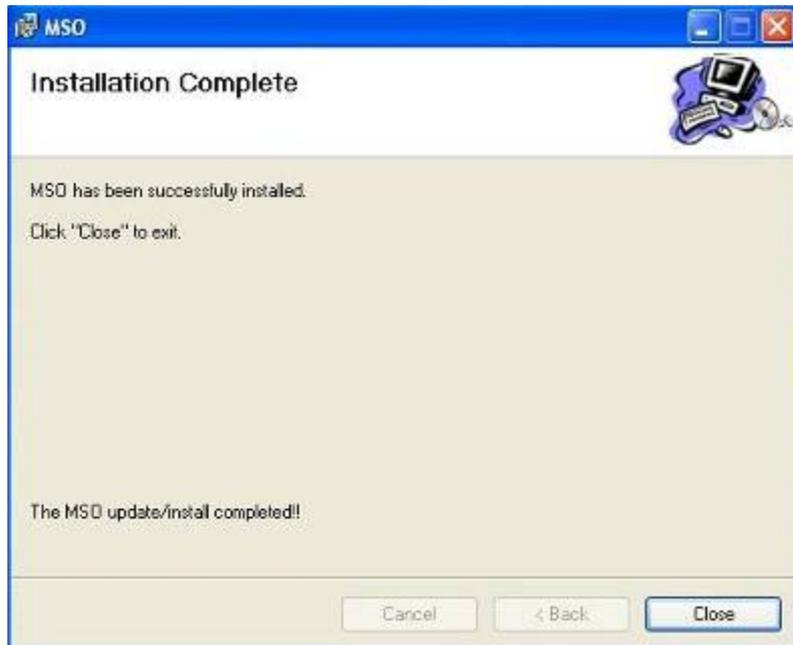
<sup>5</sup> Please remove MSO from Control Panel if you cannot uninstall MSO successfully from Start menu.



4. The setup utility will choose a default folder to install the MSO files. Click “**Browse**” to browse to the folder you would like to install MSO. Click “**Next**” to continue installation process.



5. The MSO utility is now installed. Click the “**Close**” button to complete the installation.



## 4. MSO Utility

The factory setting for every Media Signage is listed below. We also provide a utility to configure client settings in your PC and use a USB flash drive to apply those configurations in the Media Signage unit. Please refer to **4.19 Client Config Export** for more detail.

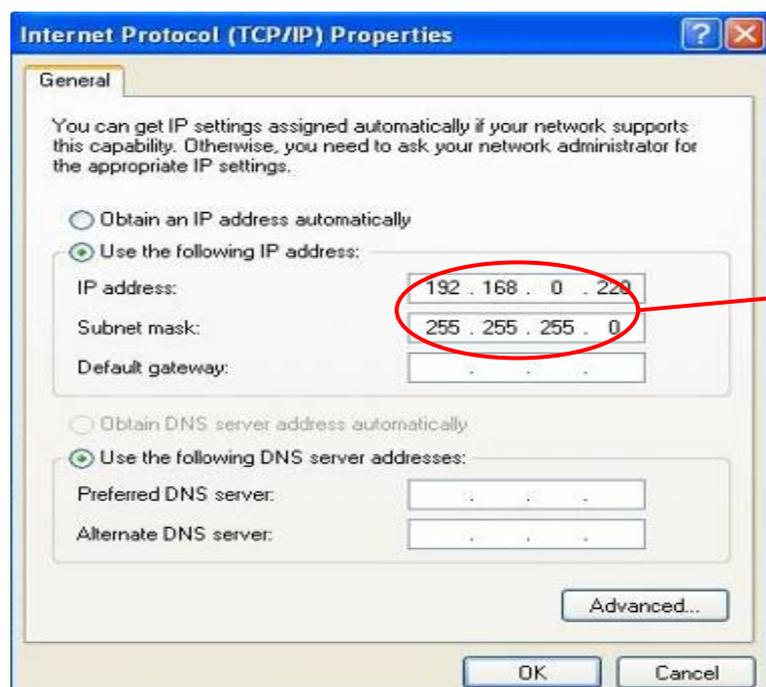
### Factory Setting

IP mode	Fixed
LAN IP	192.168.0.128
LAN Subnet Mask	255.255.255.0
LAN Gateway	192.168.0.1
WLAN IP	192.168.252.249
WLAN Subnet Mask	255.255.0.0
IP port	5001, 8000 <sup>6</sup>

In order to successfully connect to the Media Signage unit, you will need to configure the IP address of your PC to establish connection. Please make sure your desktop or laptop's IP address complies with the following rules.

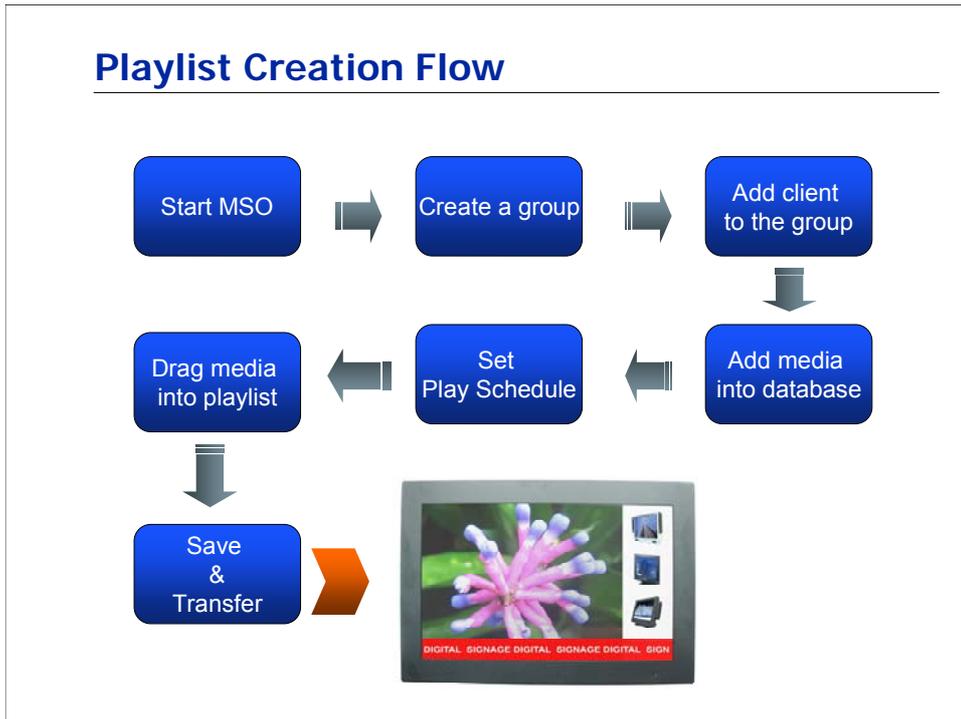
Path to call **Internet Protocol(TCP/IP) Property**:

- Click **Start** → **Control Panel** → Double-click on **Network Connections**.
- Right-click on **Local Area Connection** → select **Properties**.
- On **General tab**, double-click **Internet Protocol (TCP/IP)**.
- Setup client IP
- Click **OK** to confirm the setting



Default IP address for every MS unit:  
192.168.0.128  
Default Subnet Mask: 255.255.255.0  
Therefore, the IP address of your server PC has to be 192.168.0.XXX in order to connect to the MS unit at the first time. Then you are free to set the MS IP address.

<sup>6</sup> If your PC is behind a firewall, please make sure port 5001 and 8000 are open.



## 4.1 Starting the MSO

1. Click MSO icon on your desktop.



2. If this is the first time you start the MSO, a pop-up window will guide you to set up your own password.\*<sup>7</sup>



3. Enter your password and choose language\*<sup>8</sup> from drop-down menu.

4. Click the “**Enter**” button to start MSO.

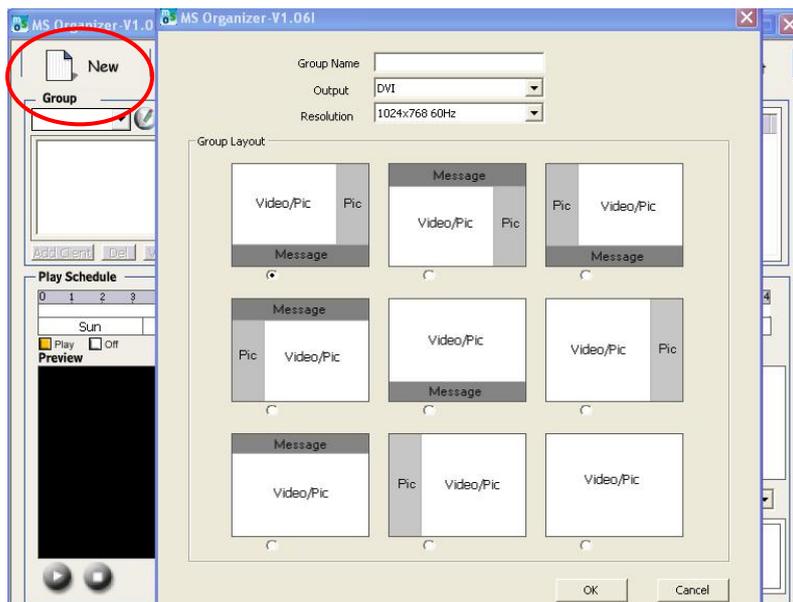
<sup>7</sup> The length of password has to be at least 6 alphanumeric characters. We strongly suggest you select a password consisting of uppercase and lowercase letters, numbers, and special characters.

<sup>8</sup> Currently there are four languages available: English, Japanese, Simplified Chinese, and Traditional Chinese.



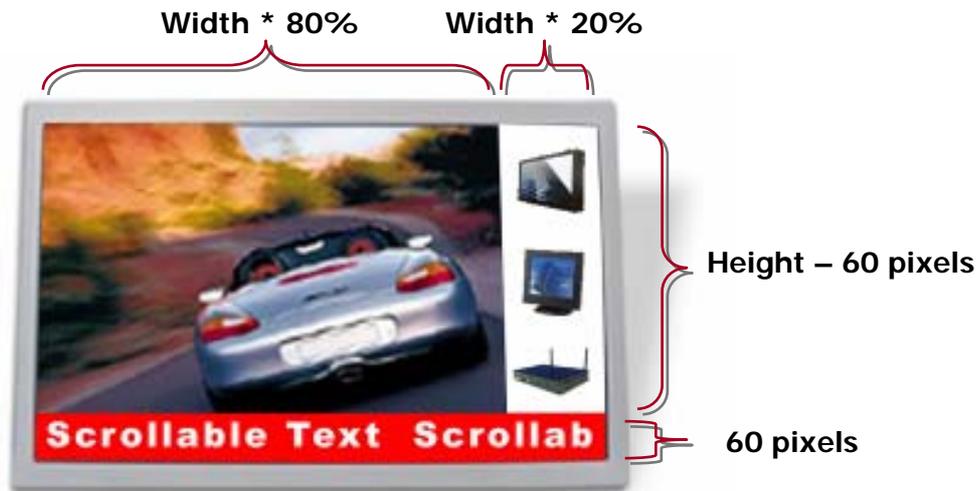
## 4.2 New Group Creation

1. Click the **"New"** button, then a dialog with Program Name, Output, Resolution, and Layout will pop up on the screen.
2. Enter the program name.
3. Select the video output<sup>9</sup> (DVI/S-Video).
4. Select the resolution, default resolution is 1024x768 60Hz.
5. Select the layout.
6. Click **OK** to add a new group.



<sup>9</sup> If you choose S-Video as video output, you can only choose PAL\_BG or NTSC\_M in Resolution.

## General Zone Size Description



## Output Resolution V.S Zone Size (in pixel)

Output Resolution	Video/Pic Zone	Pic Zone	Message Zone
640 x 480	512 x 420	128 x 420	640 x 60
800 x 600	640 x 540	160 x 540	800 x 60
1024 x 768	820 x 708	204 x 708	1024 x 60
1280 x 960	1024 x 900	256 x 900	1280 x 60
1280 x 1024	1024 x 964	256 x 964	1280 x 60
1360 x 768	1088 x 708	272 x 708	1360 x 60

7. You can view group property in the bottom.

MSO version

Program size

Program resolution

Program start time

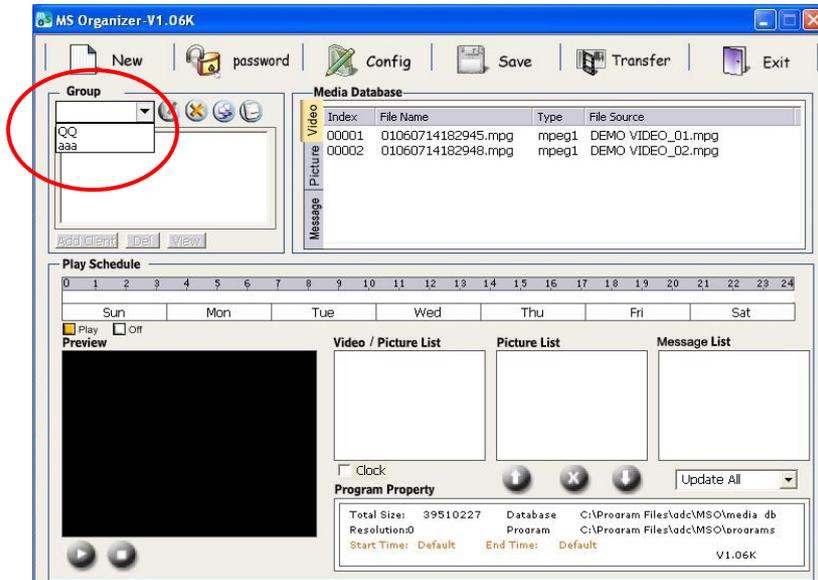
Database directory

Program directory

Program end time

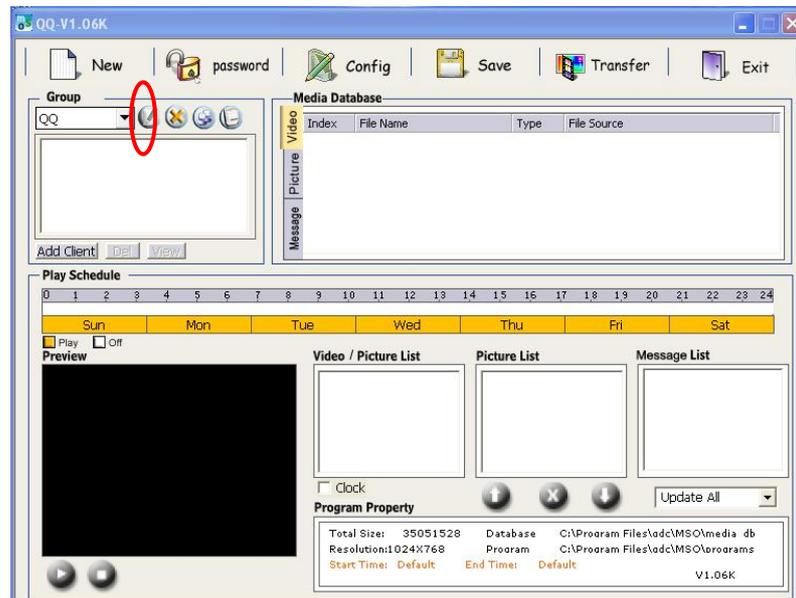
## 4.3 Open an Existent Group

1. Click on the drop-down menu and select the group you would like to open.

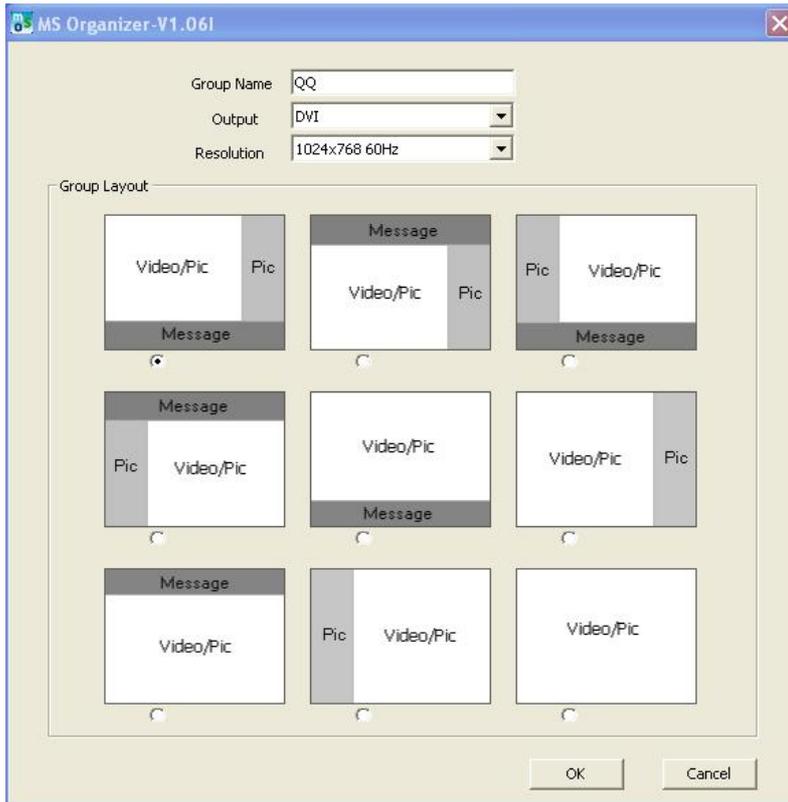


## 4.4 Group Edition

1. Click  to edit existent group properties.

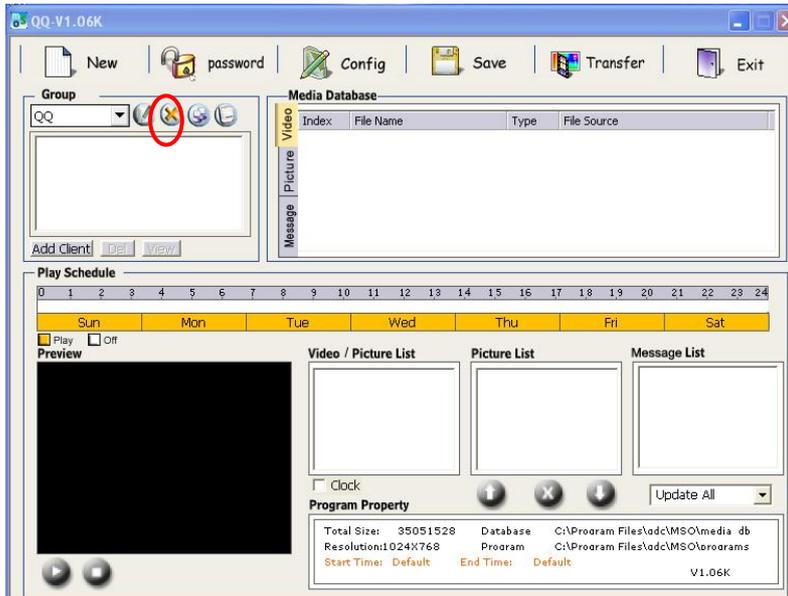


2. You will be able to change Program Name, Output, Resolution, and Layout of a group.



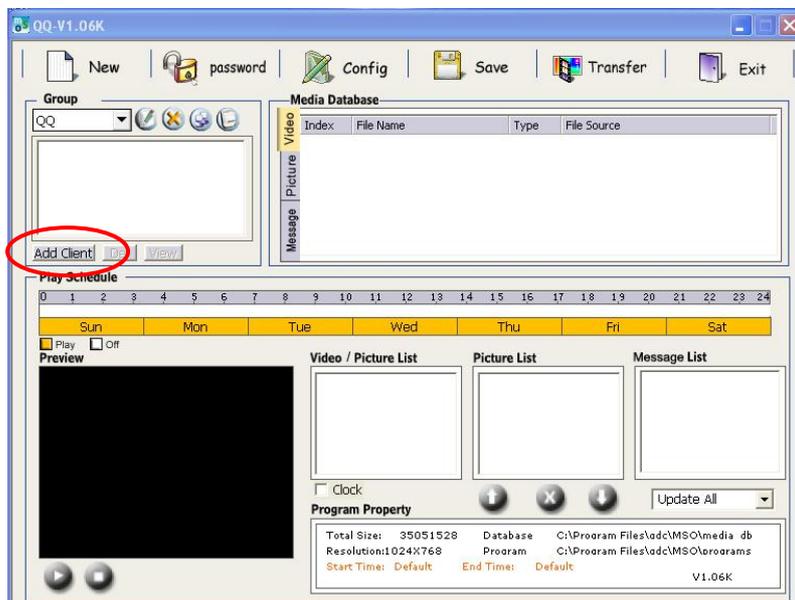
## 4.5 Group Deletion

1. Select the group you would like to delete from the drop-down menu.
2. Click button.
3. Click “**OK**” to confirm the delete.



## 4.6 Add a New Client

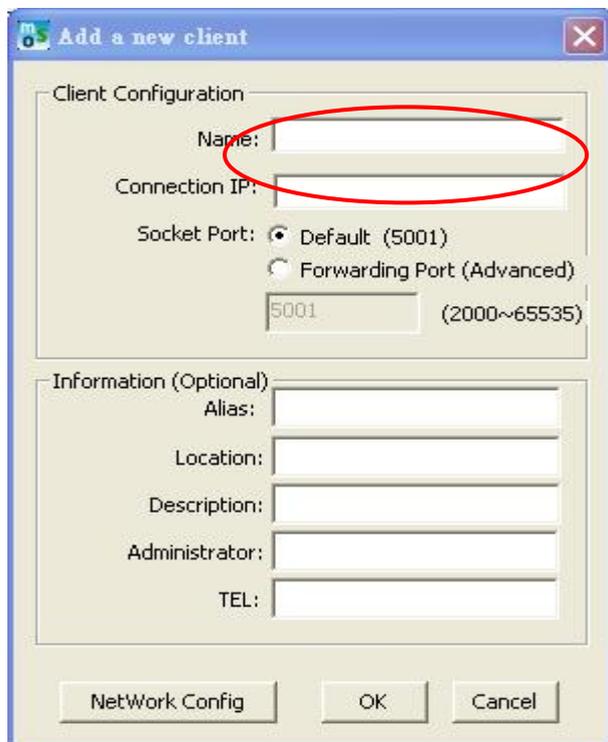
1. Click “AddClient” button to start adding process.



2. A dialog with Client IP and Client Name fields will pop up on the screen.

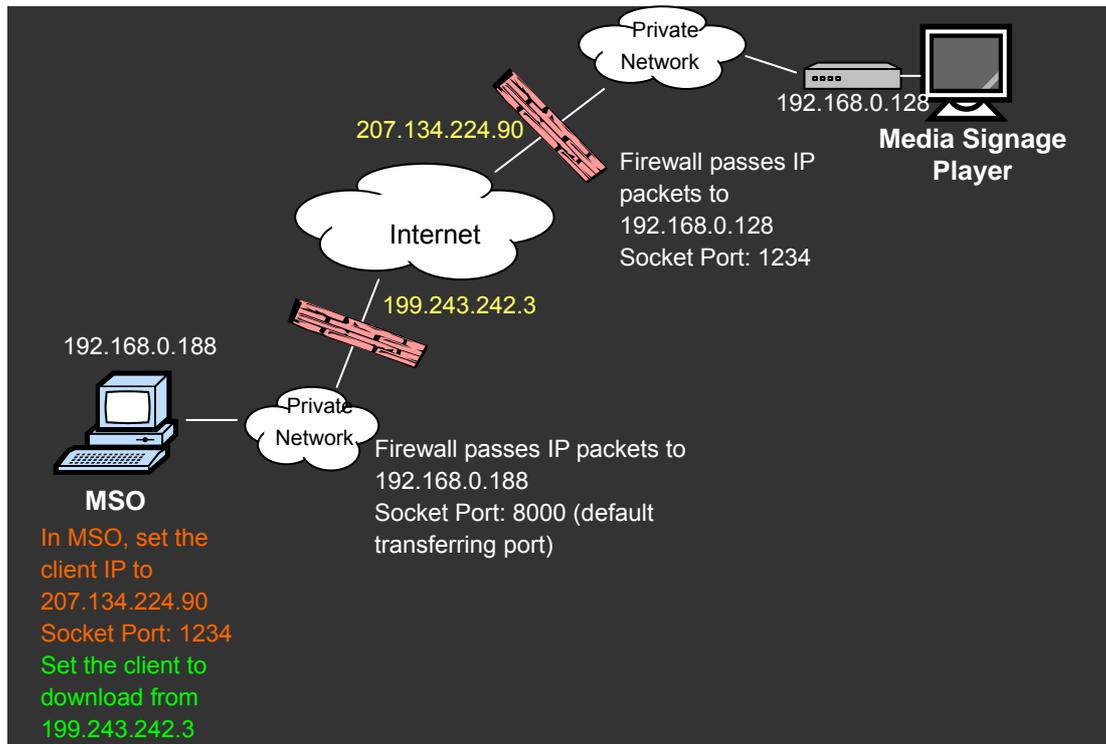
3. Type in Client Name and connection IP.

4. You can use the default port 5001 or choose **Forwarding Port** and type in the port number you would like the router to forward IP packets.\*<sup>10</sup>



<sup>10</sup> You will also need to configure your router to forward IP packets to a specific port that the Media Signage uses.

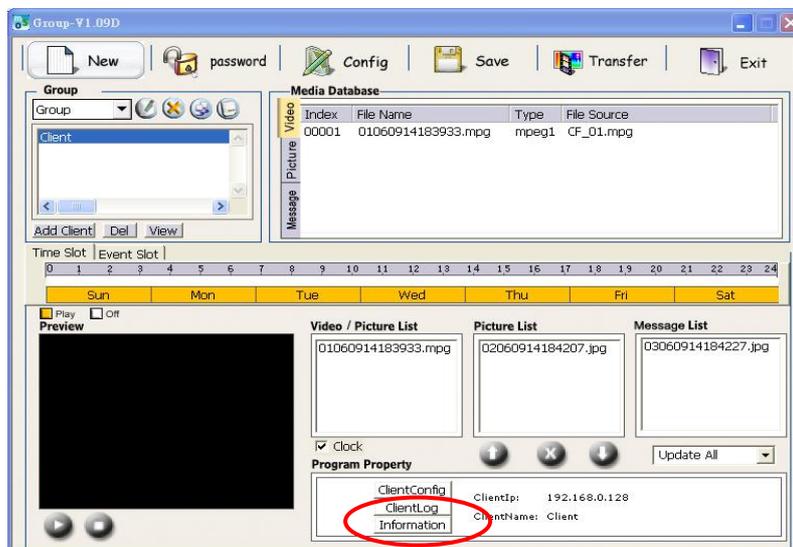
## Network Address Translation (NAT) Diagram



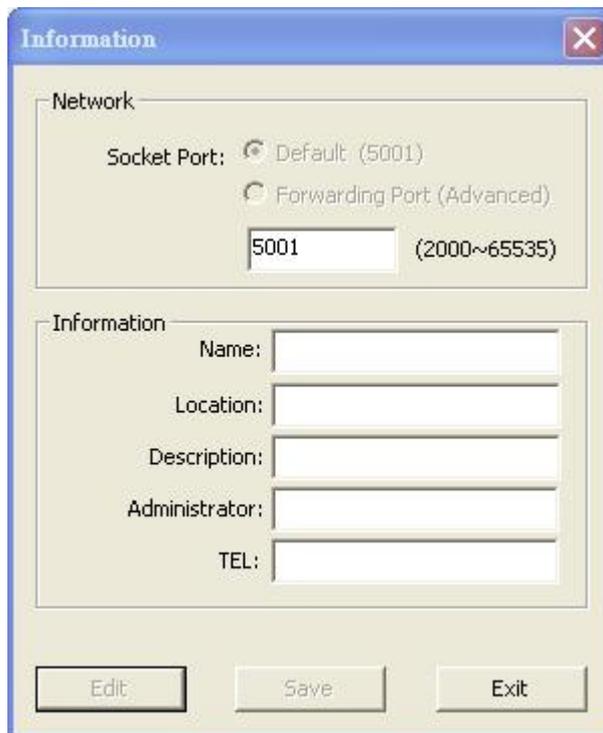
5. (Optional) Enter client information including name, IP, location, description, administrator, and contact telephone number.
6. Click “Yes” button to complete the adding process.
7. Repeat step1 to step5 if you need to add more clients.

You will be able to edit related client information anytime through the following steps.

1. Highlight the client you would like to configure its network.



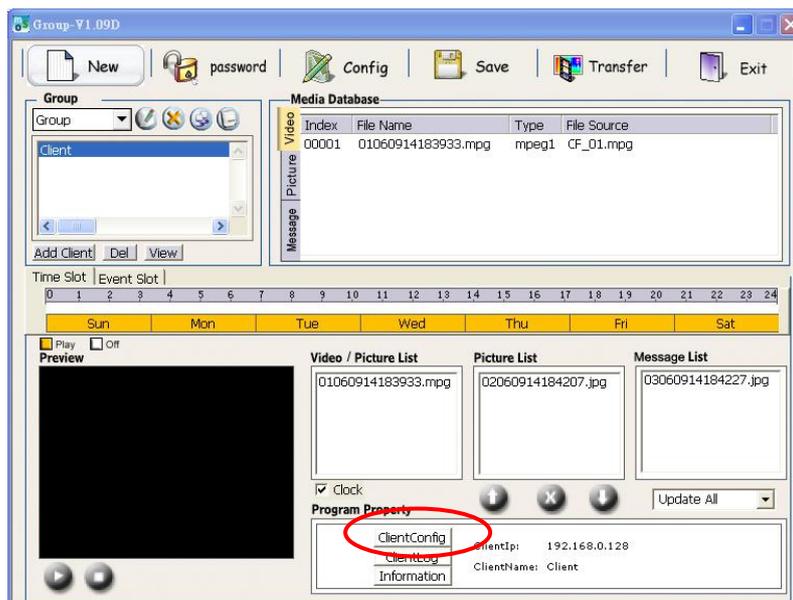
2. Click **Information**.
3. Click **Edit** and make changes.



4. Click **Save** to save settings.
5. Click **Exit** to exit Client Information.

## 4.7 Client Network Configuration

1. Highlight the client you would like to configure its network.



2. Click **ClientConfig**.

### 4.7.1 Time Sync

1. Select the Time Zone from the drop-down menu<sup>\*11</sup>.
2. Choose -2Hr~+2Hr from the Daylight saving time drop-down menu depends on your location to apply daylight saving.
3. Click “Time Sync” to synchronize the system time.
4. Click “**Reboot**” for this change to take effect.

The screenshot shows the 'MS Organizer - client' configuration window. It is divided into three main sections: Client LAN Config, Client WLAN Config, and Time Sync. The Time Sync section includes a Time Zone dropdown set to 'GMT+', Hour and Min dropdowns set to '8 Hrs' and '0' respectively, and a Daylight saving time dropdown set to '0Hr'. A 'Time Sync' button is circled in red. Below the Time Sync section is a Security Key section with an 'Enable' checkbox and a 'Key' field. At the bottom of the window, a 'Reboot' button is also circled in red, along with a 'Close' button.

<sup>11</sup> The default time zone is set as GMT+ 8 hrs.

#### 4.7.2 LAN Setup

1. When LAN/WLAN configuration window pops up on the screen, fill in all fields in **Client LAN Config**\*<sup>12</sup>.
2. Click **“Set”** to setup LAN.

The screenshot shows the 'MS Organizer - client' window. The 'Client LAN Config' section is highlighted with a red box. It contains the following fields and values:

Field	Value
New IP	
IP Mask	255.255.255.0
Gateway	192.168.0.1
DNS	192.168.0.1

Below the LAN config is the 'Client WLAN Config' section. It includes a checkbox for 'Enable WLAN', fields for 'New IP' (192.168.252.249), 'IP Mask' (255.255.0.0), 'Gateway' (192.168.1.254), 'ESSID' (default), 'Channel' (192), 'Mode' (managed), and 'WDNS' (192.168.1.1). It also has a 'WEP' checkbox and 'DEFKEY' (1) dropdown, and four 'KEY' fields (KEY1-4).

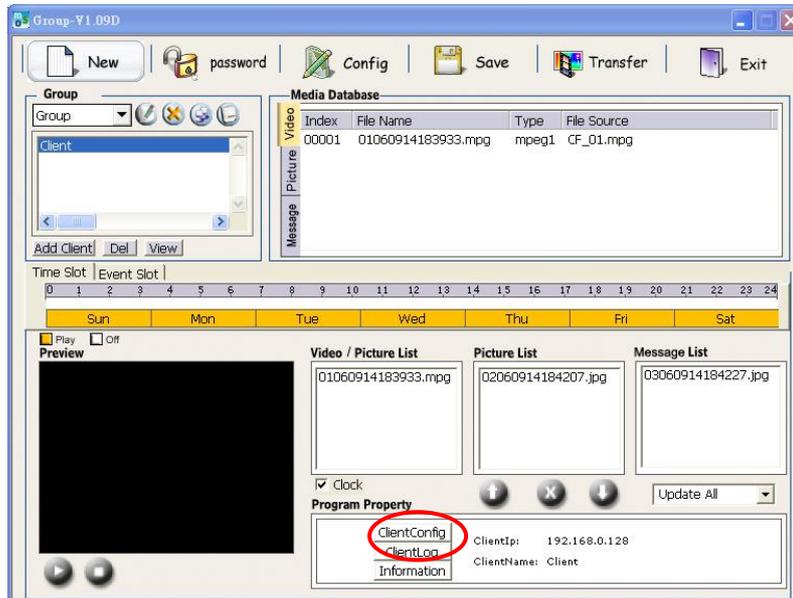
At the bottom, there are 'Time Sync' and 'Security Key' sections. 'Time Sync' includes 'Time Zone' (GMT+), 'Hour' (8 Hrs), 'Min' (0), and 'Daylight saving time' (0Hr). 'Security Key' includes an 'Enable' checkbox and a 'Key' field.

3. A pop-up confirmation window will be shown if the setup is successful.
4. Click **“Reboot”** for the setting to take effect.

<sup>12</sup> You need to fill in **ALL** fields in **Client LAN Config** in order to setup client IP. Contact your system administrator for setting information.

### 4.7.3 Wireless LAN Setup\*<sup>13</sup>

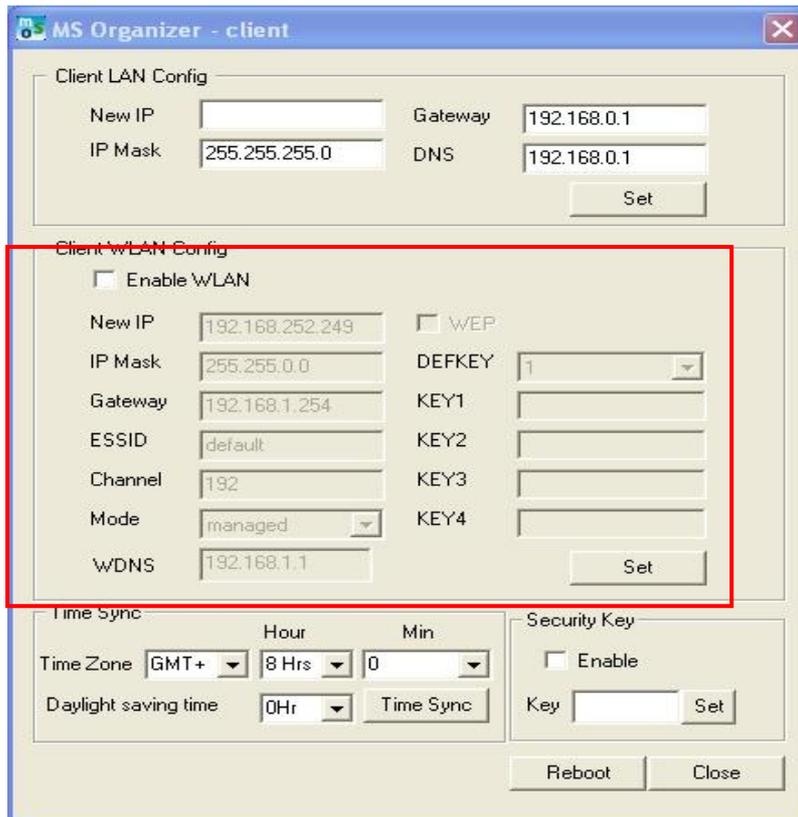
1. Highlight the client you would like to set wireless LAN.



2. Click the “**ClientConfig**” button to bring up the configuration window.
3. Fill in all fields in Client WLAN Config\*<sup>14</sup>.
4. Click **Set** to setup WLAN.

<sup>13</sup> The Media Signage does not support Ad-hoc mode WLAN. You should always use a WLAN AP to connect the Media Signage unit.

<sup>14</sup> You need to fill in **ALL** fields in **Client WLAN Config** in order to setup WLAN. LAN and WLAN ports are able to work simultaneously, however, they should be in different subnet. If LAN and WLAN are in the same subnet, the LAN's priority is higher than WLAN. In this case, WLAN is inactive. Contact your system administrator for setting information.

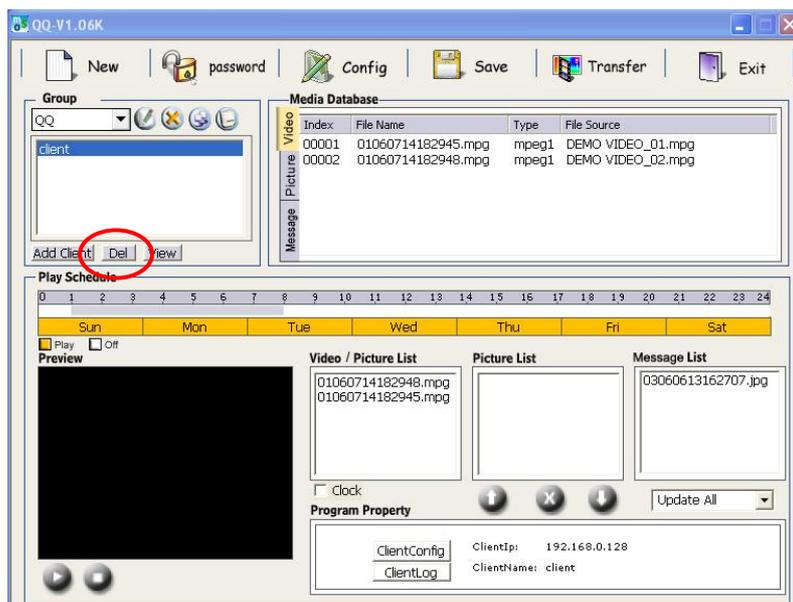


5. A confirmation window will pop up if the setup is successful.
6. Click **“Reboot”** for the setting to take effect.

## 4.8 Client Deletion

Use the function when you would like to delete a client.

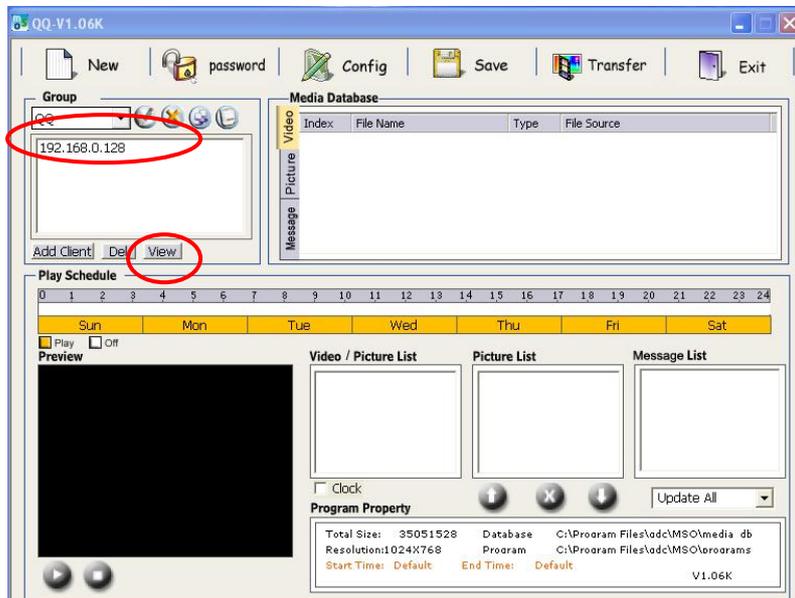
1. Highlight the client you would like to delete.
2. Click **“Del”** to delete the client.



## 4.9 IP Mode Switching

Use this function when you would like to switch between client name and its IP address.

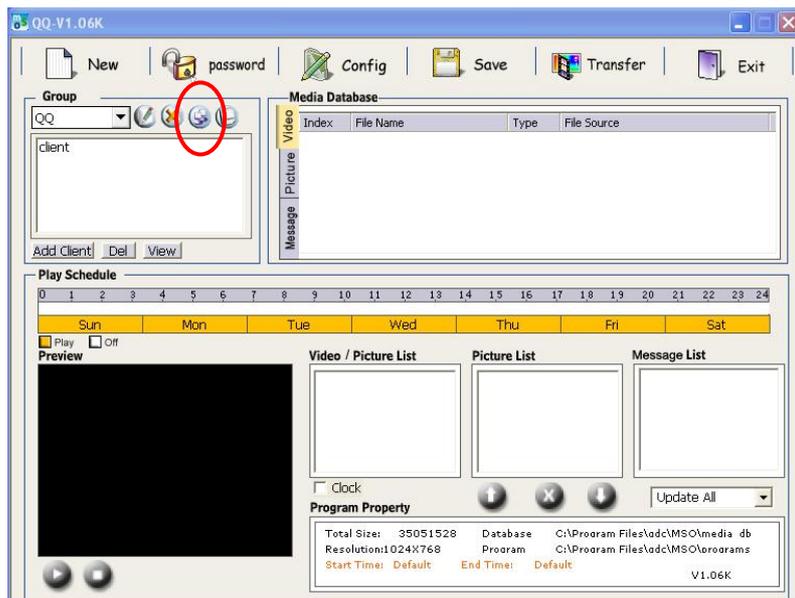
1. Click “**View**” button to switch from text mode to IP mode.



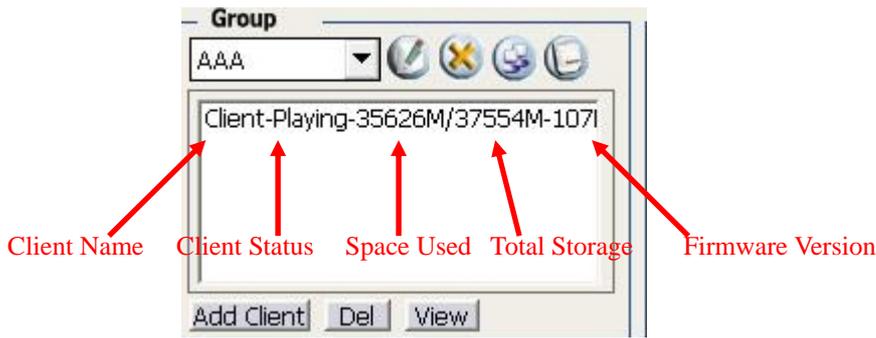
## 4.10 View Client Status

Use this function when you would like to view client’s status.

1. Click “**GetStatus**” button to get the client status. Client status is either playing, sleep\*<sup>15</sup>, or disconnect.



<sup>15</sup> Sleep indicates currently no play schedule.

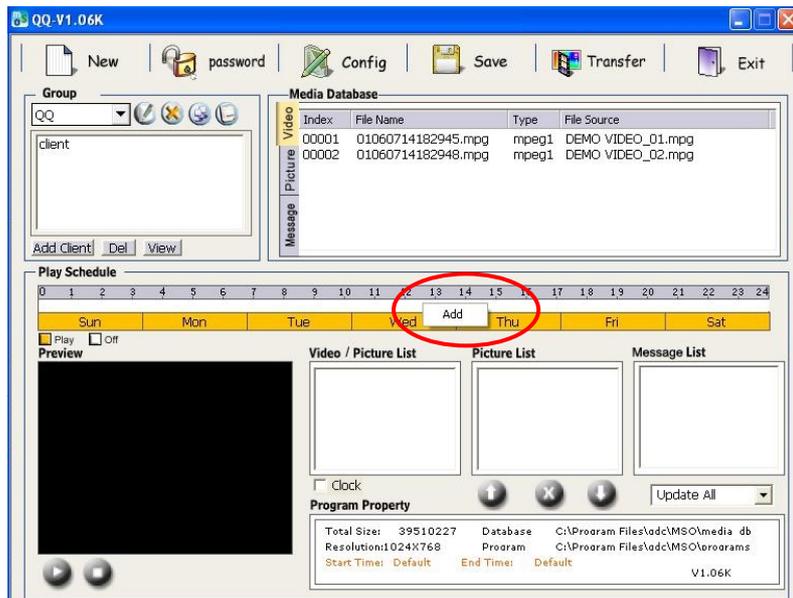


## 4.11 Schedule Setting

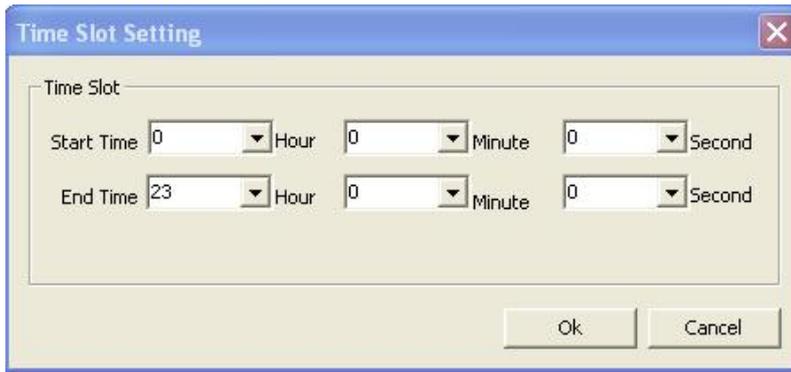
You can set schedule for each play list, note that the time slots can not be overlapped. **Remember always set time schedule before you drag media files into play list.**

### Playback Schedule Setup

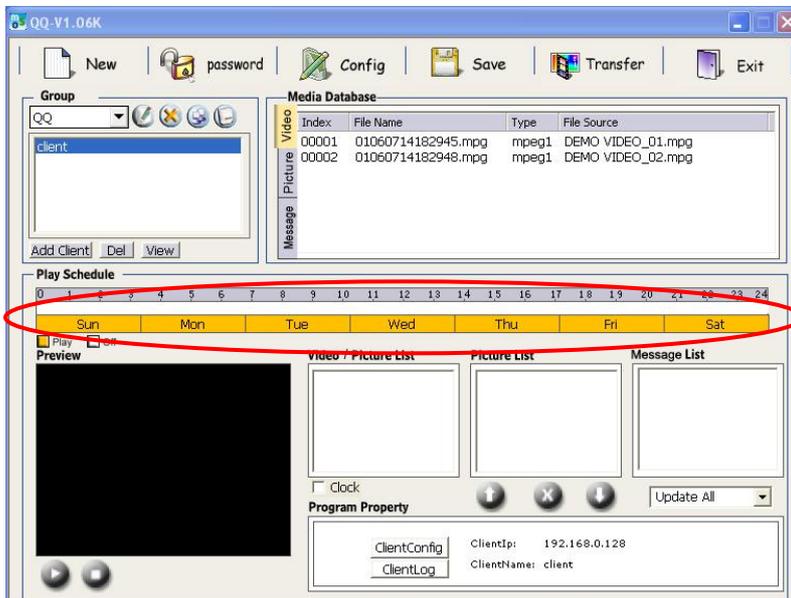
1. Right-click on "Play Schedule" (white bar area) and then select "Add". A dialog box with "Time Slot" will pop up on the screen.



2. Set Start Time and End Time for play list. (The time slot will change to pink color)



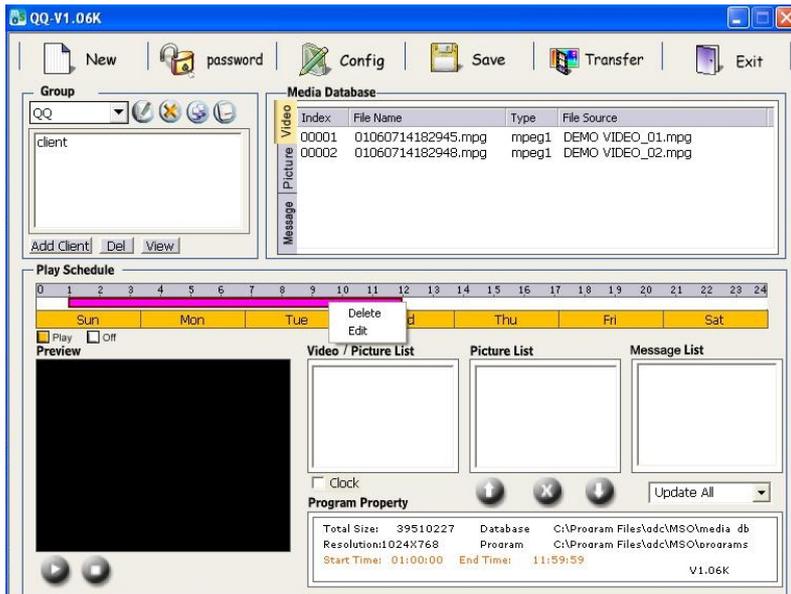
3. Select the day(s) you would like the play list to be played. Orange color indicates the days are selected; you may click on the days to de-select them. From Sunday to Saturday are all selected by default.



### Playback Schedule Deletion/Edition

1. To delete or edit, right-click on the time slot block to select “Delete” or “Edit”<sup>16</sup>

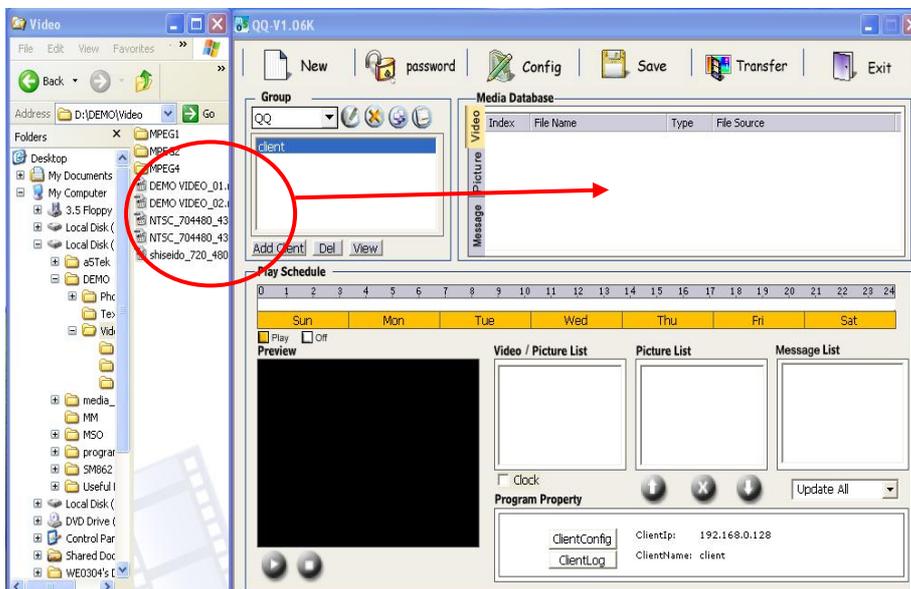
<sup>16</sup> Time slots can not be overlapped.



## 4.12 Media Collection

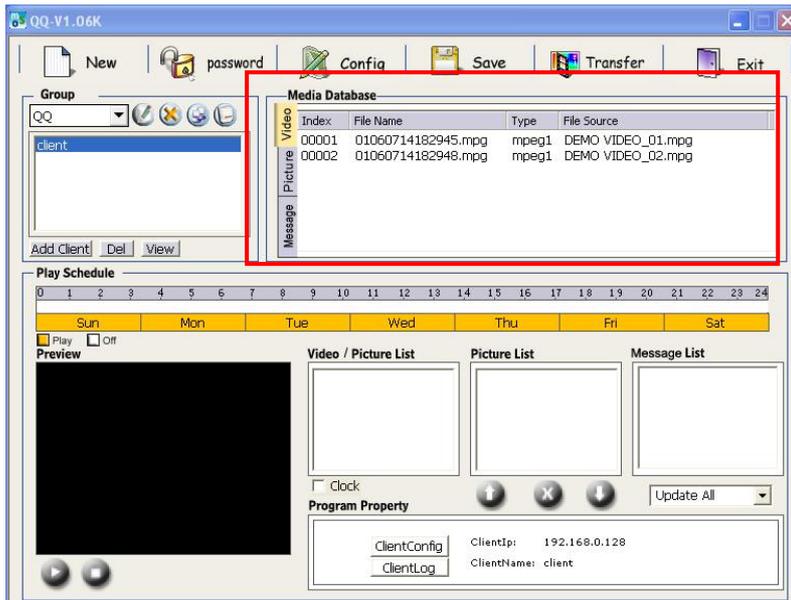
### Video

1. Drag video file(s) from Windows Explorer and drop to the "Media Database".  
(Only valid files can be added in repository \*<sup>17</sup>)



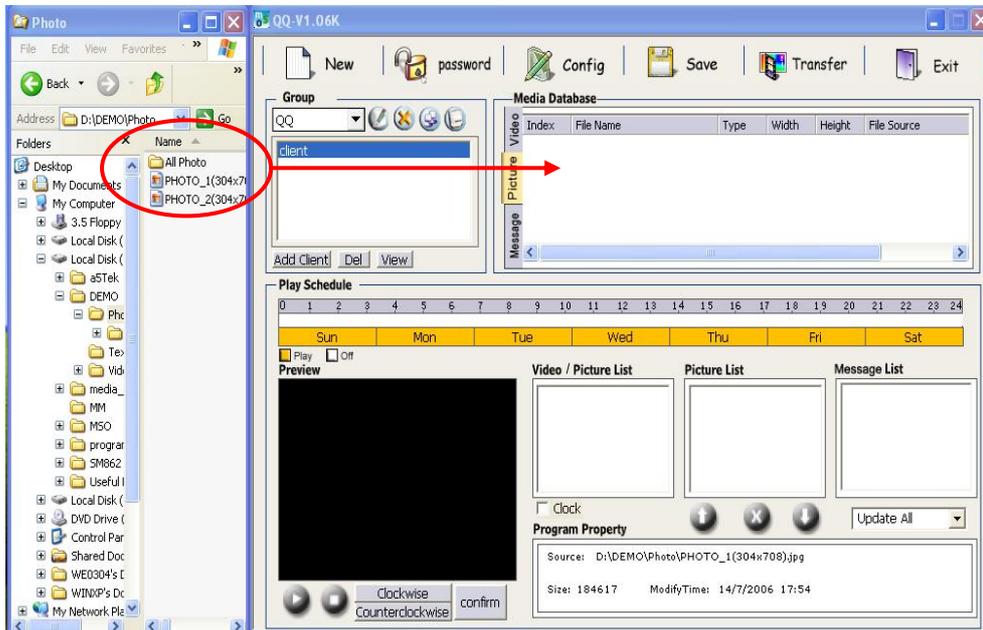
2. Media file will be identified with a normalized ID when being added into the "Media Database". This ID will be used to specify the file in the application and as the filename while exported to an external storage device.

<sup>17</sup> Acceptable movie formats: MPEG-1, MPEG-2, MPEG-4 (.mpg, .vob, .mp4, .avi(divx)).



## Graphics

1. Drag graphic file(s) from Windows Explorer and drop into the “Media Database”. (Only valid files can be added in repository \*<sup>18</sup>)



## Text

1. Drag text files from Windows Explorer and drop into the “Media Database”. (Only valid files can be added in repository \*<sup>19</sup>)

<sup>18</sup> Acceptable graphic types: .jpg, .bmp

<sup>19</sup> Acceptable text type: ASCII text (.txt). You may use any text editor to edit your message and save it as .txt file.

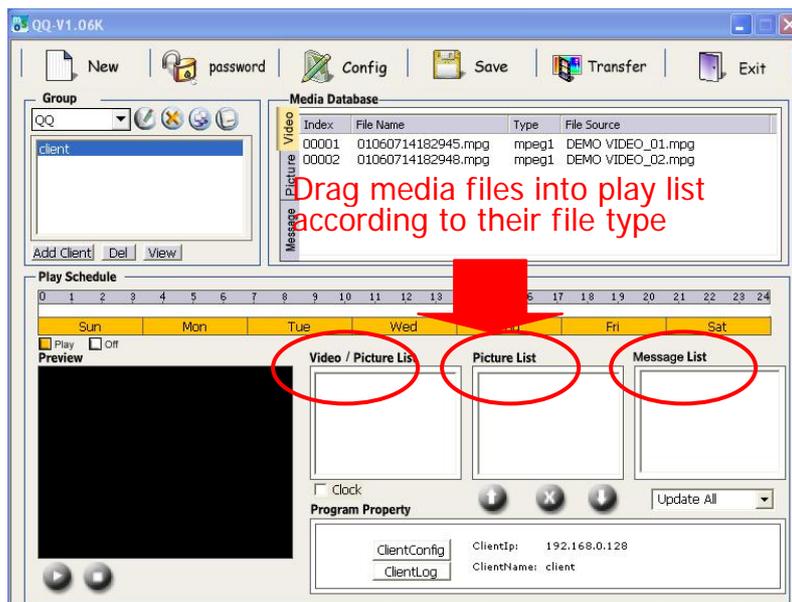
2. When adding text into the Media Database, a dialogue will pop up and the user can select Back Color and Font. Changes can be previewed in the window.



3. Click "OK" to complete the text conversion.

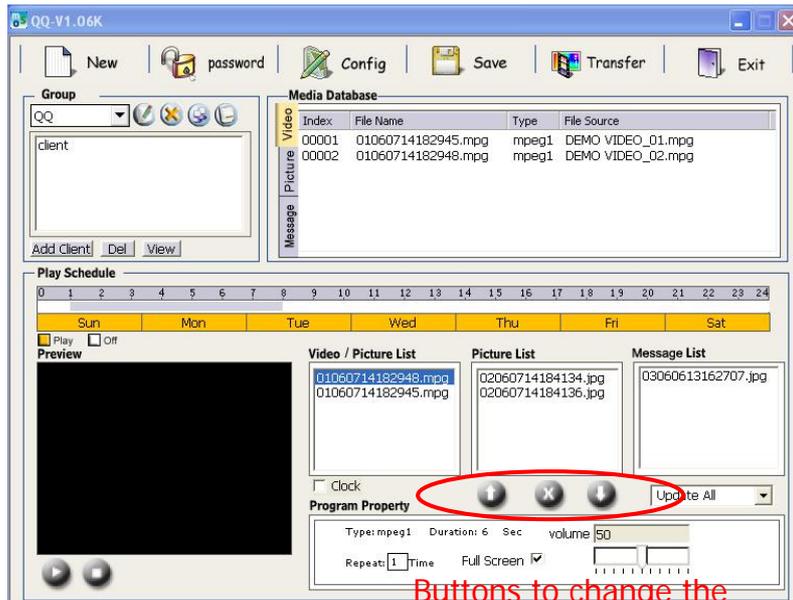
### 4.13 Play List Edition

1. Drag and drop media file(s) into the Play Lists. Only media files in the repository with a valid format can be accepted<sup>\*20</sup>. Note that you MUST have at least 1 video or graphic file in Video/Pic zone, otherwise the system is unable to detect the play list.



2. Click "UP", "DOWN", and "X"(delete) button on the Play Lists field to change the order of media files in Play Lists.

<sup>20</sup> For pictures displayed in Picture Zone should be smaller than 1024x768/2.



Buttons to change the order of media files

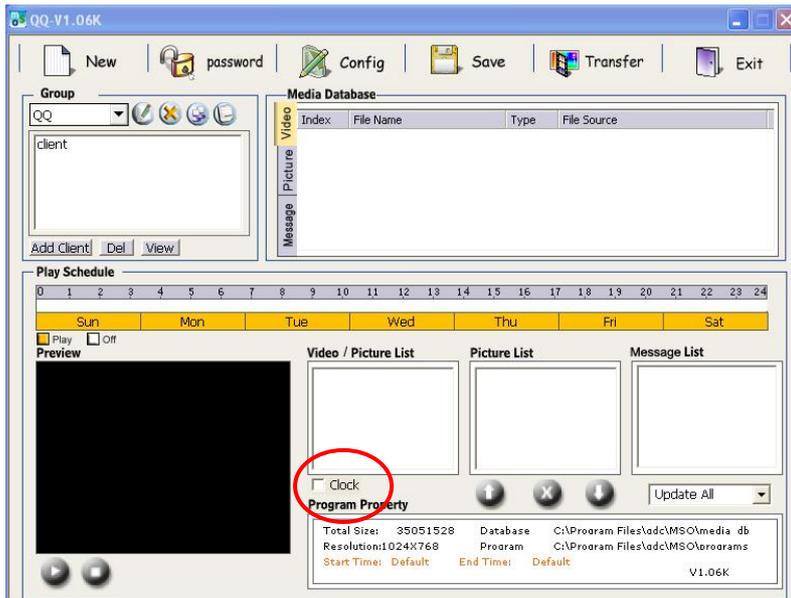
#### 4.14 Clock Display

The clock display function is enabled and displayed in the upper-left corner by default. Follow the steps below if you would like to disable this function.



1. Click the Clock check box to disable Clock Display in the top left corner of Video/Pic zone.\*<sup>21</sup>

<sup>21</sup> The Clock Display function will be applied to all clients within a group.

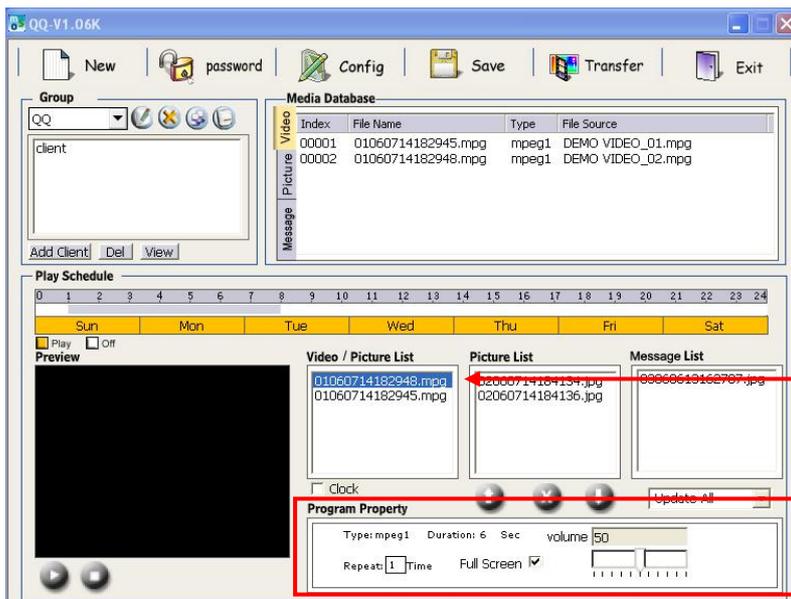


2. Click “Save” to save the setting.
3. Click “Transfer” to apply the setting.

## 4.15 Media File Property

### Video

1. Click on a video file from Video List.
2. View video property in Program Property area.
3. You will see file type, file duration, repeat time, and volume.
4. The default repeat time is 1 and the default volume is 50 <sup>\*22</sup>.



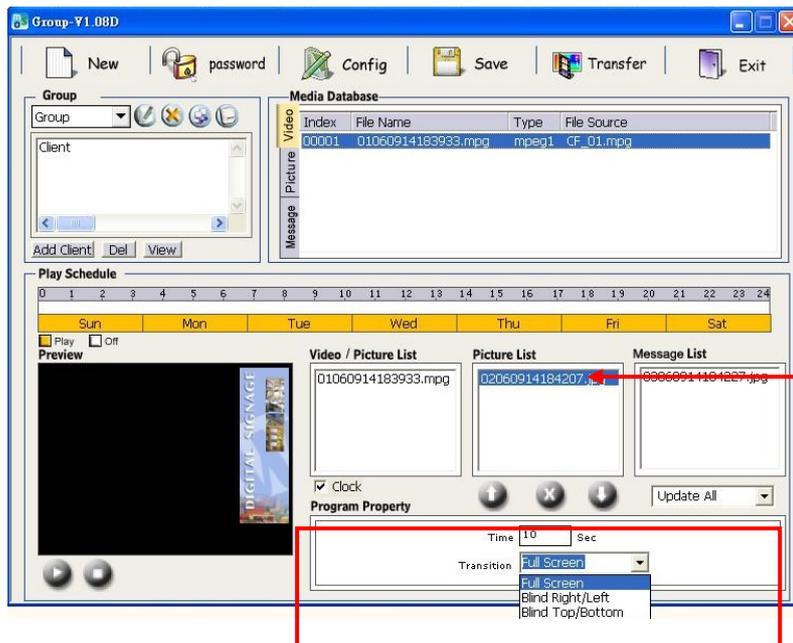
1. Click on a video file

2. View file property

<sup>22</sup> The Repeat Time indicates the number of times it should play in the play list. Volume can be set from 0 – 100(max.). Note that once you ever use remote controller to adjust volume, the volume setting from MSO will be ignored.

## Picture\*<sup>23</sup>

1. Click on a graphic file.
2. View picture property in Program Property area.
3. You will see file display duration and be able to change it.
4. The default time is 10 sec.
5. There are 4 different transition effects (Full Screen, Blind Right/Left, Blind Top/Bottom, and Blend) for you to choose.



1. Click on a graphic file

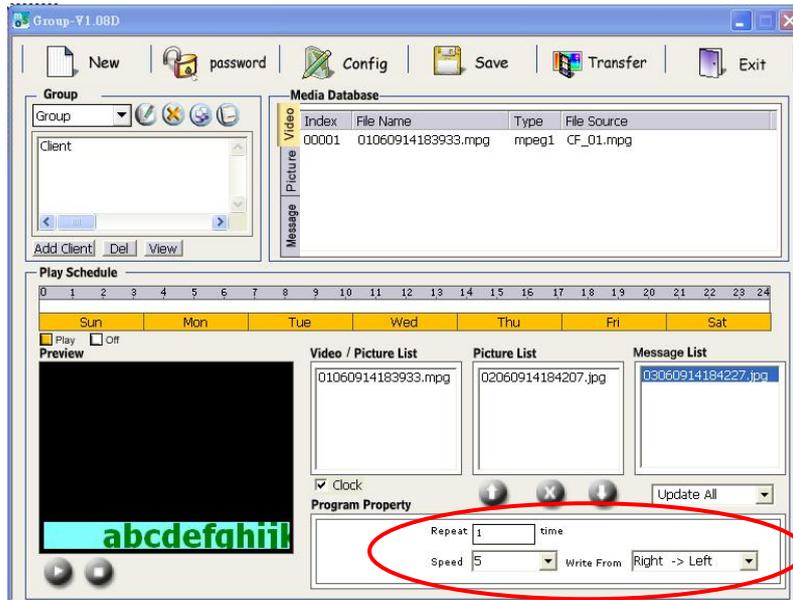
2. View file property

## Text

1. Click on a text file.
2. View message property in Program Property area.
3. The default repeat time is 1 and default speed is 5 pixel\*<sup>24</sup>.

<sup>23</sup> The duration of picture in Video/Picture zone should be greater than 10 sec to allow graphic decoding.

<sup>24</sup> From 1-10, 1 indicates the slowest speed and 10 indicates the fastest speed.

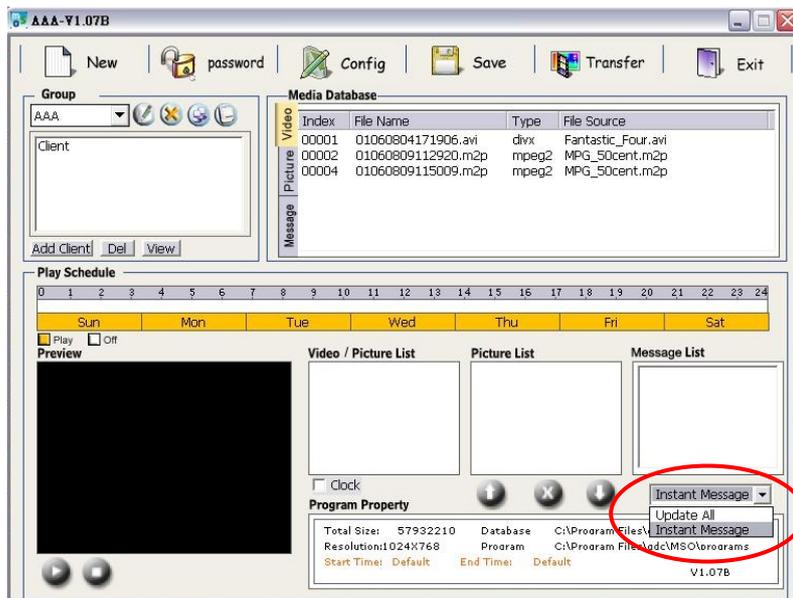


4. You will be able to choose the appearance style of scrollable text message. Five styles are available: Right->Left, Left->Right, Bottom->Top, Top->Bottom, Pop.

#### 4.16 Instant Message

In Instant Message Mode, the message can be updated independently. However, the message will run from right side to left side only once, and then it turns back to the original message.

1. Click on the drop-down menu and choose the **Instant Message** option.

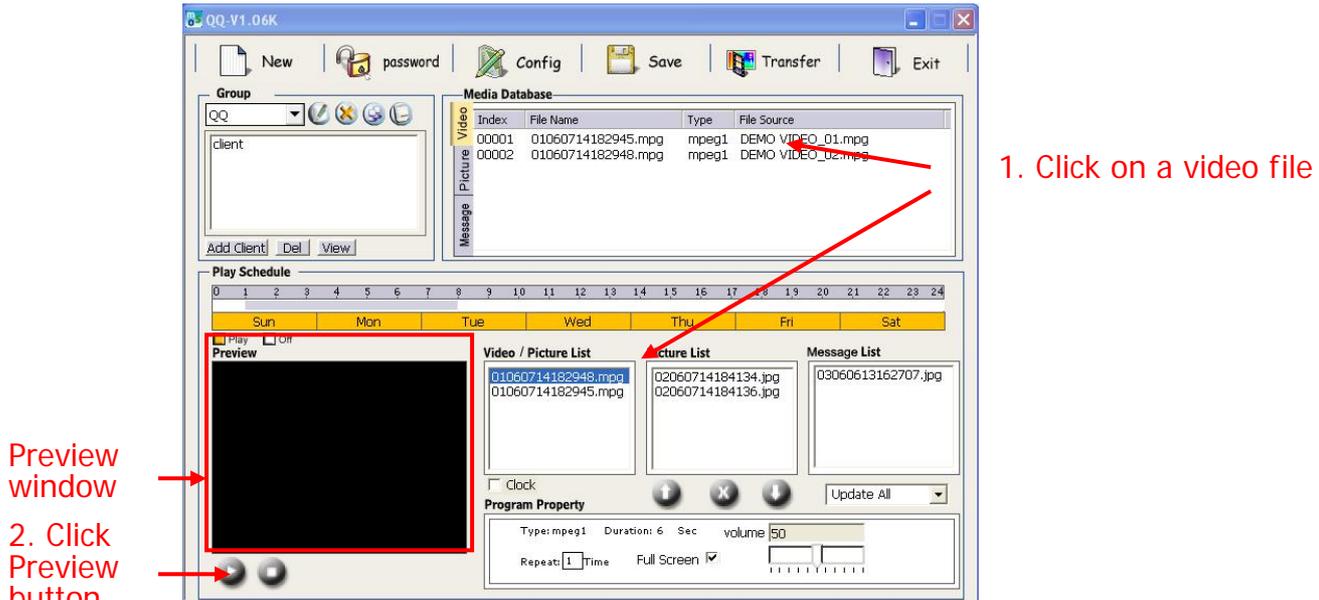


2. Drag message(s) to the Message List.
3. Click **“Save”** button to save the change.
4. Click **“Transfer”** button and choose transferring to single client or group.

## 4.17 Media Files Preview

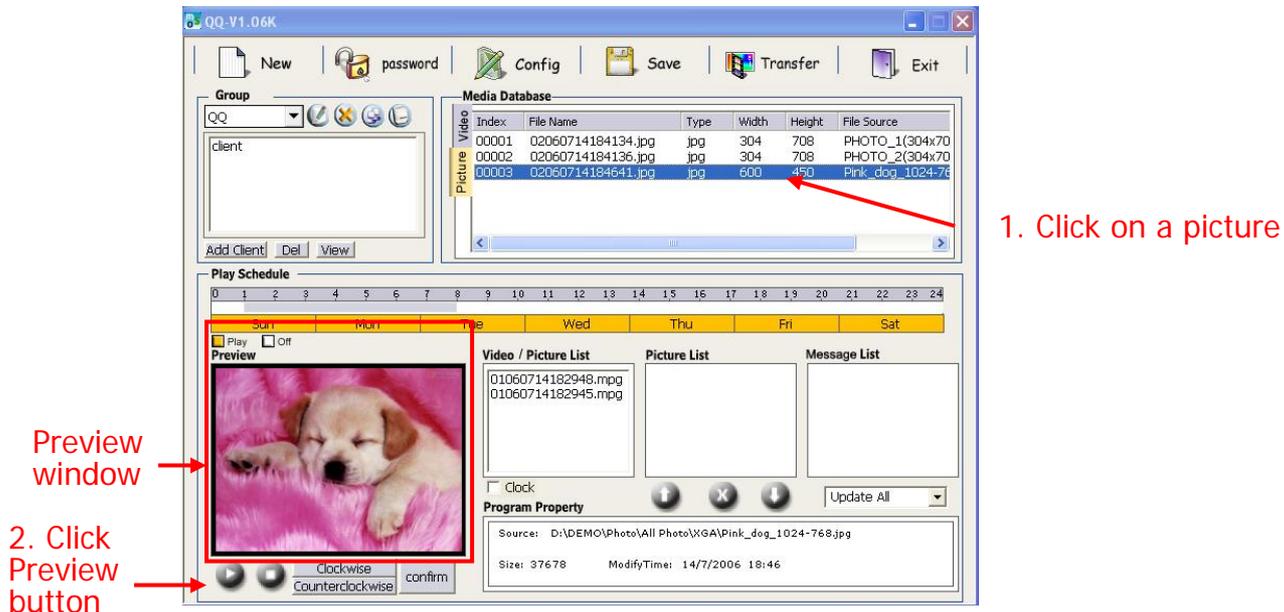
### Video

1. Click on the video file you would like to preview (either in Media Database or Video list).
2. Click **Preview** button.
3. The video content will be displayed in the preview window.



### Picture

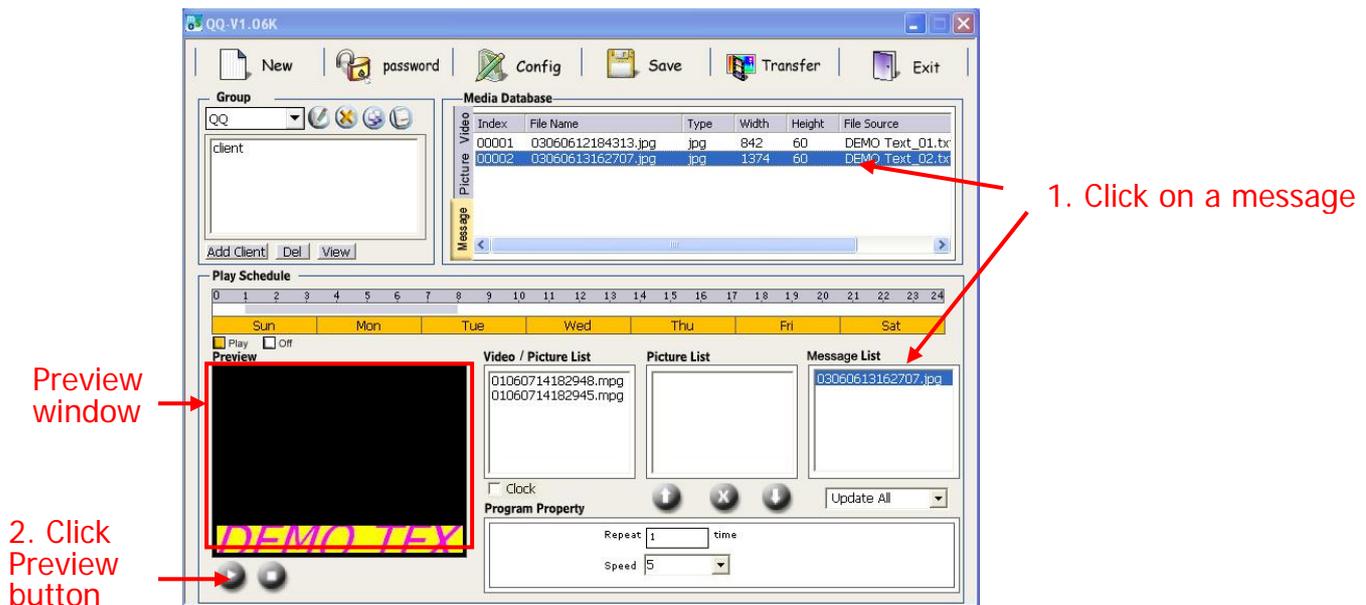
1. Click on the picture you would like to preview (either in Media Database or picture list).
2. The picture will be displayed in the preview window.



3. From Media Database, you can rotate the picture by clicking “**Clockwise**” or “**Counterclockwise**”.
4. Click “**Confirm**” to confirm the change.

## Message

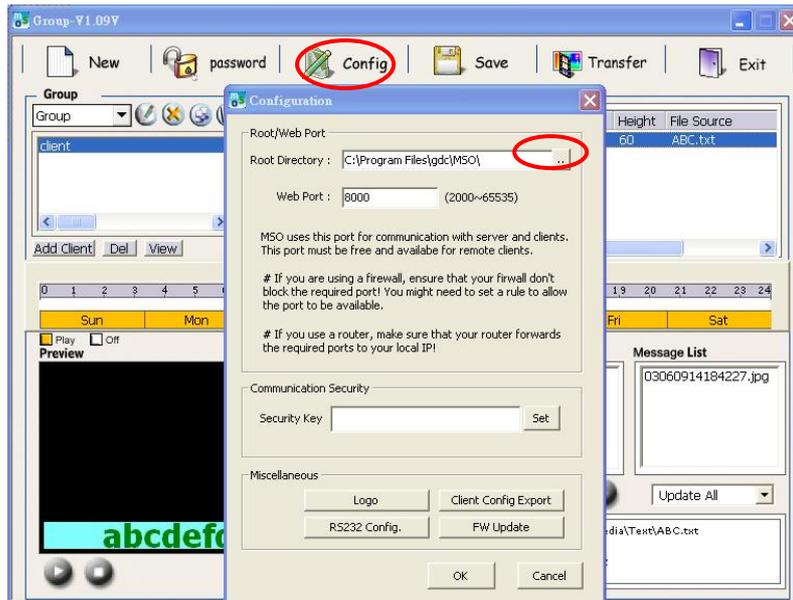
1. Click on the text file you would like to preview (either in Media Database or picture list).
2. Click “**Preview**” button.
3. The message will be displayed in the preview window.



## 4.18 Program Configuration

### Root Directory

1. Click the “**Config**” button to bring up the configuration window.
2. If you would like to change media Database and Program saving directory, please click the button next to Root Directory field, then a browsing window will pop up on the screen.



3. Select media Database and Program saving directory.
4. Type in WEB Port. Please Enter 2000~65535. (We suggest you use the default value: 8000<sup>\*25</sup>)

### Security Key Setup

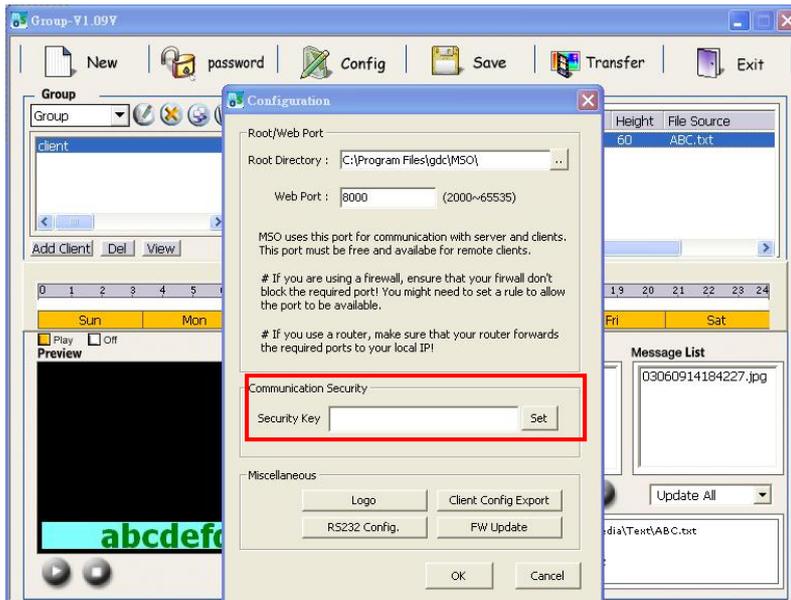
In order to avoid the situation that any PC with MSO installed can connect to the Media Signage unit, you can specify the management server with a security key. The security key is an ID number for the client to identify the server. Note that once you decide to use security key authorization mechanism, you need to set key for both server and client.

### Server Side

1. Click the “**Config**” button to bring up the configuration window.
2. Enter the key<sup>\*26</sup> in Security Key field.
3. Click the “**Set**” button to activate the setting.

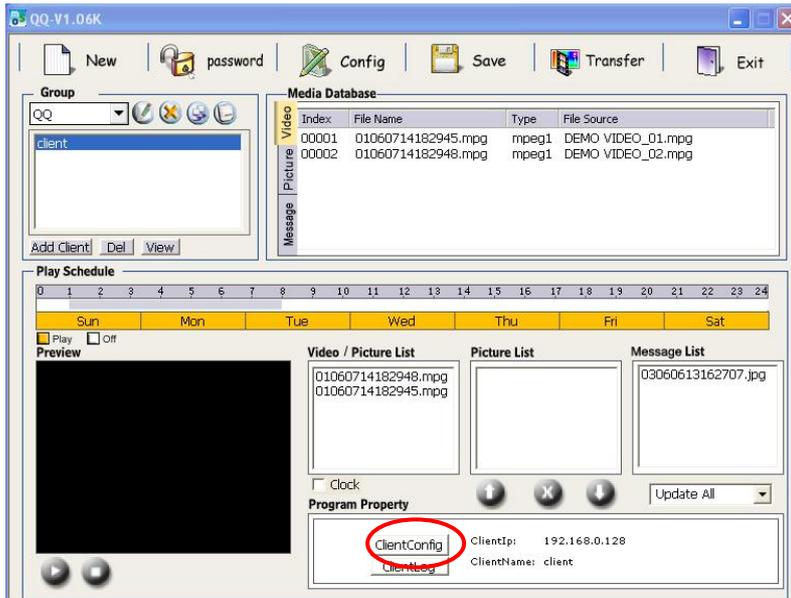
<sup>25</sup> You will also need to configure your router to forward IP packets to a specific port that the MSO uses for file transferring.

<sup>26</sup> The key length should be less than 8 characters, cannot include any space.



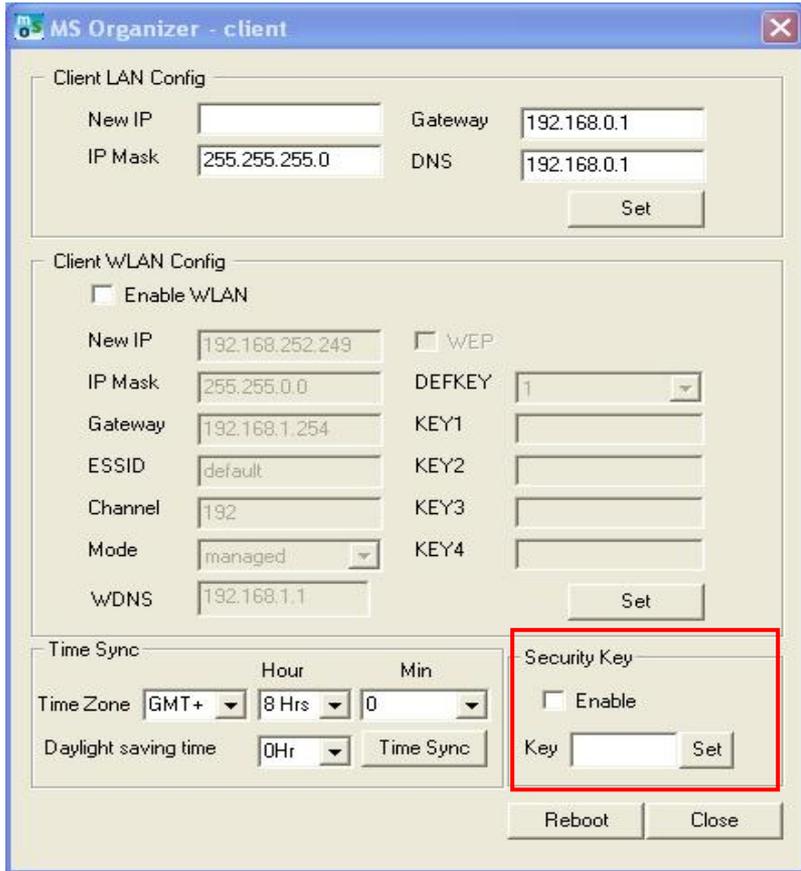
## Client Side

1. Highlight the client you would like to set security key.



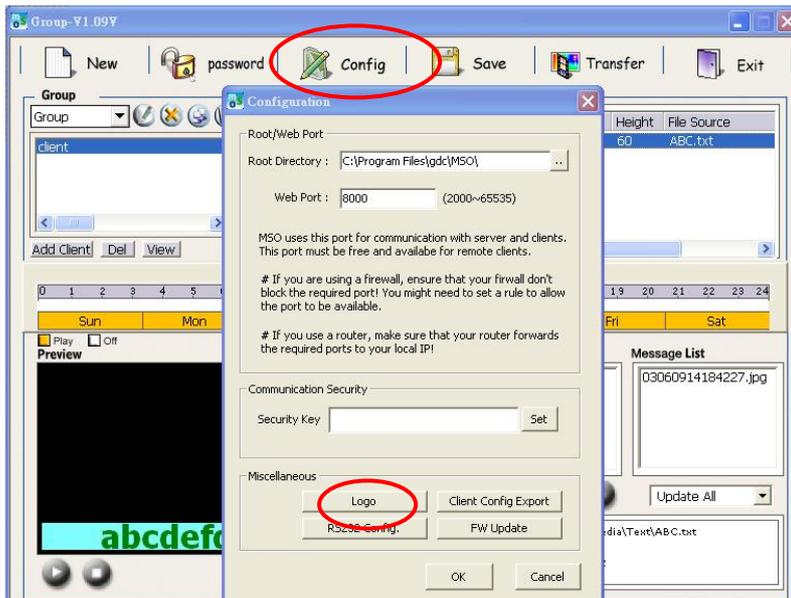
2. Click **ClientConfig**.
3. Click the “**Enable**” check box and enter the key\*<sup>27</sup> in the following field.
4. Click the “**Set**” button to save this setting.

<sup>27</sup> In order for the client to connect to the server, you must use the same key as you set in server side.



## Boot-up Logo Setup

1. If you want to change system boot-up logo, please click the "**Config**" button, then click "**Logo**" button from the dialog box.

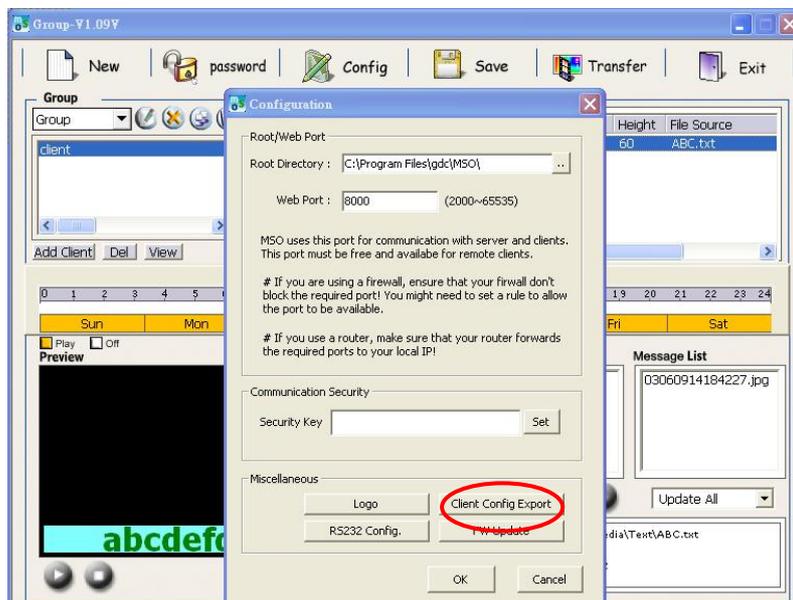


2. Browse to the picture you would like to use as logo.\*<sup>28</sup>

## Client Config Export

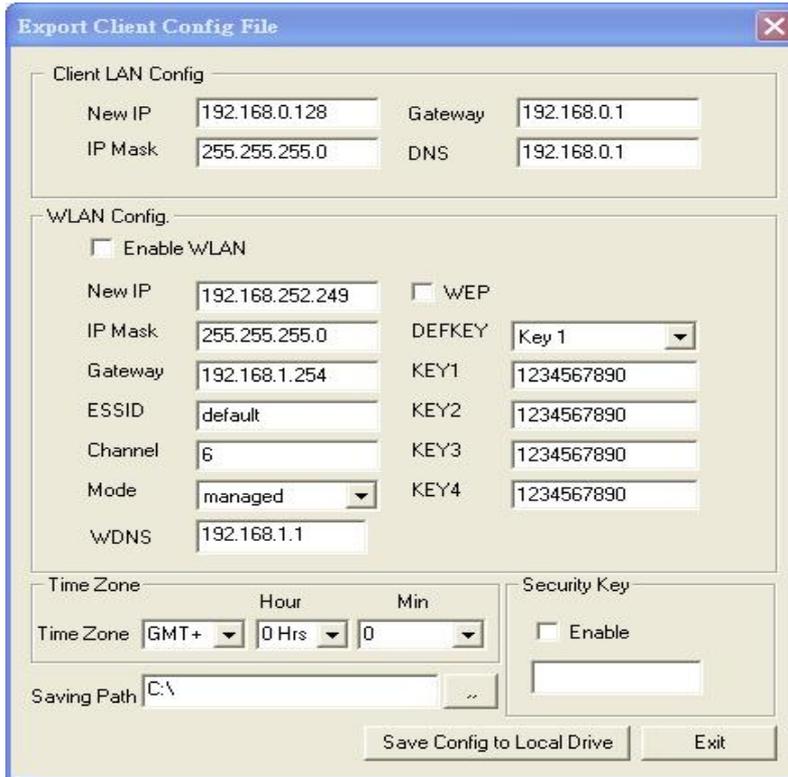
This function is really convenient for you to configure client settings without using a crossover cable or a hub. Configurations you can make with this function including the Server IP that the client should connect to, client LAN settings, client WLAN settings, and client time zone.

1. Click the "**Config**" button, and then click the "**Client Config Export**" button from the pop-up window.



2. Make setting changes (LAN/WLAN config, time zone, security key).
3. Browse to the location (USB flash drive) you would like to save the files.
4. Click the "**Save Config to Local Drive**" button.
5. Click the "**Exit**" button.

<sup>28</sup> Acceptable picture type: jpeg. Resolution is limited no bigger than 720 x 480.



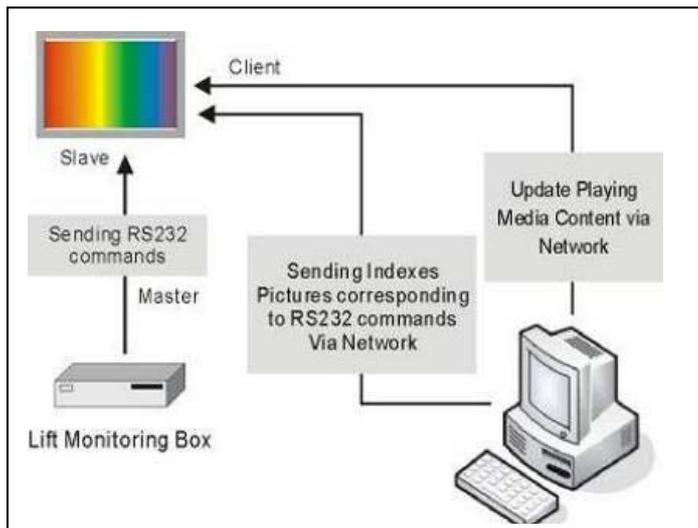
6. Take the USB flash drive and plug it into the Media Signage unit.
7. Reboot the Media Signage unit to apply settings.

### RS232 Configuration (Optional)

RS232 is a channel that you can send external commands to Media Signage. When a correct RS232 command code is sent during operation, Media Signage will display a picture corresponding to the index.\*<sup>29</sup>

### Application (Elevator)

Lift industry uses RS232 to display lift status or show company logo.

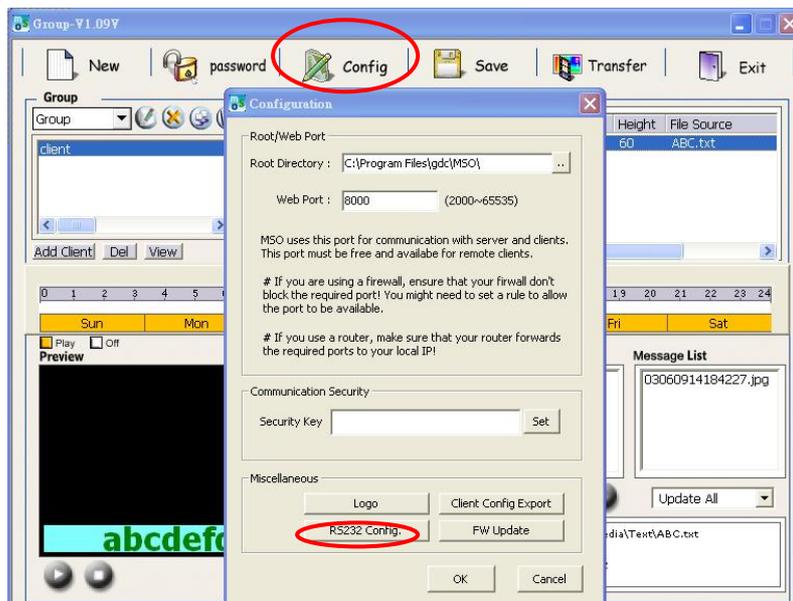


<sup>29</sup> The picture should be displayed over video area. If you place the picture over graphic area, the latter picture will cover your RS232 picture.

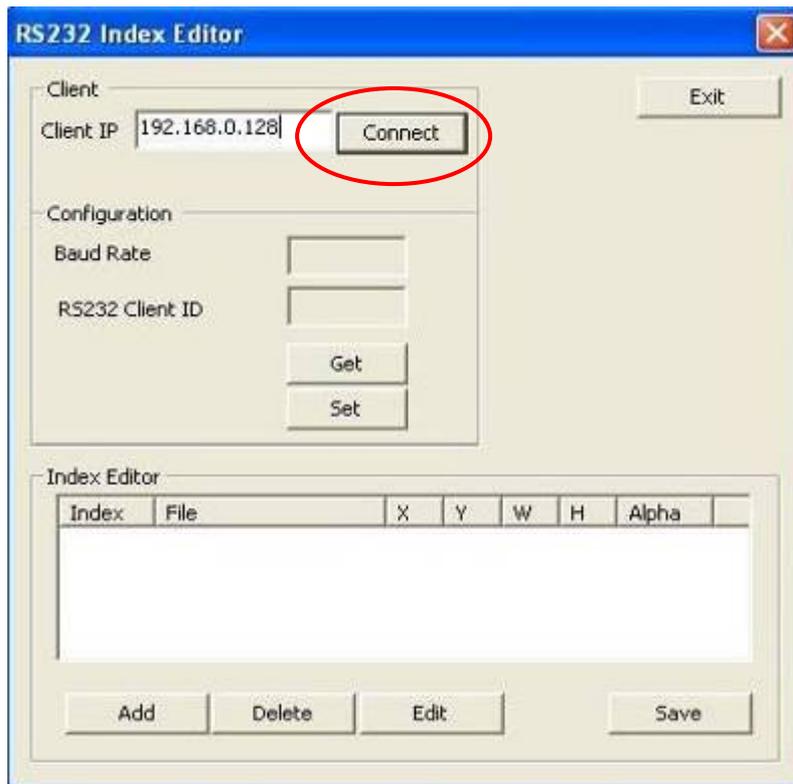


Picture called via  
RS232 command

1. If you would like to configure RS232 index, please click the "**Config**" button, then click "**RS232 Config**" button from the pop-up window.



2. Enter the Client IP that you would like to connect.
3. Click "**Connect**" to establish connection.



- **Baud Rate, Client ID Setup**

Baud rate indicates the number of bits per second is transmitted. Normally five values can be chosen: 9600, 19200, 38400, 57600, and 115200. The default baud rate of Media Signage is 38400.

You can give each client a number as client ID for identification. The value is limited and has to be 0~254.

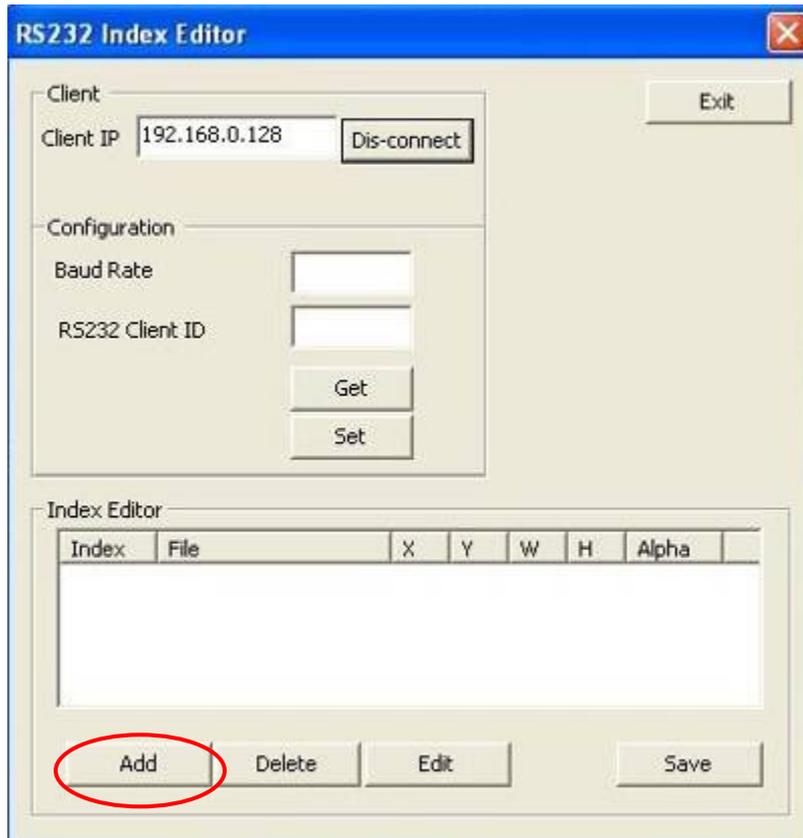
1. Click **“Set”** after entering valid Baud Rate and Client ID.
2. Click **“Exit”** to exit setup.

### **Index Edition**

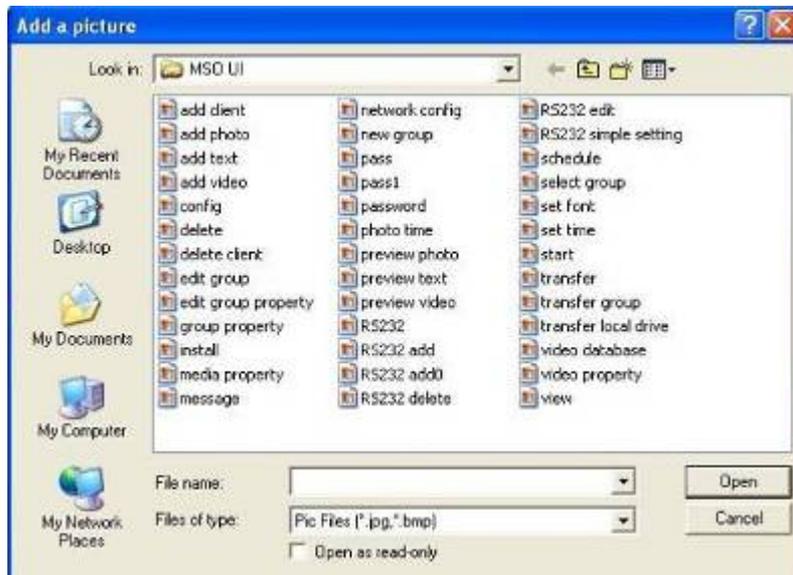
The Index Editor is a tool where you can add, delete, and edit index.

#### **Add**

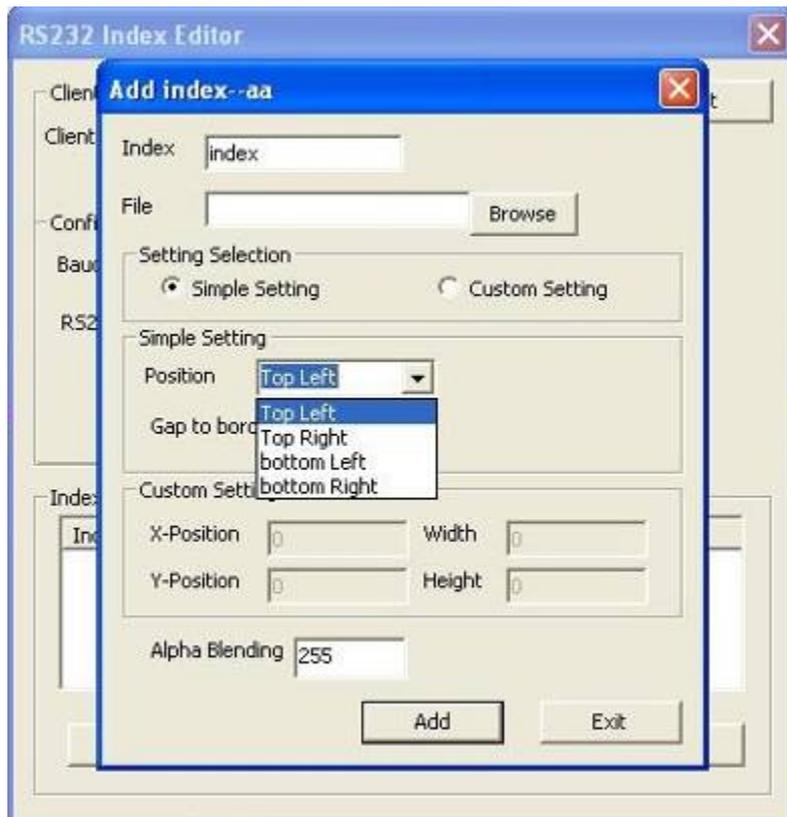
1. Click **“Add”** to start adding an Index.



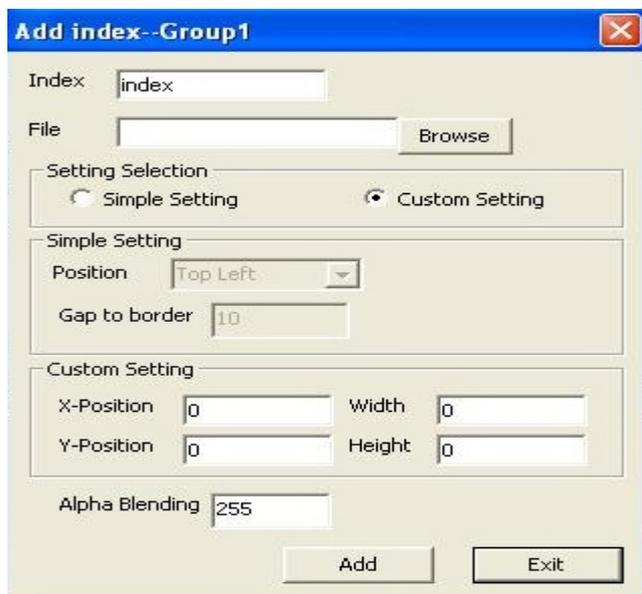
2. Enter Index name.
3. Browse to the picture for this index.



4. Select setting. In Simple Setting, you have choices to place the picture in Top Left, Top Right, Bottom Left, or Bottom Right. If you choose Custom Setting, you can specify the X-Position, Y-Position, Width, and Height to start posting the picture.

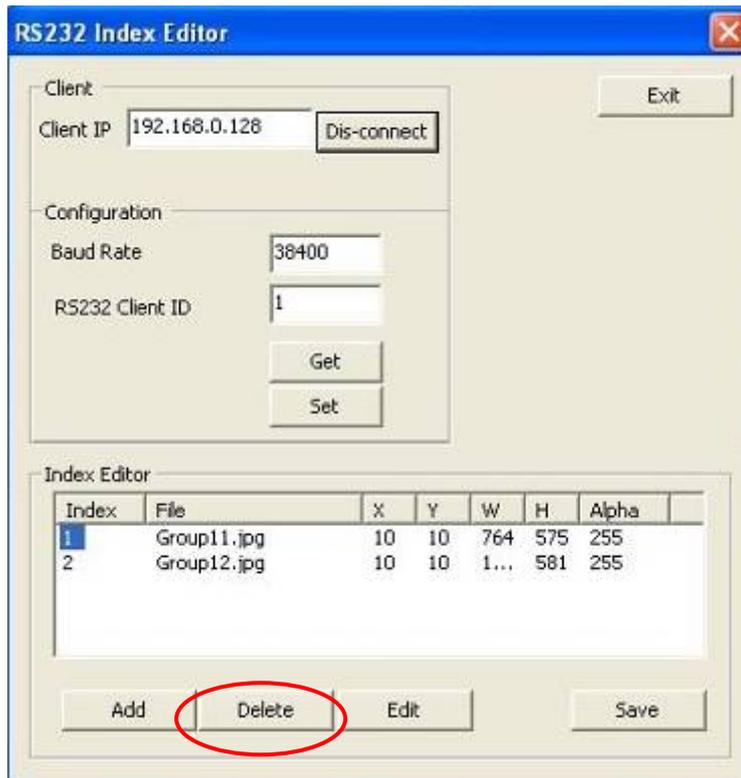


- Alpha Blending indicates the degree of transparency. The value of Alpha Blending is from 0 to 255, 0 as no transparency to black color and 255 as totally transparent.



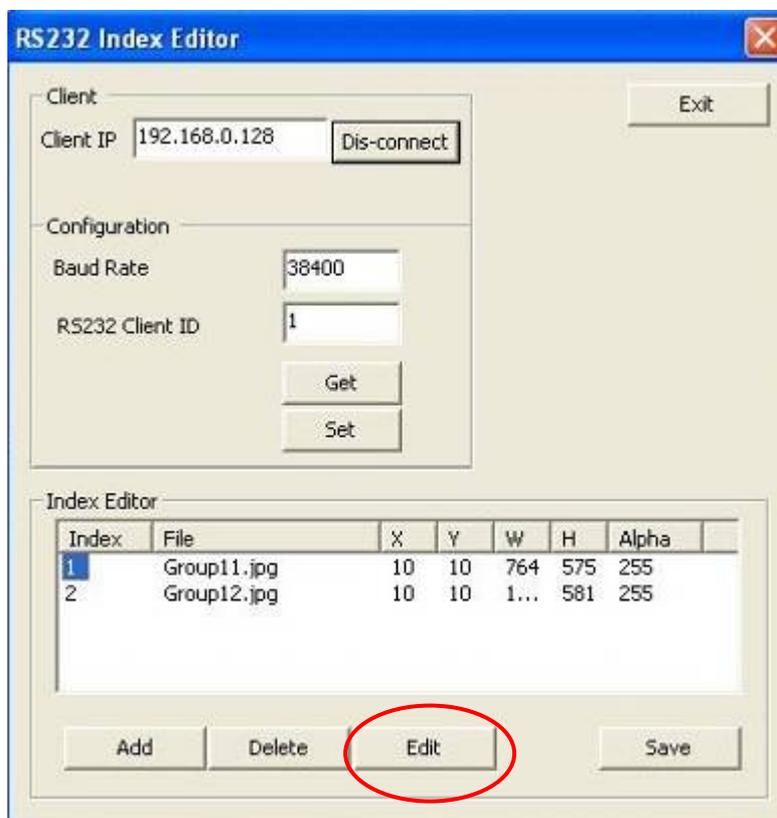
### Delete

- Click the index that you would like to delete.
- Click **Delete** to delete the index.

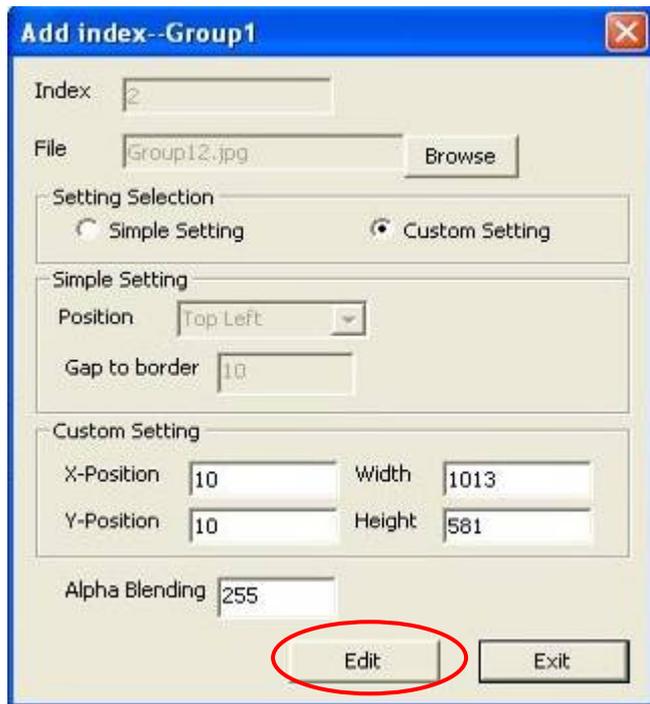


## Edit

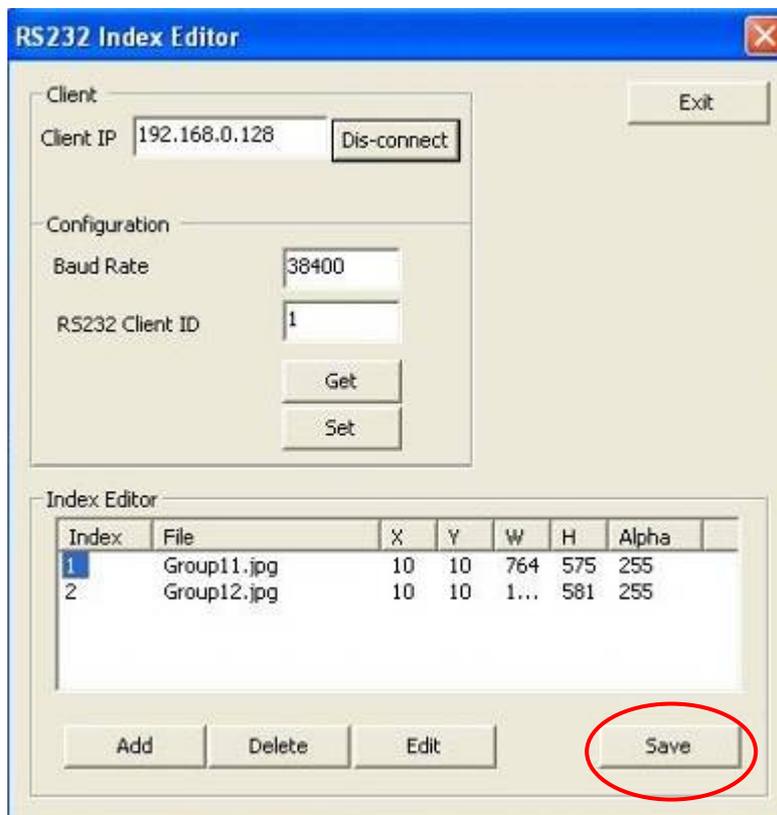
1. Click the index that you would like to edit.
2. Click "Edit" to edit the index.



3. Make modifications.
4. Click **"Edit"** to save changes.



5. Click **"Save"** to save all the changes.



6. Click **"Exit"** to exit RS232 Index Editor.

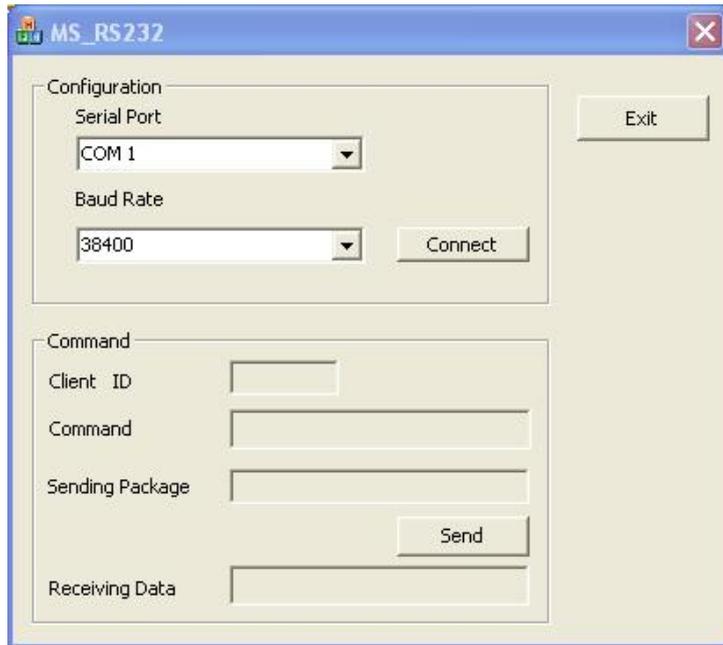
## Sending RS232 Command

You will find a tool from installation CD to simulate RS232 command.

1. Double-click on MS\_RS232.exe to execute the application.



2. Choose Serial Port and Baud Rate<sup>30</sup> from drop-down menu and click **Connect**.



3. If the connection is established, you will be able to type in Client ID and Command. The Client ID is an identification number that you give each client from MSO.

### Available Command Table

Master command	Command description
“TEST”	Test a specify slave exist or not
“PASTE n”	Paste an index command. The index file and parameters are specified in a script file which is downloaded from master via Ethernet. n is the index string.
“PLAY_VIDEO”	Video start playing

<sup>30</sup> Baud rate indicates the number of bits per second is transmitted. Normally five values can be chosen: 9600, 19200, 38400, 57600, and 115200. The default baud rate of Media Signage is 38400.

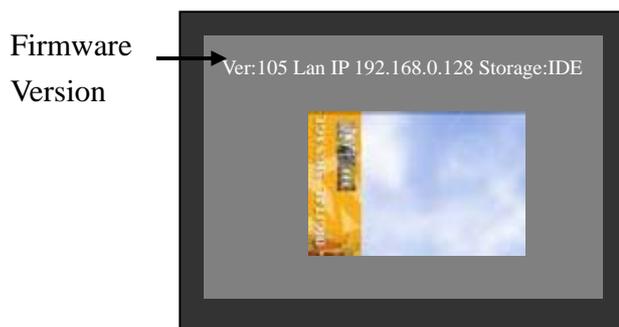
“STOP_VIDEO”	Video stop playing
“PLAY_NEXT”	Video skip to next file
“PLAY_PREV”	Video skip to previous file
“PLAY_FORW”	Video forward
“PLAY_BACKW”	Video backward
“CLOSE n”	Erase the pasted picture. n is the index string

### 4.19 Firmware Update (optional)

Ever since a while, we add new features in MSO to meet customer’s requirement. You can fully utilize those features by updating the latest firmware. Note that once you update firmware to XXX version, you MUST use the same version of MSO for management.

#### Check Firmware Version

Depends on the display size and the existent version of firmware in your Media Signage Unit, you can choose the most convenient way to upgrade firmware. You will be able to check the firmware version of Media Signage in the beginning of system boot up.

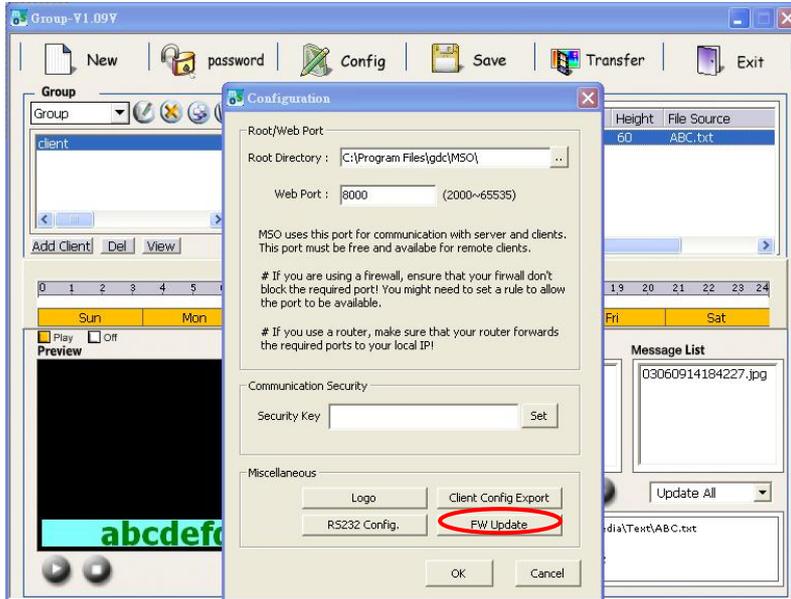


#### Suggest Way of Firmware Update

	<b>FW version 1.03 or earlier</b>	<b>FW version 1.04 or later</b>
<b>7” Media Signage</b>	Not Applicable	LAN
<b>Media Signage above 7”, Media Signage BOX</b>	USB	USB / LAN

## Firmware Update via Ethernet

1. If you would like to update firmware via Ethernet, please click the "Config" button, then click "**FW Update**" button from the pop-up window.

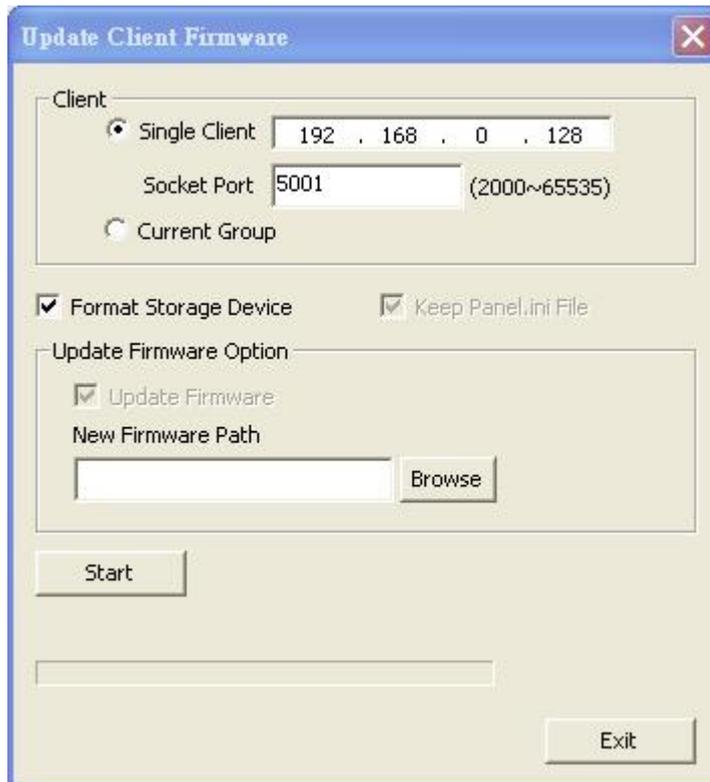


2. A warning message will pop up to remind you checking the firmware version you are about to update is compatible with the MSO.



3. Choose Single Client or Current Group for updating.
4. Uncheck the "**Format Storage Device**" checkbox if you do not want to format internal storage<sup>31</sup>.
5. Click "**Browse**" to select the firmware file you would like to update.
6. Click "**Start**" to begin the firmware updating process.

<sup>31</sup> Note that all media content will be deleted if you choose to format the storage device.



7. When the updating is completed, click “**Exit**” to close the Update Client Firmware window.

## **Firmware Update via USB (not applicable for 7” Media Signage)<sup>\*32</sup>**

### Prerequisites

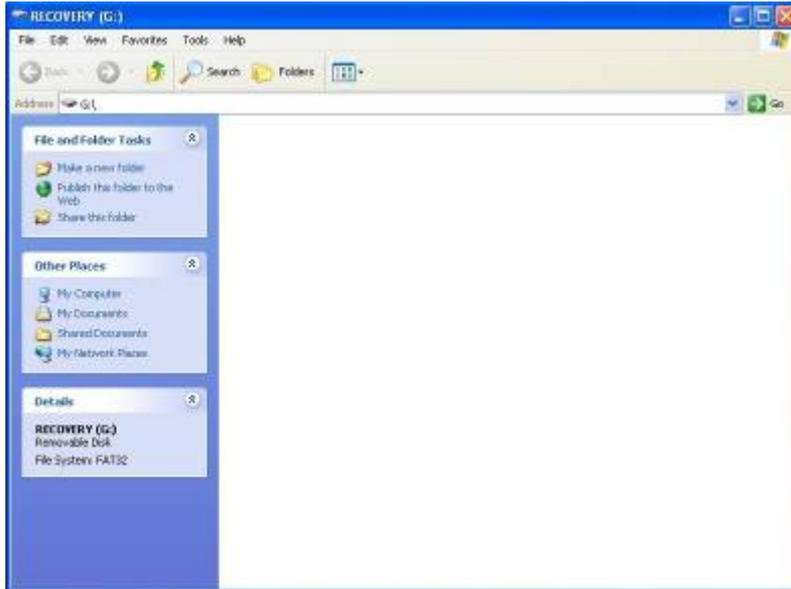
---

- A USB 2.0 flash drive bigger than 32MB

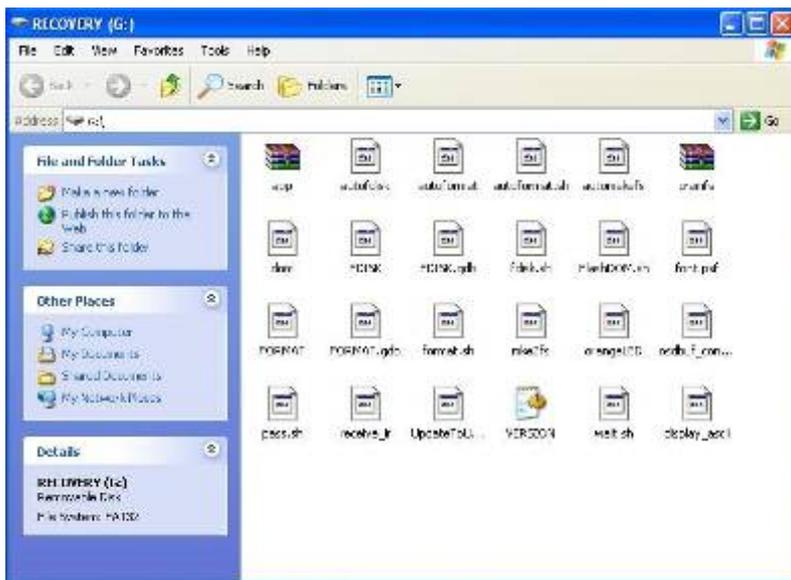
1. Clear all data from your USB Flash drive.

---

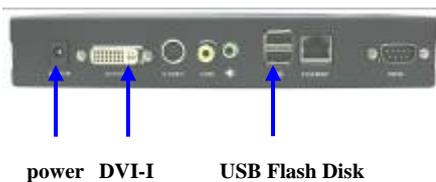
<sup>32</sup> Note that all media contents will be deleted if update firmware via USB.



2. Extract the updateall\_vxxx.rar into the root directory of USB flash drive.



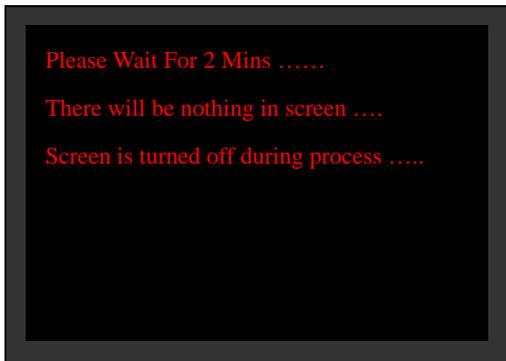
3. Insert the USB flash drive and DVI/VGA cable to Media signage then power on.



4. You will see a message on monitor after a few seconds when the system is

preparing for update.

## 5. Updating<sup>\*33</sup>



6. When the update is done, unplug USB and power on again.



7. Check the firmware version again to be sure the update is successful.

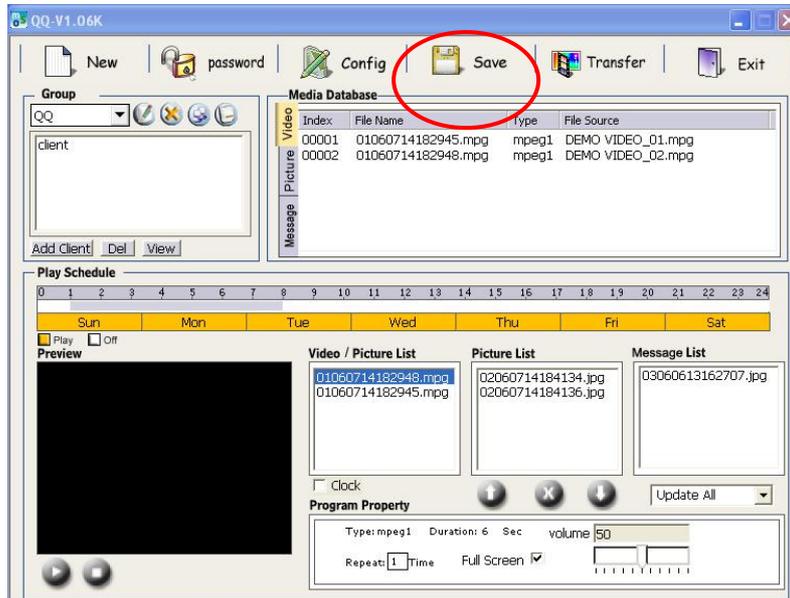
Firmware  
Version



<sup>33</sup> If you encounter any problem such as power lost and abort the update process abnormally, you only need to start the update process over again and it will resume from where the update process is corrupted.

## 4.20 Save Program

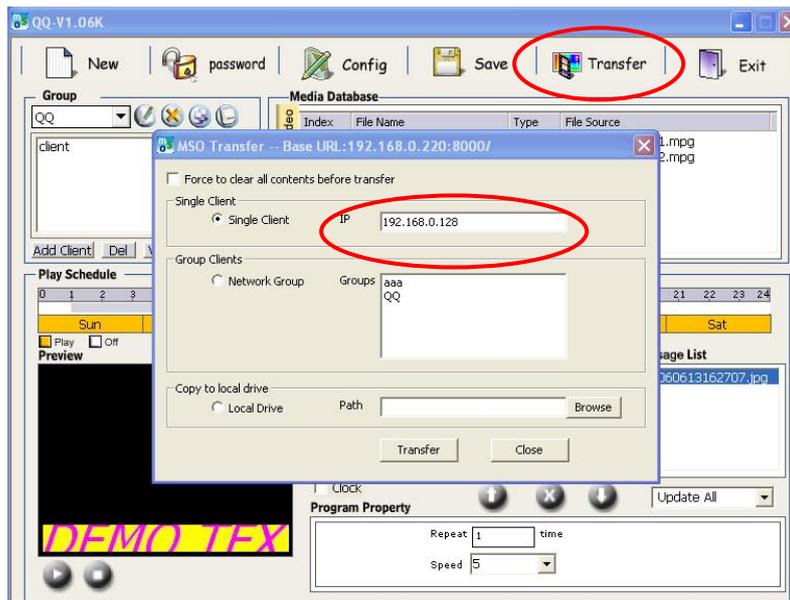
1. Click the "**Save**" button when you are finished editing the Play List (All media files are saved in the folder).



## 4.21 Transfer

### Single IP

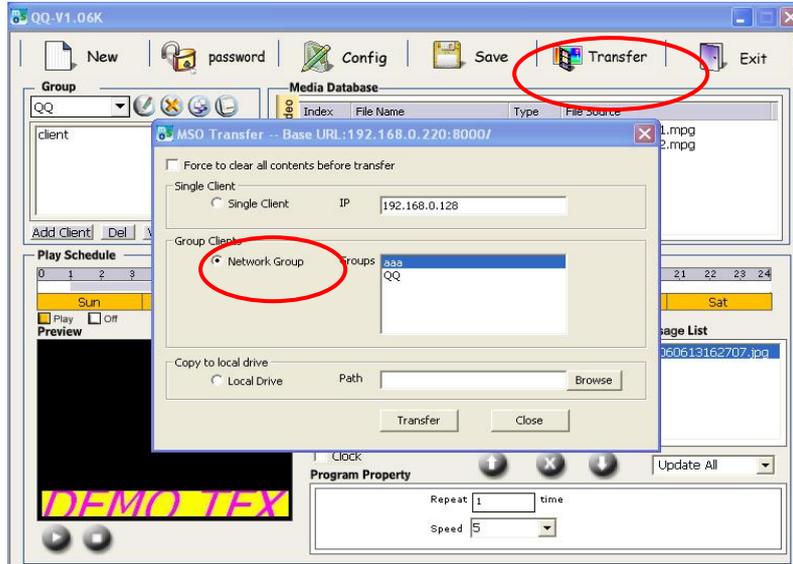
1. Click the "**Transfer**" button.
2. Type the IP address that you would like to connect and click "**Export**" to transfer the program to the Media Signage.\*<sup>34</sup>



<sup>34</sup> Default IP is 192.168.0.128

## Group

1. Click the “**Transfer**” button.
2. Click the “**Network Group**” radio button.
3. Click the group you would like to connect and click “**Transfer**” to transfer the program to all clients within a group.



## Local Drive(for Media Signage BOX / Integrated Display above 7’)

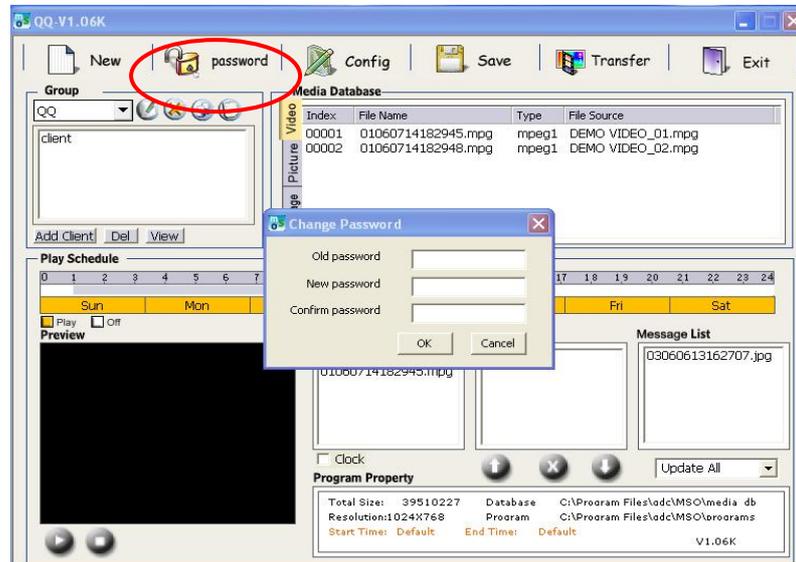
1. Click the “**Transfer**” button.
2. Click the “**Local Drive**” radio button.
3. Click “**Browse**” to browse to the USB Flash disk plugged in your computer.
4. Click “**OK**” to save the program in your USB Flash disk.\*<sup>35</sup>



<sup>35</sup> The “Local Drive” is limited to USB Flash disk only. Take the USB Flash disk with play list program saved and insert it to the USB slot of Media Signage. Media Signage will clone the program in the USB Flash drive into its IDE storage automatically after power on.

## 4.22 Password\*<sup>36</sup>

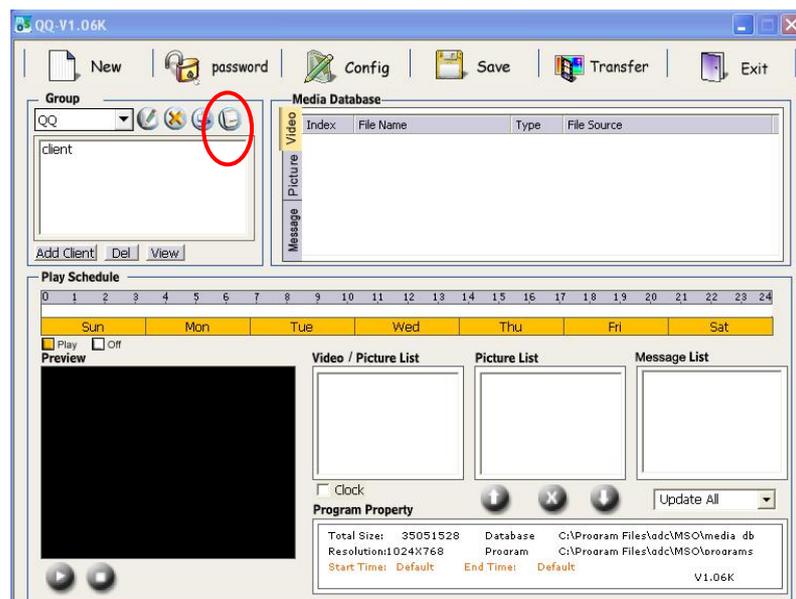
1. Click the “**Password**” button.
2. Enter the old password.
3. Enter the new password, then re-enter the new password to confirm it.
4. Click “**OK**” to setup the new password.



## 4.23 Get Group Log Reports

The Get Log function is ideal for retrieving playing logs from clients/group. MSO generates three files for your convenience to view the client log.

1. Click “**Get Group Log Reports**” button to get the log reports of all clients within a group.



<sup>36</sup> You will be able to change password anytime during operation. The length of password has to be at least 6 alphanumeric characters. We strongly suggest you select a password consisting of uppercase and lowercase letters, numbers, and special characters.

2. Click on the drop-down menu to specify the start date and end date you would like to view the log reports.



3. Click **“Browse”** to specify the destination you would like to save the log reports.

4. Click **“Get Log”** to start downloading log files. Three files will be produced for your convenience to view the client log.

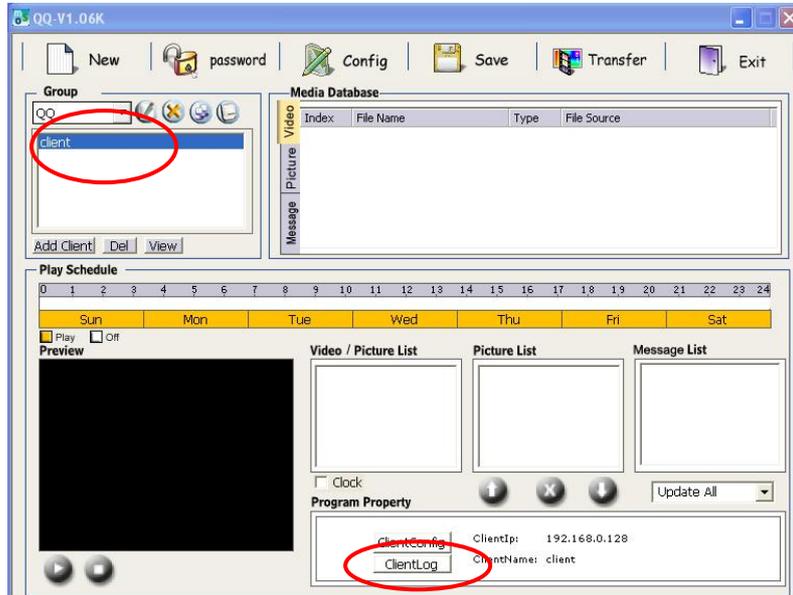


xxx.csv	Can be imported to EXCEL for statistics.
ClientBaseInfo.txt	Contains file name and total playback time based on each client.
FileBaseInfo.txt	Contains client name and total playback time based on each file.

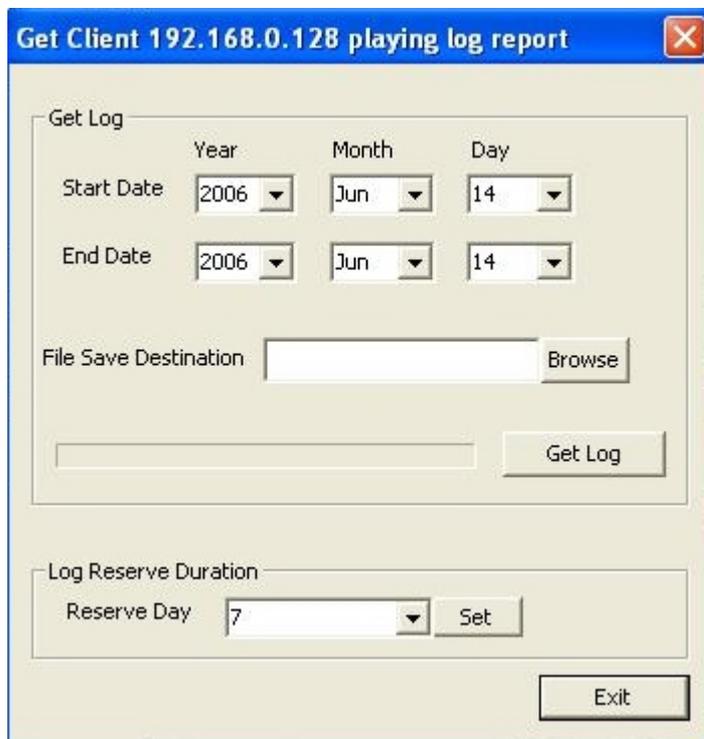
## 4.24 Get Client Log Reports

The Get Log function is ideal for retrieving playing logs from clients/group. MSO generates three files for your convenience to view the client log.

1. Click on a client that you would like to view its log reports and click the “**ClientLog**” button below.



2. Click on the drop-down menu to specify the start date and end date you would like to view the log reports.



3. Click “**Browse**” to specify the destination you would like to save the log reports.

4. Click “**Get Log**” to start downloading log files. Three files will be produced for your convenience to view the client log.



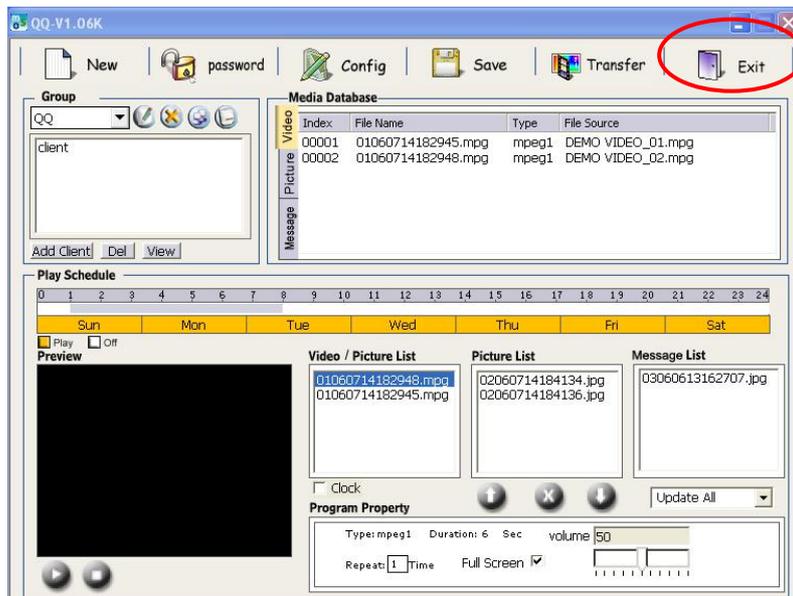
xxx.csv	Can be imported to EXCEL for statistics.
ClientBaseInfo.txt	Contains file name and total playback time based on each client.
FileBaseInfo.txt	Contains client name and total playback time based on each file.

#### 5. Set Reserved Log Duration (optional)

The default client log duration is set to be 7 days. You can set the reserved log duration from 1 to 30 days. Note that the more days you keep the log file, the more storage space it occupies.

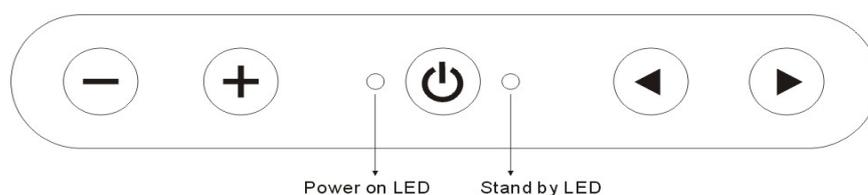
### 4.25 Exit

1. Click the “**Exit**” button to exit MSO.



## 5. OSD Control Key Definition (Optional)

The OSD control is only available when Media Signage with display. With OSD control, you will be able to adjust volume and display backlight.



1.  : Power switch
2.  : Reduce backlight
3.  : Increase backlight
4.  : Volume UP
5.  : Volume DOWN

### All-mode Reset

Press  button and  button simultaneously to clear media data from IDE storage.

## 6. Remote Control (Optional)

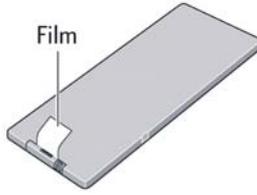
The remote control is only available when Media Signage with display (does not work with Media Signage BOX). With remote control, you will be able to power on/off display, adjust volume, adjust display backlight, and reset all setting to factory value.

### 6.1. Install Battery in the Remote Control.

Insert the battery and match the (+) and (-) on battery to the marks inside the battery compartment.

### First-time use:

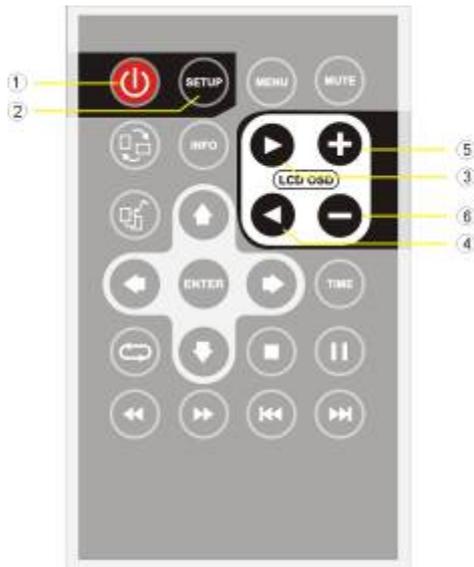
Remember to remove the insulating Mylar piece from the battery.



### Service life of battery:

1. The battery normally last for about one year although this depends on how often and for what operations the remote control is used.
2. If the remote control unit fails to work even then it's operated near the player, please replace the battery.
3. Use a 3V lithium battery.

### 6.2 Remote Control Key Define<sup>\*37</sup>



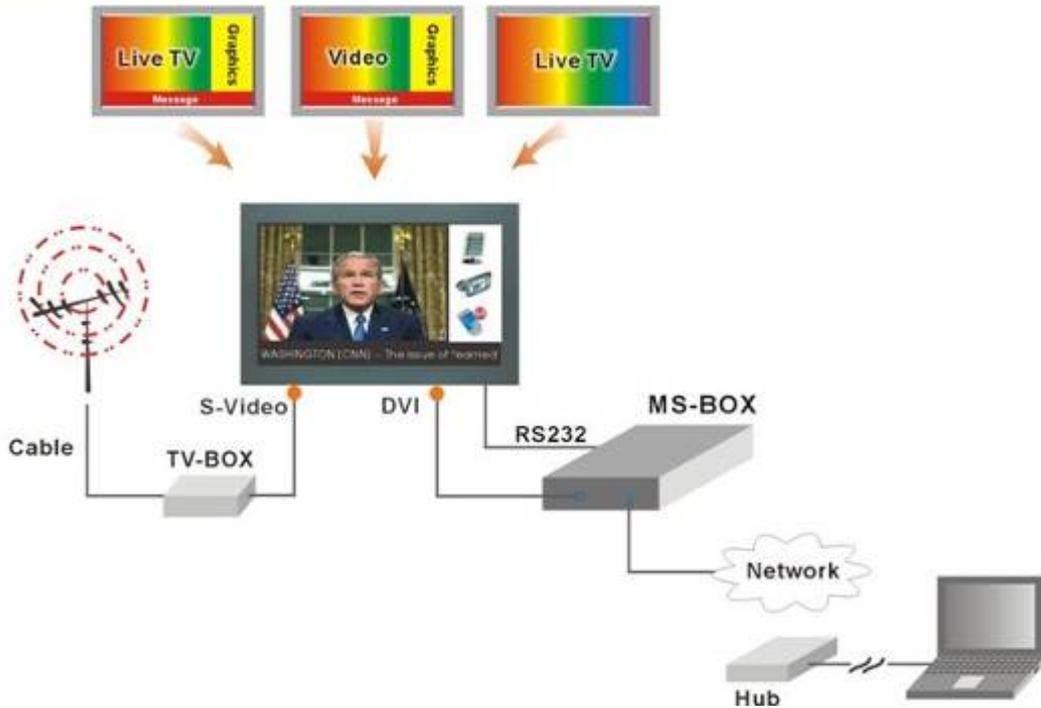
1	POWER ON/OFF	To switch on/off display
2	ALL MODE RESET	To clean up all media files in memory card and reset all settings to factory default
3	BRIGHTNESS UP	To increase the brightness of display
4	BRIGHTNESS DOWN	To decrease the brightness of display
5	VOL UP	To increase the volume
6	VOL DOWN	To decrease the volume

<sup>37</sup> Currently only 6 keys are programmed and ready to be used, other keys are reserved for future usage.

## 7. Media Signage BOX with Add-on TV function (optional)

If connected to a custom-made monitor, Media Signage BOX is able to switch between Media Signage content and TV display through RS-232 port. With this feature, TV program becomes part of your playback content to attract more audience and makes your Media Signage more plentiful.

### Media Signage + TV Streams Solution



## 8. How to Get Codec Information

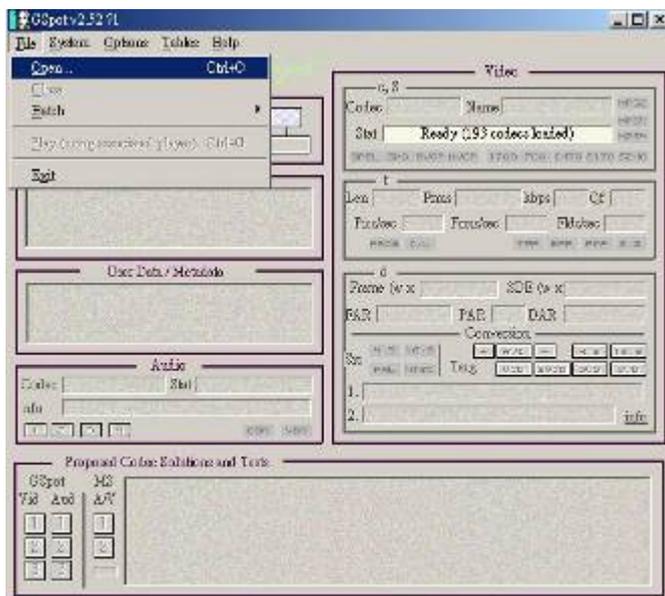
1. We suggest you download and install the “K-Lite code pack 2.50 Full” from [http://www.free-codecs.com/download/K\\_Lite\\_Codec\\_Pack.htm](http://www.free-codecs.com/download/K_Lite_Codec_Pack.htm) to your PC if you would like to see the CODEC information of your media file.

2. After successfully install “K-Lite code pack 2.50 Full” application. Please open the “GSpot Codec Information” application from

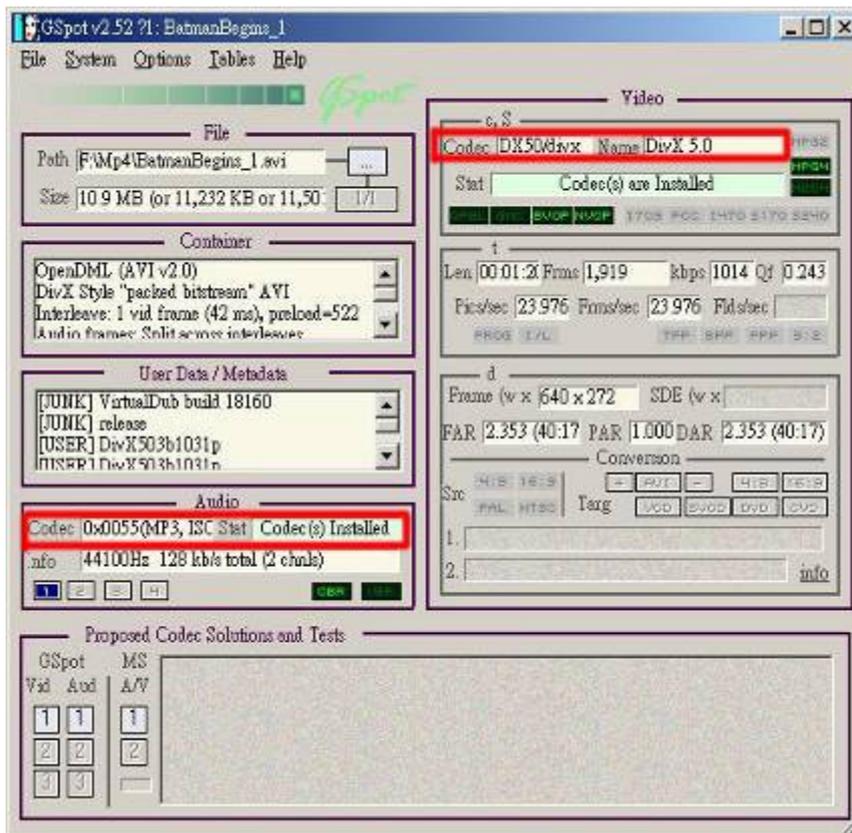
**Starts->Programs->K-Lite Codec Pack->Tools->GSpot Codec Information**



The GSpot dialog will appear. Open the media file that you want to get codec information from **File->Open**



The “GSpot” application will display the detail information about the media file. You can get the audio and video codec information from “Audio” and “Video” sections.



## 9. Troubleshooting

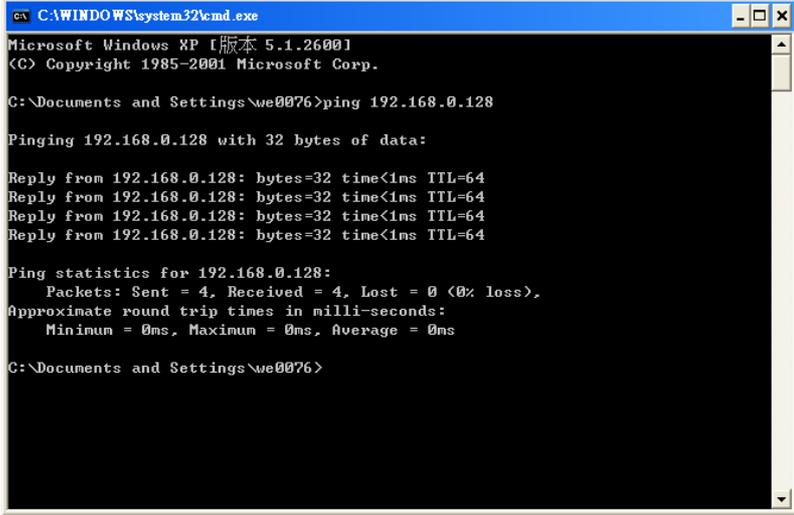
This guide is only a reference of quick self-examination. If you cannot find description similar to the problem you are encountering, please contact our technical support for further assistance.

### 9.1 ISSUE: Update Schedule False

If you are failed on updating play list and see an error message “Update schedule false”.

#### Troubleshooting Step 1: Ping your client

1. Try to “ping” your client unit to ensure the network status between you host PC and client unit. Open the “DOS prompt”, then type “ping 192.168.0.128\*<sup>38</sup>”.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\we0076>ping 192.168.0.128

Pinging 192.168.0.128 with 32 bytes of data:

Reply from 192.168.0.128: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.128:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\we0076>
```

<Connection is established>

---

<sup>38</sup> “192.168.0.128” is the default factory IP of client. If you have changed the IP, you should type the current IP of Client. You can always find the client IP information when client unit boot up.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\we0076>ping 192.168.0.128

Pinging 192.168.0.128 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.0.128:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Documents and Settings\we0076>
```

<Connection is not established>

## Troubleshooting Step 2: Delete ARP table

### What is ARP?

Address Resolution Protocol (ARP) is a network protocol, which map the MAC address to IP address. It is used to resolve IP address to the corresponding MAC address. For more detail information, please refer to RFC 826.

If you have more than one Media Signage device, before you connect to the second unit with the same IP (192.168.0.128). Please try to delete the record in the arp table. Open the “DOS prompt”, then type “arp -d 192.168.0.128”. This will delete the previous arp record.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

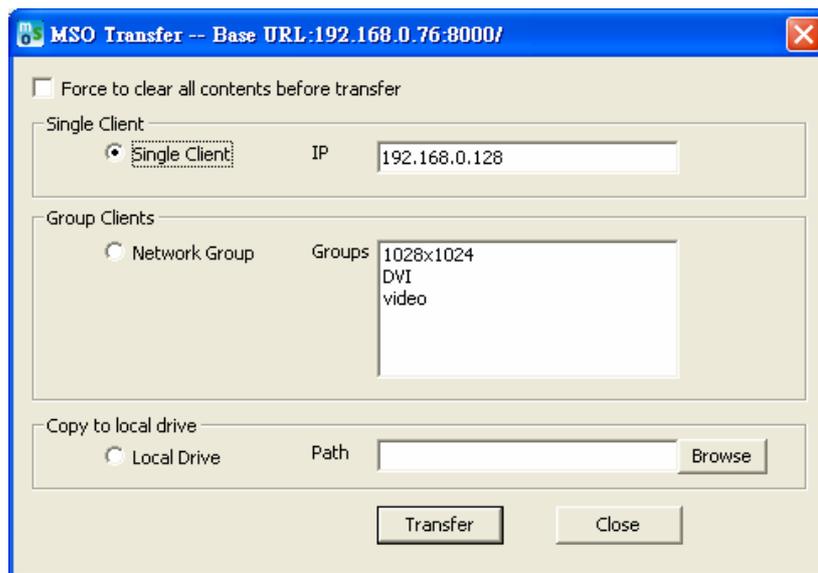
C:\Documents and Settings\we0076>arp -d 192.168.0.128

C:\Documents and Settings\we0076>
```

### Troubleshooting Step 3: Disable another wireless/wire network card

If the connection is established, but you still can not update the play list. In this case, chances are there are more than one network adaptor cards in you PC host.

Try to disable the others, only enable the one that is connected to the client unit, then ping the client unit again to be sure that the connection is established. The update service should bind to only one network card (IP). You could get the information (Base URL) from MSO windows title. Make sure the Base URL and client IP can connect to each other.



### 9.2 ISSUE: How to set Windows XP firewall exception

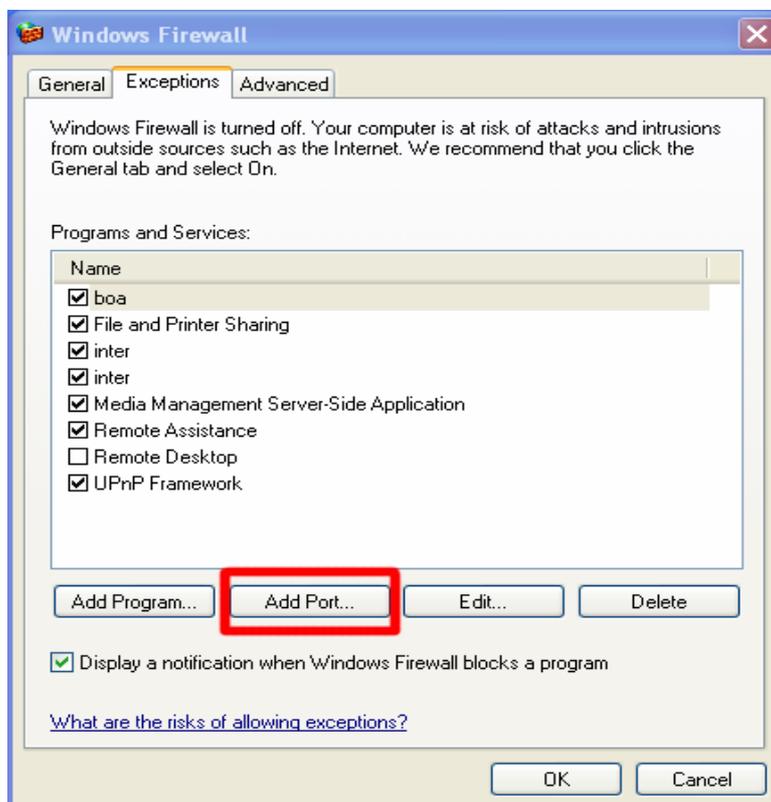
Windows XP comes with build-in firewall software that is turned on by default when you create a network connection. Firewalls are designed to protect you computer by closing unnecessary network openings, or services, on your system that viruses or hackers might use to enter your system. However, some applications like MSO need to use these openings in order to work properly.

To enable the openings for MSO, do the following steps:

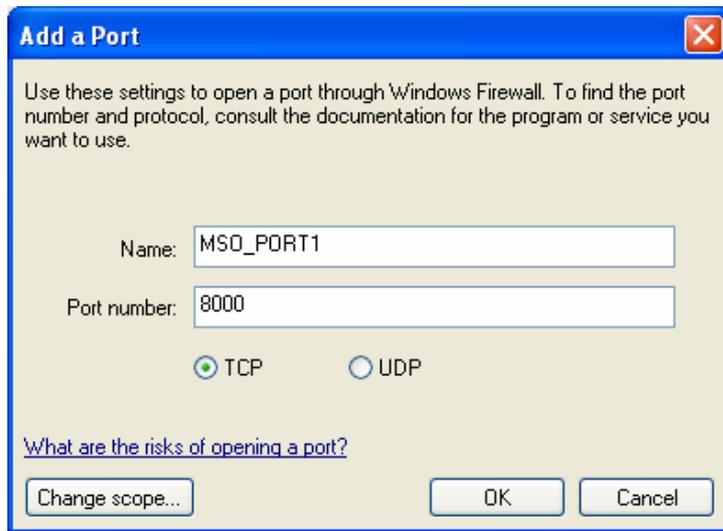
1. Click **Start-> Control Panel-> Network and Internet Connection-> Windows Firewall.**



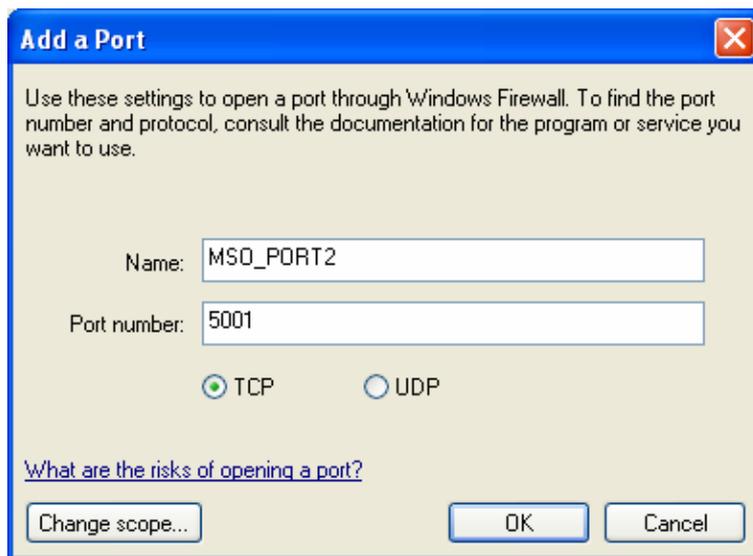
2. In the General tab, check “On (recommended)”, and uncheck “Don’t allow exceptions”.
3. In “Exceptions” tab, click “Add Port” button.



- In the “Add a Port” window, type **MSO\_PORT1** in **Name** text edit, **8000** in **Port number**. Click **OK** button to accept the value.

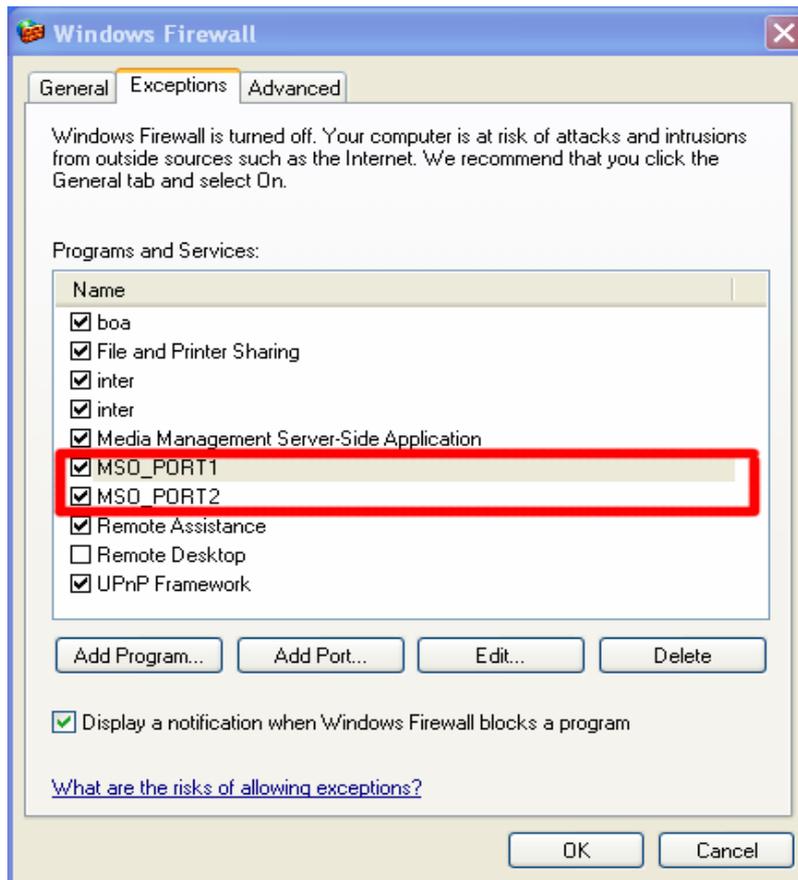


- Click “Add Port” again in “Exceptions” tab, enter the following value in “Add a Port”, then Click OK.



Exception	Name	Port number	Protocol
1	MSO_PORT1	8000	TCP
2	MSO_PORT2	5001	TCP

6. Click on the “**Exception**” tab to ensure the two exceptions are added.



7. Click **OK** to confirm the firewall setting.