AVerMedia®

XR8032 RACK

User's Manual

March 2009

FCC NOTICE (Class A)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Federal Communications Commission Statement

NOTE- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION ON MODIFICATIONS

To comply with the limits for the Class A digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class A limits. All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.
Changes and modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

European Community Compliance Statement (Class A)

This product is conformity with the protection requirements of EU Council Directives 89/336/EEC amended by 92/31/EEC on the laws of the Member States relating to electromagnetic compatibility.
Warning - This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to correct this interference.

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The mark of Crossed-out wheeled bin indicates that this product must not be disposed of with your other household waste. Instead, you need to dispose of the waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information about where to drop off your waste equipment for recycling, please contact your household waste disposal service or the shop where you purchased the product.

Battery Safety Information

Store the batteries in a cool dry place.
Do not dispose of used batteries in domestic waste. Dispose of batteries at special collection points or return to point of sale if applies.
Remove the batteries during long periods of non-use. Always remove exhausted batteries from the remote control. Battery leakage and corrosion can damage this remote control, dispose of batteries safely.
Do not mix old and new batteries.
Do not mix different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
Do not dispose of batteries in a fire. The batteries may explode or leak.
Never short circuit the battery terminals.

WARNING

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

IF THERE IS ANY DAMAGE, SHORTAGE OR INAPPROPRIATE ITEM IN THE PACKAGE, PLEASE CONTACT WITH YOUR LOCAL DEALER. WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT MODIFICATION.

NOTICE

- INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.
- THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCE ONLY.

Manual Conventions

The following conventions are used throughout this manual

Caution symbol is intended to alert the user of the important installation and operating instructions. Fail to comply may damage the system.

Information symbol is intended to provide additional information for the purpose of clarification.

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Chapter 1 Introduction

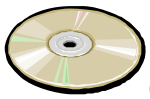
AVerMedia® XR8032 RACK is a standalone DVR unit that through the network to receive video and monitoring and recording of video. It can connect 8 sensors and relays. The XR8032 RACK is customized to use it right away. No more software and hardware installation. Just connect the cables and you may now start video surveillance. Through the USB port, user can back up the recording video and playback within the bundled software on personal computer.

1.1 Package Contents

(1)

(2)

(3)



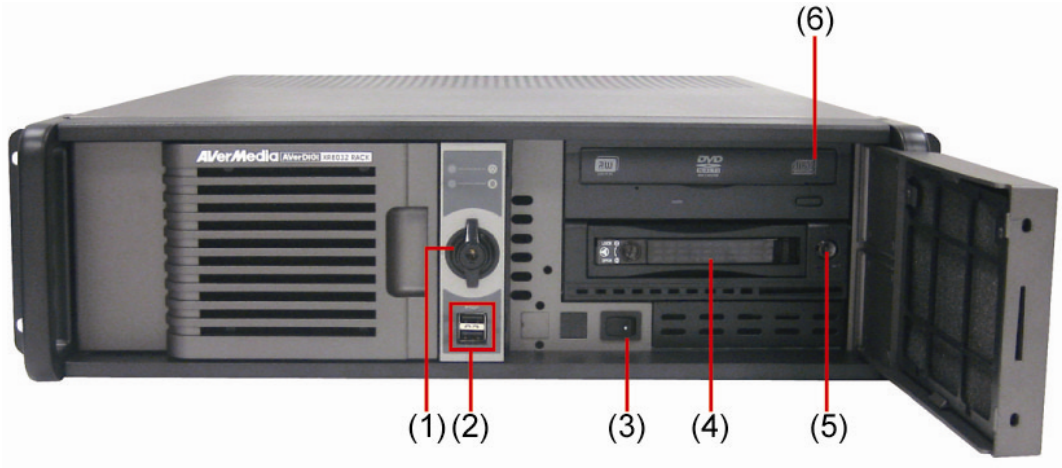
(4)

(5)

- ☐ (1) XR8032 RACK unit
- ☐ (2)Quick Guide
- ☐ (3) Power cord
- ☐ (4)Utility Software CD (Manual is included)
- ☐ (5) AVerMedia USB optical mouse

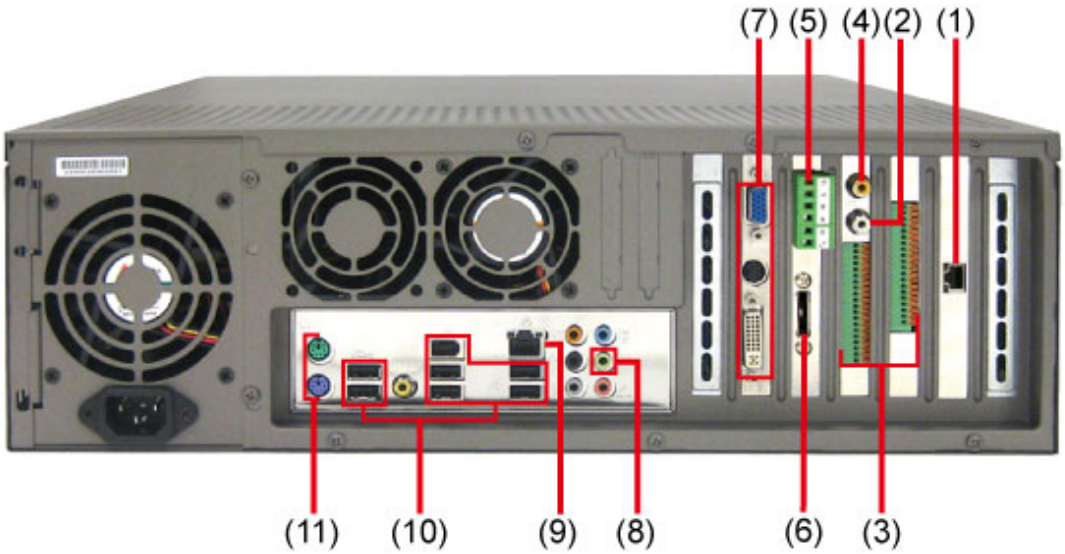
If there is any damage, shortage or inappropriate item in the package, contact your local dealer immediately.

1.2 Front Panel



Name	Function
(1) Locker	To lock the front cover
(2) USB port x 2	To connect external USB storage device
(3) Power switch	Turn on/off the system unit
(4) Removable HDD drawer	It can be installed one SATA hard disk
(5) Removable HDD drawer power switch	To on/off the removable hard disk
(6) DVD-RW	To backup recorded file on DVD-R/RW disk

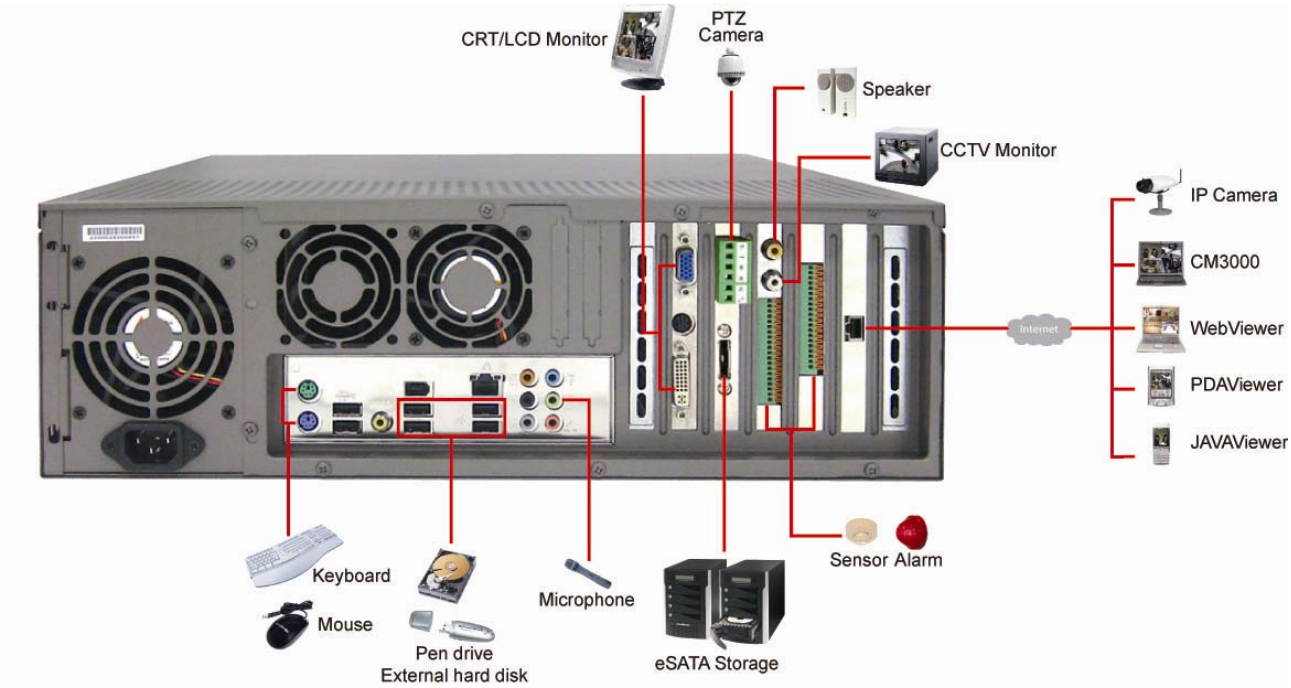
1.3 Back Panel



Name	Function
(1) Ethernet Port	For WAN/LAN connection
(2) TV Out	Output the video signal to a CCTV monitor
(3) Sensor In Relay Out	Support 8 sensor devices and 8 relay devices (Relay: 1A @ 125V AC/30V DC)
(4) Audio Out	Output the audio of the selected video channel
	The audio output device has its own power supply is necessary.
(5) RS485	For PTZ camera connection
(6) eSATA port	For connecting with eSATA RAID
(7) Video Out (DVI)	Output the video signal to a LCD monitor
(8) Speaker/Microphone port	Connect the speaker and microphone
	The speaker and microphone has its own power supply is necessary.
(9) Ethernet Port	For WAN/LAN connection
(10) USB Port	For connection of any USB interface devices
(11) Keyboard/mouse port	Connect the keyboard and mouse.

1.4 Connecting Device

The DVR unit can connect up to 32 IP cameras through internet and also can connect 8 sensor devices, 8 alarm device and output video to a CRT/LCD monitor. Connecting the unit to an external hard disk through USB connection, the bundled software enables you to transfer and back up the recorded video. Also, the bundled software can playback and segment the backup recorded video. Follow the illustration below to make the connection:



Chapter 2 Using the DVR Software

2.1 Running the Unit for the First Time

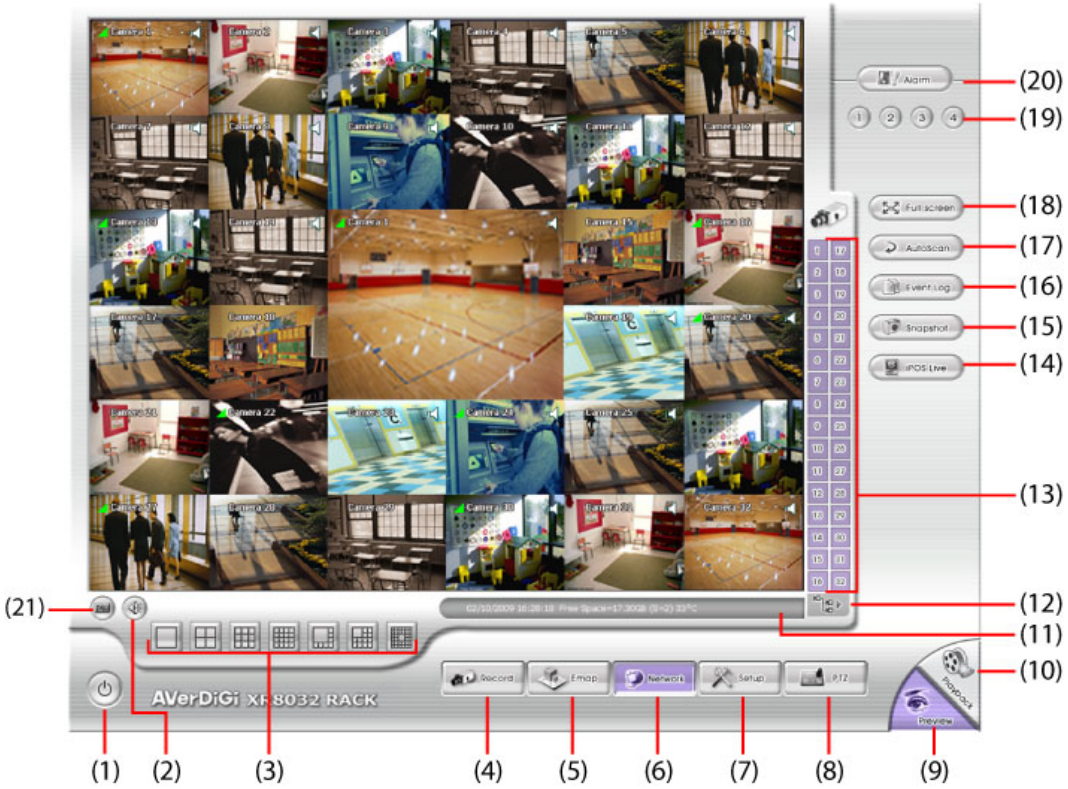
When the unit is turned on for the first time, the system will prompt you to enter the serial number. The serial number is located on the **REAR PANEL** of the DVR unit.

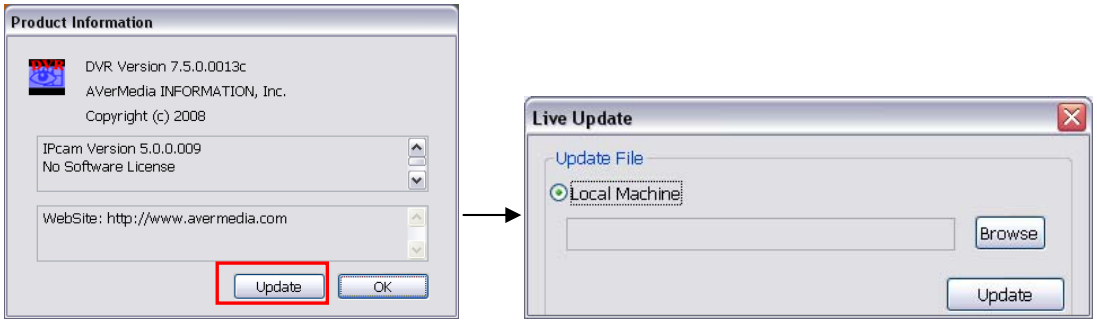
After entered the serial number, the main surveillance interface will show up. Follow the below steps to connect the IP cameras to start surveillance.

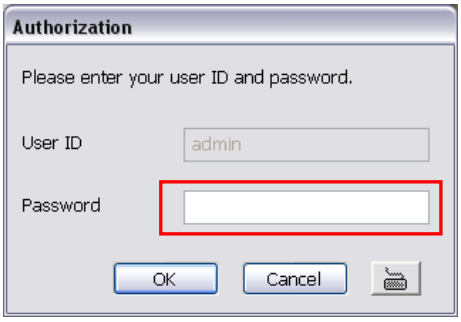
1. Click **SETUP** and enter the password (default is 111111)
2. Click **Camera**
3. Select the camera icon(channel) and mark **Enable**.
4. Click **IP Setting** and select the **Protocol**, **Model**, **Video Format**, and **Channel** of the IP camera.
5. And then, enter the **IP address** or **URL** of IP camera. If IP camera has ID and Password for connecting, mark **Authentication** and enter the **ID** and **Password**.
6. Click **Save&Exit** to complete the configuration.
7. Now, user should see the video of IP camera on the surveillance screen.

For more detail setting, please refer to Chapter 3 Customizing the DVR System.

2.2 Function buttons of Advanced/Preview Mode



Name	Function
(1) Exit	Call up the Logout dialog box. In the logout dialog box, you may do the following: - Click **Exit** to shutdown the DVR system. - Click **Reboot** to restart the DVR system - Click **Login** to sign-in in different account. - Click **Compact** to switch to compact mode (see 2.4). - Click **Guest** to switch to the guest authority level. In guest authority level, user only allow to preview and playback the recorded video. - Click **Cancel** to exit Logout dialog box.
(1) Exit	- Click **About** to update patch or find about the software info. To update the patch file, Click Update and select the patch file location by click **Browser** button. And then, click **Update** button to start upgrading. 
(2) Volume	Adjust the audio volume to a proper volume.

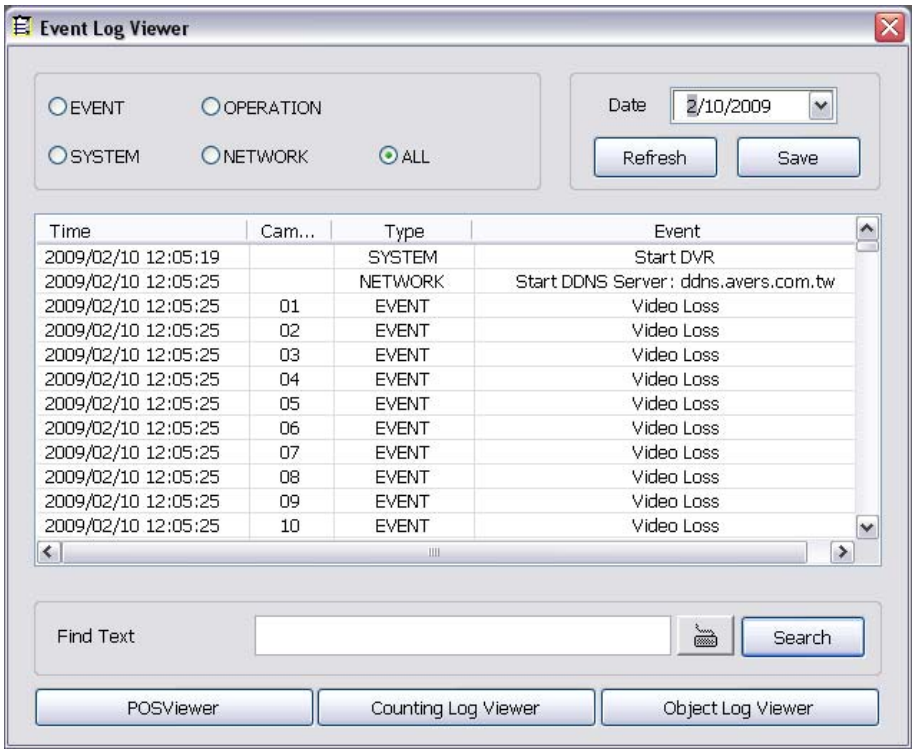
Name	Function
(3) Split Screen Mode	Select from 7 different split screen types to view all the camera, or one camera over the other or alongside on a single screen. It also allows you to switch and view different camera number. 1-Cam display 4-Cam split display 9-Cam split display 16-Cam split display 8-Cam split display 13-Cam split display 32-Cam split display
(4) Record	Start/stop video recording.
(5) E-Map	Display the map in each area, and the location of camera/ sensor/ relay and the warning. (see also 2.6)
(6) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection.
(7) Setup	When setting up the system for the first time, type the word “admin” in the Password text box to access.  Click button to configure settings for cameras, recording, network, scheduler, backup, sensors, relays, alarms and user authentication (see also Chapter 3).
(8) PTZ	Access PTZ control panel. Beside PTZ camera, XR8032 RACK DVR system also support mega pixel IP PTZ camera (also see 2.5).
(9) Preview	Switch to Preview/Advanced mode. This allows you to view live camera display. Press **ctrl + F** can freeze the live preview video screen. And then, click **Snapshot** can save the freeze video screen.
(10) Playback	Switch to Playback mode. This allows you to view the recorded video file (also see 2.3).
(11) Status Bar	It shows the current time, and the hard disk’s free space.

Name	Function
(12) Camera Group Tree	To view the user defined channel group tree (see also 3.2.3). Click **+** of group to extend group and drag the camera to surveillance screen to view. Click **+** of camera to view the camera information.
(13) Camera ID	Click a desired icon to play the desired channel. After you click the icon, it turns yellow. If you assign a split display mode and appoint a camera number, the icon group of the cameras will turn yellow altogether.
(14) iPOS Live	To view the real time iPOS data of channels. Click the iPOSLive to call out the real time iPOS data windows. User can move the each channel of iPOS windows apart to proper position. If user didn't enable the multi-channel of iPOSLive(see aslo POS Adavanced Setting in 3.1.1), and then, user only can view one channel each time. To switch to different channel, click **Select Camera** drop down list to select the channel. To tempore stop iPOS data coming, click **Freeze**. To un-freeze, click **Transaction**.

Name	Function
(15) Snapshot	Catch a static recording image and save it as a BMP or a JPG file.
(16) Event log	Click it to pop-up the Event Log Viewer dialog to check Event, Operation, POS (Point of Sales), System and Network logs. You can select a desired date and a log item to show all logs data in the table.(also see 2.2.1)
(17) AutoScan	Click it to start Auto Scan.
(18) Full screen	Click it to turn to full screen mode. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon. When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.
(19) Alarm Button	Click to trigger defined alarm. The alarm buttons have been defined will show on the application UI (see also Alarm Button in 3.9).
(20) Alarm	Alert and display warning info. Only Administrator-level can reset and turn on, off and trigger the Sensor and Relay by right-clicking the item in the Sensor and Relay list.
(21) On Screen Keyboard	If the keyboard is not available, you may use the Virtual Keyboard.

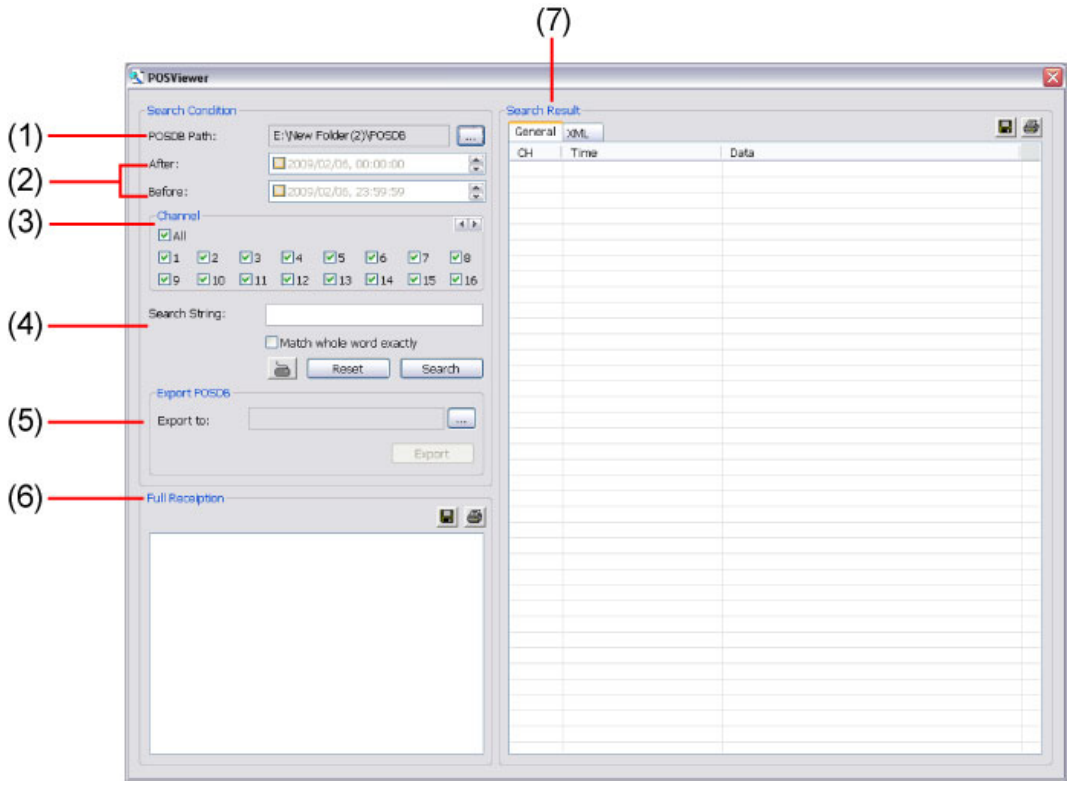
2.2.1 Using Event Log Viewer

Show the record of activities that take place in the system.



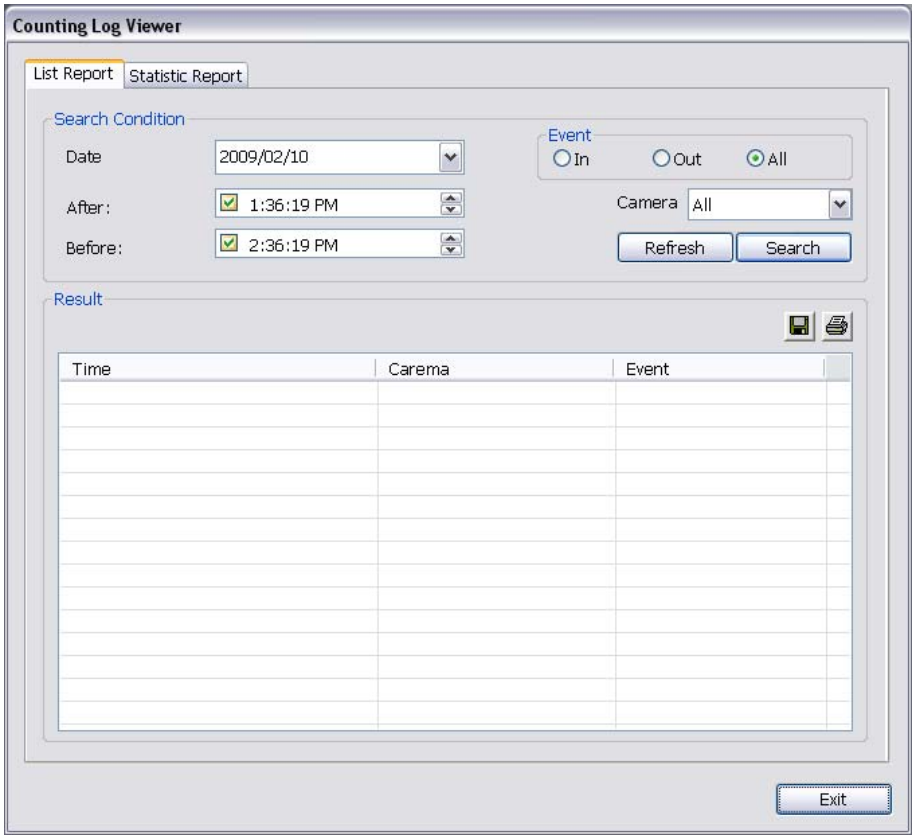
1. Click the Event Log button on DVR system main interface. The Event log viewer window will show up.
2. Select the **Date** to view or search certain event log by key word. Enter the key word in **Find Text** column and click **Search** button.
3. To filter the records, select and click the select button to display Event, System, Operation, Network or All.
4. The events list which display on the screen can be saved as text file format. To save the events list, click **Save** button.
5. To view POS event log, click **POS Viewer** bar to call out the POS event log window.

Using the POSViewer

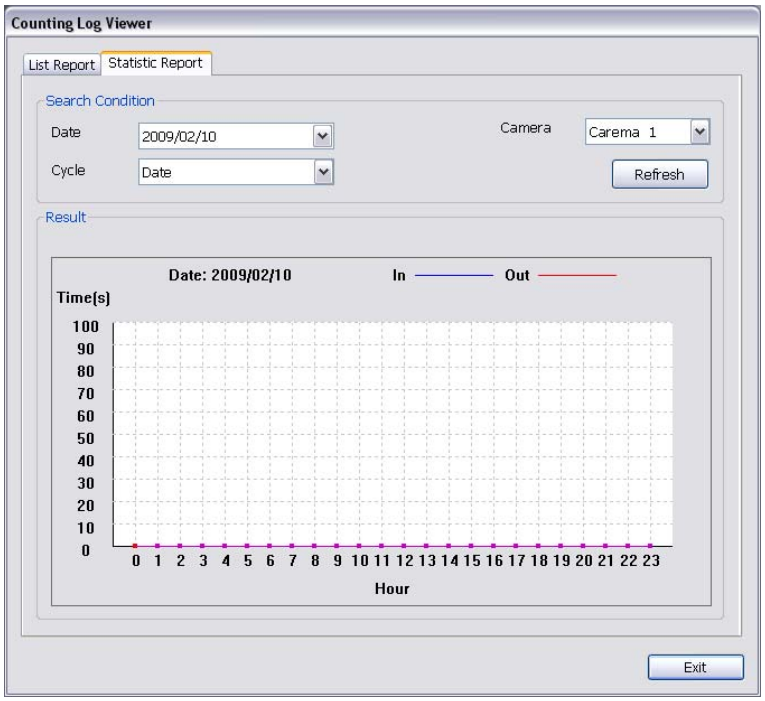


Name	Function
(1) POSDB Path	The storage path for POS event log. Click ... to change the storage path.
(2) Before/After	Set a time period before and after of POS event log.
(3) Channel	Select the POS event log of channel
(4) Search String	Enter specific key word or word string to search the POS event log. Mark the "**Match whole word exactly**" box if wants to find exactly key word or word string of POS event log.
(5) Export POSDB	It allows user to save the POS database to selected storage path in excel format. Click ... to change the storage path. Click **Export** to save the POSDB to selected storage path.
(6) Full Reception	Display the POS event log detail that user selected from Search Result window. Click to save the POS event log. Click to print out the POS event log.
(7) Search Result	Display the POS event log of search result. Click to save the search result. Click to print out the search result.

Using Counting Log Viewer



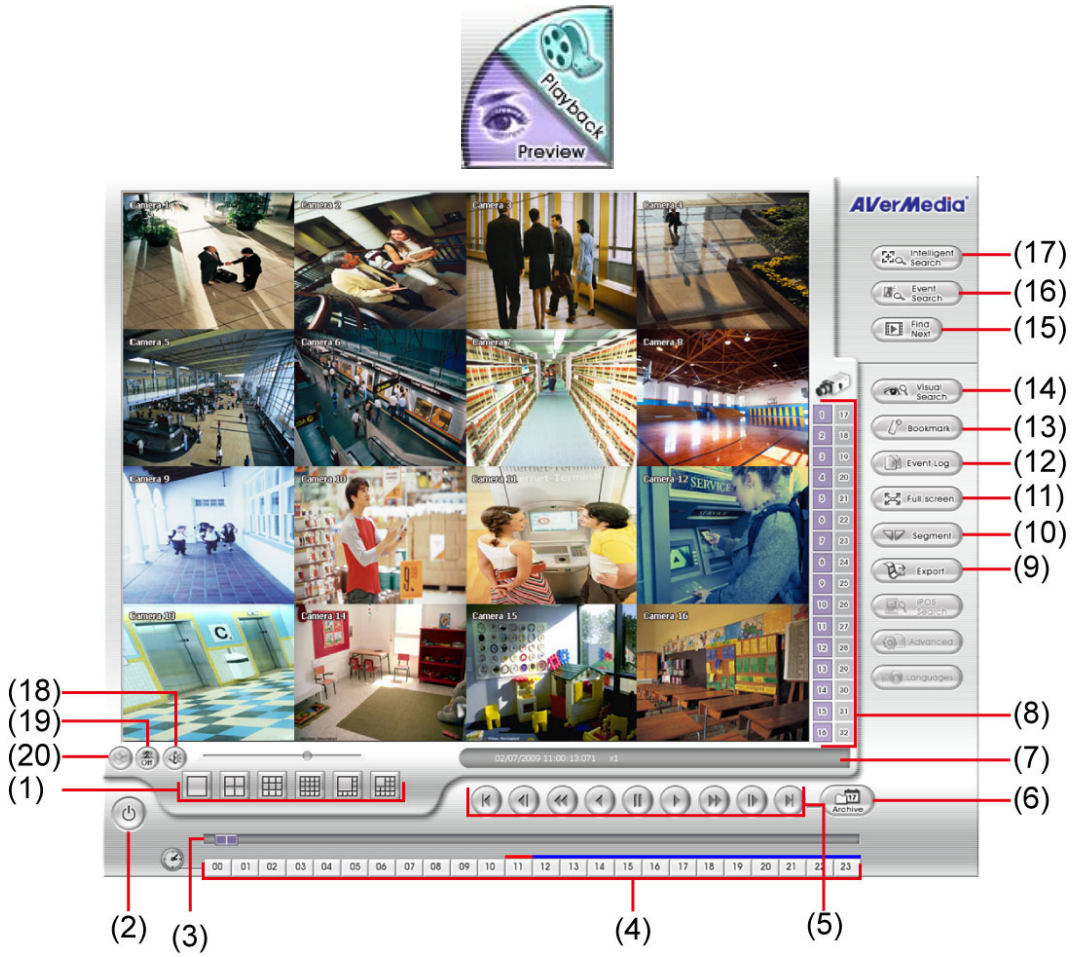
1. Select the **Date** and set a time period between **After** and **Before** for object counts searching.
2. Select the search **Event** – **In**, **Out** or **All**.
3. Select the **Camera** or **All** cameras to search.
4. Click **Search** to start searching.
5. The result will be list out in **Result** tablet.
6. To save the search result, click .
7. Click to print out the object counts log.
8. To view the analysis of object counts, click **Statistic Report** tab.



9. User can select the **Date**, **Camera**, and **Cycle** to view the report of object counts (In/Out).

2.3 Familiarizing the Buttons in Playback Mode

To switch in Playback mode, click **Playback** button at the lower right corner of Advanced/Preview mode user interface



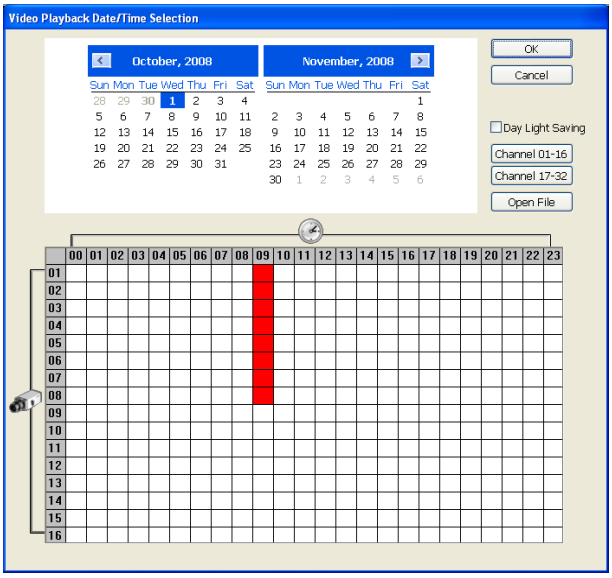
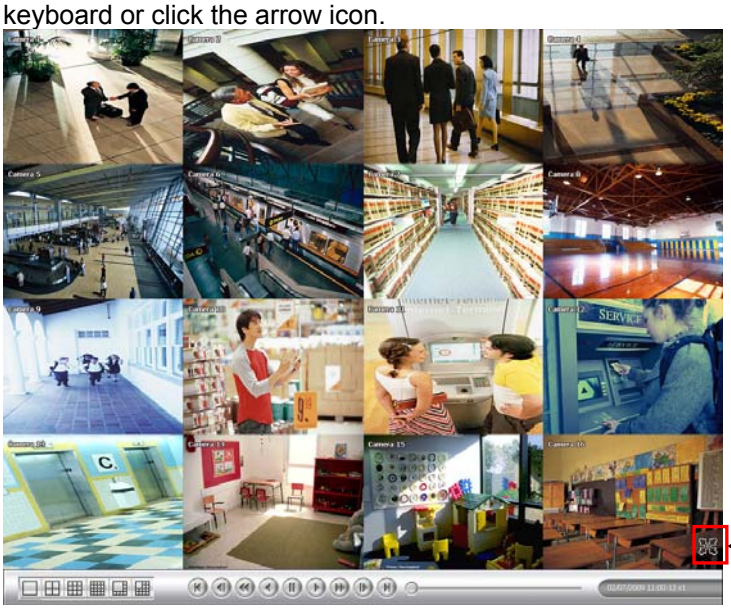
Name	Function
(1) Split Screen Mode	Select from 6 kinds of split screen type to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen. To view 32 channels, click 16 split screen button to switch channel display.

- If there are only 4 cameras, you won't be able to switch to 9, 13, and 16 split screen mode.
- To zoom in an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.

(2) Exit	Close playback mode and go back to the preview mode
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.

(5) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of ½x, ¼x, or ⅛x. **Rewind:** Wind back the recorded video file. **Pause**: Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. **Next**: Go to the next frame. **End:** Go to the end of the recorded video file.

Name	Function
(6) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file. – **OPEN FILE:** user can open the recorded file from HDD – **Channel 01~ 16&Channel 17 ~ 32:** Switch to different channel group of playback calendar. – **Day Light Saving:** the playback calendar will show the available video records during day light saving time period. 
(7) Status bar	Display the recorded date, time and play speed.
(8) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(9) Export	Export includes Snapshot, Print, Output Video Clip, and Backup function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output Video Clip:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also 2.7). ■ **Backup:** Save the playback file to USB device or DVD-ROM disk
(10) Segment	Keep a portion of the recorded video (see also 2.7).
(11) Full screen	View in full screen mode. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon.  Click the arrow icon to exit from full screen display mode When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.

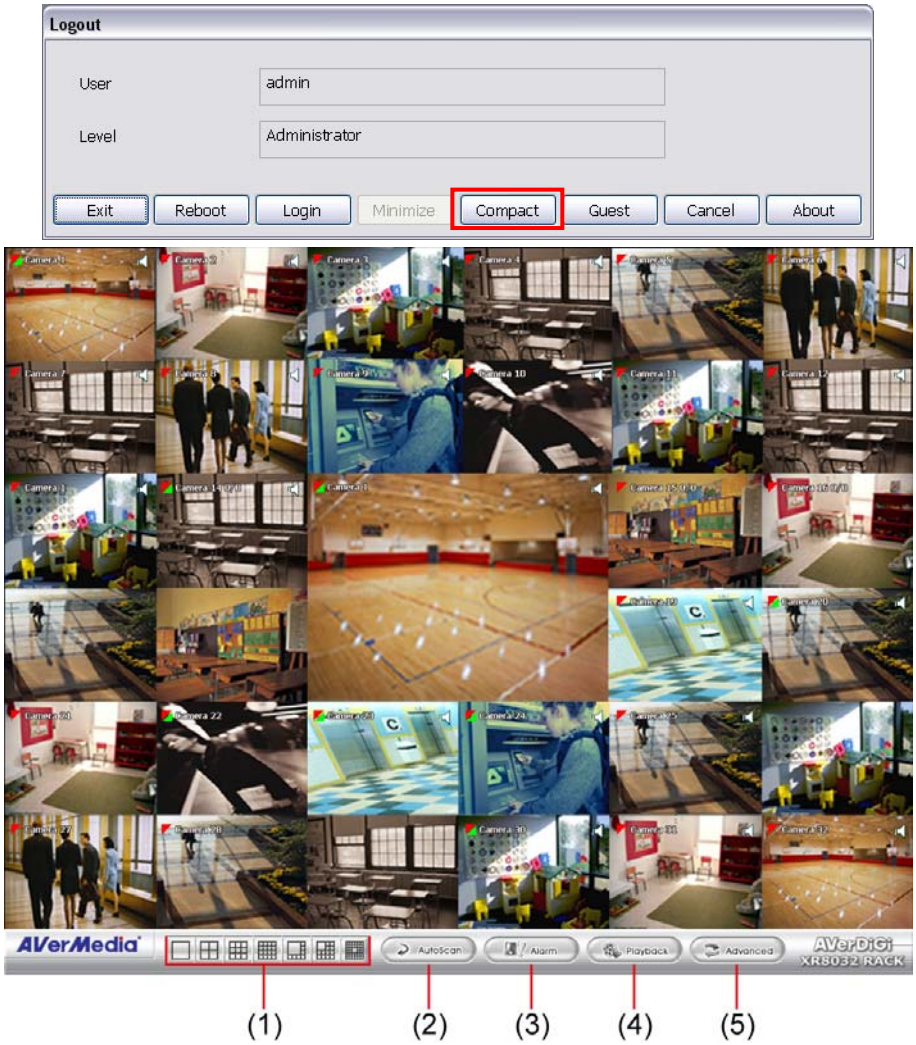
The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.

Name	Function
(12) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(13) Bookmark	Mark a reference point when previewing the recorded video file to which you may return for later reference. You may also set it to protect the file. (see also 2.8)
(14) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (see also 2.9)
(15) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(16) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS). (see also 2.10)
(17) Intelligent Search	Search the changes in the motion detector frame (see also 2.11).
(18) Audio	Enable/disable volume
(19) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.
(20) Watermark	Watermark-checking to identify the authenticity of playback video

Watermark verification doesn't support on XR8032 RACK.

2.4 Familiarizing the Buttons in Compact Mode

To view in Compact mode, click **Exit** button. In the logout dialog box, click **Compact**.

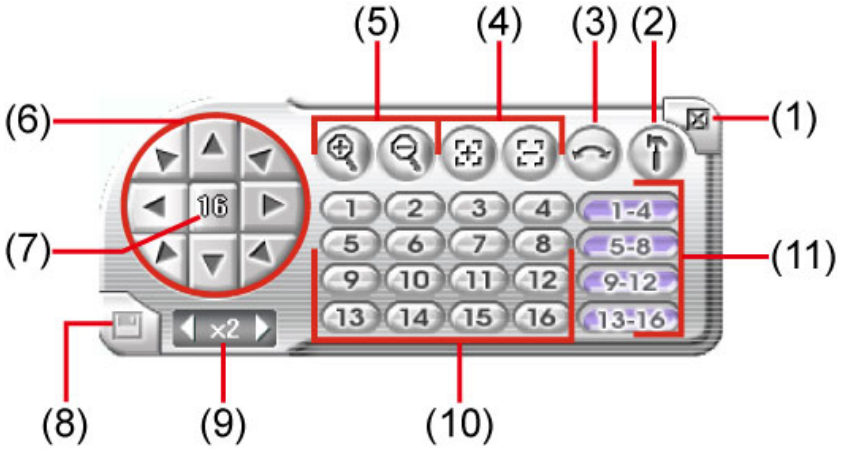


Name	Function
(1) Split Screen Mode	Select from 7 kinds of split screen type to view all the camera, or one camera over the other or alongside on a single screen.

- If there are only 4 cameras, you won't be able to switch to 9, 16, 13, and 32 split screen mode.
- When you are in single screen mode, **Right click** and **Drag** a square on the area you want to enlarge.
- When you are in multiple-screen mode, **Right click** the video screen of the camera and **Drag** on where you want to locate it. To only display one of the video in the multiple-screen mode, **Left click** the video screen you want to display.

(2) AutoScan	Start/Stop video screen cycle switch
(3) Alarm	Alert and display warning info.
(4) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see 2.3)
(5) Advanced	Switch to Preview/Advanced mode.

2.5 Familiarizing the Buttons in PTZ Camera Controller



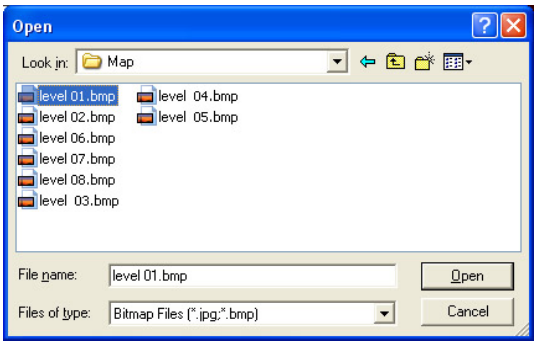
Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Configure PTZ cameras.(also see 2.12)
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Save Camera preset position	Save the PTZ camera preset position number. Select the camera and click the preset position number and save it.
(9) Camera lens speed controller	Adjust the moving speed of the PTZ camera lens.
(10) Camera preset position number	Move the PTZ camera to the preset point.
(11) Group AutoPan	Select to automatically operate PTZ camera in group.

2.6 Setting Up and Using the Emap

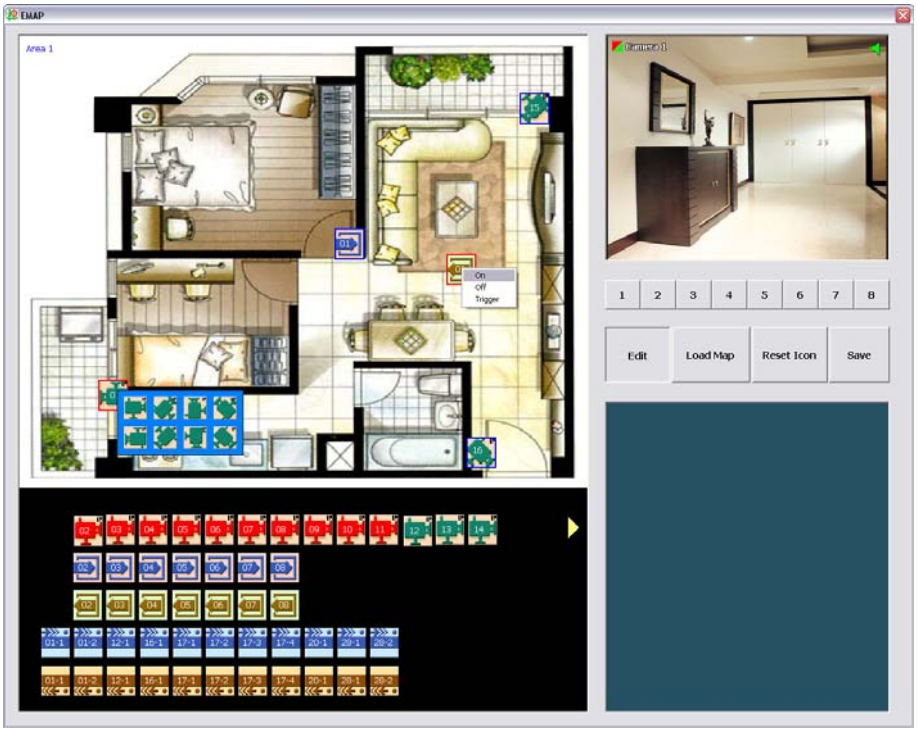
E-Map can hold up to 8 maps in *.bmp/*.jpg format. You may locate the camera, sensor and relay on the map.

2.6.1 To Set Up the Emap

1. Click **Emap**.
2. When the Emap screen appears, click the area number (1 to 8 buttons) on where you want to insert the map.
3. Click **Load Map** to insert the map. When the open dialog box appears, locate and select the map and click **Open**.



4. When the inserted map appears on the Emap screen, click **Edit**. You may now drag the camera, sensor, and relay icons to its place on the map. Icons on the map can be relocated anywhere.
5. To set the camera direction, right click camera icon can select the camera direction in 8 angles.
6. If you are going to locate the icon on the map to other area, you need to drag the icon to the black pane at the bottom of the Emap screen and then switch to the area on where you want to locate the icon. To bring all the icons back to the black pane at the bottom of the Emap screen, click **Reset Icon**.

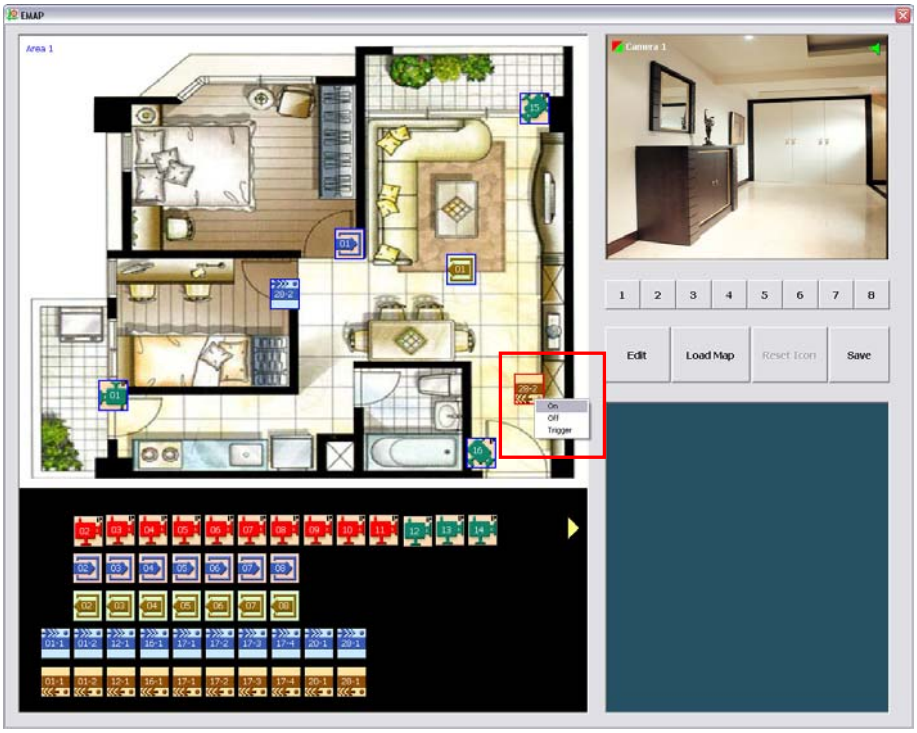


7. When you are done, click **Save** button to save the new setting. To close Emap screen, click **X**.

2.6.2 To Use the Emap

To use the Emap:

1. Click **E-map**.
2. In the Emap screen, click the camera icon to switch on the area where the camera is located on the map and to display the video at the upper right corner of the Emap screen. At the lower right corner of the Emap screen, it lists all the warning message.



3. To control relay, right-click relay icon and select status (on, off, or trigger) of relay.
4. To view different Emap, click Emap number button (1 ~ 8).
5. Click **X** to close Emap screen.

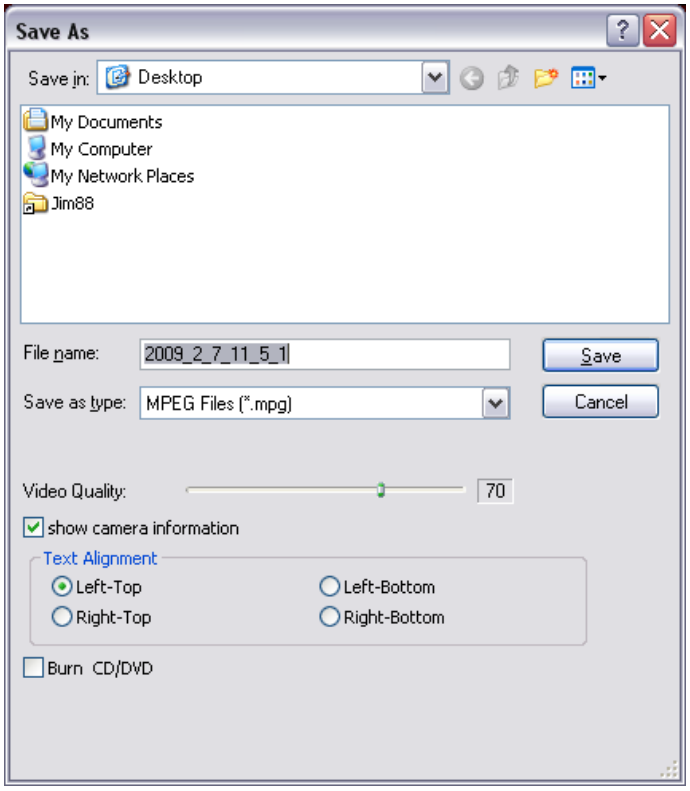
2.7 To Cut and Save the Wanted Portion of the Recorded Video

1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark.

2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation or set the segment marks from the start, click **Segment** button again.

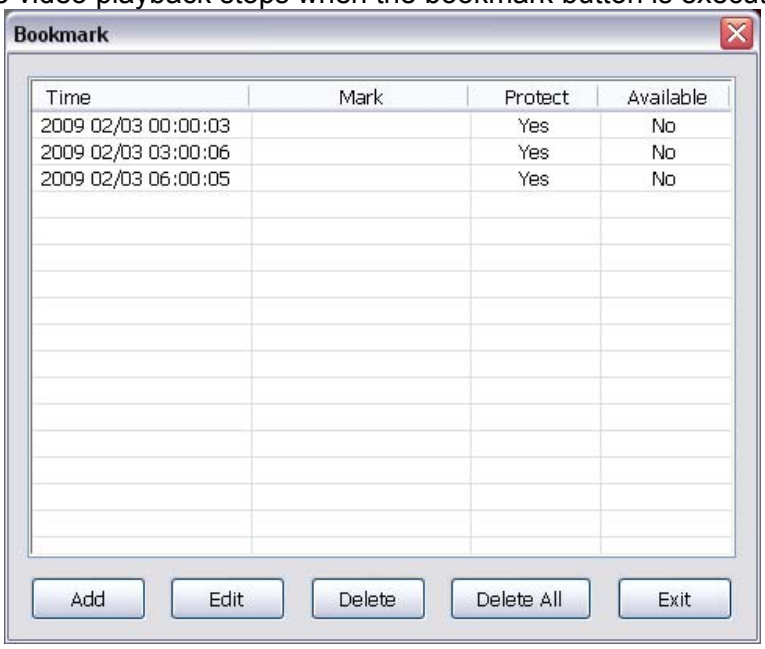
3. Click **Export** → **Output Video Clip** button to save the wanted clip.
4. In the Save As dialog box, locate on where you want to save the file or choose to **Burn** the video segment to VCD/DVD ROM (only for .*mpeg file format).
5. Select the file type and select the camera information display position when playback. The camera information will be the information of server name that user has defined in Network Setting.
6. If the select the file type is *.avi, user can mark **included audio** to include audio in output video segment.
7. To adjust **Video Quality** if needed.
8. Click **Save** to save the video segment.

Right-click function is disabling for security issue.

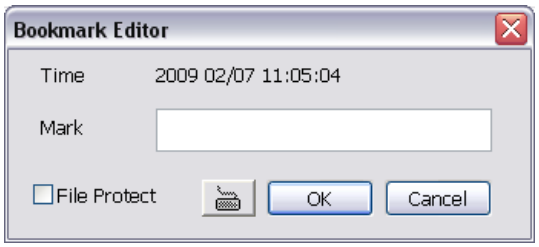


2.8 To Bookmark a Section of the Video

1. Click **Bookmark**. The video playback stops when the bookmark button is executed.



2. In the Bookmark dialog box, you may do the following:
   - **Add** to include the new reference mark in the bookmark list. You may select to enable/disable file protection.



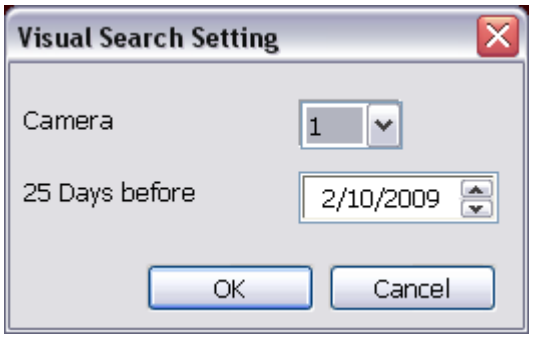
   - **Edit** to change the mark description or enable/disable file protection.
   - **Delete** to remove the selected reference mark in the list.
   - **Delete All** to remove all the reference marks in the list.
   - **Exit** to close Bookmark dialog box.

- When the bookmark is protected, the file won't be overwritten.
- The protected bookmark file will be deleted when the **Delete the recorded data** is enable in the **System setting**.(also refer to 3.1 System setting)

3. Select and click one in the bookmark list to preview the file.

2.9 To Search Using the Visual Search

1. Click Visual Search.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click OK.

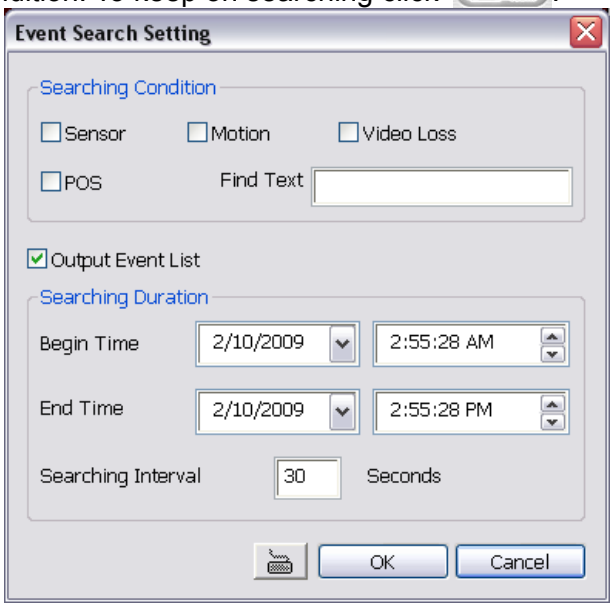


3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minute of that hour, every 10 Seconds of that minute, every Second of that 10 seconds. To go back, click . To view from the selected frame and close event search, click .

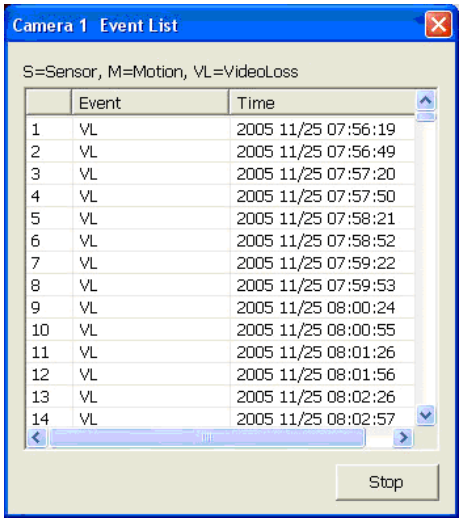
2.10 To Search Using the Event Search

1. Click on the video screen on where you want to search.
2. Click **Event Search**. The Event Search text (red) would appear at the lower left corner of the screen.
3. In the Event Search Setting dialog box, check the type of condition you want to search. If you select POS, in the Find Text box, type the word. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click

.



4. You may also set to search and list all the result. Just check the **Output Event List** box. In the Search Duration section, set the **Begin Time**, **End Time** and **Searching Interval**. Then, click **OK** to start searching.
5. When the Event list appear, click and select the item you want to view.

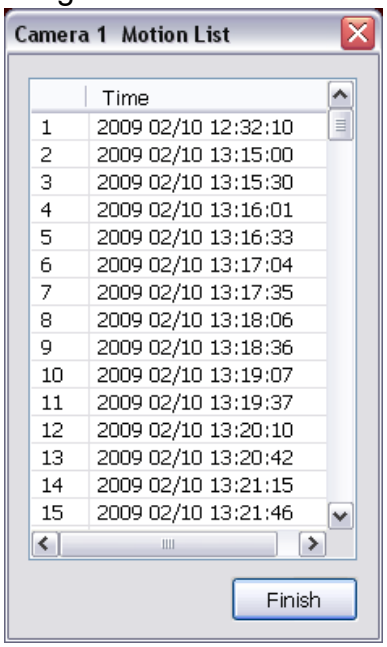


2.11 To Search Using the Intelligent Search

1. Click on the video screen on where you want to search.
2. Click **Intelligent Search**. The Intelligent Search text (red) would appear at the lower left corner of the screen.

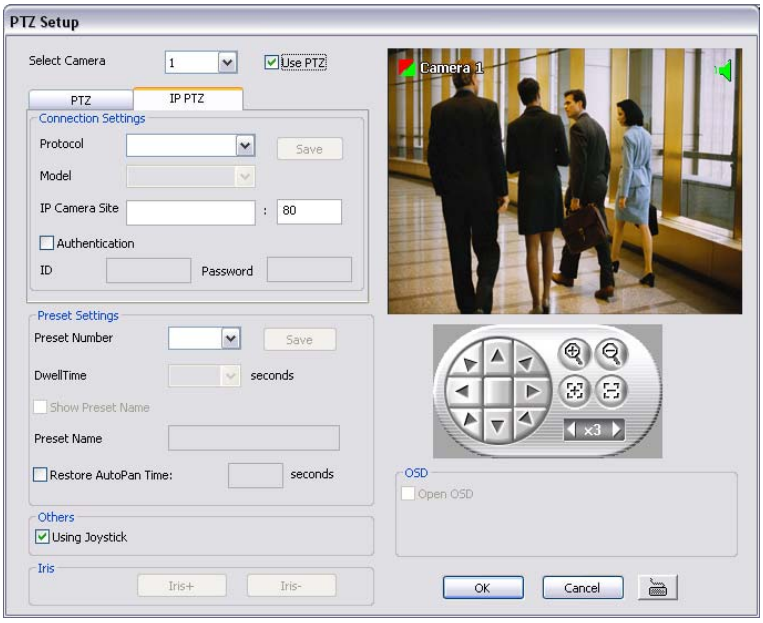
3. When the Intelligent Search Setting dialog box and motion detector frame appear, you may adjust the sensitivity bar and the motion detector frame size and location. To set motion detector frame size and location, left click and drag on the screen. Then, click **OK** to start searching. The video search would stop at the frame that matches the condition. To keep on searching click

.
4. You may also set to search and list all the result. Just check the **List** box. In the Search Duration section, set the **Begin Time**, **End Time** and **Searching Interval**. Then, click **OK** to start searching. The search result will show as below figure:

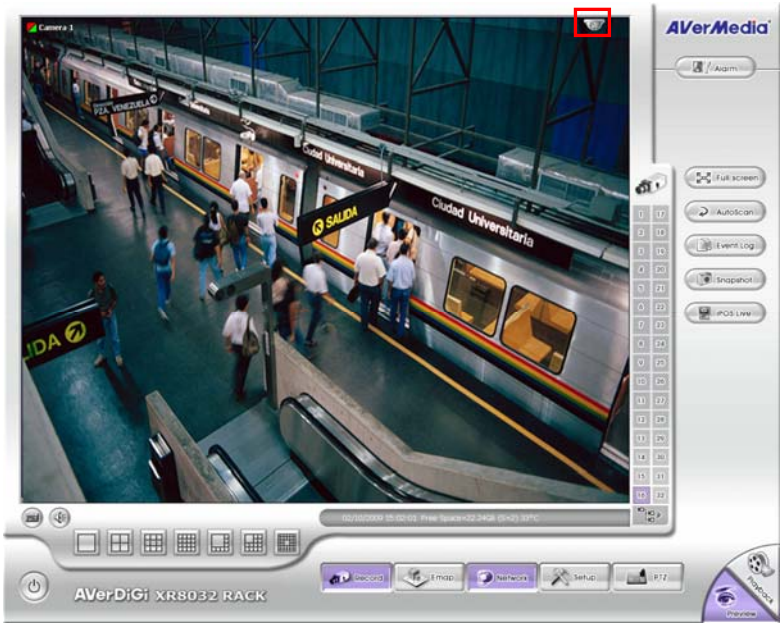


2.12 To Setup the IP PTZ Camera

1. In the PTZ control panel, click **Setup**.
2. When the PTZ Setup dialog box appears, select the camera number and check the **Use PTZ** box.



3. In the Connection Settings section, select the **Protocol** and **Model** that is brand of IP PTZ camera and enter IP address of IP PTZ camera in **IP Camera Site**. Mark the **Authentication** box if **ID** and **Password** is required when connecting to IP PTZ camera. And then, click **Save** to keep the settings.
4. In the **Preset Setting** section, use the PTZ control panel and adjust the position of the IP PTZ camera and select the preset number to assign a number for the PTZ camera current position.
5. Set the **DwellTime** (1-60 sec) for how long the IP PTZ camera stays in that position before it moves to the next one. If you want to add description, check the **Show Preset Name** box and in the **Preset Name** text box, type the word. When done, click **Save** to keep the settings.
6. Repeat step 4 & 5, if you want to save another IP PTZ camera position.
7. **Restore AutoPan Time:** set a time period for restoring auto path function after the IP PTZ camera has been moved. Mark the check box and set the time period in second.
8. **Others:** Enable/disable Using Joystick such as USB joystick device.
9. **Iris:** To adjust the iris of IP PTZ camera. It may not support that depends on brand of the IP PTZ camera.
10. **OSD:** To allow call out IP PTZ camera factory's OSD setup menu. The OSD setup menu may vary that depends on the brand of IP PTZ camera.
11. When is done, click **OK** to save the setting or Click **Cancel**, to leave without saving the new setting.
12. When IP PTZ camera is enabling, user can control IP PTZ camera by using the mouse and on screen PTZ control bar.
13. Click on screen IP PTZ control icon to call out the control bar.

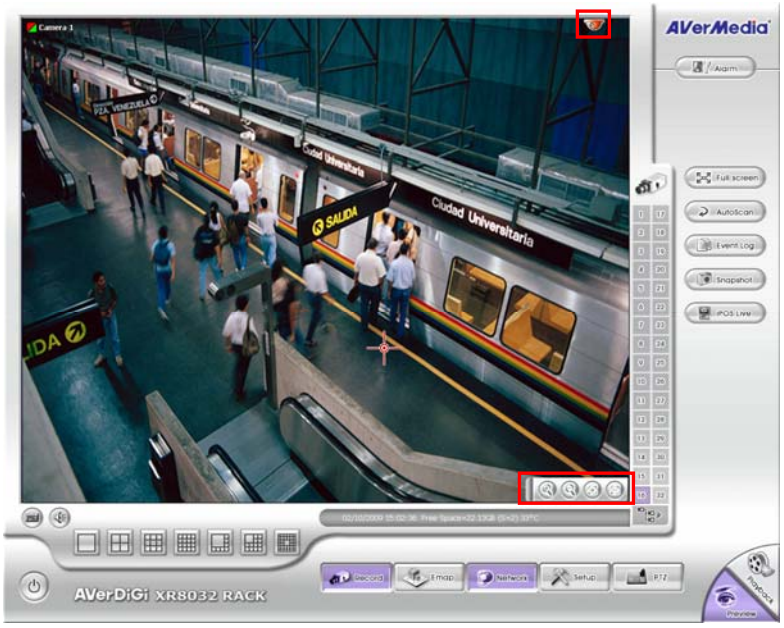


Single Screen mode with PTZ control icon

14. When PTZ control icon has been click on, it will turn to red, the mouse course will become a red cross, and PTZ control bar will show up on the screen.

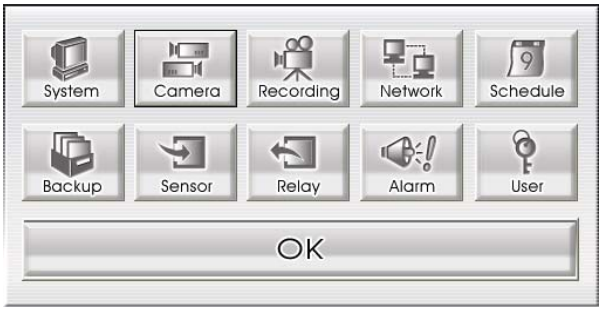
- User can move the on screen PTZ controller to any position of screen
- The on screen PTZ controller only display on a channel screen at a time.

15. Using the red cross mouse course to zoom in/out the camera view by drag on the screen directly.
16. To focus in/out, click the button on PTZ control bar.



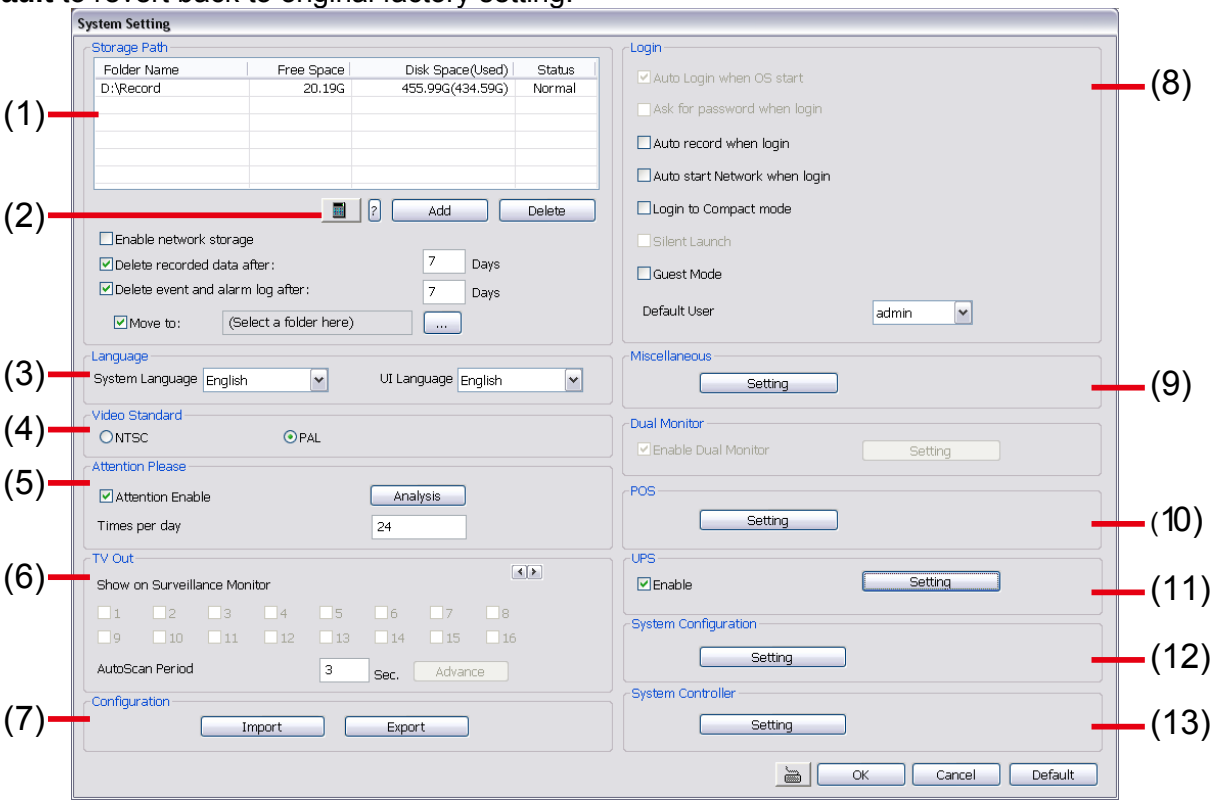
Chapter 3 Customizing the DVR System

In the Preview/Advanced screen mode, click Setup button to customize your DVR. When the DVR configuration setup selection appears, select and click the buttons you want to change the setting.



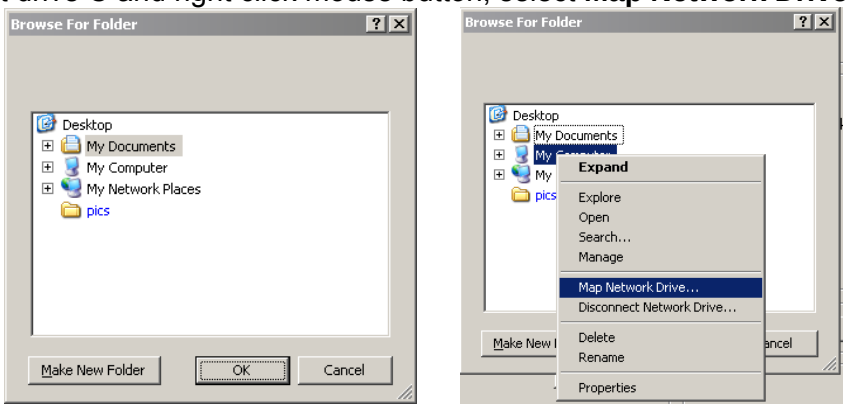
3.1 System Setting

In the System Setting dialog box, click **OK** to accept the new settings, click **Cancel** to exit without saving, and click **Default** to revert back to original factory setting.

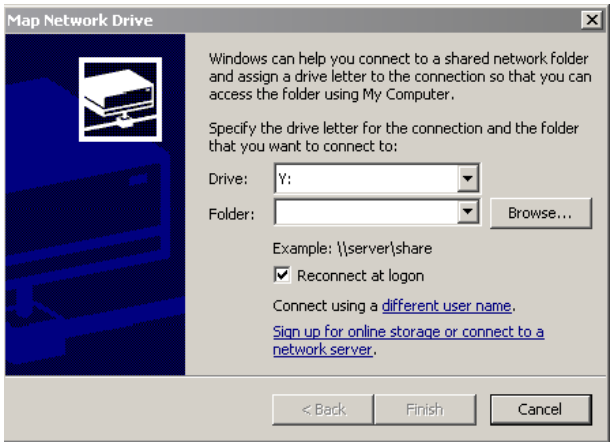


(1) Storage Path

Set the directory on where to save the data. When there is not enough free space to record one hour data, the system automatically replaces the oldest data. In case you have more than one storage path, the system automatically saves the data to the next storage path. You may also add additional network-attached storage (NAS) for extremely high storage capacity. Select the Enable network storage check box to send the recorded video in network-attached storage. **To add network storage, the Internet storage drive/folder must be mapped as Network Driver in DVR server.** Enable network storage first, and then, click Add. In **Browse For Folder** windows, select drive C and right click mouse button, select **Map Network Drive** option.



In the **Map Network Drive** windows, select the **Drive** and fill in the network drive direction in **Folder** column if you know. Or click **Browse** to find the folder direction. Click **Finish** to complete the network drive mapping. After the network drive has been added, user needs to create a folder for network storage. In **Browse For Folder** windows, select the network drive and right click mouse button to add a new folder. And then, click **OK**. User should see a new storage folder display in Storage path list.

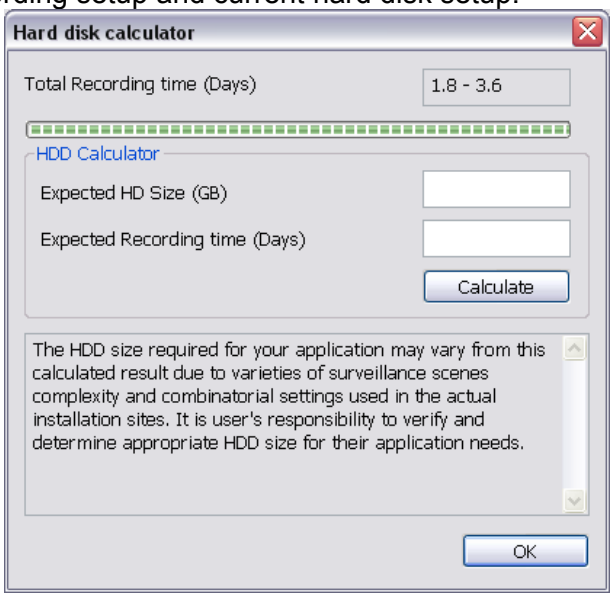


By default the data is stored in C:\Data, to insert another storage path, click **Add**. To remove the selected path, click **Delete**. If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box. If you want the system to automatically erase the event and alarm log after a certain days, enable the **Delete event and alarm log after** check box and enter the numbers of days in **Days** text box. To change logs save direction, enable **Move to** and select the new save path.

(2) Hard Disk Calculator

Estimate the hard disk recording capacity. The result of calculation is a rough value which only for reference. The hard disk record capacity will be varied by the real record quality and complexity of video scene.

Click , the hard disk calculator windows will show up. **Total Recording time** is the current hard disk recording capacity. Enter the expect hard disk size or expect recording time in **Expected HD Size** or **Expected Record time**, and then click **Calculate** button. Click **OK** to exit the hard disk calculator windows. The hard disk calculation will base on the recording setup and current hard disk setup.



(3)Language

Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.

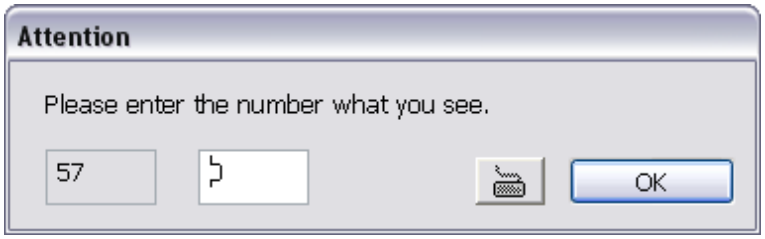
(4) Video Standard

Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.

(5) Attention Please

Check the attentiveness of the person who is monitoring the system. You may set the number of times the Attention dialog box to appear in a day in **Times per day** text box. To check the graph on how fast the person response, click **Analysis**.

When this feature is enabled, the Attention dialog box would appear. The person who is monitoring the system must enter the same number that appears from the left box at the right text box and then click **OK**.



(6) TV Out

Autoscan period: Set the time gap from 3 to 10 sec. before it switches to the next camera.

(7) Configuration

Backup a copy of all the settings and allows you to regain the same settings back. To save the current settings, click **Export**. To replace the settings with the one you have saved, click **Import**.

(8) Login

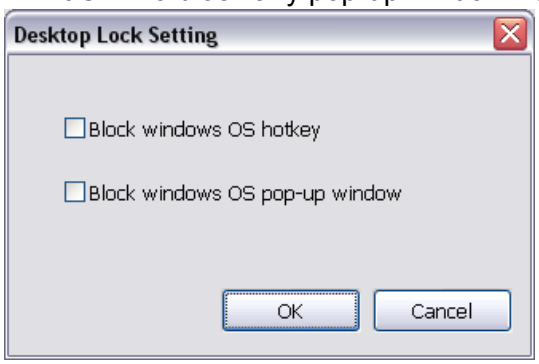
Enable the conditions in Login section you want the system to automatically carry out.

- **Auto record when login**
  Automatically start video recording when the DVR is executed
- **Auto start Network when login**
  Automatically enable DVR network connection when login into DVR program.
- **Login to compact mode**
  Switch to compact mode directly when the DVR is executed.
- **Guest Mode**
  Automatically log in Guest mode when the DVR is executed. In guest mode, the functions are limited to preview and playback only.
- **Default user**
  Automatically log in to the selected default user when the DVR is executed

(9) Miscellaneous

Enable the conditions in **Miscellaneous** section you want the system to perform.

- **Status Report**
  Send a daily system event and attention analysis report. To change the e-mail settings, click **Setup**.
- **Desktop Lock**
  - ✓ **Block window OS hotkey:** Deactivate the [Ctrl-Alt-Del] and [Windows] keyboard key functions.
  - ✓ **Block windows OS pop-up window:** To block any pop-up window from windows system.

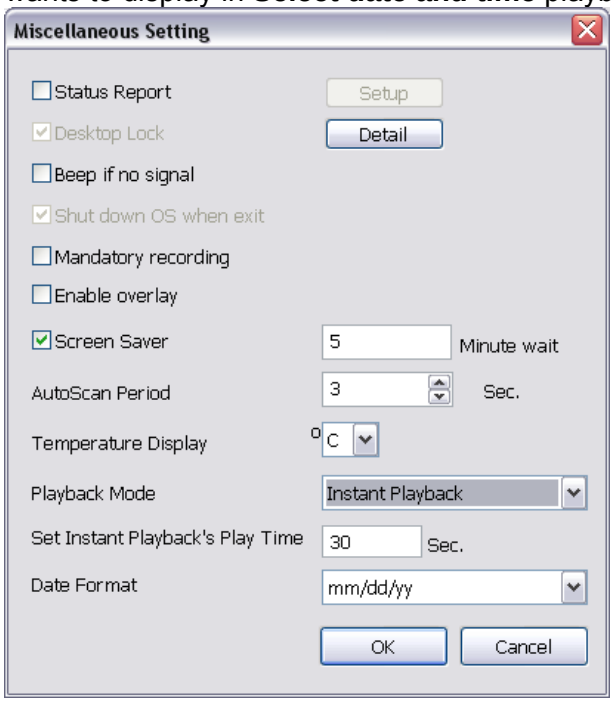


- **Beep if no signal**
  Make sound when the video signal is lost.
- **Mandatory Recording**
  Always recording the video in any condition.
- **Enable Overlay**
  To enhance video signal for better video quality.
- **Screen Saver**
  Set a period time to enter screen saver mode when system idle.
- **Auto Scan Period**
  Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.
- **Temperature Display**
  Select the format of temperature -- °C or °F
- **Playback Mode**
  Select the mode of playback the video.
  - ✓ **Select date and time:** Select the date and time which user wants to playback.
  - ✓ **Play the last file:** Automatically playback the video from the last hour
  - ✓ **Instant Playback:** Automatically playback the video which has just recorded. To set the instant playback

time period, fill in the time in second at **Set Instant Playback's Play Time** column.

- **Date Format**

  Select the date format which wants to display in **Select date and time** playback mode



(10) POS

Set from which camera screen to display the data from the POS equipment. Click **Setting**, to set the POS Console Setting.(see also 3.1.1)

(11) UPS (Uninterruptible Power Supply)

Protect the system from damaging, such as power surges or brownouts. This automatically gives time to close the DVR properly when the battery backup power has reached the Shutdown when capacity below percentage level setting.

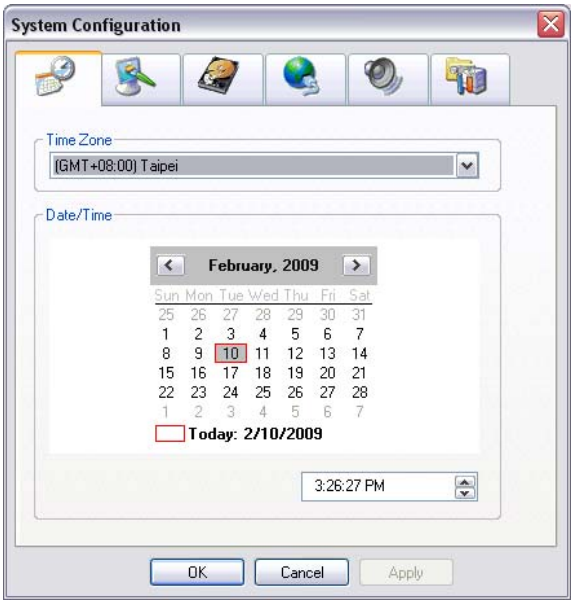
The UPS device must be connected to your computer (refer to your UPS user's guide).

The UPS application must meet Windows 2000 or Windows XP system requirements.

(12) System Configuration

To configure the DVR system date, time and IP address.

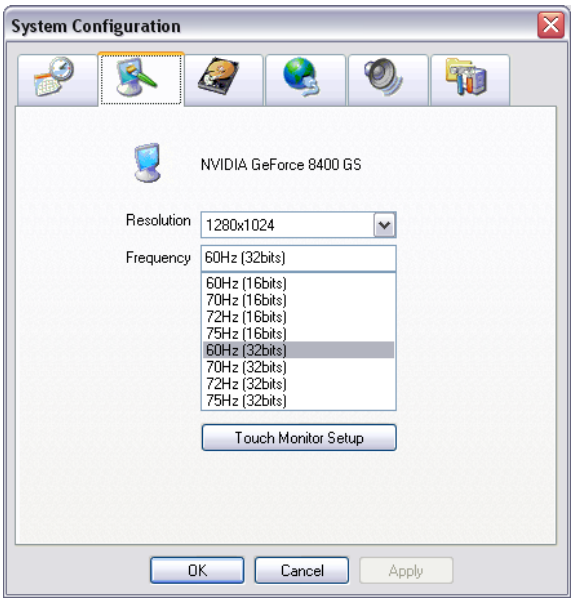
Date/Time Setting



1. Select the **Time Zone** of DVR server located
2. Select the **Month** and **Date**. Click arrow button can switch to different month.
3. Adjust the **Time** by click spin box arrow button.
4. Click **OK** to save the configuration.

Display Setting

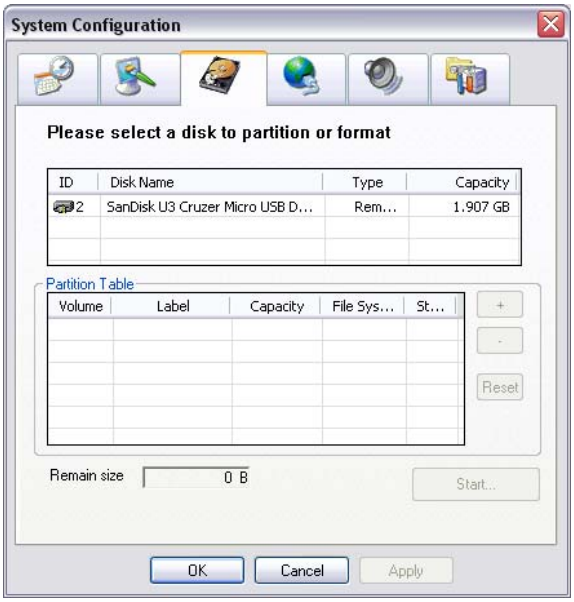
To adjust resolution of display.



HDD Management

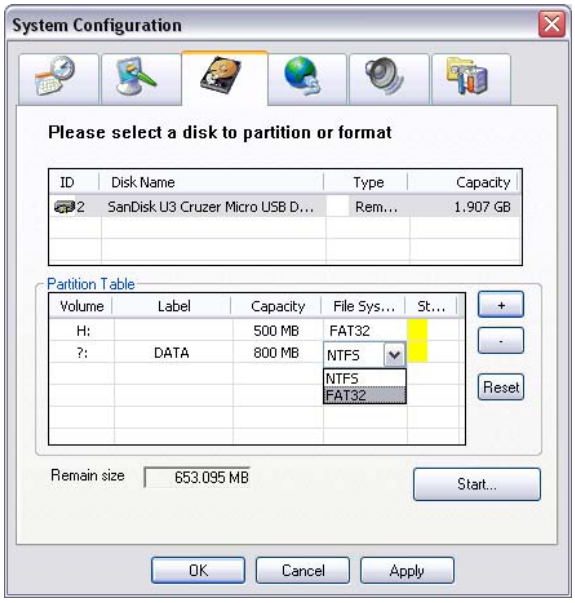
To manage and format the hard disk drive. The DVR system can format the HDD that is the first time install on DVR system.

- Please stop recoding before formatting HDD.
- The hard disk has been added into storage path that is not able to re-format and partition.

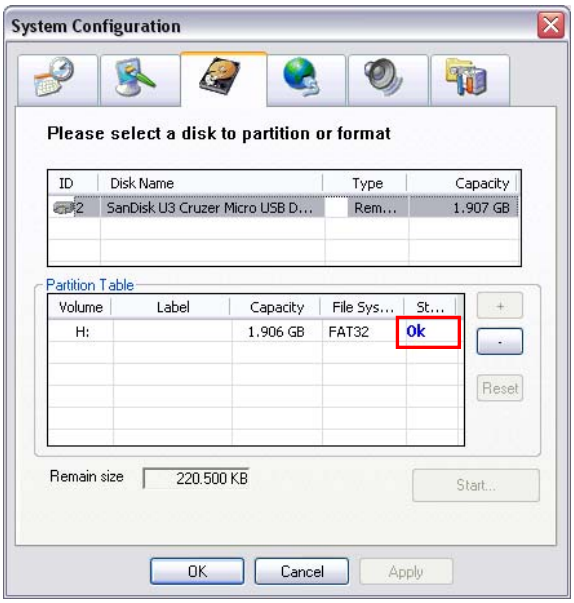


To format and partition hard disk:

1. Click **+** button to add the selected hard disk into **Partition Table** section.

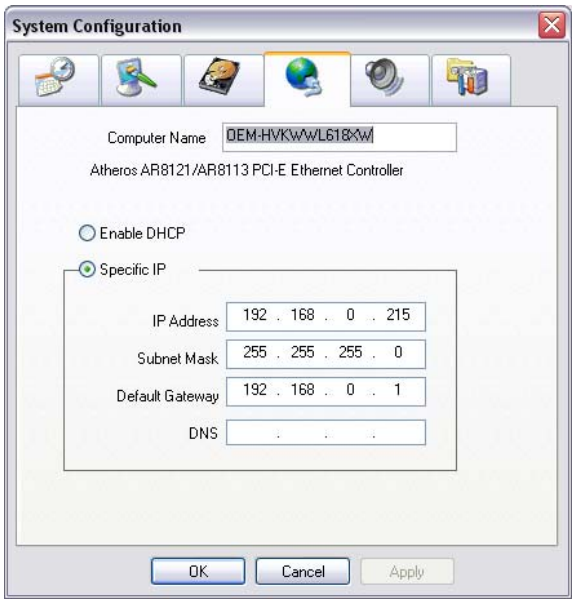


2. User can adjust the capacity of partition by clicking **Capacity** column and enter the capacity. If user doesn't want to divide hard disk into several partitions, and then, just leave the capacity without change.
3. The partition can be named by clicking on **Label** column and enter the name.
4. To create more than one partition, do the steps 1 and 2 again.
5. When all the partition has been added, click **Start** to format all partitions.
6. When the formatting complete, the each partition status will change to **OK**.
7. Click **OK** to exit when formatting is completed.
8. Now, user can assign formatted hard disk or partition as a storage path(see also Chapter 3.1 System setting(1)Storage Path)



Network Setting

To configure the network setting (IP address, subnet, DNS, and son on…) of the system.



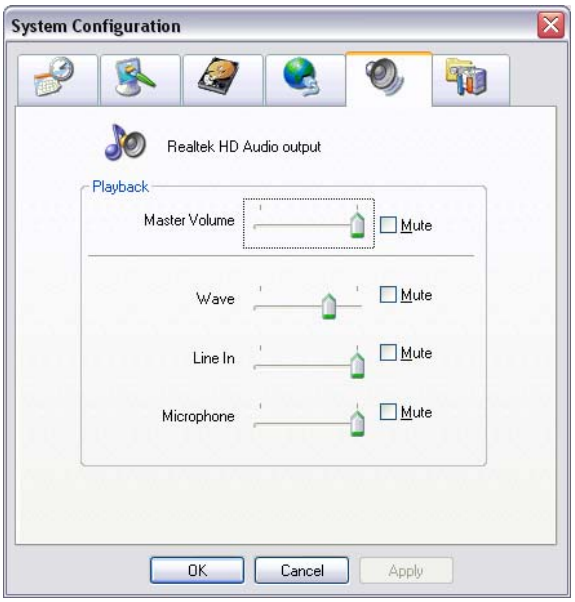
- **Obtain an IP automatically (DHCP):** To use DHCP server assigning DVR server a IP address.
- **Using the following IP address:** Assign a fixed IP address for DVR server
- **IP ADDRESS:** Assign a constant IP address which a real IP addresses give from ISP to DVR system.

Do Not assign the DVR to 1.0.0.0 network segment. It will ca use the DVR can not access to Internet due to the un-recognize to 1.0.0.0 IP segment.

- **Mask:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to DVR system.
- **GATEWAY:** A network device act as a passageway to internet. Enter the network gateway IP address
- **DNS:** Enter the IP address of DNS

Audio Setting

To adjust audio volume of system.

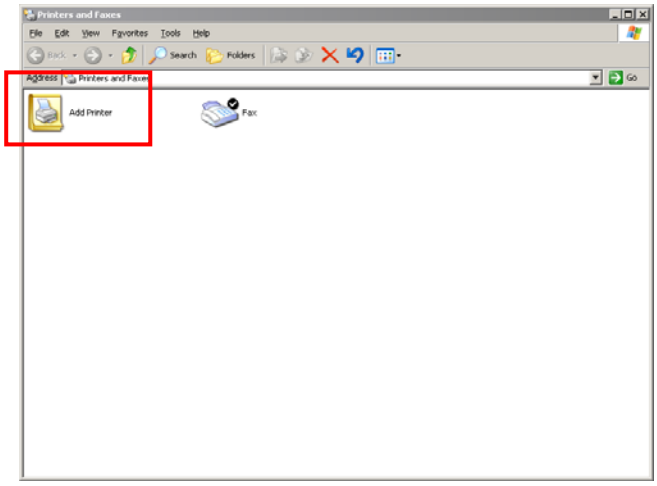


Others

Reboot: To restart the DVR unit.
Shutdown: To power off the DVR unit.

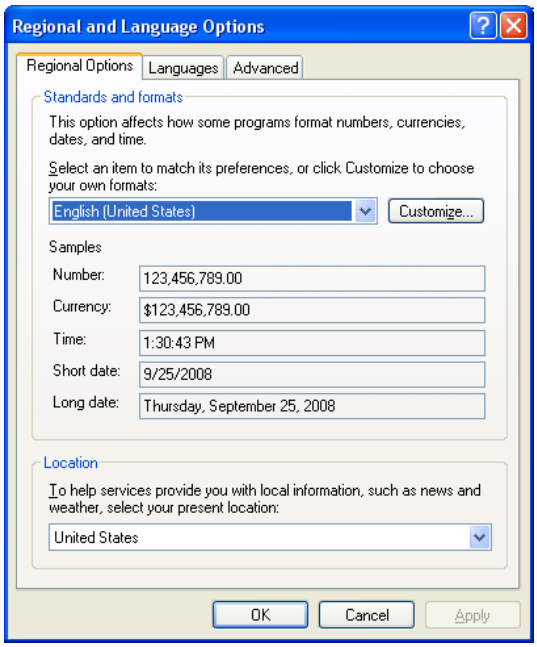
Printer Setting

Click **Add Printer** and following the wizard to install a printer.



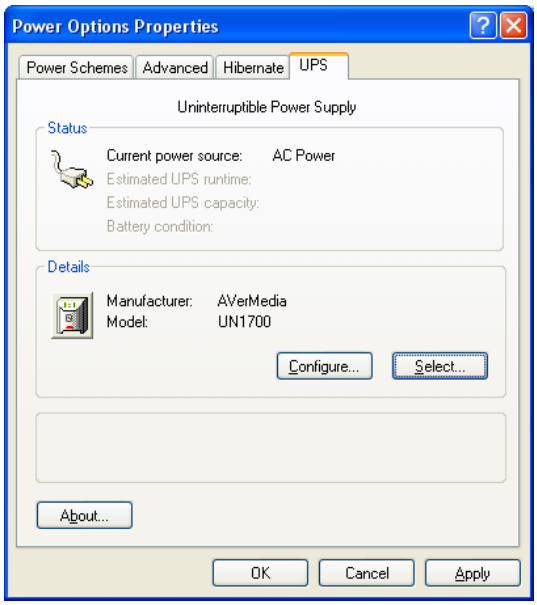
Regional/Language Setting

When DVR application is using different language of UI besides English, user can select the corresponding region and language in order to make UI display correctly.



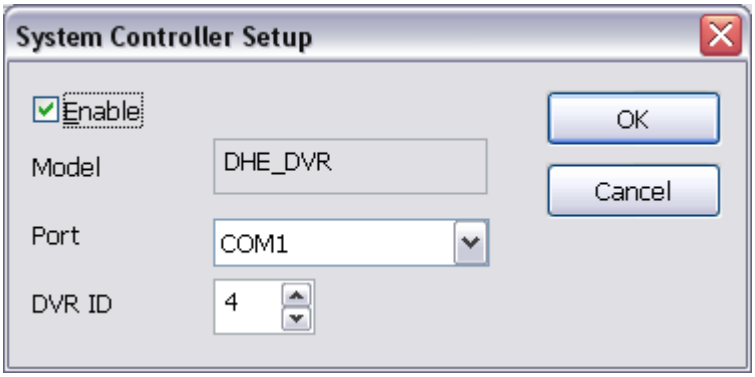
Power Management

To configure UPS. Click **Select…** to select the UPS that has connected with DVR system.



(13) System Controller Setup

To configure the parameters that is for communicating with the System Controller (an optional accessory). Also please refer to user manual of the System Controller.



Enable – Mark the check box to enable the System Controller function.

Model – Select model of the System Controller.

Port – Select the com port that is connected with the System Controller. Click **Setup** to configure com port value. The com port value is shown in below table:

Baud rate	9600
Data bits	8
Parity	No
Stop bit	1
Flow control	No

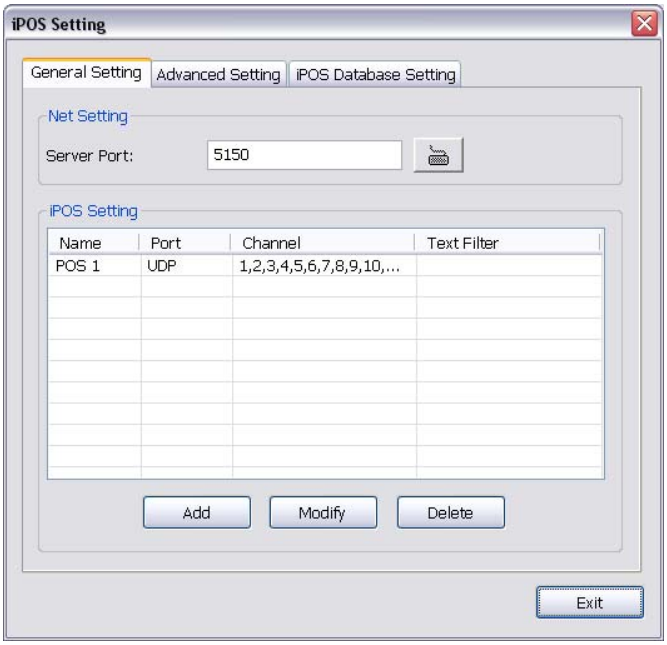
ID – Set an ID for DVR server (0~99). This ID is a key for communicating between the System Controller and the DVR server.

When the DVR server ID is X, the DVR server can be controlled by System Controller irrespective of the DVR ID that is selected in System Controller.

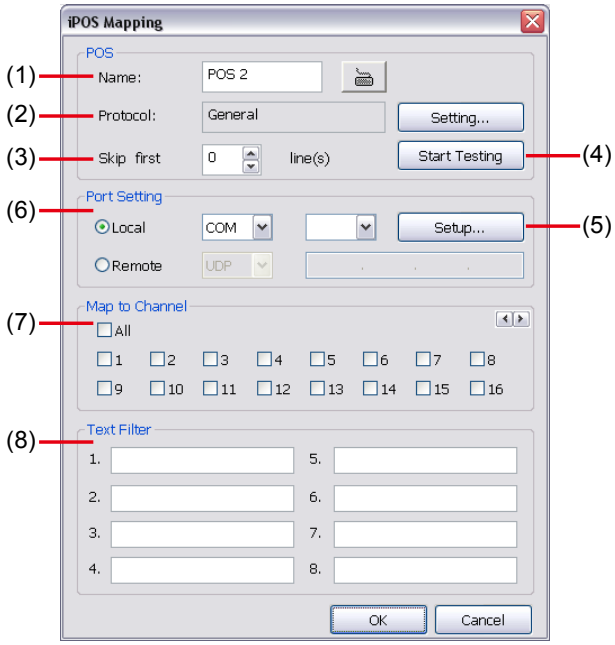
3.1.1 To Set the POS Setting

General Setting

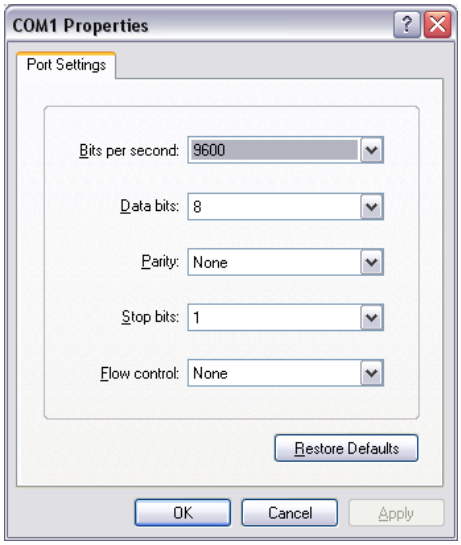
1. In the System Setting dialog box, POS section, click **Setting**.
2. In the POS Console Setting dialog box, click **Add** to set a new POS setting, **Modify** to change the POS setting, and **Delete** to remove the selected POS setting. Click **OK** to save and close POS Console Setting.



3. In the POS Mapping dialog box, click **OK** to accept the settings and **Cancel** to exit without saving the new setting.



(1) POS Name: Enter a name to identify the POS.
(2) Protocol: To select the protocol, click **Setting** button (see Setup POS Protocol)
(3) Skip first: Set the number of lines you want to be removed
(4) Start Testing: Click to test POS setting. You will see a test result on the right side of POS Mapping window.
(5) Setup…: Set the COM Properties. If you are not sure, please contact your POS service provider.



(6) Port Setting : Select the Local or Remote port to where it is connected.

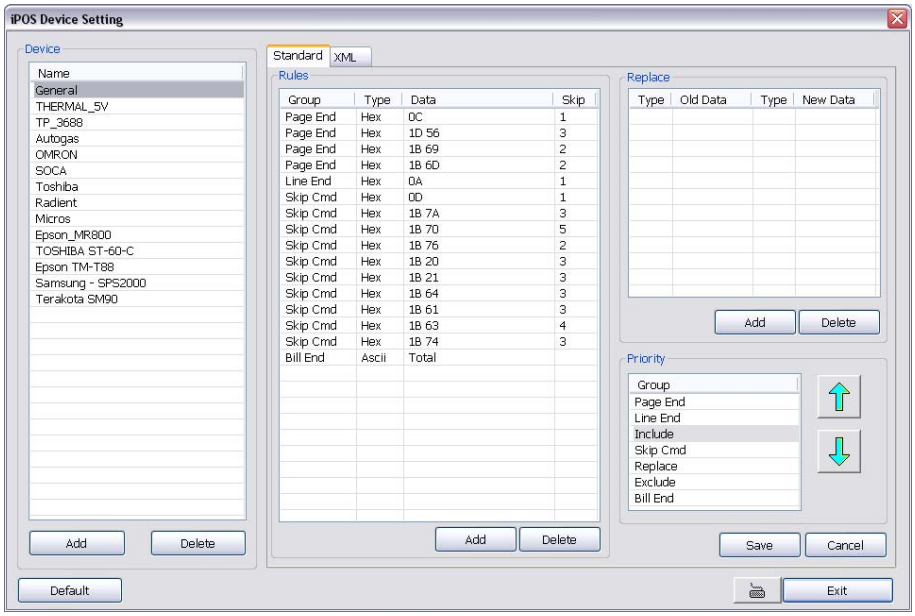
- **Local:** select the COM port number which is connected.
- **Remote**: Use the UDP protocol for remote connection if POS system can broadcast to Internet. Enter the IP address of the remote station.

(7) Map to Channel: Select to which camera number to display the transaction text.

(8) Text Filter: Enter the word you want to be removed.

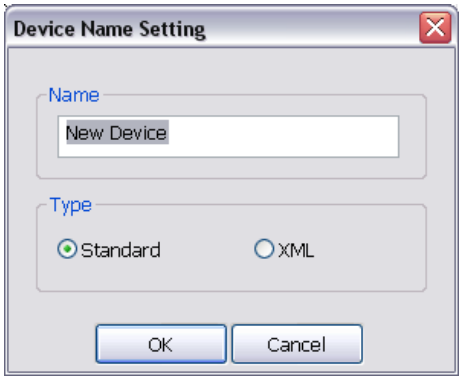
Setup POS Device

There are 4 default POS devices. If user uses the POS device beside defaults, user can add new POS device and rules. The POS device can be added up to 50 include defaults.



Setup Standard POS Device

- **Add New POS Device**



1. Click **Add**
2. Enter the POS device name in **Name** column
3. Select the **Type** as **Standard**
4. Click **OK** to save
5. To modify existing device, double click it.
6. Click **Default** can be reset back to original setting.

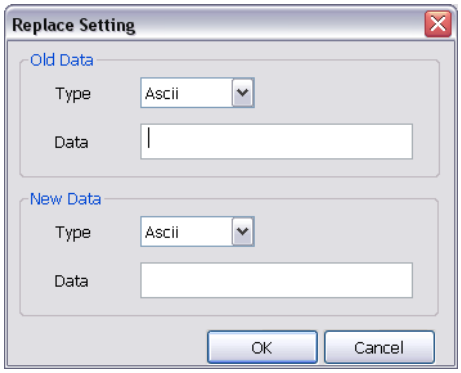
- **Add Rules**

1. Select the POS device form device list
2. Click **Add** in Rules section
3. In Rule Setting windows, select **Group**. Each group has a limited number of times ; please refer to the "**Maximum**" and "**Remainder**" information in Rule Setting windows. The Line End, Page End, and Bill End group only can be set once.
   - **Line End:** set a rule to separate each line.
   - **Page End:** set a rule to switch page.
   - **Skip Cmd:** set a rule to discard a string or character.
   - **Include:** set a rule for a lime with a string or character to be displayed.
   - **Exclude:** set a rule for a line with a string or character to be concealed.
   - **Bill End:** set a rule to divide each transaction.
4. Select **Type** – Ascii or XML
5. Enter the string or character as the rule in **Data** column. The maximum length is 31 characters.
6. Click **OK**
7. Click **Save**. The configuration will be lost without saving.
8. To modify existing replace rules, double click it.

- **Character Replacement**

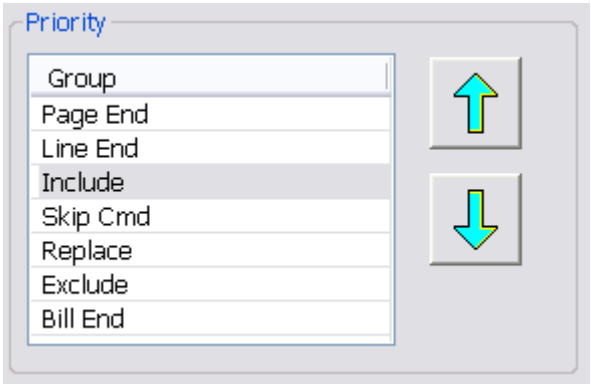
Set a rule to replace a character or word in POS data. The maximum replacement is 8.

1. Select a POS device from device list
2. Click **Add** in Replace section
3. **Old Data:** select the **Type**(Ascii or Hex) and enter word or character that wants to be replaced
4. **New Data:** select the **Type** (Ascii or Hex) and enter the word or character that will replace it in Old Data.
5. Click **OK**
6. Click **Save**. The configuration will be lost without saving.
7. To modify existing replace rules, double click it.



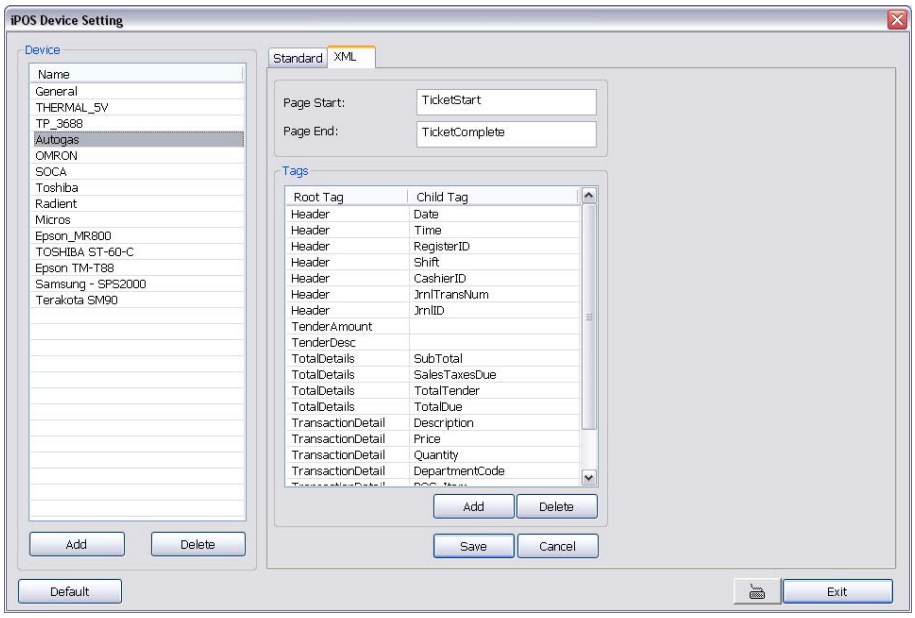
- **Adjust Rule Priority**

User can set the priority of rule groups. Select the group and click up/down arrow button to move the priority level. The upper position, the priority is higher.

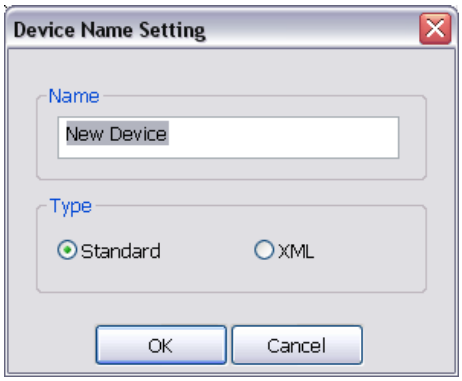


Setup XML POS Device

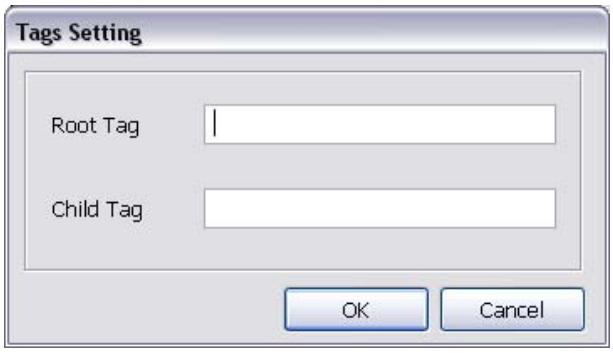
XML can only work with the POS data is transmitting in XML format.



✓ **Device:** select or add a new device. Only device that supports XML can be configured in here. Click **Add** to add a device. Enter device name and select Type as **XML**. The POS device can be added up to 50 include defaults.



Page Start: Beginning of data for transaction
Page End: End of data for transaction
Tag: select a root tag and sub tag as a range for data transaction to DVR server. Click **Add** to set a tag. Click **Save**. The configuration will be lost without saving.



Please refer to the following example for more detail.

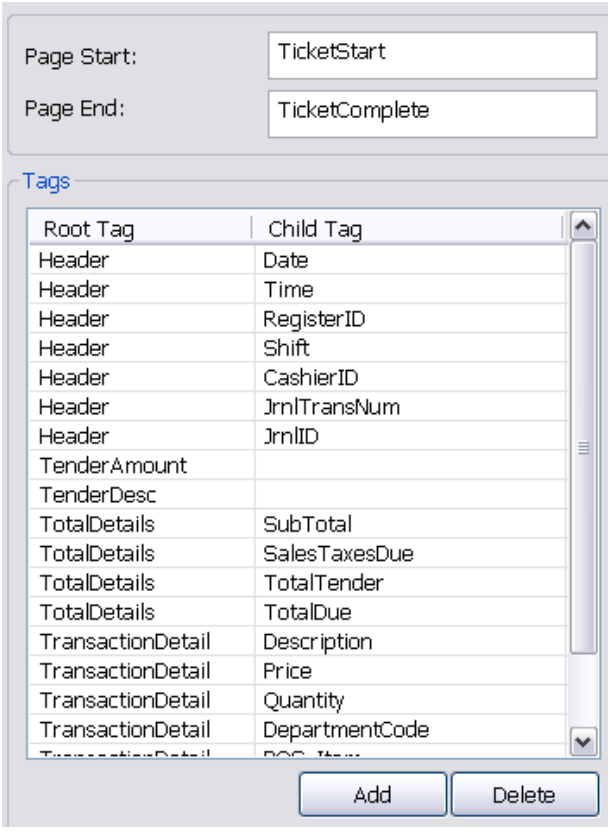
<TicketStart> → ***Page Start***

<Header> → ***Root tag***

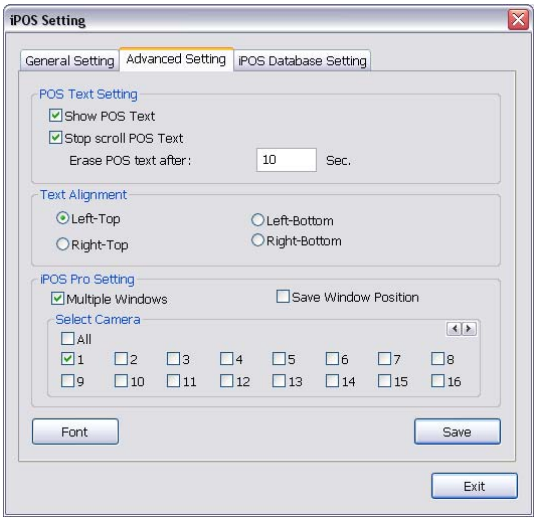
<MessageVersion>1.0</MessageVersion>
<Date>20060317</Date>
<Time>164216</Time>
<RegisterID>3</RegisterID>
<Shift>4</Shift>
<CashierID>000000009</CashierID>
<JrnlTransNum>3</JrnlTransNum>
<JrnlID>0</JrnlID>

→ ***Sub tag***

</Header>
</TicketStart>
<Item>
<SaleTotals>
<Item>
<SaleTotals>
<Item>
<SaleTotals>
<TenderEvent>
<TicketComplete> → ***Page End***



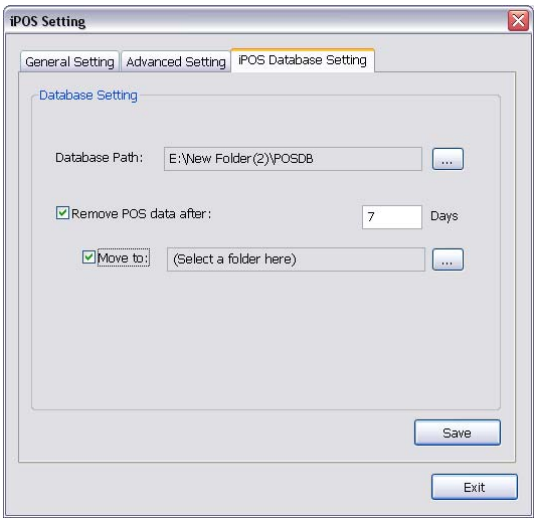
Advanced Setting



To setup POS text display position, text font and color.

1. In the System Setting dialog box, POS section, click **Setting** >> **Advanced Setting**
2. Mark **Show POS Text** to allow POS data to be display on surveillance screen.
3. If user doesn't want POS data to be scroll up, mark **Stop scroll POS Text** and enter the time to delete POS text at **Erase POS text after** column.
4. Select the POS data display position on surveillance screen – Left-Top, Left-Bottom, Right-Top, or Right-Bottom.
5. To change the POS data font and color, click **Font**.
6. Enable **Multiple windows** for viewing multi-channels of real time iPOS data. To save the real time of iPOS data window position on the UI, mark the **Save window Position**. To select all channels, mark **All** check box. Or mark each channel one by one.
7. When it is done, click **Save** to complete the configuration.

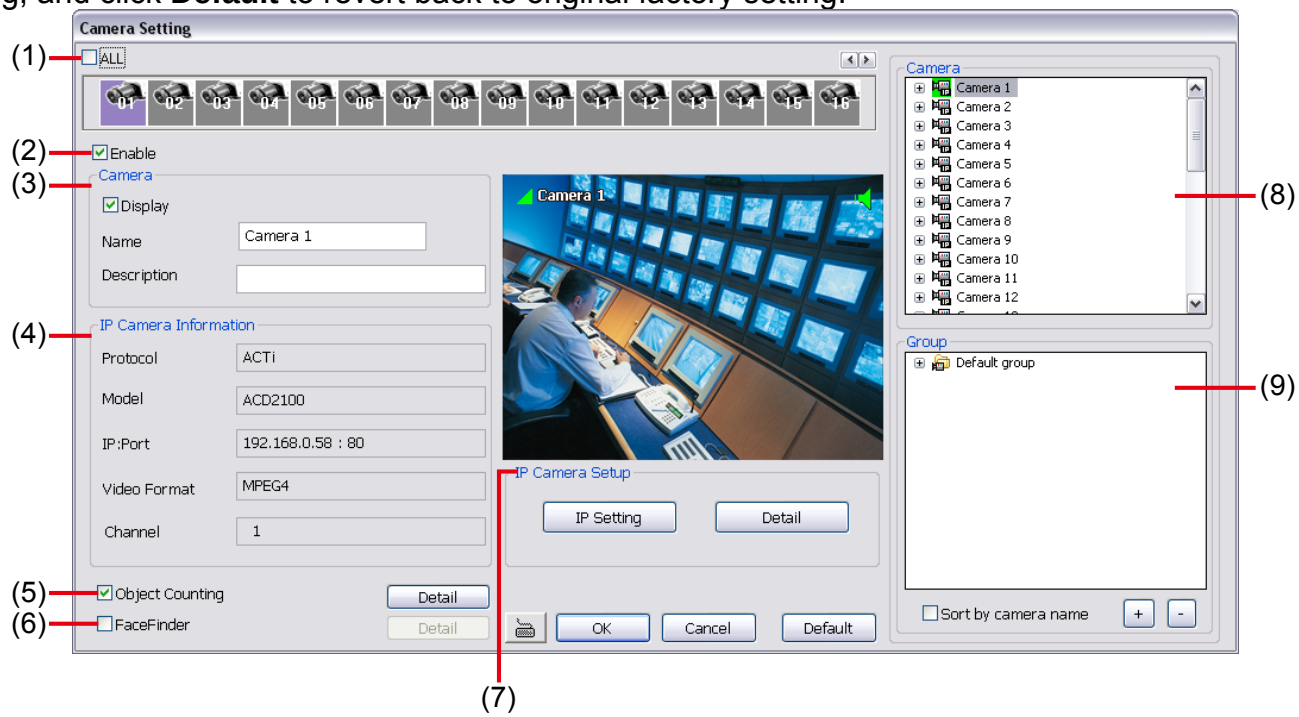
POS Database Setting



User can export the POS database to another save location or storage device. Click ... to change the save path. Mark **Remove POS data after** the POS data will be delete from DVR hard disk on the day that user has setup. Also, mark **Move to:** user can save the POS data to another folder on DVR when the POS data is removing. Click ... to set a storage path. Click **Save** to complete the configuration.

3.2 Camera Setting

In the Camera Setting dialog box, click **OK** to accept the new settings, click **Cancel** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Camera Icons

Select the camera number you want to adjust the video setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Camera

- ✓ **Display**
  Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- ✓ **Name**
  Change the camera name.
- ✓ **Description**
  Add a short comment.

(4) IP Camera Information

Display the camera information, such as camera **protocol**, **model**, **video type**, **IP address**, and **channel number**. If the camera hasn't been configured, those information are blank.

(5) Object Counting

Select the two regions on the screen and the system will count the objects that appear from one selected region to another selected region.(See also 3.2.1).

(6) FaceFinder

To setup the capture of human face image from live or recorded video. (See also 3.2.2)

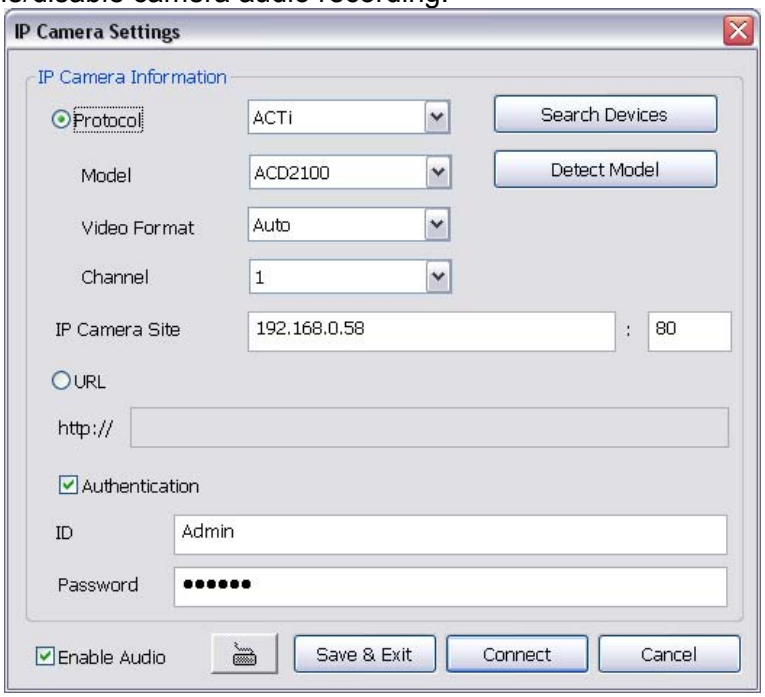
(7) IP Camera Setting

Configure the camera for monitoring. Click **IP setting** to enter configuration interface. Click **Save&Exit** to save the setting and exit the IP Camera Setting window. Click **Connect** to connecting with IP camera right away. To cancel the setting click **Cancel**.

- **Protocol:** select the brand of camera. Drag down the list and select the brand of camera. User also can click **Search Device** to find the selected protocol of camera on the LAN network.
- **Model:** After selected the protocol of camera, the available model will be list in drag down list. If user is not sure the camera is which model, click **Detect Model** to find the correct model of camera. Choosing the wrong model, user is not able to continue the camera setup.
- **Video Format:** select format of IP camera video, if not sure, select **Auto**.
- **Channel:** assign a channel for this IP camera.
- **IP Camera Site:** Enter the IP address and connecting port of the camera. Through the IP address and

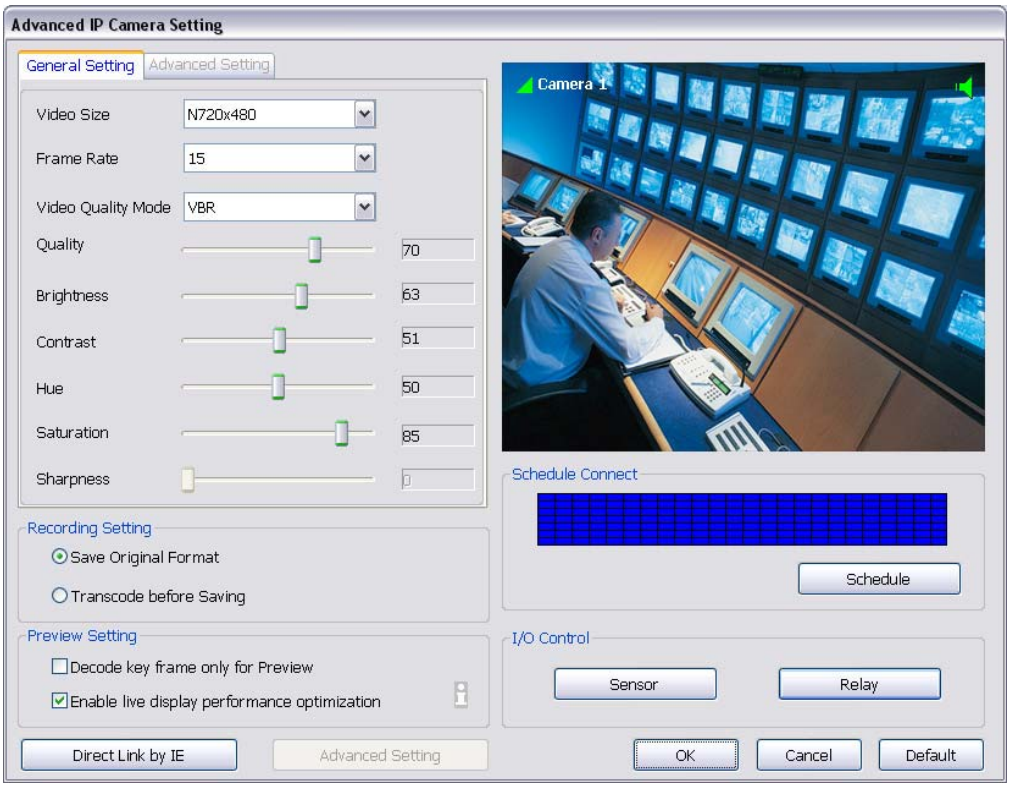
connecting port, the DVR system can reach and monitor the camera.

- **URL:** Besides the IP address, user can enter the URL of the camera, too.
- **Authentication:** Mark check box and enter the **ID** and **password** for authorizing to connect the camera. Only if the camera has assign the ID and password for authentication.
- **Enable Audio:** Enable/disable camera audio recording.



To configure **Video**, **Senor**, **Relay**, and **Direct Link by IE** of the IP camera, click **Detail.** Click **OK** to save the configuration and exit the setup windows. To reset the configuration back to factory value, click **Default**.

The Video, Direct Link by IE, and Advanced Setting setup contents may be varied that depends on the brand of IP camera supported.



■ General Setting

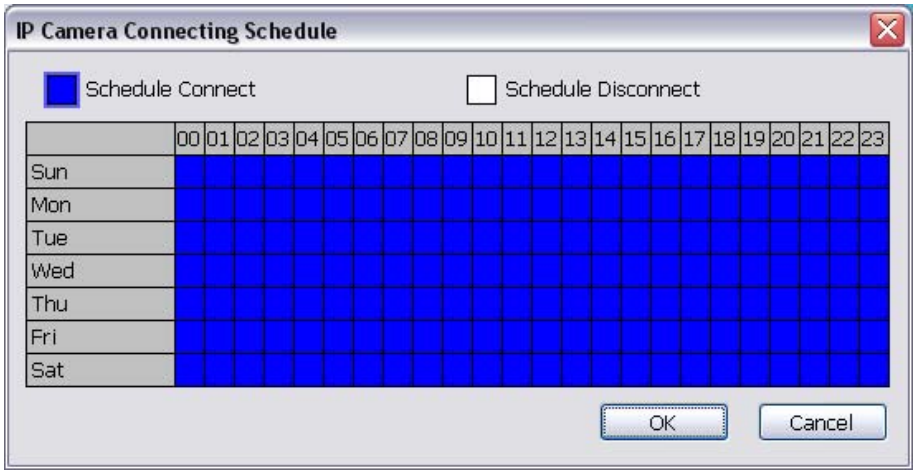
Adjust the video setting of the selected camera. Click **Video Setting** to enter video adjustment interface.

- **Video Setting**
  Adjust the Video Size, Frame Rate, Video Quality Mode, Quality, Bright, Contrast, Hue, Saturation and Sharpness.
- **Recording Setting**
  ✓ **Save Original Format:** Save the video that is compressed by IP camera's compress mode.

✓ **Transcode by MPEG4 Encoder:** Decoding the video and compress video again by using MPEG4 encoder.

- **Preview Setting**
  - ✓ **Decode key frame for Preview:** When selected the **Save Original Format** selection, user can mark **Only decode key frame for Preview** this option. When previewing video, DVR system only shows key frame and one frame per second.
  - ✓ **Enable live display performance optimization:**
- **Schedule Connect**

  User can select a certain date and time to connect with IP camera. The blue block means connect with IP camera and the white block means disconnect with IP camera. Select the connection status (blue or white) and click the date and time block to set the connection schedule.

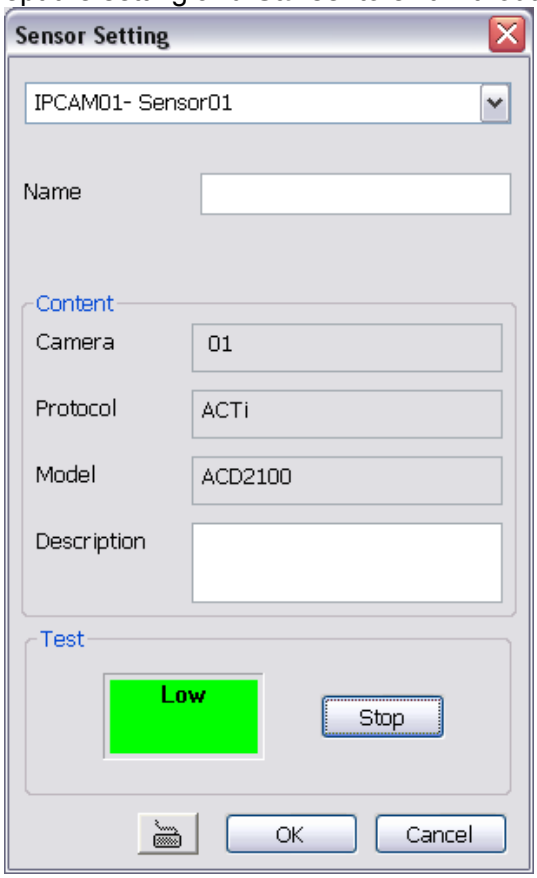


- **I/O Control**

  To setup the sensor and relay devices that is installed on IP camera.
  - ✓ **Sensor Setting**

    To setup sensor that is embedded on the camera.

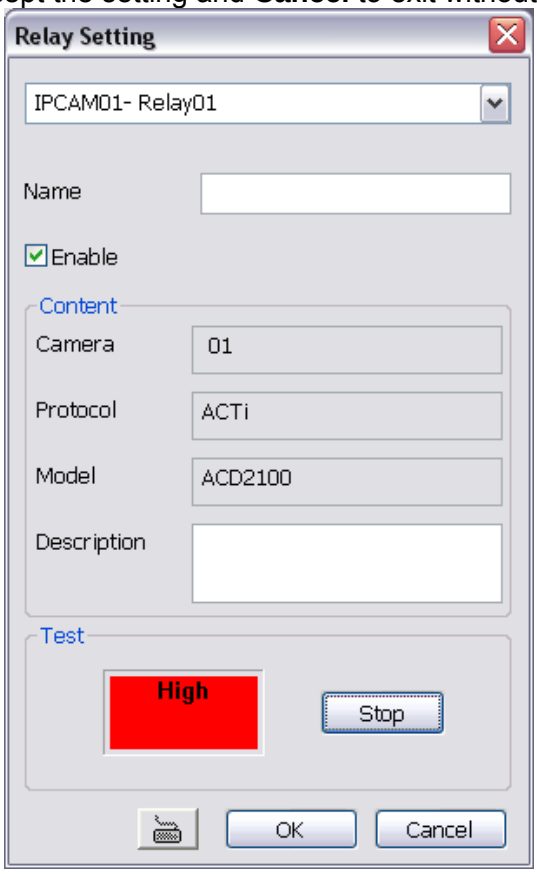
    1. Click the drop-down list and select the sensor ID number.
    2. Enter sensor name in **Name** column
    3. The system automatically detects the camera and input relates information. In the Content section, enter sensor description.
    4. In the test section, click **Test** to check the sensor status. Red is high and Green is low.
    5. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



✓ **Relay Setting**

To setup relay device that is embedded on the camera.

1. Click the drop-down list and select the relay ID number.
2. Enter relay name in **Name** column
3. The DVR system automatically detects the camera and input relates information. In the Content section, enter relay description.
4. In the test section, click **Test** to trigger relay. Red is high and Green is low.
5. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



- **Direct Link by IE**

  Using IE browser to connect to camera and view the real time video. Click **Direct Link by IE**，the IE browser will pop up and connect to camera. The video viewing interface will be varied by different brand of camera.

(8) Camera

List all available cameras for grouping. User can drag the camera to video screen in Camera Setting window to view camera live video.

(9) Group

User can create several camera groups for managing purpose. All cameras can be group into several different groups (see also 3.2.3).

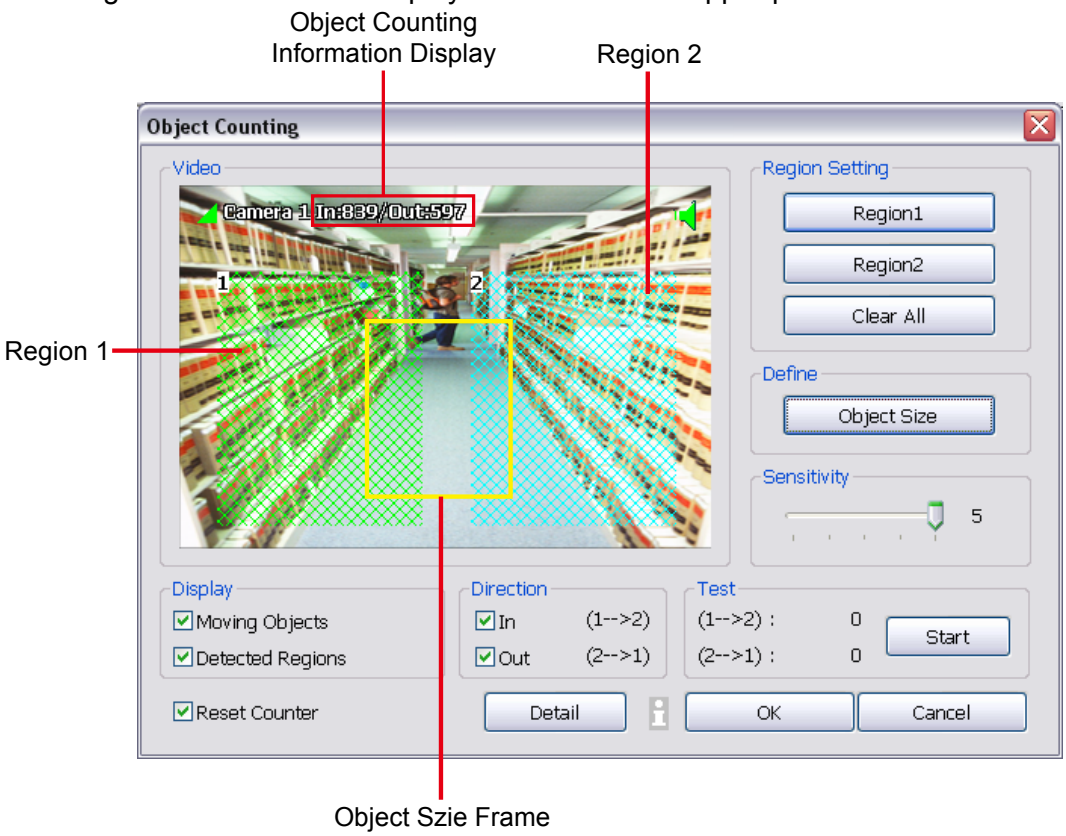
3.2.1 Setup the Object Counting

The DVR system only supports 4 channels for object counting.

1. Click **Detail** to enter the object counting setup window.

2. Enable **Detected Regions** in **Display** section. This enables the object counting information show on the screen. **Moving Object** will enable the object size frame to show on the screen.
3. Click **Region1** and press left button of mouse and drag the area that user wants the object to be counted. And then, click **Region2** and drag another area that user wants the object to be counted, too. Those selected regions will mark in different color. The system will count the objects that move between the selected regions.
4. Click **Object size** to define the detected object dimensions. Press left button of mouse and drag on the screen. To see the object size frame on screen, enable **Moving Object** in Display section.
5. Adjust the **Sensitive** of object detecting.
6. To test the setting, mark the **Directions (In/Out)** want to be test and click **Start**. The testing result will show in Test section.
7. Enable Reset Counter, save statistic report of counter, and set a time period to delete the counter data. Click **Detail** to setup reset counter.
   - **Reset Counter**
     - ✓ **Auto reset counter:** Select the counter reset by every hour, every 12 hours, or every day automatically.
     - ✓ **Reset the counter now:** reset counter manually.
   - **Statistic Report**
     - ✓ **Save statistic report after counter reset:** Enable to save a counter statistic report after counter has been reset. Click [...] to change the **Stored Path**.
     - ✓ **Remove data after:** Set a time period to delete the counter data from system hard disk.
     - ✓ **Move to:** Move the counter data to the save location that has been setup by user.

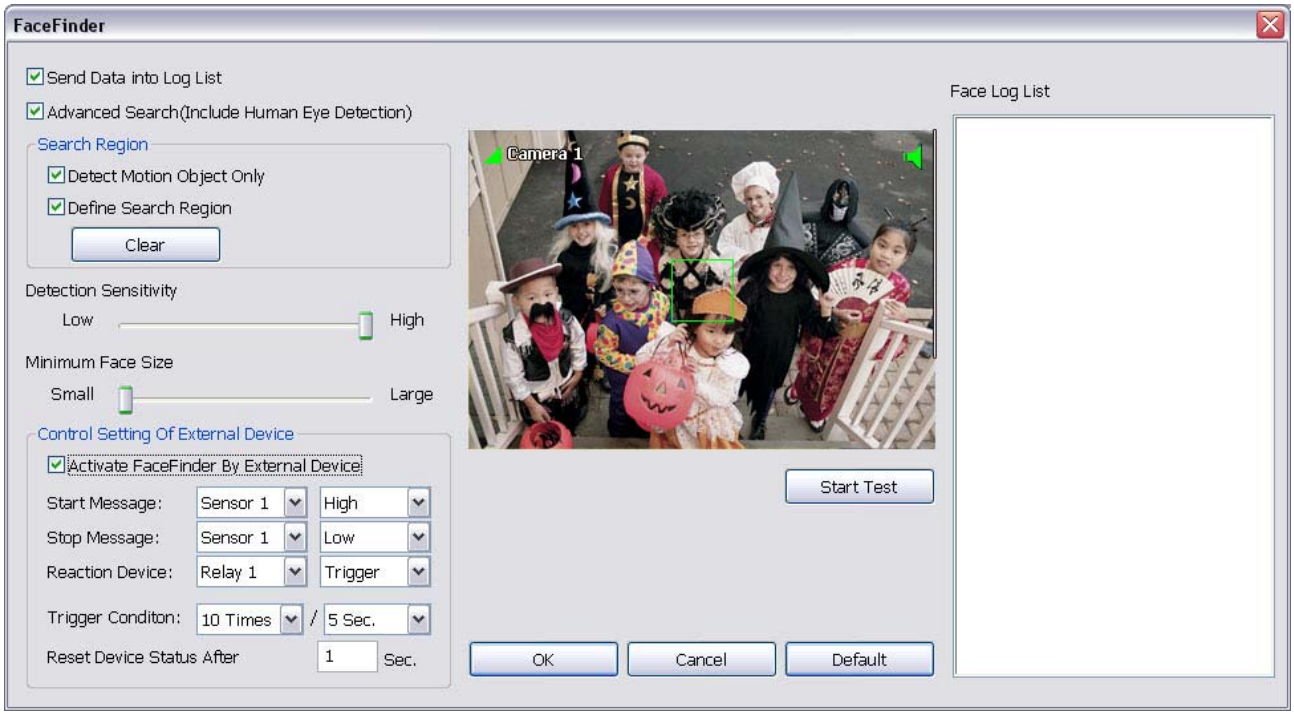
8. Click **OK** to save the setting. Click **Cancel** to leave the setup window without saving.
9. The object counting information will be display on the screen of upper part.



3.2.2 To Setup FaceFinder

To setup the human face detection and capturing from live and recorded video for security issue. Click **Detail** to enter the FaceFinder setup window. To set the value back to default, click **Default** button.

- The face detection angle is around 30 ~ 45 degrees for both side of face and 25 ~ 30 degrees for look up and down of face.
- It is to recommend that user install the camera in the position of light comes in for better face detection result.
- DVR only supports 4 channels for facefinder detection.

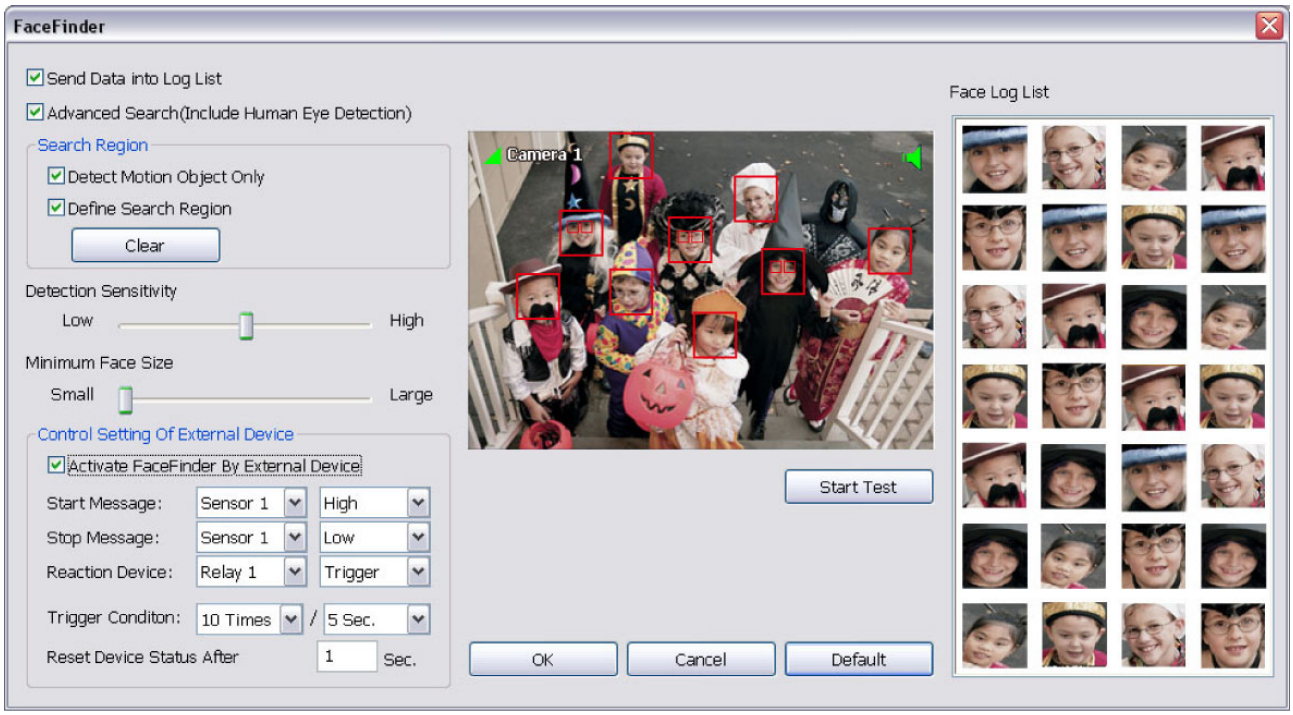


- **Save Data into Object index:** Mark to enable face detecting and capturing face image to display on face object log. The default is enabled when the FaceFinder is enabled.
- **Advanced Search(Include Human Eye Detection):** Beside face recognition, the system will also focus the

detection on eyes of face.

- **Search Region:** User can select condition of face detection and setup face detects area.
  - **Detect Motion Object:** Only when the human face is moved, the system will detect and the face will be captured.
  - **Define Select Region:** Setup the face detects area. The system will only detect the face in the selected area. On the preview screen, use mouse to drag the area that user wants to search. User should see the blue frame on the preview screen of FaceFinder setup window. User can select multiple areas for detection. To clear the selected area, right click the mouse button and drag the selected area to clear. Or, click **Clear** to clear all selected areas.
- **Detection Sensitivity:** To set the sensitivity level of face detection. More higher is more easily to detect the difference of the face.
- **Minimal Face Size Level:** To set the face detection of minimal size. The system will only detect the face size is equal or greater than the minimal face size. User should see a green frame on the preview screen of FaceFinder setup window.
- **Control Setting of External Device:** Set the conditions of the face detection that is trigger by outside device such as sensor, relay device.
  - **Activate FaceFinder By External Device:** Mark to enable trigger condition.
  - **Start Message:** Set the sensor level that will trigger the face detection. The default is high.
  - **Stop Message:** Set the sensor level that will reset the condition of face detection. The default is low.
  - **Reaction Device:** Set the activate level of relay device. When the face detects condition meets the condition in **Trigger Condition**, the relay will send out the signal and the system will send out the face object log. The log can be viewed in Face Object Log.
  - **Trigger Condition:** Set the condition for activating relay device to send out the log to DVR system. Select the time (second) and times (the number of face has been detected) from drag down list.
  - **Reset Device Status After:** Set the time period to reset activate device back to normal status. It works only when the activate status is set to trigger.

After set up, click **Start Test** to test the configure result. When the system is detecting face, the red frame will show up on the screen. The test result will display in Face log List windows as below figure shown:



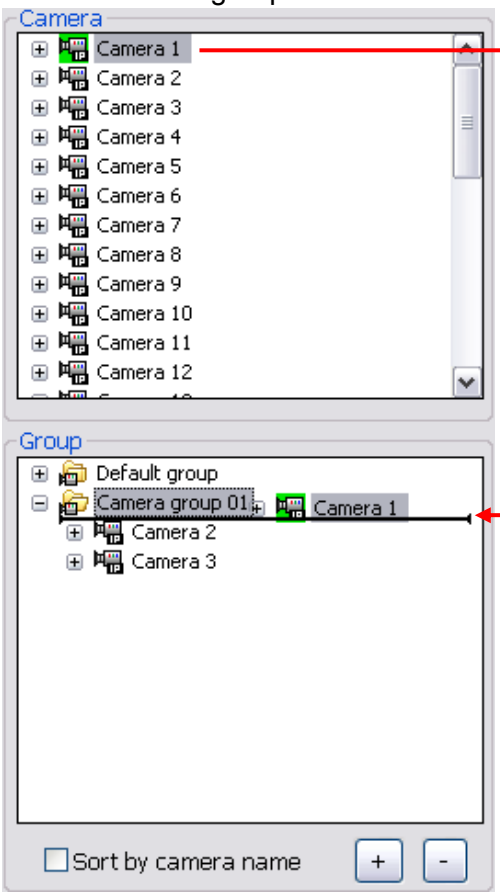
3.2.3 Create a Camera Group

Follow the below steps to create a camera group. The maximum of group number is 64. The default group can be deleted and modified.

1. Click [+] to add a new group.

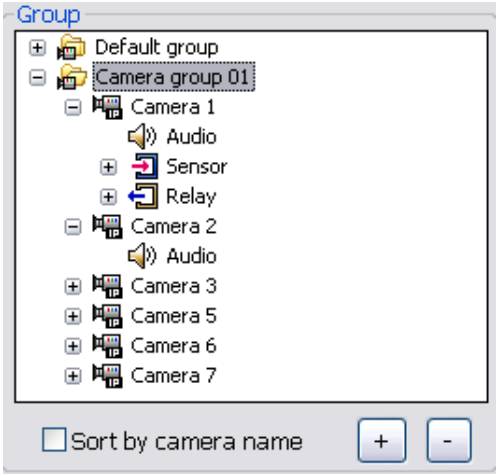
2. Right-click on group to rename the group name.

3. Drag the camera from Camera list section to the group.



Select and drag the camera to the group

4. Right-click the camera can rename, delete, display/no display video of camera, and enable/disable camera.
5. To add another group, do the step 1 to 4 again.
6. To delete the group, click [-] or right-click the group and select delete.
7. Mark **sort by camera name** to display group by name order.
8. Click **+** of the group to extend the group. Click **+** of the camera to view all devices that is connected with camera.

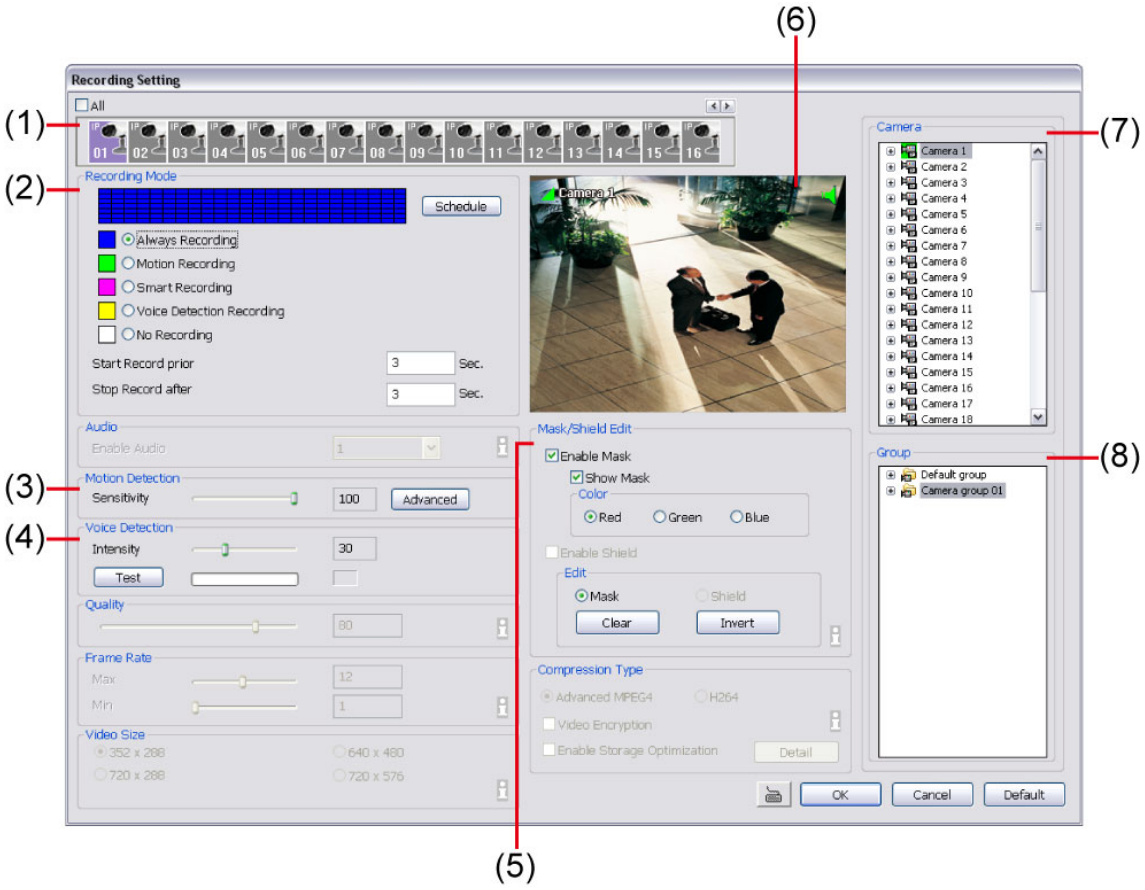


9. User can easy to view and manage the camera group in preview/advanced mode by click camera tree icon (see also Chapter 2.2(12) Camera Group Tree). From camera group tree, user can enable/disable, display/un-display, and rename the camera and enable/disable the audio of the camera.

To manage the camera group tree in preview/advanced mode, user need to be enabled the **Group Tree Menu** control right in account setting(see also Chapter 3.9 User Setting)

3.3 Recording Setting

In the Recording dialog box, click **OK** to accept the new settings, click **Cancel** to exit without saving, and click **Default** to revert back to original factory setting.

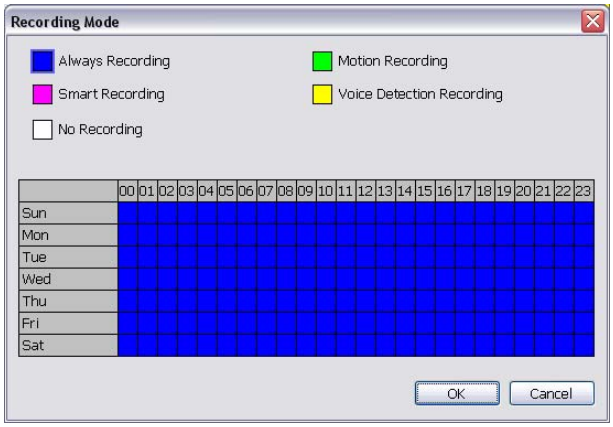


(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Recording Mode

The blocks from 00 to 23 represent the time in 24-hour clock. To record in full 24 hours, select the recording mode and click the ⊙ button. If you want to only record at a particular time, click the colored block beside the recording mode then click on the time blocks.



When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- **Always Recording**
  Record the video from the selected camera and save it to the designated storage path (see also 3.1(1)).
- **Motion Recording**
  Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and Stop **Record After settings**.
- **Smart Recording**
  Automatically switch to recorded at the maximum frame rate setting once a motion is detected and if there

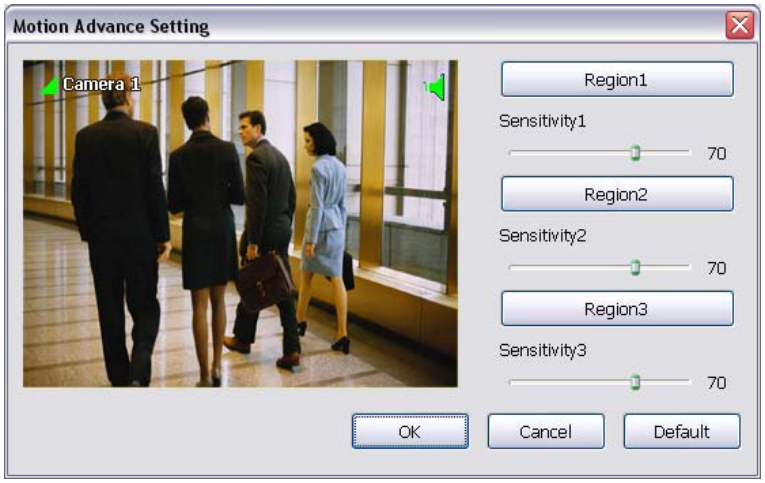
is no motion, it records at the minimum frame rate.

- **Voice Detecting Recording**
  DVR system will record when the voice exceeds the intensity value in **Voice Detection** setting.
- **No Recording**
  The system won't do any recording.

(3) Motion Detection

Adjust the sensitivity of the motion detector. The higher the value, the finer the sensitivity is detected. When it detects a motion, a green triangle mark would appear at the upper left corner of the screen.

Click **Advanced** button to select the area for motion detection. Click **Region 1/2/3** button, and then, click-and-drag an area on camera screen for motion detect. To adjust motion detect sensitive, scroll the **Sensitivity 1/2/3** bar. Click **OK** to save and exit the setting window. To reset all setting, click **Default**.



(4) Voice Detection

Adjust the intensity of the audio detector. The system detects sound when it exceeds the intensity value. Click **Test** button to test the voice detection setting.

(5) Mask/Shield Edit

Mask, mark an area on the screen to disregards the motion in the marked area and to only monitor outside the marked area.

1. In the Mask/Shield Edit section, activate the **Enable Mask** check box.
2. In the Edit section, select Mask click the ⊙ button.
3. Click and drag a frame on the **(6) Video Screen** to create Mask area.
4. To show and change the color mask, enable the **Show Mask** check box.
5. In the Color section, select the color and click ⊙button.

(6) Video Screen

Preview the selected camera live video.

(7) Group

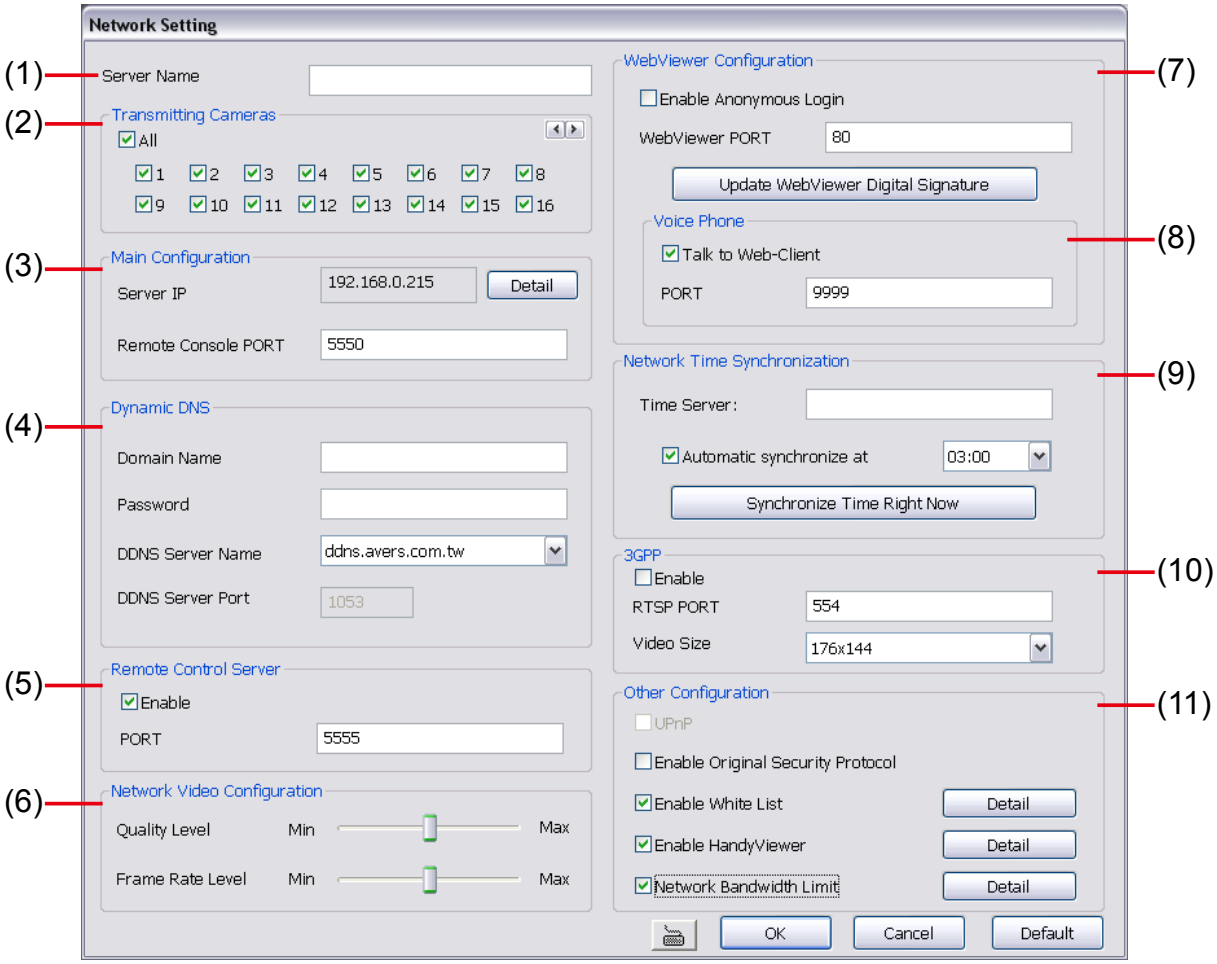
Click to view the camera group that user has been setup in **Camera setup (**see also 3.2.3).

(8) Camera

Click to view the camera live video on **(6) Video Screen**.

3.4 Network Setting

In the Network Setting dialog box, click **OK** to accept the new settings, click **Cancel** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Server Name

Assign a name for the DVR unit. Alphabet letters and numbers only.

(2) Transmitting Cameras

Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using WebViewer, Remote Console, PDA Viewer and Hand Viewer (still image). To select all the cameras, enable the ALL check box.

(3) Main Configuration

Set the Server IP and Remote Console Port number. The system will automatically detect your Server IP address. You need this when accessing DVR server from the remote location via internet. To change the IP address of DVR server, click **Detail** button.

(4) Dynamic DNS (Domain Name System)

Enter the Domain Name and Password. To use this feature, go to http://ddns.avers. com.tw and register.(also see Appendix A) You will be prompted to enter serial number, product name, password, and user information. Use this service if the IP address changes each time when you connect to internet.

(5) Remote Control Server

Enable/disable remote control from remote application (ex. CM3000). Enter the remote accessing port in **Port** column. The default value is 5555.

User also can manually run this function. To run, click **Start** > **Programs** > **DSS** > **Tool** > **Remote Control Server**. The remote control server icon appears on the taskbar when the remote control server is enabled. (also see Chapter 10)

(6) Network Video Configuration

Set up the video quality and frame rate for viewing and transmitting to the remote program. Scrolling adjust bar to set the **Quality level** and **FrameRate level**.

(7) WebViewer Configuration

Activate **Enable Anonymous Login** to remotely access the DVR server without the need of password

(8) Voice Phone

The **Talk to Web-Client** is to use the 2-Way Talk feature that allows the client and server to talk via internet using microphone. Make sure both microphone and speakers work before using this feature. If the **Talk to**

Web-Client is disabled, the person in the DVR server side can only hear the voice from the client side that is when the WebViewer 2-Way Talk button is activated (see also 6.1 #6).

Make sure that your Webcam Digital Signature is updated yearly; else you won't be able to access the DVR server from the DVR WebViewer. To update/download your WebViewer Digital Signature, click **Update WebViewer Digital Signature**. Make sure your PC is connected to internet.

(9) Network Time Synchronization

Adjust the DVR system time same as network time server. Fill in the **Time Server** IP address or domain name. Select **Automatic Synchronize** time to set automatic synchronize time on a daily basis. Or, user can click **Synchronize Time Right Now** to adjust time right away.

(10) 3GPP

Enable 3GPP that allows user to use browser on the mobile phone to view recorded video. Just enter the http:// DVR server IP address/3GPP on the browser of mobile phone, and then, user will receive the recorded video from DVR server. Fill the RTSP PORT for 3GPP connection. Select the video size for transmitting to user's browser on the mobile phone.

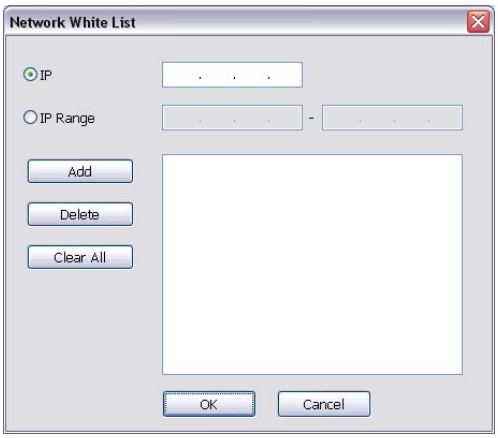
(11) Other Configuration

✓ **UPnP**

Enable UPnP function to automatically configure the port setting on the local network. This function is available when there is UPNP device in the same network. It will write the DVR port information into the router or other network device (see Appendix B)

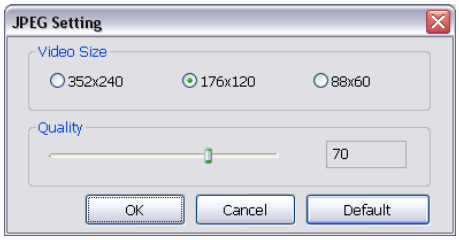
✓ **Enable White List**

An access permit list for the remote accessing of DVR server. Enter the IP address and click **Add**. Or, enter a range of IP address and click **Add**. To delete the IP from the list, select the IP and click **Delete** button. To reset the input, click **Clear** button.



✓ **Enable Handy View**

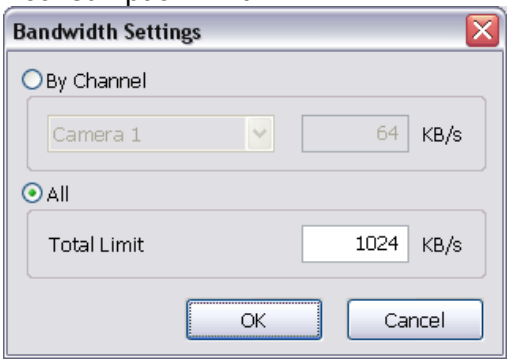
Enable remote users to use a PDA or a mobile phone to access DVR server and select the video size and quality. (See also 6.5 and 6.6)



✓ **Network Bandwidth Limit**

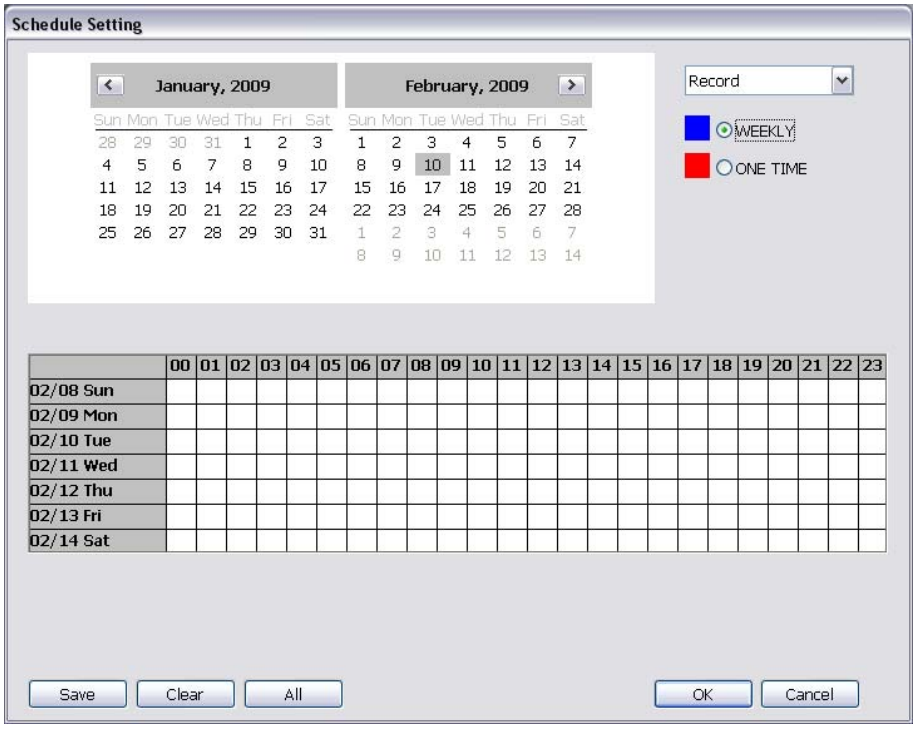
By Channel: Set the network bandwidth by each channel.

All: Set the total network bandwidth consumption limit.



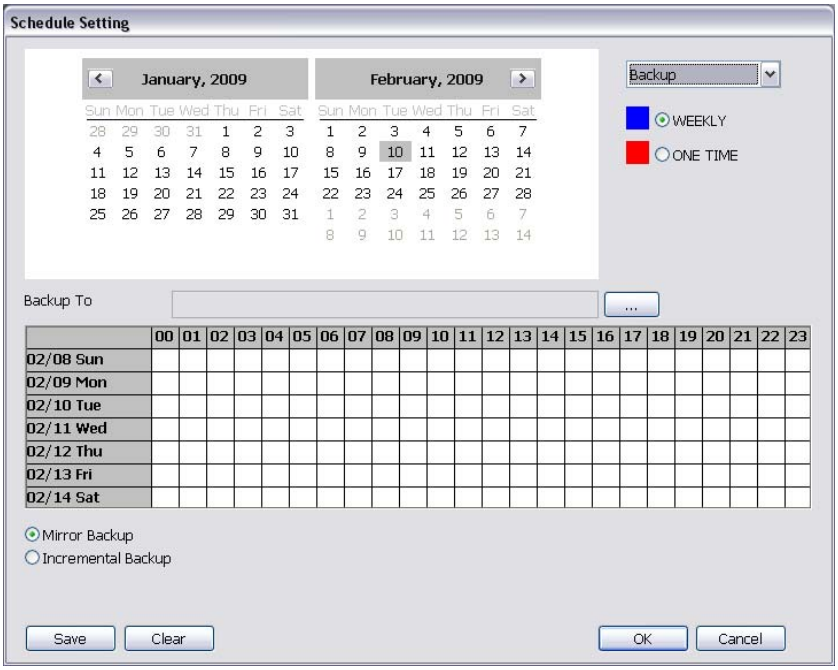
3.5 Schedule Setting

Schedule to record, backup, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.



To Set the Schedule Setting:

1. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
2. Select the condition you want to schedule in the drop down list.
   - **Record**
     Activate all the cameras to start video recording at the set time based on the Recording setting (see also 3.3).
   - **Backup**
     Save another copy of all the data at the set time and specified backup path. DVR automatically updates and only backup the data that are not yet included in the archive. To assign backup path, click ...



- ✓ **Mirror Backup:** Save a copy of all the data at the set time and specified backup path.
- ✓ **Incremental Backup:** Only backup the data that are not yet included in the archive from last time.

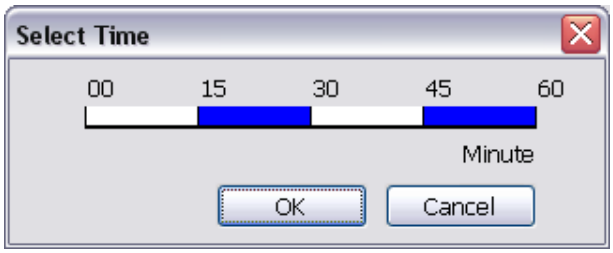
Make sure the backup folder and storage folder are not on the same drive.

- **Enable Network**
  Activate DVR remote system to access at the set time. After the appointed time, the Network function will be disabled. If the Network function is already enabled, the Network function will not be disabled when the appointed time has ended.
- **Reboot**
  Restart the DVR system at the appointed time.
- **Disable Alarm**
  Deactivate the alarm at the set time temporarily.
- **Turn on Relay #**
  Active the Relay at the set time. If there are no Relays are connected, Turn on Relay # function will not display in drag down list. The Relay number will depend on how many Relays are connected.

3. Specify to either schedule it weekly or one time. Click ⊙ to make a selection.
4. Click on the blocks to set the schedule (see also 3.5.1). Or click **All** to select all. To store the setting, click Save. To remove the settings, click **Clear**.
5. To end Schedule Setting, click OK to exit and accept the setting and Cancel to exit without saving the setting.

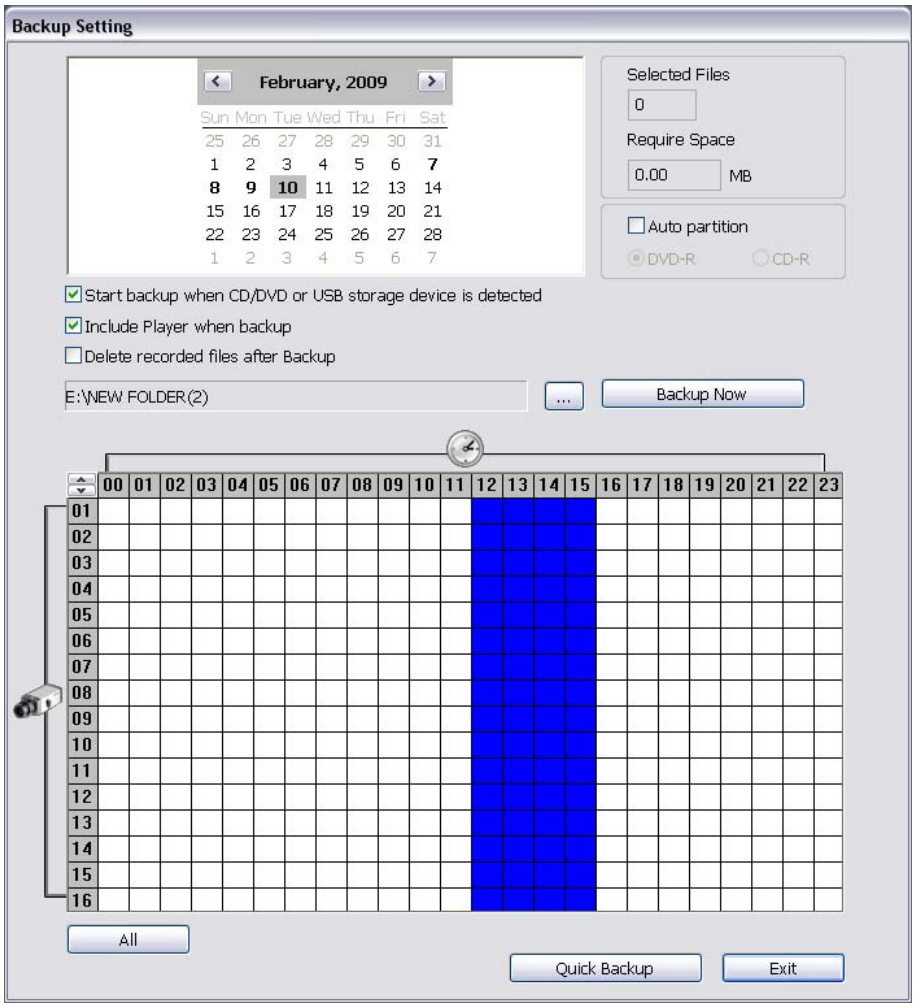
3.5.1 Set schedule at specific portion of time

1. **Right click** the colored blocks.
2. In the Select time dialog box, click to enable or disable the portion you want to set.
3. Click **OK** to accept the setting and **Cancel** to exit without saving the setting.



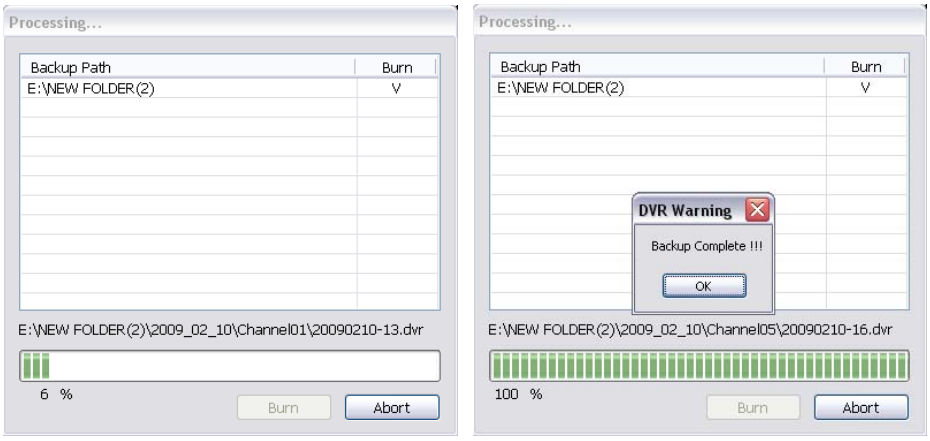
3.6 Backup Setting

In the Backup Setting dialog box, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera number. When you back up the file, you may find QLogViewer and Player application included in the backup folder (see also Chapter 4).



To Backup file:

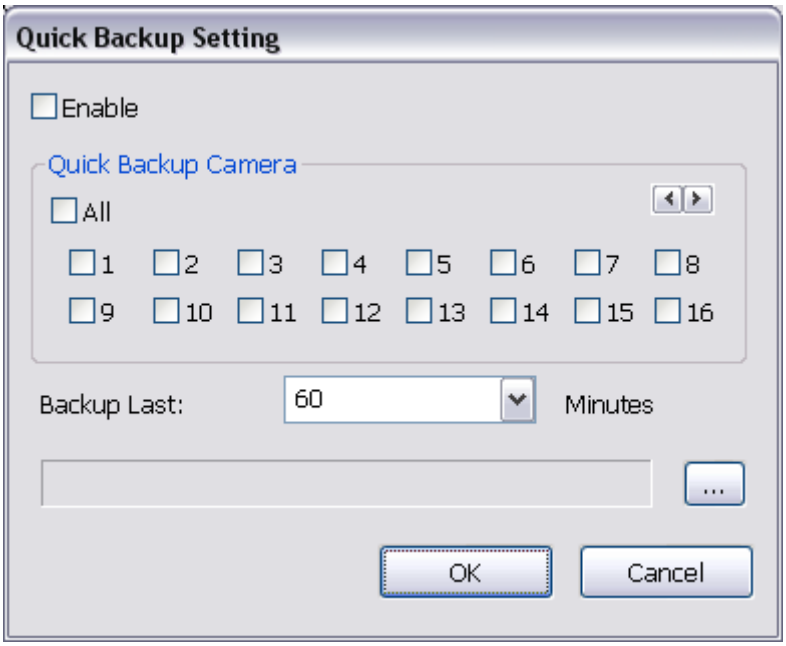
1. Select the date of the recorded file in the calendar you want to backup. Use ◂ and ▸ buttons to shift the calendar to the left or right.
2. In the table below, click on the blue block to select the recorded file. The blue block turns red when it is selected. The block that appears in white doesn't have data. If you want to set the specific time, right-click on the selected block. Then, set the time to start and end.
3. Check the information beside the calendar.
   - **Selected Files:** Show the number of files selected.
   - **Require Space:** Show the total size of the selected file.
4. Enable **Auto partition** and select to divide the file size into **DVD-R** or **CD-R**. DVR automatically backup and divide the file sizes to facilitate burning into DVD or CD disc.
5. If you do **NOT** want to keep the recorded file in the storage folder, enable **Delete files after Backup** check box.
6. Click ... to set the path on where to store the backup file.
7. Click **Backup Now** to start archiving the selected file.
8. In the Processing… dialog box, to stop archiving press **Abort**. When done, in the Backup Path list, shows the archived item. To burn the file in CD, you need to have NERO 6 or above installed in your PC then select the item in the list and click **Burn**. Click **Exit** to end this procedure and burn it later.



9. In CD/DVD Backup, enable/disable Delete file after burning check box to remove the archived file after burning. Click **Burn** to start and **Exit** to cancel this process.

3.6.1 Setup Quick Backup

1. Click **Quick Backup**
2. In Quick Backup Setting window, mark **Enable**
3. And then, select the channels that want to backup and click [...] to select the save path.
4. **Backup Last:** Set the backup time period. For example: time 60 minutes means backup the recorded file start from present time backward 60 minutes to present time.

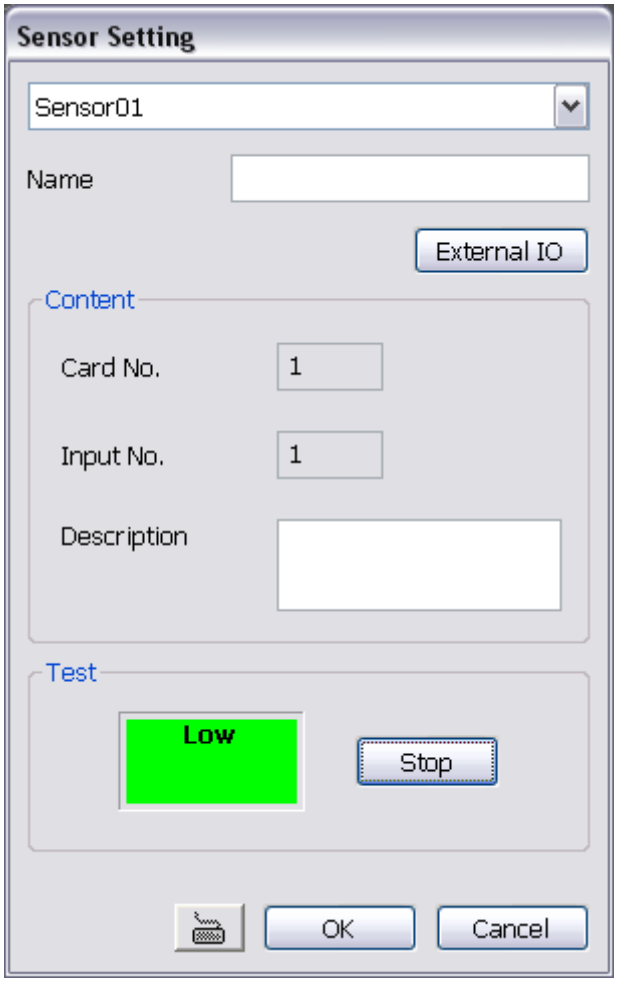


3.7 Sensor Setting

The I/O device must be installed to use this function.

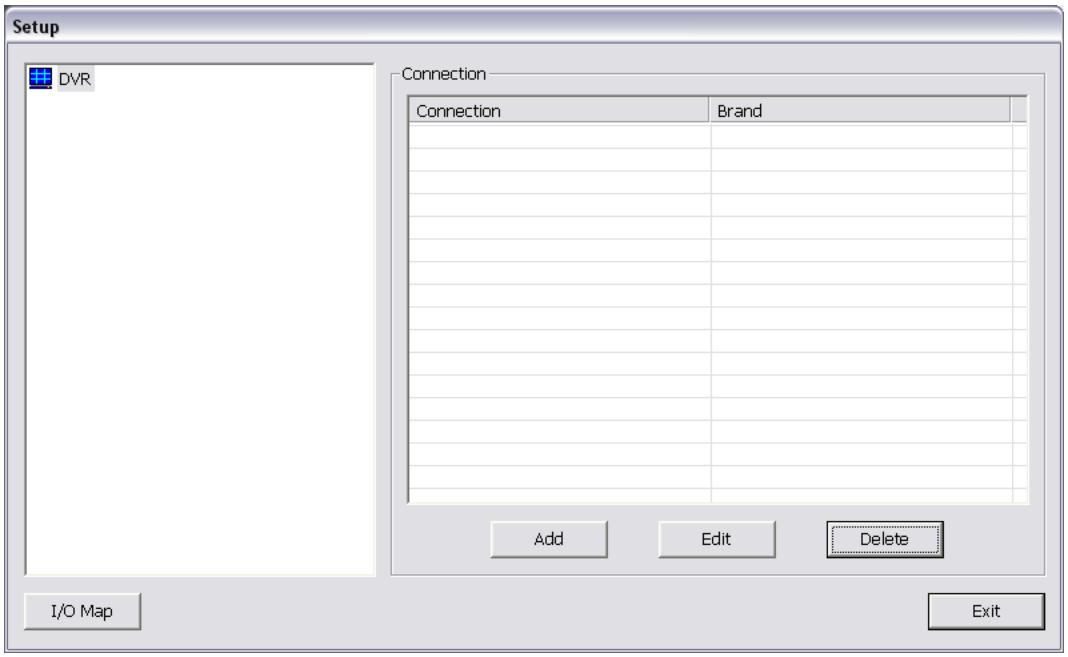
To Set the Sensor Setting:

1. Click the drop-down list and select the sensor ID number.
2. Enter sensor name.
3. Click **External IO** to configure external I/O device if it is available(see also 3.7.1)
4. The system automatically detects the sensor and input relates information. In the Content section, enter sensor description.
5. In the test section, click **Test** to check the sensor status. Red is high and Green is low.
6. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

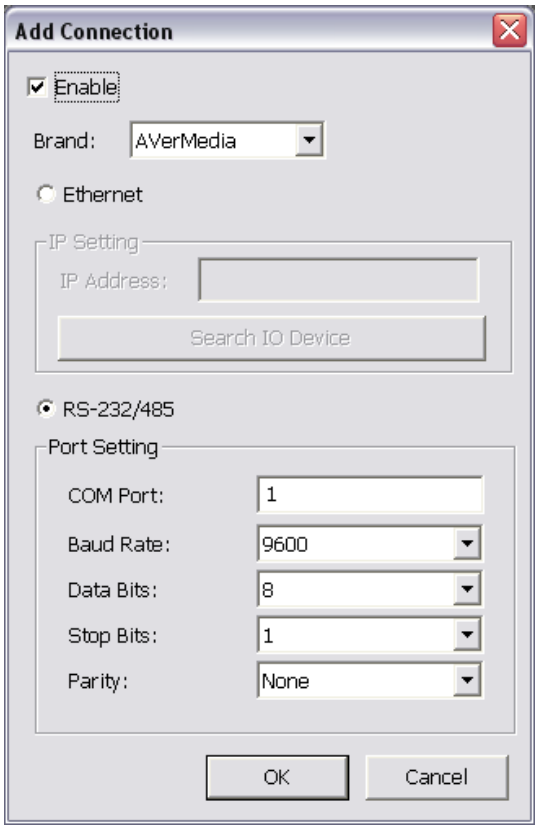


3.7.1 To Setup External I/O Box

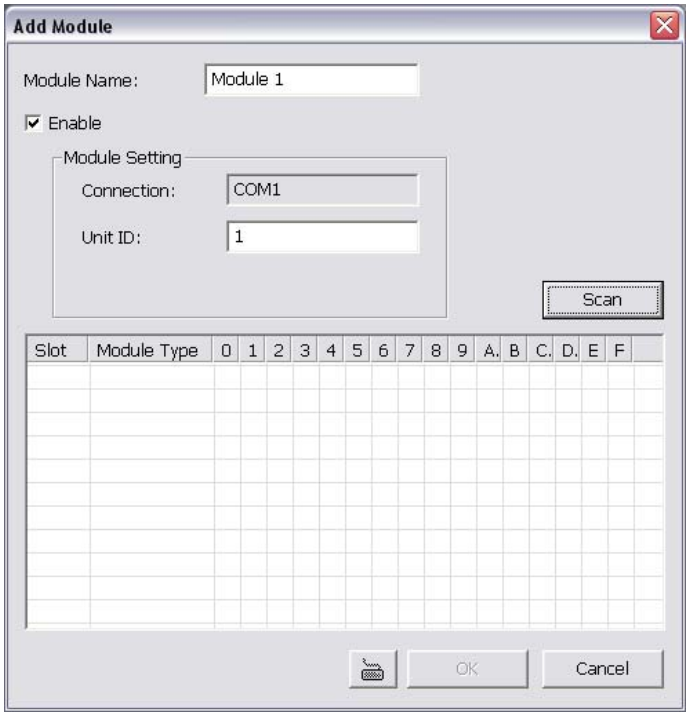
The DVR system can connect the external I/O box for more installed of I/O devices.



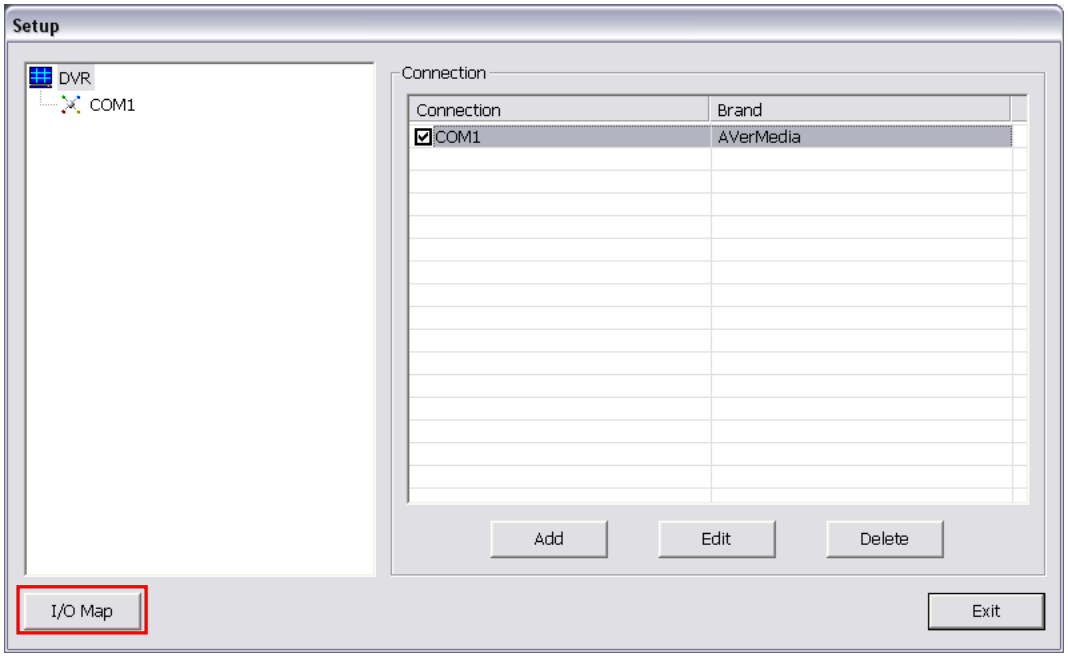
1. Click **Add**.
2. Mark **Enable** box to enable this external I/O box.
3. Select the Brand of external I/O box from drag down list.
4. In **Port Setting**, different brand of external I/O box may have different port parameters. Please refer to the external I/O box's user manual for port setting information. Using the default value if user uses AverMedia External I/O box.
5. Click **OK** to save the setting.
6. To add more than one external I/O box, click **Add** and follow the above step 2~4.



7. In External I/O box setup dialog, user will see all added External I/O. Click added External I/O box and click **Add** to scan the connected relays and sensors.
8. In **Add Module** windows, click **Scan** to scan the connected relays and sensors on the External I/O box.



9. All connected relays and sensors will be listed. User can click radio button to control relays' status. And then, click **OK** to save the setting and click **Cancel** to exit and without saving.
10. All connected External I/O box and their modules will be listed as tree topology in External I/O Setup windows.



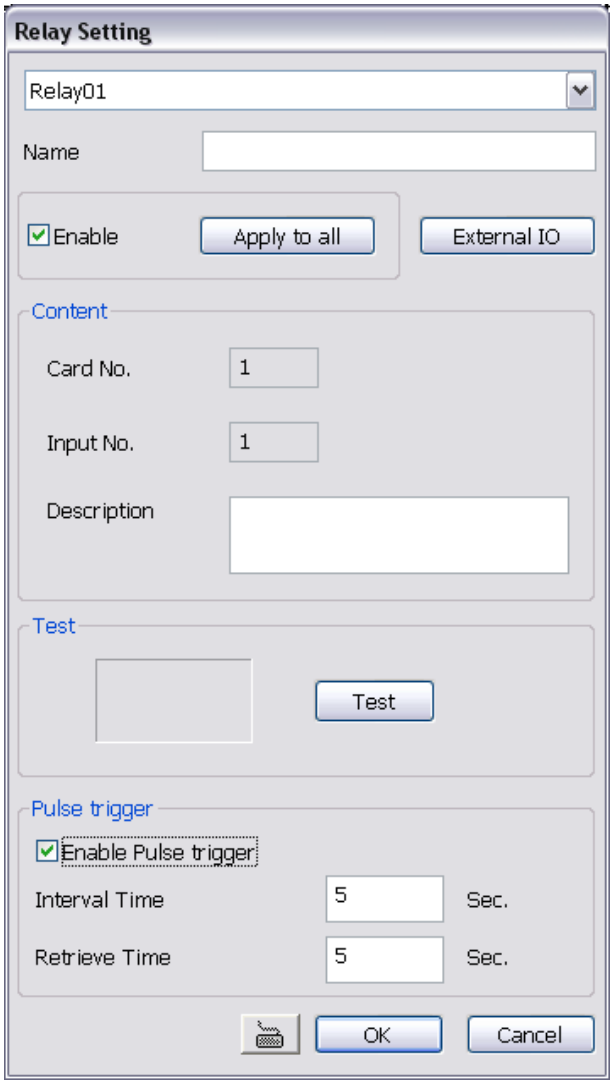
11. To view the all I/O devices information, click **I/O Map**.

3.8 Relay Setting

The I/O device must be installed to use this function.

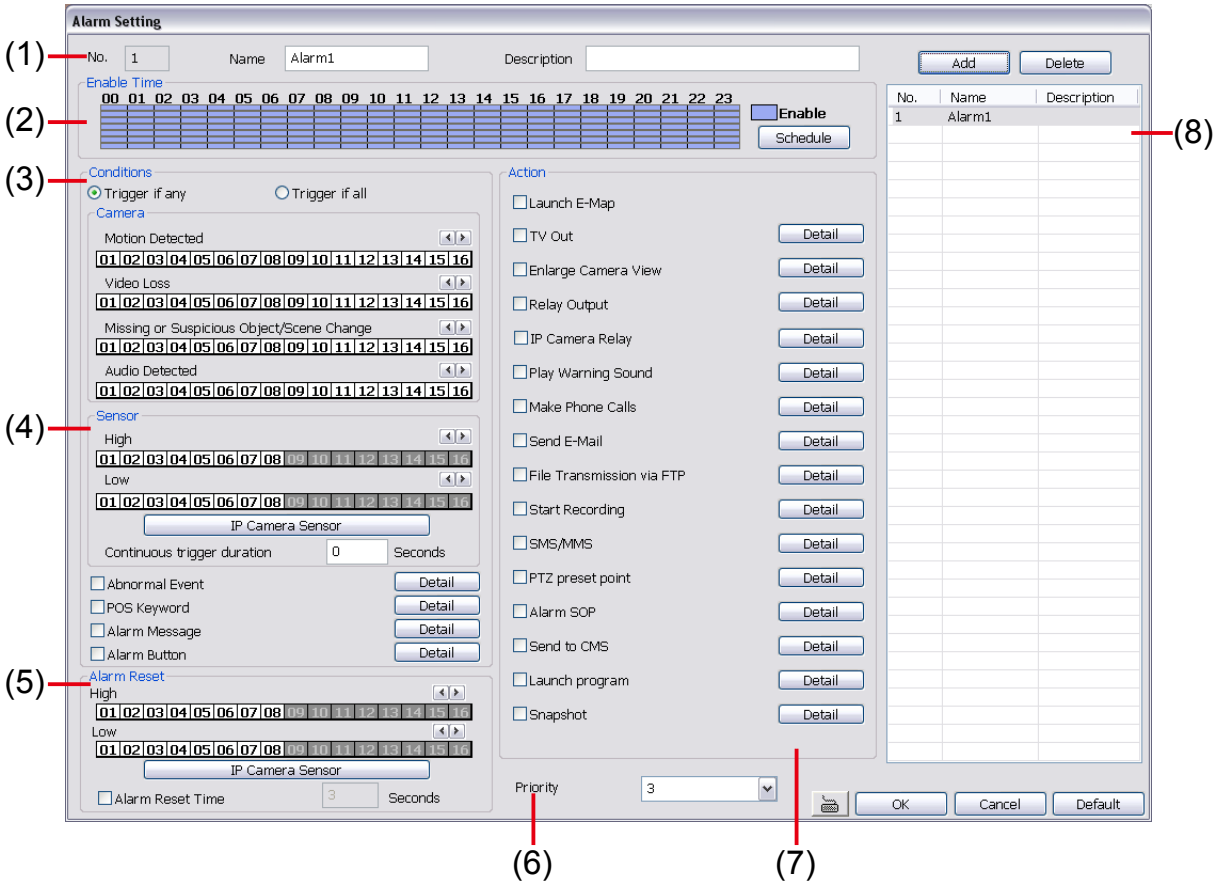
To set the Relay Setting:

1. Click the drop-down list and select the relay ID number.
2. Mark **Enable** to enable the selected relay.
3. Click **External IO** to configure external I/O device if it is available (see also 3.7.1). When external I/O is set and it will be available in drag down list for selecting.
4. The system automatically detects the card and input number. In the Content section, enter relay description.
5. In the test section, click **Test** to trigger relay. Red is high and Green is low.
6. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



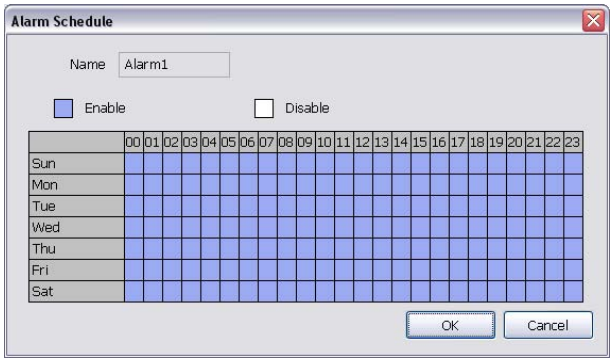
3.9 Alarm Setting

In the Alarm Setting dialog box, click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **OK** to exit and save the setting, **Cancel** to exit without saving, and **Default** to revert back to original factory setting

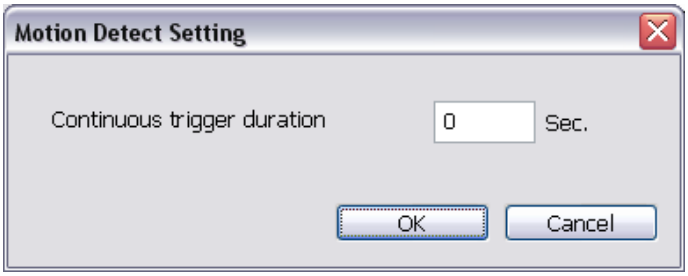


To set the Alarm Setting:

1. Click **Add** to insert and set a new alarm setting. Click the items in the **(7) Alarm Setting List**, if you want to modify the alarm setting.
2. In **(1) Alarm Setting number/Name/Description**, display the selected alarm setting number in the list below. Enter alarm name and description.
3. In **(2) Enable Time**, the number from 00 to 23 represent the time in 24-hour clock. Click **Schedule** to select the time and date that you want to activate or deactivate the alarm function. Select **Enable** or **Disable** and click the block that user want to activate or deactivate the alarm function.

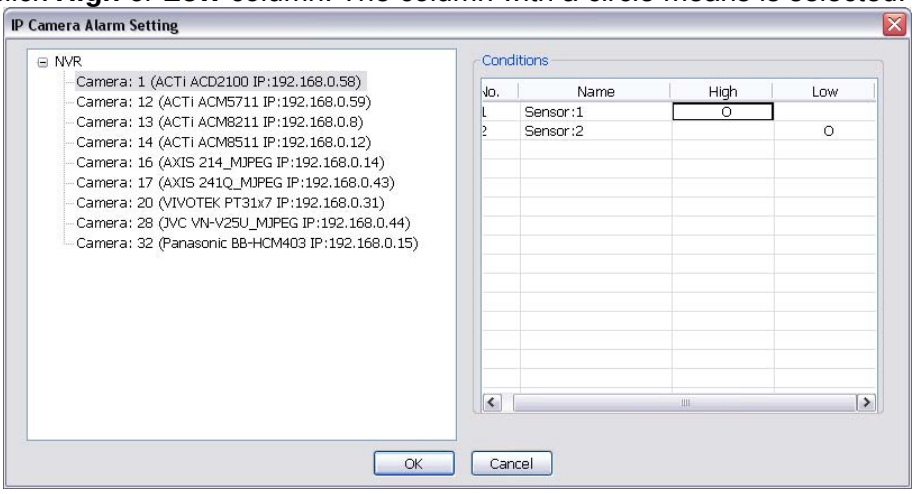


4. In **(3) Conditions**, you can set "**Trigger if any**" to activate if it falls to one of the conditions or "**Trigger if all**" to activate if it falls to all conditions.
   - **Motion Detected:** select and click on the camera number (01 to 32) to set the condition for the system to alarm. Right click on the camera number to setup the **Continuous trigger duration** of Motion detected. Enter the time period for system to send out the alarm when motion has continuous detected for a period.



- In **Video Loss**, click the camera number (01 to 32) to set the alarm condition when video is lost.
- In **Missing and Suspicious Object Detected**, click the camera number (01 to 32)and select the certain object on the screen (right click on camera number for detailed setting)), and when the certain object is missing or doubtful, the system will alarm.(see also 3.9.12) In **Scene Change**, when the camera has been moved, the system will alarm, too.
- In **Audio Detect**, click the camera number (01 to 32) to the system to alarm when detect the abnormal audio.

5. In **(4) Sensor**, select and click on the sensor number (use ◀ and ▶ to select the sensor) to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low (see 3.7 step #5).
   Click **IP Camera Sensor** to configure IP camera's sensor condition. To set the sensor condition for the system to alarm, click **High** or **Low** column. The column with a circle means is selected.



- **Continue trigger duration:** Set a time period that when sensor has been trigger and stay in the same status for that period, then the alarm will be sent out.
- **Abnormal Event:** Enable/disable to set the condition of the event for system to alarm.

- **System Reboot:** when the DVR system reboot without abnormal condition, the system will send out the alarm message.
- **Abnormal Reboot:** when the DVR system reboot in irregular condition, the system will send out the alarm message.
- **Recording is switched off:** when the recording has been stopped, the system will send out the

alarm message.

- **Network is switched off:** when the network connection of DVR system is lost, the system will send out the alarm message.
- **Hard Disk failed:** when the hard disk can't work normally, the system will send out the alarm message.
- **Temperature:** set a temperature limited of system for system to alarm. When DVR system temperature is over the temperature limited, the system will send out the alarm. The system supports °C and °F temperature mode.
- **Illegal Entry:** any objects move between selected regions which user has set up in **Object Counting** section (see 3.2.1), the system will send out the alarm. Select the entry (object moves from region 1 to 2 or from region 2 to 1) and and click the **Detail** to select the camera and the times for system alarm.
  - ✓ **Trigger if once:** Send out the alarm when the selected camera match the illegal entry has selected.
  - ✓ **Trigger if the amount exceeds:** Send out the alarm when the selected camera and illegal entry times match the illegal entry has selected.

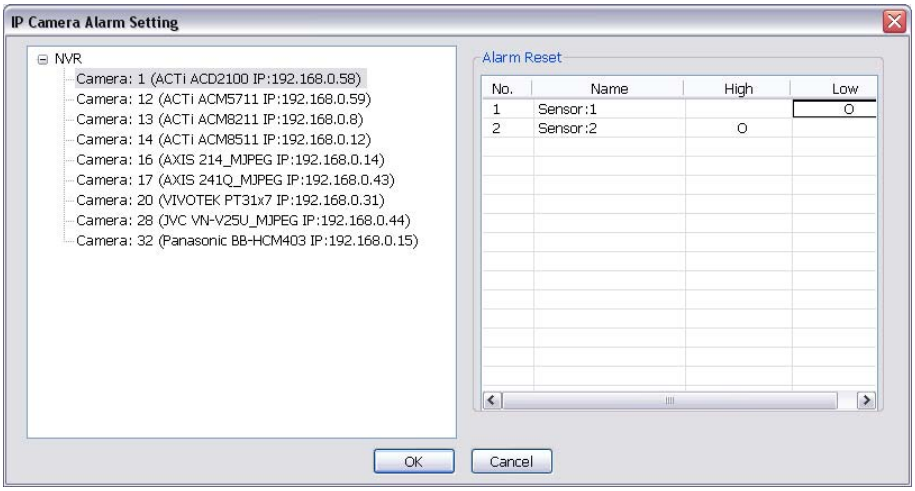
Only the camera has been setup in **Object Counting** will be available for selecting in **Illegal Entry**.

- **FaceFinder:** Enable to send out the alarm when the selected channel has detected face.

Only the camera has setup FaceFinder detection will be available for selecting.

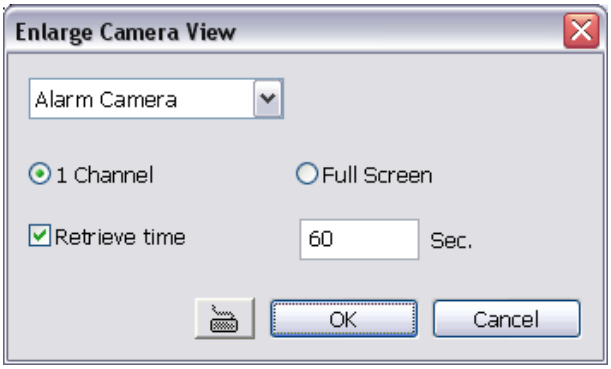
- Enable/disable the **POS Keyword** check box, to scan the data from the POS if it matches the keyword (see also 3.9.11).
- **Alarm Message:** Enable/disable to active with external alarm message by your own program. For the detail configuration, please contact the local reseller.
- **Alarm Button:** Enable/disable to active manual alarm function (see also Chapter 2.2#(19)). To define alarm message of manually alarm trigger. Click alarm button and select the alarm button # and fill in the description of alarm button.

6. In **(5) Alarm Reset**, click the camera number (01 to 16) to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the sensor condition to low.
   Click **IP Cam Sensor** to IP camera sensor reset condition. Click **High** or **Low** column to set the reset condition of alarm.

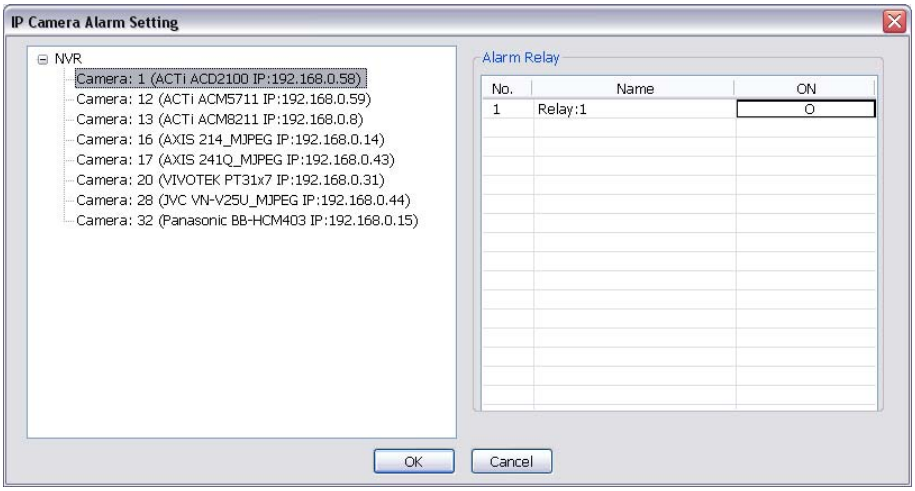


- **Alarm Reset Time:** Set a time for the alarm auto reset. When an alarm happen such as motion detected and video loss, the alarm will reset at the alarm reset time.

7. In **(6) Priority**, set the priority of this alarm set.
8. In **(7) Action**, you may now set the alarm action for the system to perform when the alarm condition is activated.
   - **Launch E-Map**
     Display mini Emap screen.
   - **TV Out**
     Switch to only display the video on TV from where the alarm is activated.
   - **Enlarge Camera View**
     Switch to only display video in Preview/Advanced mode from where the alarm is activated.
     a. Select the camera from drop down list to specify which camera video to be enlarged on screen when the alarm is triggered.
        - ⊙ **Alarm Camera:** when a channel has an alarm occurred, and then, the channel video that has an alarm occurred will be enlarged on screen.
        - ⊙ **Camera # (1~32):** the selected channel video that will be enlarged on screen when an alarm is activated.
     b. Select the display mode – **1 Channel** or **Full Screen**.
     c. **Retrieve time:** set the waiting duration before system switching back to original Preview mode. If the retrieve time is un-mark, the alarm video will keep enlarging until user switch back to Preview mode manually. The retrieve time range is 3~ 600 seconds.



   - **Relay Output**
     Set to enable/disable the relay operation when the alarm is activated and to extend additional time in second before it stops the relay operation (see also 3.9.1).
   - **IP Camera Relay**
     Set to enable/disable IP camera relay trigger. Click **ON** column to enable/disable the relay trigger. The blank column means the trigger is off.



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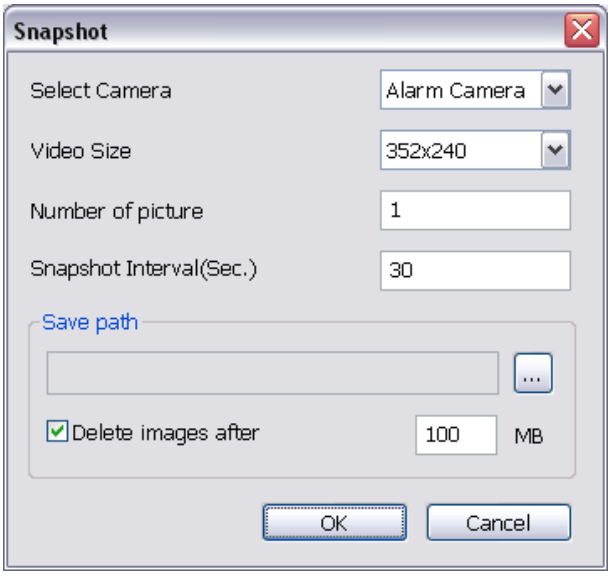
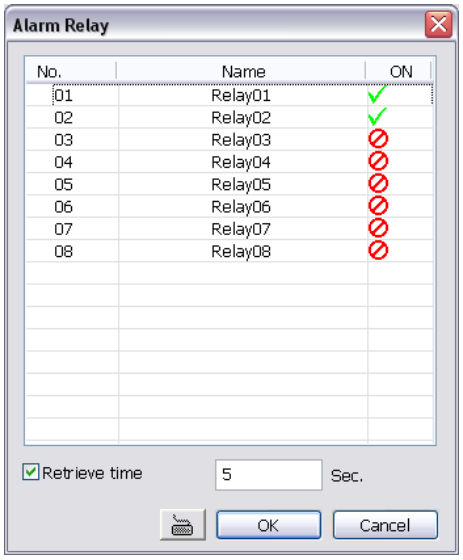
- **Play Warning Sound**
  Play alarm sound. To setup click **Detail** (see also 3.9.2).
- **Make Phone Calls**
  Dial and contact the number in the list. To setup click **Detail** (see also 3.9.3). To use this feature, the PC must have a voice modem connected to it. The supported audio system is only 8KHz and 16Bit mono.
- **Send E-mail**
  Send an electronic text message. To setup click **Detail** (see also 3.9.4).
- **File Transmission via FTP**
  Upload file to remote computer thru FTP (File Transfer Protocol). To setup click **Detail** (see also 3.9.5).
- **Start Recording**
  Record the video from the selected camera. To setup click **Detail** (see also 3.9.6).
- **SMS (Short Message Service)/MMS (Multimedia Messaging System)**
  SMS transmits only text messages to mobile phone. MMS transmits text messages and images over wireless networks using the wireless application protocol (WAP). Make sure your mobile phone support this feature and your PC is connected to GSM/GPRS modem. To setup click **Detail** (see also 3.9.7).
- **PTZ preset point**
  Position the PTZ camera based on the preset point setting. To setup click **Detail** (see also 3.9.8).
- **Alarm SOP (Standard Operation Procedure)**
  List the instructions to inform the person of what to do when the alarm is activated. To setup click **Detail** (see also 3.9.9).
- **Send to CMS (Central Management System)**
  Enable/disable the selected camera to send video to CMS when the alarm is activated (see also 3.9.10)
- **Launch Program**
  To call up the external program that is provided by 3rd party. Click **Detail** and click ... to locate the program path. Enable **Multiple instance** check box to allow the program can be executed many times at the same time.
- **Snapshot**
  Take a snapshot when the alarm is activated.
  a. **Select Camera:** specify which channel video to be snapshot when the alarm is occurred.
     - **Alarm Camera:** when a channel has an alarm occurred, and then, the DVR system will snapshot the channel video.
     - **Camera # (1~32):** the selected channel would be snapshot when an alarm is occurred.
  b. **Video Size:** select the size of snapshot picture.
  c. **Number of picture:** the number of picture that is going to be taken.
  d. **Snapshot Interval:** a time gap for next snapshot
  e. **Save Path:** a storage path for saving snapshot pictures.



3.9.1 To Setup Alarm Relay:

1. Beside the Relay Output check box, click **Detail**.
2. In the Alarm Relay dialog box, select from the available relay list and in the ON column, set to enable/disable the relay operation when the alarm is activated.
3. In the Retrieve time check box, you may enable/disable to extend the relay operation time and set the duration in second.
4. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

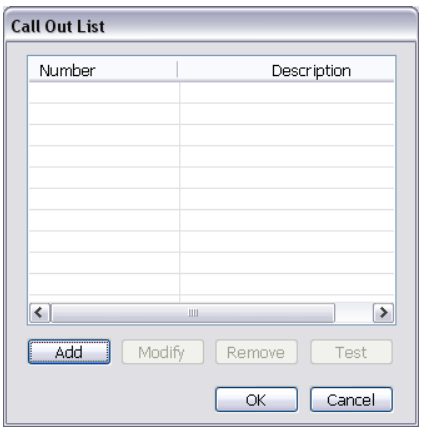


3.9.2 To Setup the Alarm Sound Setting

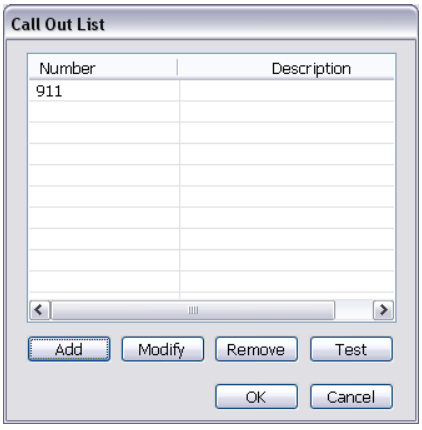
1. Beside the Play Warning Sound check box, click **Detail**.
2. In the Alarm Sound Setting dialog box, click ... to select other wav file from other source or folder, Play to listen, Record to make a new copy of a sound.
3. If you click Record, you will be prompted if you want to replace the file. Click **OK** to continue and Cancel to discontinue.
4. When the Sound Recorder appears, use the record control panel to record, stop, play, rewind and forward. If you want to keep the existing file, click **File** > **Save As…**, enter filename and click Save. Make sure you have microphone connected to your PC.
5. Click **OK** to exit and accept the setting and click **Cancel** to exit without saving the setting.

3.9.3 To Setup Call Out List:

1. Beside the Make Phone Calls check box, click **Detail**.
2. In the Call Out List, click **Add** to insert a new contact number, click **Modify** to edit the selected item, click **Remove** to delete the selected item, click **Test** to check if it is working.
3. In the Call Out Setting, enter the **Phone Number** and **Description**. Click ... to select existing sound recorded massager and **Record** to make a new voice message.

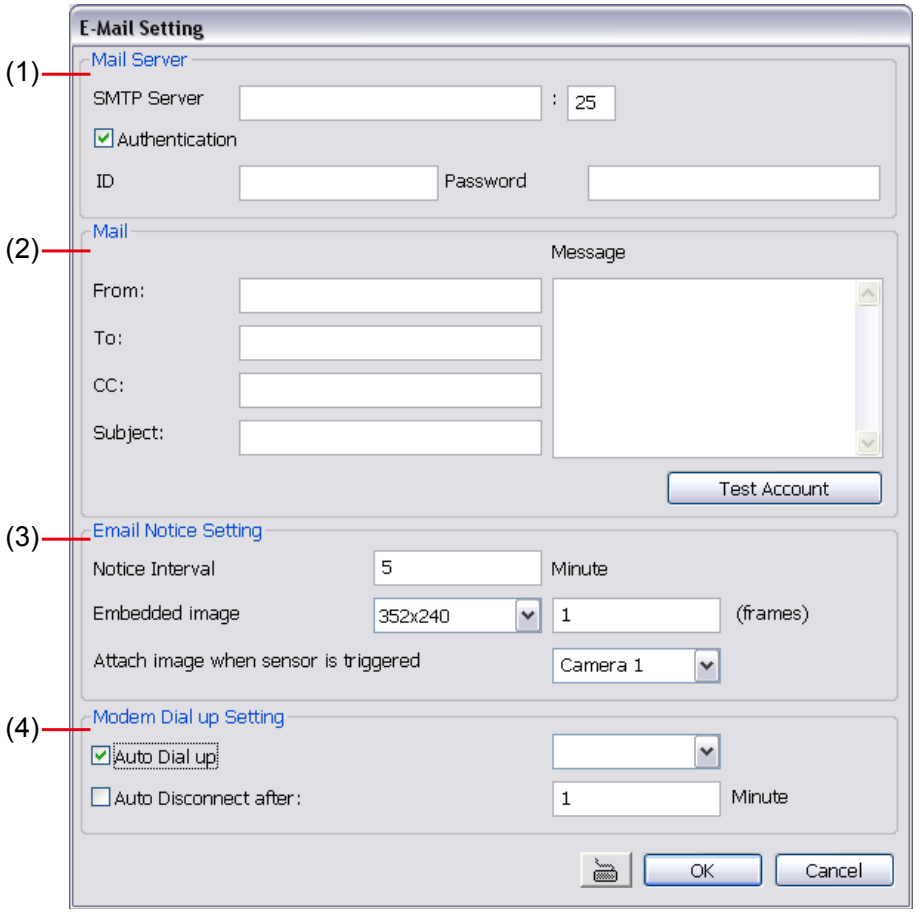


4. When the Sound Recorder appears, use the record control panel to record, stop, play, rewind and forward. If you want to keep the existing file, click **File** > **Save As…**, enter filename and click **Save**. Make sure you have microphone connected to your PC.
5. The supported audio system is only 8KHz and 16Bit mono.
6. Click **OK** to exit and accept the setting and Cancel to exit without saving the setting.



3.9.4 To Setup Send E-mail Setting:

Beside the Send Email check box, click **Detail**. In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



(1) Mail Server

Enter the SMTP Server and port. If your e-mail system requires user identification, enable **Authentication** check box and enter User ID and Password.

(2) Mail

To check if it is working, click **Test Account** button.

From: Enter the sender e-mail address.

To and CC: Enter the recipient email address and separate it with comma or a semicolon (;).

Subject: Enter the message title.

Message: Type the message.

(3) Email Notice Setting

Notice Interval Set the period of time before it sends another e-mail notice.

Embedded image Select the image size and set the number of frames.

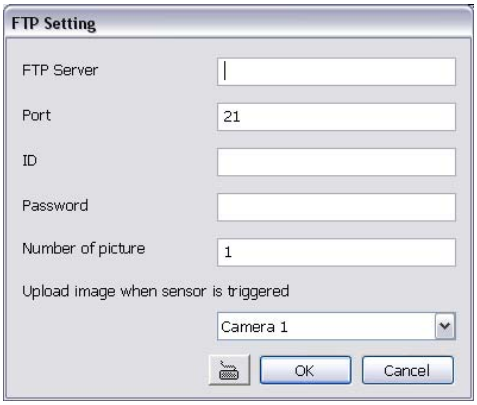
Attach image when sensor is triggered When the sensor is triggered, the system will capture the image and send the image to the certain e-mail address with the alarm message.

(4) Modem Dial up Setting

If you are using dial up modem, enable **Auto Dial up** check box and select the modem name. You may also set the time to disconnect automatically, just enable the **Auto Disconnect after** check box and set time.

3.9.5 To Setup FTP Setting:

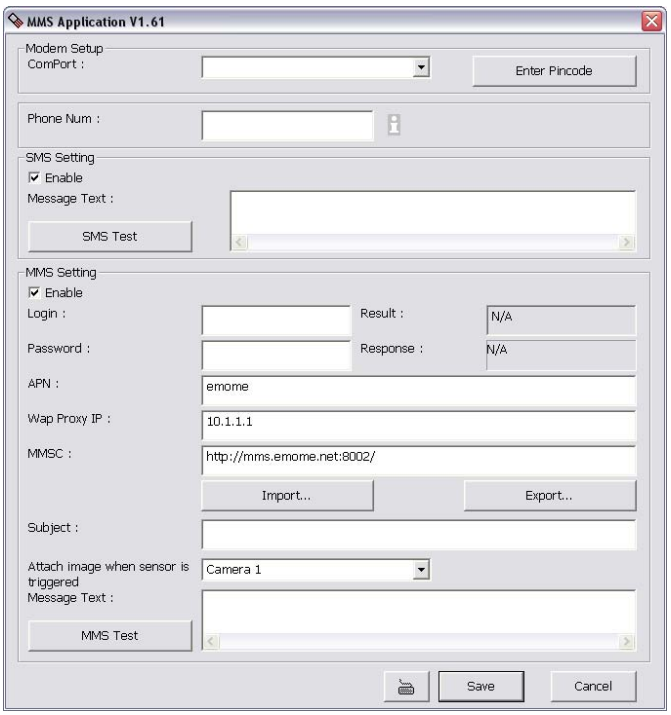
1. Beside the File Transmission via FTP check box, click **Detail**.
2. In the FTP Setting dialog box, enter the FTP IP, port, user ID and password.
3. In **Number of Pic** text box, enter the number of sequence images that want to send when file is transmitting.
4. In **Upload image when sensor is triggered**, select the camera that the images will be capture and send when the sensor is triggered.
5. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



3.9.6 To Setup Alarm Recording Setting:

1. Beside the Start Recording check box, click **Detail**.
2. In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable **All** to select all cameras.
3. In the Frame Rate selection, select **As Setting** to record the number of frames based on the Recording Setting or **Max** to record the maximum of frames based on the available speed.
4. In the Stop Recording after text box, set the number in second for the program to continue recording after the alarm has ended.
5. Click **OK** to accept the new settings and **Cancel** to exit without saving.

3.9.7 To Setup SMS/MMS Setting:



To use this feature, GSM/GPRS modem is required. Connect the GSM/GPRS modem to the serial COMM port of PC. Beside the SMS/MMS check box, click **Detail**.

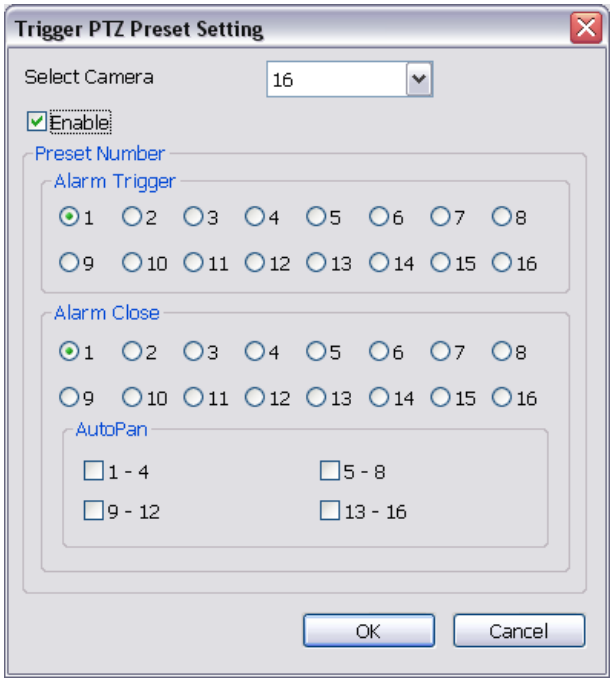
Select the port number in Com Port drop down list from where the GSM/GPRS modem is connected.

1. Click **Modem Setup** button to automatically detect the Modem Baud Rate.
2. In **Local Phone Number** text box, enter the GSM SIM card phone number.
3. In **Phone Num** text box, enter the contact number.
4. You may now set to send thru SMS &/or MMS. If you enable SMS setting, just enter the message in the text box. If you enable MMS, enter the APN name, WAP IP, MMS address and the message. If you are not sure, please contact your mobile service provider.
5. **Attach image when sensor is triggered** select the camera that the images will be capture and send when the sensor is triggered.
6. Click **OK** to accept the new settings and **Cancel** to exit without saving.

Make sure your ISP provider and cell phone provider both support JPG file format transmitting.

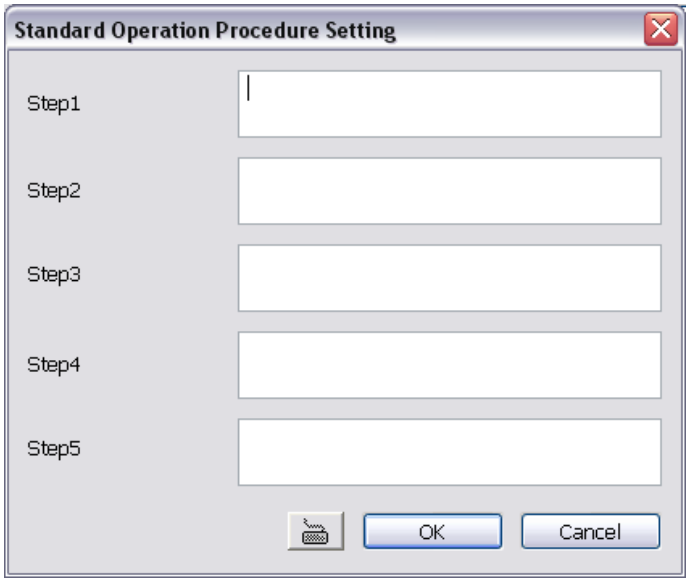
3.9.8 To Setup PTZ Preset Point:

Beside the PTZ preset point check box, click **Detail**. In the Trigger PTZ Preset Setting dialog box, select the PTZ camera number then select the Enable check box. Select the position of the PTZ camera when the alarm is activated and ended. For the PTZ camera ended point, user also can select one preset position or **Auto Pa**n between preset position groups.



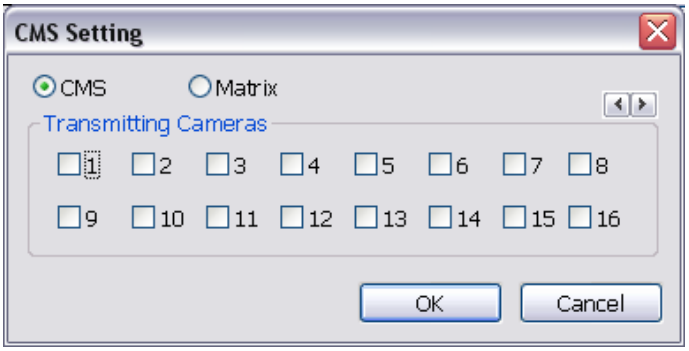
3.9.9 To Setup Alarm SOP:

Beside the Alarm SOP check box, click **Detail**. In the step text boxes, type the standard protocol when the alarm is activated. When the alarm is activated the Standard Operation Procedure dialog box will appear. Just click **Next** to see the next instruction, **Back** to see the previous instruction, **Finish** to end and **Abort** to terminate.



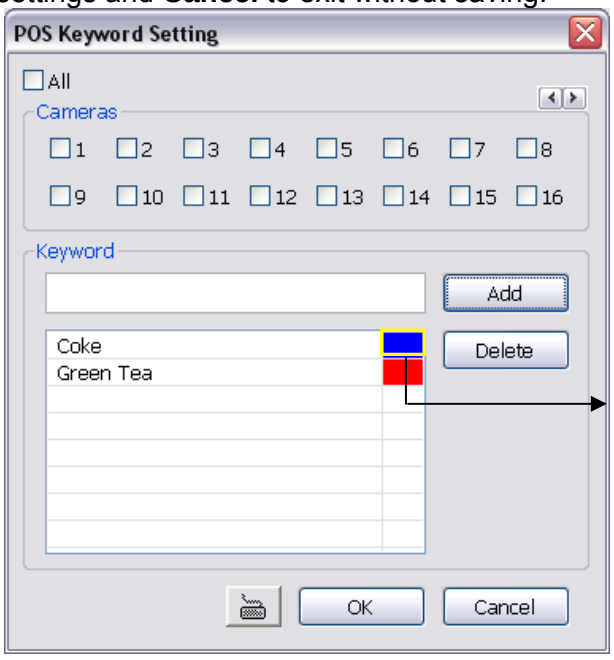
3.9.10 To Setup CMS Setting

Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.



3.9.11 To Setup POS Keyword Setting

1. Beside the Send to POS Keyword check box, click **Detail**.
2. In the POS Keyword Setting, select the camera to enable/disable scanning the keyword. Enable **All** to select all cameras.
3. Enter the text below keyword text box. Click **Add** to include the keyword in the list. To remove, select the word in the list and click **Delete**. You may only add 8 keywords. User can define the color for each keyword. To set the color, click the color panel after next to POS keyword column and a color selection window will pop up. Select the color that user wants and click **OK**.
4. Click **OK** to accept the new settings and **Cancel** to exit without saving.

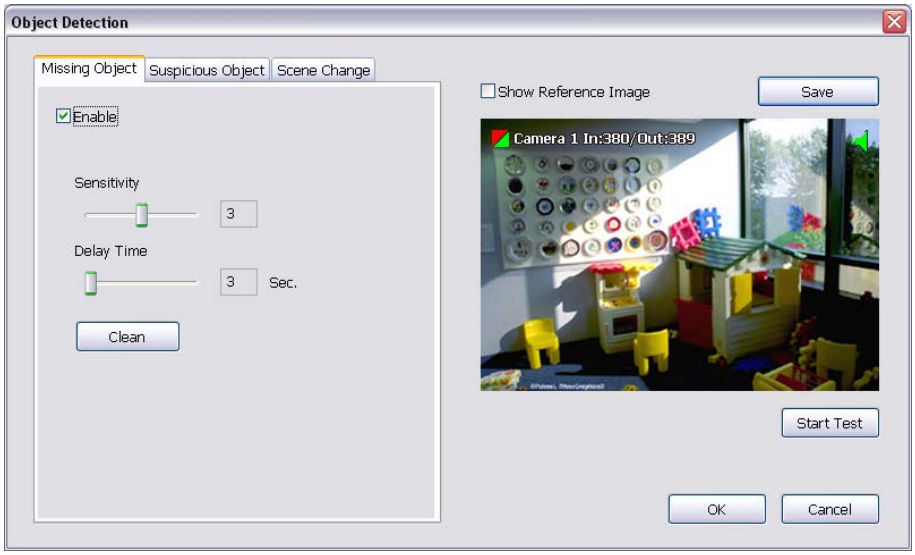


3.9.12 Missing and Suspicious Object Detected

- **Missing Object**

  Select the certain object on the screen for the system to detect; when the object is disappear or move and the system will alarm. Click **OK** to exit and save the configuration. To exam the setup condition, click **Start Test**.

  1. Select the camera number (0-16) and press RIGHT button on the mouse to call up the setup windows.
  2. Click **Save** to capture the image for comparing reference first. To view the captured image, enable the **Show Reference Image** check box. The captured image will display on screen. The reference image is sharing with the Suspicious Object and Scene Change function.
  3. Mark the **Enable** check box to setup the condition.
  4. Use the mouse to click and drag the frame on the screen. User can drag more than one frame.
  5. **Sensitivity:** Set the system detects sensitivity.
  6. **Delay Time:** Set the lasting time for system to detect the object.
  7. To reset all object frames, click **Clean**. To clean an object frame, click right button of mouse and drag the object frame that user want to clean.

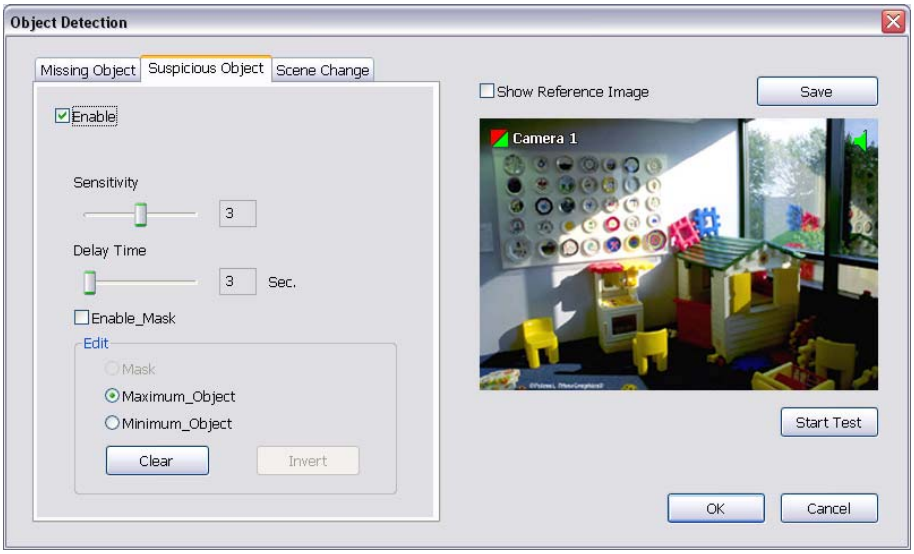


- **Suspicious Object**

  Suspicious Object is including the object missing or the doubtful object appears on the screen. Click **OK** to save and exit the setup windows. To exam the setup condition, click **Start Test**.

  1. Select the camera number (0-16) and press right button on the mouse to call up the setup windows. And then, click the **Suspicious Object** Tab.
  2. Click **Save** to capture the image for comparing reference. To view the captured image, enable the **Show Reference Image** check box. The captured image will display on screen. The reference image is sharing with the Missing Object and Scene Change function.
  3. Mark the **Enable** check box to setup the condition.
  4. **Sensitive:** Set the system detects sensitivity.
  5. **Delay Time:** Set the lasting time for system to detect the object.
  6. Use the mouse to click and drag the frame on the screen.
     - **Maximum_Object:** the maximum detect size. The objects are out of the maximum detect area will be disregard. Use mouse to click and drag the frame on the screen.
     - **Minimum_Object:** the minimum detect area. When the objects are smaller than the minimum detect area, the system will disregard. Use mouse to click and drag the frame on the screen.
  7. **Enable Mask**

     Mark an area on the screen to disregards the motion in the marked area and to only monitor outside the marked area. Mark the **Enable Mask** check box, click and drag the mask frame on the screen.
  8. To reset all object frames, click **Clean**. To clean an object frame, click right button of mouse and drag the object frame that user want to clean

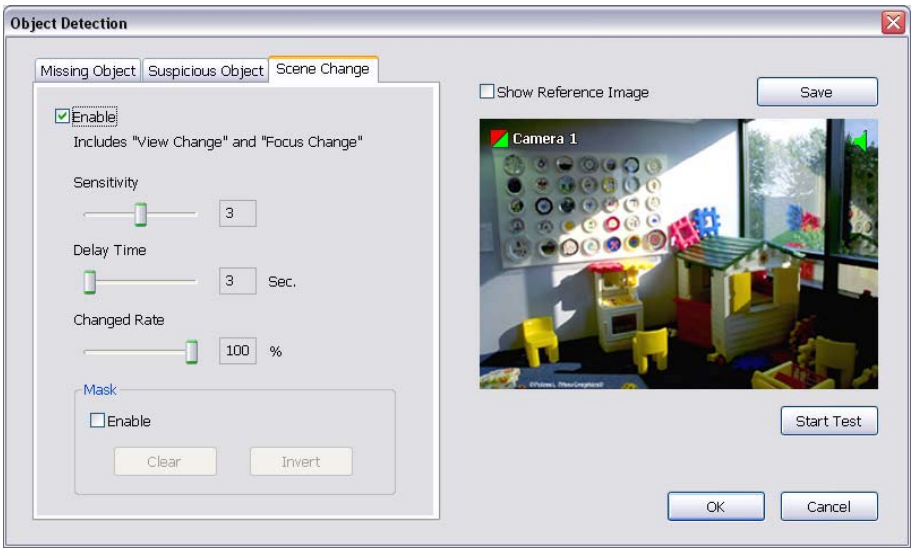


- **Scene Change**

  When the camera has been moved, the system will alarm.

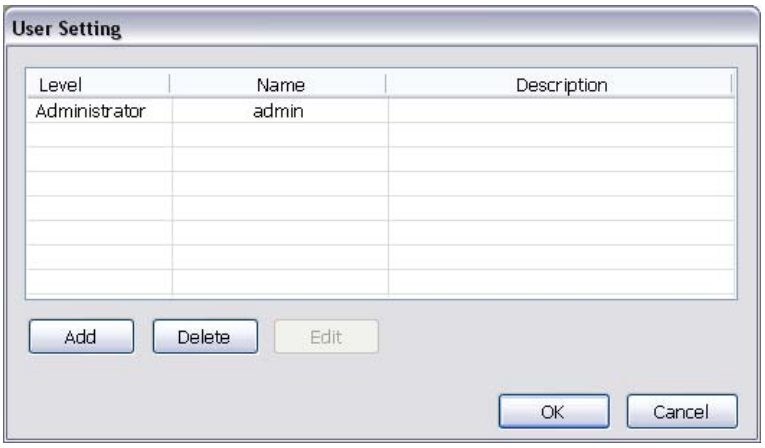
  1. Select the camera number (0-16) and press right button on the mouse to call up the setup windows. And then, click the **Scene Change** Tab.
  2. Click **Save** to capture the image for comparing reference. To view the captured image, enable the **Show Reference Image** check box. The captured image will display on screen. The reference image is sharing with the Missing Object and Suspicious Object function.
  3. Mark the **Enable** check box to setup the condition.
  4. **Sensitive:** Set the system detects sensitivity.
  5. **Delay Time:** Set the lasting time for system to detect the movement.
  6. **Change Rate:** Set the camera movement range which compare with the original position.
  7. **Enable Mask**

     Mark an area on the screen to disregards the motion in the marked area and to only monitor outside the marked area. Mark the **Enable Mask** check box, click and drag the mask frame on the screen.
  8. To reset all object frames, click **Clean**. To clean an object frame, click right button of mouse and drag the object frame that user want to clean.

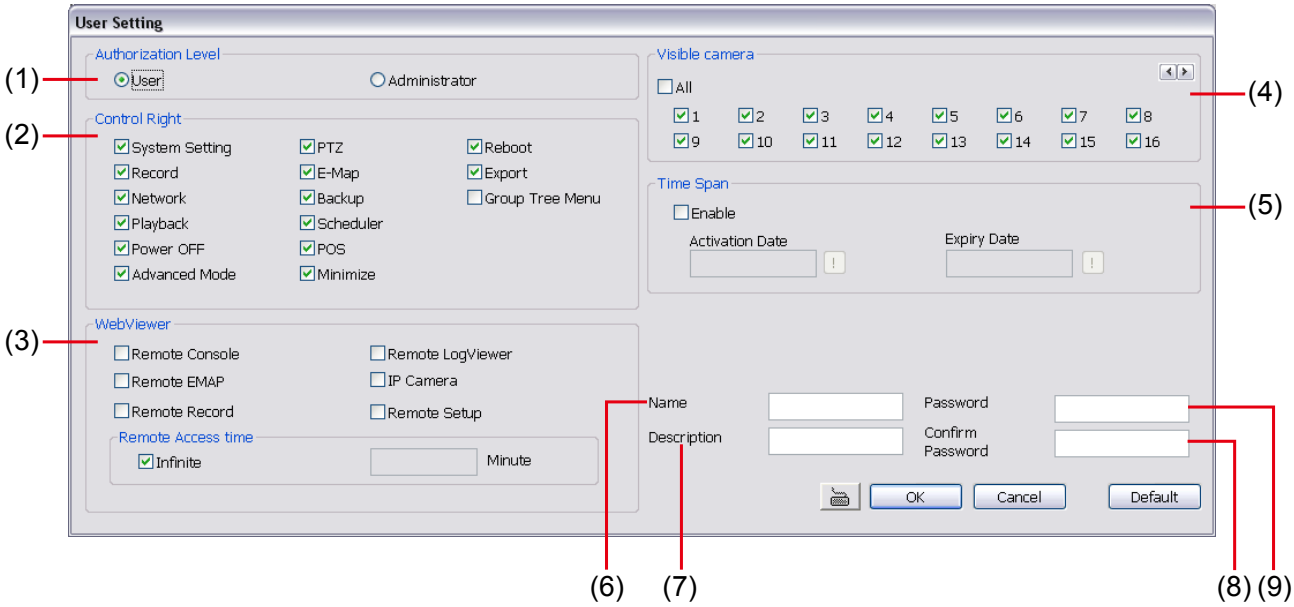


3.10 User Setting

Only administrator can access User Setting. The maximum user accounts are 256.
In the User Setting dialog box, click **Add** to insert a new user, **Delete** to remove the selected user, **Edit** to modify the user control right, **OK** to exit and accept the setting, and **Cancel** to exit without saving the setting.



After clicking **Add** or **Edit**, you may customize the user control setting. **OK** to exit and accept the setting, and **Cancel** to exit without saving the setting



(1) Authorization level
Select the status of the user. Only Administrator-level can access User Setting, and reset the Alarm status when using the Remote Console.
(2) Control Right
Enable the items that would allow the user to access.
(3) Web Viewer
Enable/disable Web Viewer control right that allow the user to operate from a remote location using internet explorer.

- **Remote Console**
  Allow the user to remote modify DVR system setting.
- **Remote LogViewer**
  Allow the user to view the event log from remote site.
- **Remote EMAP**
  Allow the user to view the E-map of DVR from remote site.
- **Remote Record**
  Allow the user to record video at remote site.
- **Remote Setup**
  Allow the user to modify the DVR system setup from remote site.
- **IP Camera**
  Enable/disable user to add new IP camera when using the Web Viewer.
- **Remote Access Time**
  Enable **Infinite** check box to access DVR without time limit. If you want to set time limit, enter the number of

minutes in **Minute** text box.

(4) Visible Camera

Select the camera number that would allow the user to access or view. To select all the cameras, enable the **ALL** check box.

(5) Time Span

Set the user account a specific time period that user only can use given account to login DVR program in that specific period. Mark **Enable** check box and select the **Activation Date** and **Expiry Date**.

(6) Name

Enter the user name.

(7) Description

Enter the user description.

(8) Password

Enter the user password.

(9) Confirm Password

Enter the same user password for confirmation.

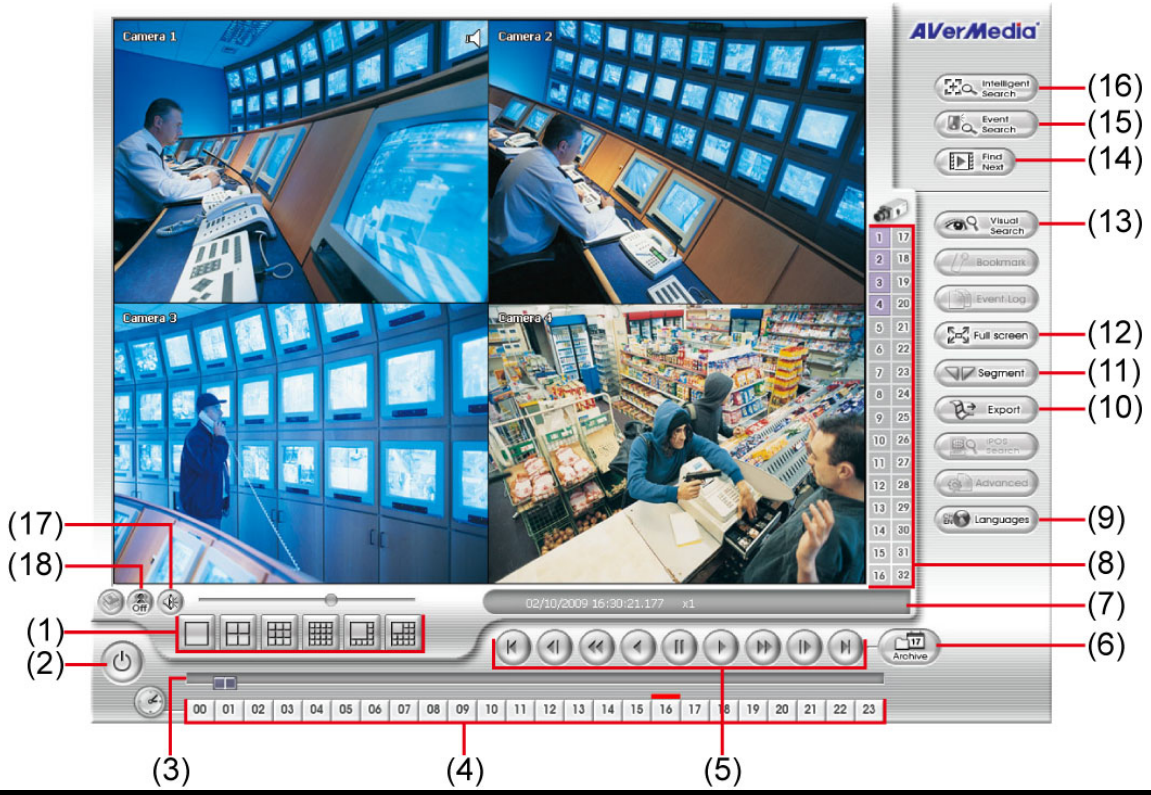
Chapter 4 Backup Video Players

You can playback the backup files using QPlayer applications. When you back up the recorded file, QPlayer applications are automatically included in the backup folder. Qplayer also can be installed when install Web Tool from installation CD-ROM.

With QPlayer, it is the same as in Playback mode and supports 6 different split screen types to view all the video at the same time. User even can select the different language of display UI. The only difference is that there are no Preview and Playback buttons.

To run the application, go to backup folder and double-click Q Player icon.

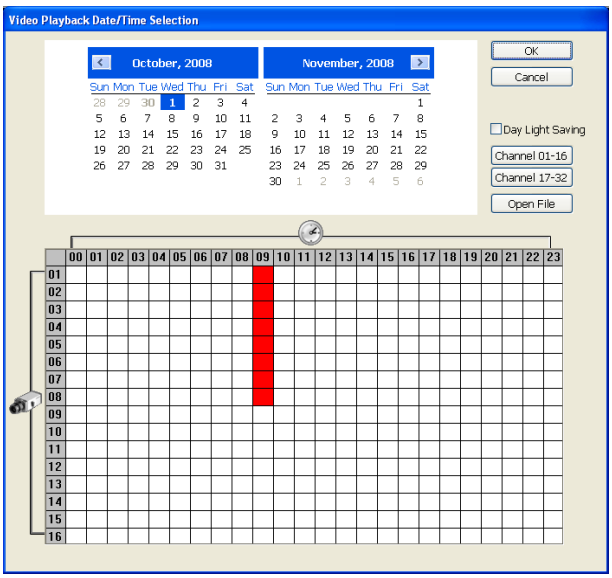
4.1 Familiarizing QPlayer Buttons



Name	Function
(1) Split Screen Mode	Select from 6 kinds of split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. To view 32 channels, click 16 split screen button to switch channel display.

- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To zoom in an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.

(2) Exit	Close the Player.
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
(5) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of ½x, ¼x, or ⅛x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.
(6) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the

Name	Function
	recorded video file. – **OPEN FILE:** user can open the recorded file from HDD – **Channel 01~ 16&Channel 17 ~ 32:** Switch to different channel group of playback calendar. – **Day Light Saving:** the playback calendar will show the available video records during day light saving time period. 

The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.

(7) Status bar	Display the recorded date, time and play speed.
(8) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(9) Language	Select the function tip display language.
(10) Export	Export includes Snapshot, Print, Output Video Clip, and Backup function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output Video Clip:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also 2.7).
(11) Segment	Keep a portion of the recorded video you want (see also 2.7).
(12) Full screen	View in Playback-compact mode. To return, **Right** click the mouse or press **ESC** on the keyboard. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(13) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also 2.9)
(14) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search only.
(15) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS) . (See also 2.10)
(16) Intelligent Search	Search the changes in the motion detector frame (See also 2.11).
(17) Audio	Enable/disable volume
(18) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

Chapter 5 Using Functional Keys

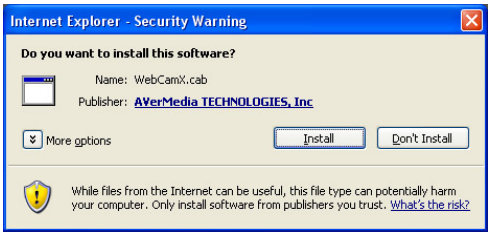
The DVR system provides shortcut keys. The table shows the function keys and descriptions.

Function Keys	Description
Q	Exit System
F1	Display system information
F2	Start recording
F3	Enable network function
F4	Access system settings
F5	Switch to playback mode
F6	Access E-map setting
F7	Access PTZ camera control panel
F8	Snapshot
F9	Switch to Full Screen
F11	Switch to AutoScan
CTRL + F	Freeze function
CTRL + B	Quick Backup
Ctrl + A	Turn on/off hardware AGC (Auto Gain Control)

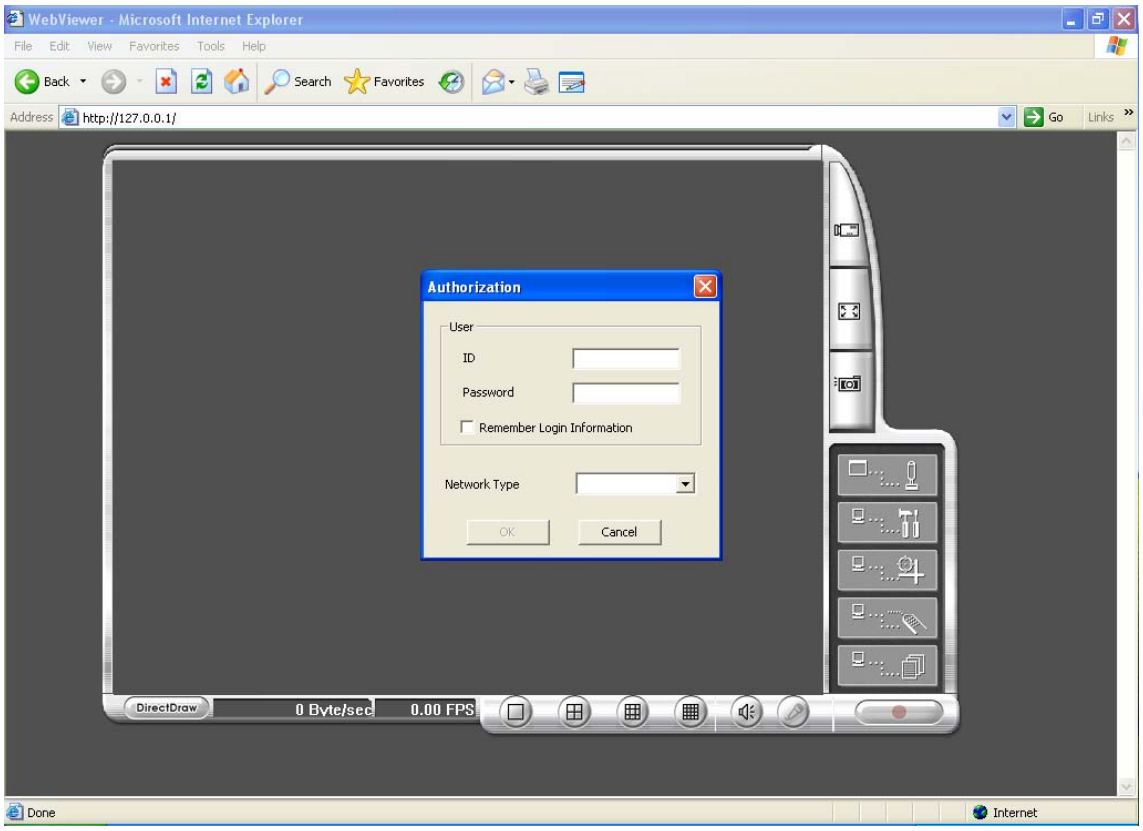
Chapter 6 Using the Remote Programs

You can use Microsoft Internet Explorer to access DVR server by entering the IP address or domain name. To use this feature, make sure that you are connected to the internet and the Network feature is enabled. Accessing this feature for the first time you will be prompted by your browser to install WebCamX.cab, allow the installation and you should be able to connect and login afterwards.
For Windows 2000, click **Yes** when the Security Warning dialog box appears.

For Windows XP, click **Install** when the Internet Explorer - Security Warning dialog box appears.



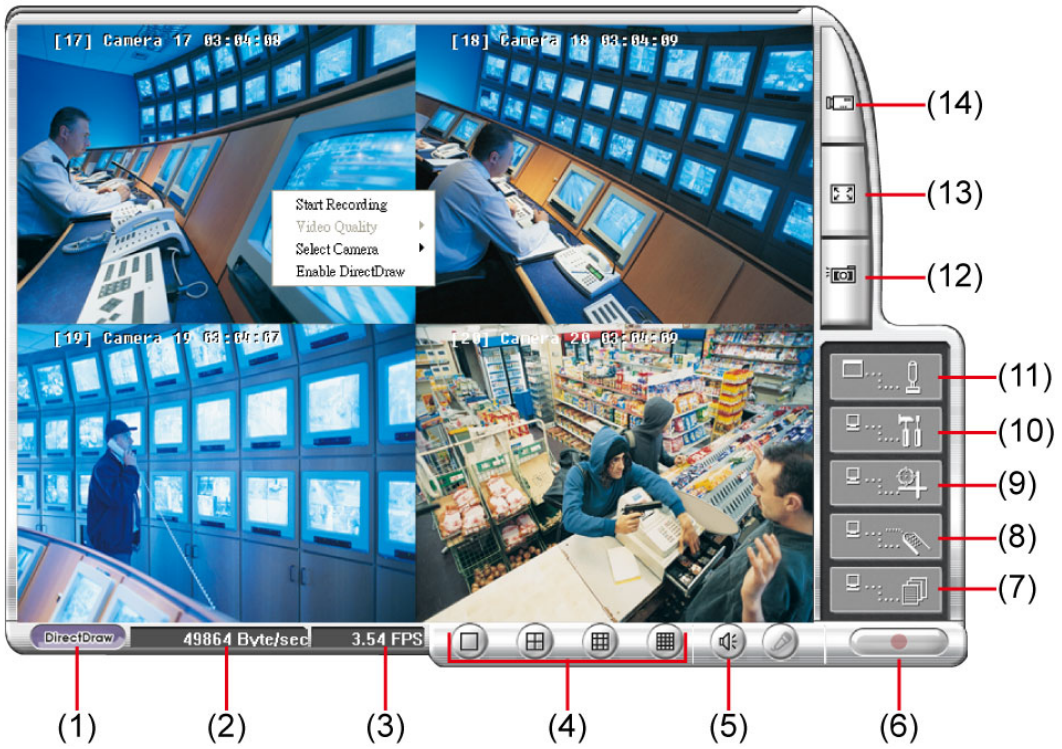
After installing the WebCamX.cab and when connecting to the DVR server, you are required to enter User ID, password and select the network type.



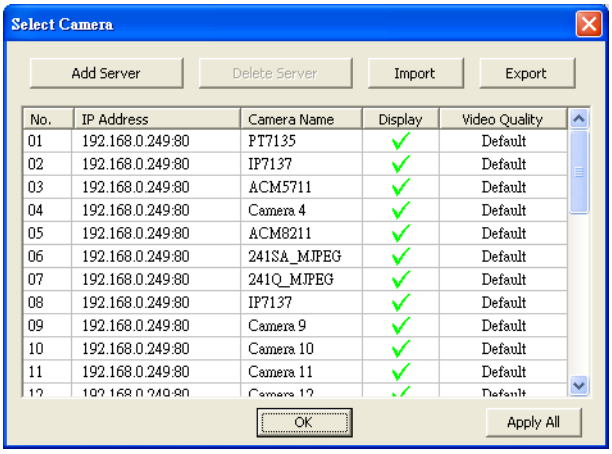
If you are not in a LAN network environment, remote playback video may be un-smooth due to network speed limitation. Slow network transmission speed may possibly cause system performance drop as well.

6.1 Familiarizing the WebViewer Buttons

Right-clicking on the webcam video screen, enables you to start video recording, change video quality, switch camera and enable/disable DirectDraw.

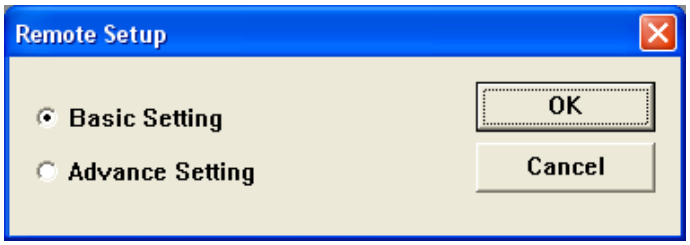


Name	Function
(1) DirectDraw	Enhance the video quality.
Not all graphic cards can support this function.	
(2) Received file size	Indicate the size of the data being sent per second.
(3) Camera frames	Indicate the number of frames per second.
(4) Split display mode	Select from 4 kinds of split screen types to view all the cameras. It also allows you to switch and view different camera number. To view 32 channels, click 16 split screen button to switch channel display.
(5) Audio	Enable/disable remote sound.
(6) Record	Save the video of the selected camera in AVI format.
(7) Event Log Viewer	Display the Event logs, Operation logs, POS logs, System logs, and Network logs.
(8) Remote Console	Initiate Remote Console. The interface is the same as DVR application and allows you to control DVR server (see also 6.2).
(9) Remote E-Map	Display the DVR server Emap screen (see also 2.6).
(10) Remote setup	Change the DVR server settings (see also 6.1.1).
(11) Select a PTZ camera	Initiate PTZ camera controller (see also 6.2)
(12) Snapshot	Capture and save the screen shot in *.bmp format.
(13) Full screen	Use the entire area of the screen to only display the video. To return, Right click the mouse or press **ESC** on the keyboard.

Name	Function
(14) Select cameras to view	Select to the view camera from different server. In Select Camera dialog box, Display column, click to enable/disable viewing the camera. In Video Quality column, click to select between High, Normal or Low. Click **Add Server** and select the server type between DVR and IP Cam to add. Click **Delete Server** to delete the selected item. Click **Import** to replace it with the previous saved list. Click **Export** to save the list. Click **Apply** All to change all the camera video quality based on the selected setting. Click **OK** to exit. 

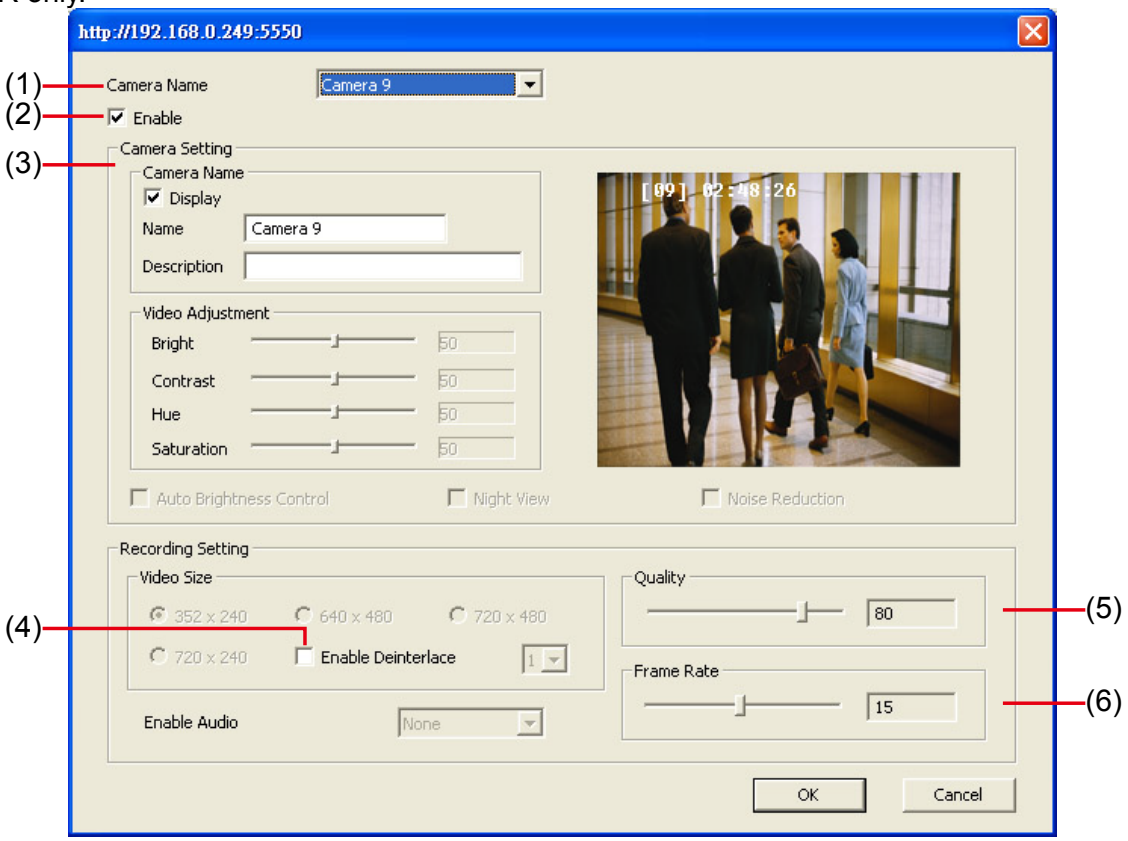
6.1.1 To Setup Remote System Setting

There are two type of remote setup mode – Basic Setting and Advance Setting. Select the setup mode and click **OK** to enter setup window.



Basic Setting

Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting. The setting here applies to Remote DVR only.



(1) Camera Name

Select the camera you want to adjust the settings.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Camera Name

- ✓ **Display**
  Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- ✓ **Name**
  Change the camera name.
- ✓ **Description**
  Add a short comment.

(4) Enable Deinterlace

Enable to enhance the video quality. Set the **Enable Deinterlace** mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

(5) Quality

Adjust the video quality. The higher the value, the lower the compression level and uses more hard disk space.

(6) Frame Rate

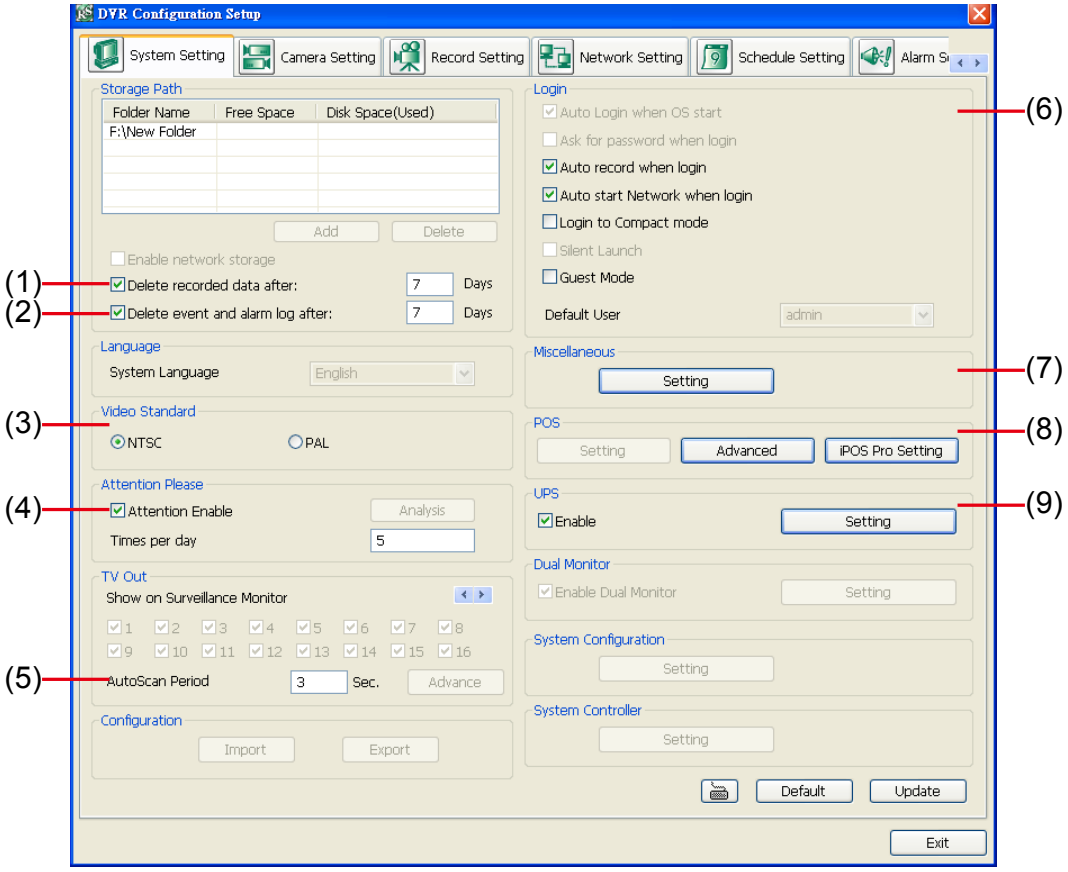
Set the number of images per second of the video to be recorded. The frame rate ranges from 1 to 30 for NTSC and 1 to 25 for PAL. The higher frame rate, it uses more hard disk space.

Advance Setting

In Advance setting, user can configure remote DVR in more detail.

System Setting

In the System Setting windows, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Delete recorded data after

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box.

(2) Delete event and alarm log after

If you want the system to automatically erase the event and alarm log files after a certain days, enable the **Delete event and alarm log after** check box and enter the numbers of days in **Days** text box.

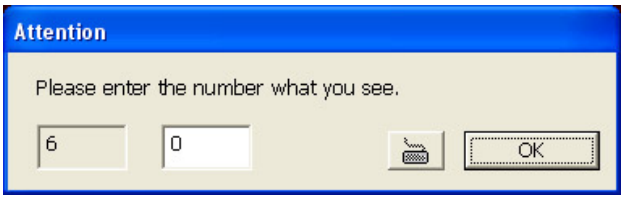
(3) Video Standard

Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.

(4) Attention Please

Check the attentiveness of the person who is monitoring the system. You may set the number of times the Attention dialog box to appear in a day in **Times per day** text box.

When this feature is enabled, the **Attention** dialog box would appear. The person who is monitoring the system must enter the same number that appears from the left box at the right text box and then click **OK**.



(5) AutoScan Period

Set the TV Out display time gap from 3 to 10 sec. before it switches to the next camera.

(6) Login

Enable the conditions in Login section you want the system to automatically carry out.

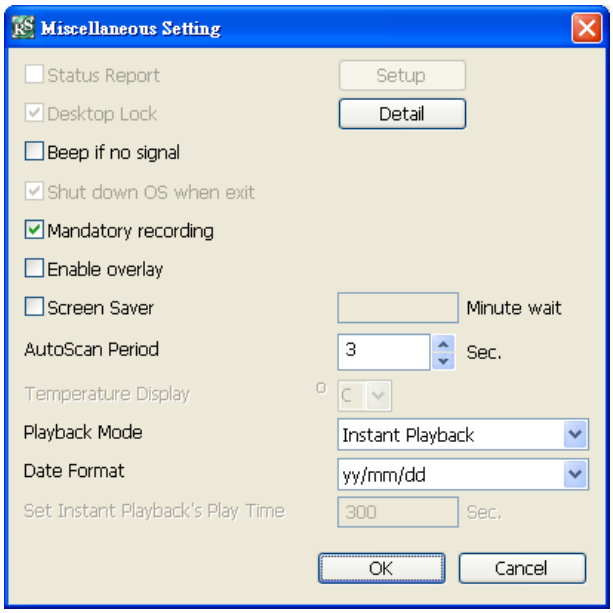
- **Auto record when login**
  Automatically start video recording when the DVR is executed.
- **Auto start Network when login**
  Automatically connect to network when the DVR is executed.
- **Login to compact mode**
  Switch to compact mode directly when the DVR is executed.
- **Guest Mode**

Automatically log in Guest mode when the DVR is executed. In guest mode, the functions are limited to preview and playback only.

(7) Miscellaneous

Enable the conditions in **Miscellaneous** section you want the system to perform.

- **Desktop Lock**
  - ✓ **Block window OS hotkey:** Deactivate the [Ctrl-Alt-Del] and [Windows] keyboard key functions.
  - ✓ **Block windows OS pop-up window:** To block any pop-up window from windows system.
- **Beep if no signal**
  Make sound when the video signal is lost.
- **Mandatory Record**
  Always record video when software is running
- **Enable Overlay**
  To enhance video signal for better video quality.
- **Screen Saver**
  Set a period time to enter screen saver mode when system idle.
- **Auto Scan Period**
- Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.
- **Playback Mode**
  Select the mode of playback the video.
  - ✓ **Select date and time:** Select the date and time which user wants to playback.
  - ✓ **Play the last file:** Automatically playback the video from the last hour
  - ✓ **Instant Playback:** Automatically playback the video which has just recorded
- **Date Format**
  Select the date format which wants to display in **Select date and time** playback mode

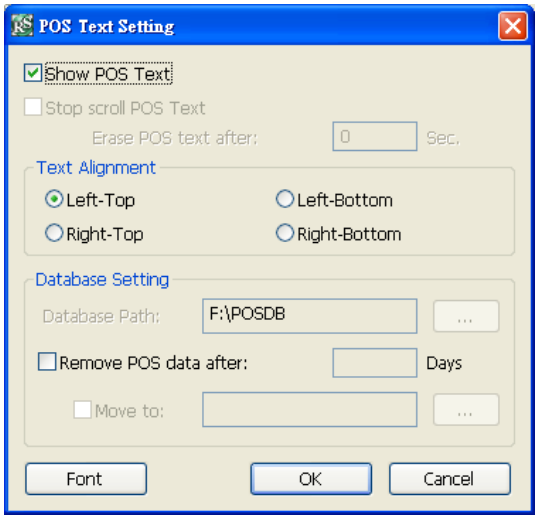


(8) POS

■ **Advanced**

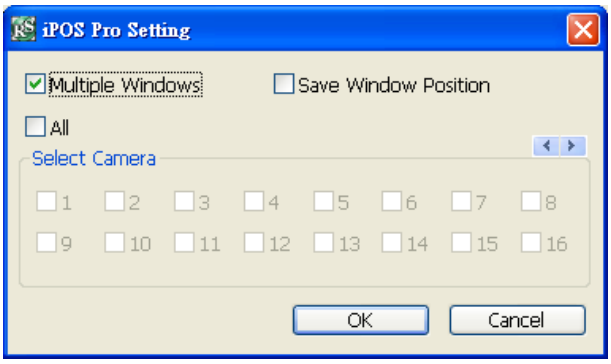
Set from which camera screen to display the data from the POS equipment. To set the text flow, color format, and POS database export, click **Advanced**.

1. Mark **Show POS Text** to allow POS data to be display on surveillance screen.
2. If user doesn't want POS data to be scroll up, mark **Stop scroll POS Text** and enter the time to delete POS text at **Erase POS text after** column.
3. Select the POS data display position on surveillance screen – Left-Top, Left-Bottom, Right-Top, or Right-Bottom.
4. To change the POS data font and color, click **Font**.
5. Mark **Remove POS data after** the POS data will be delete from DVR hard disk on the day that user has setup.



■ iPOS Pro Setting

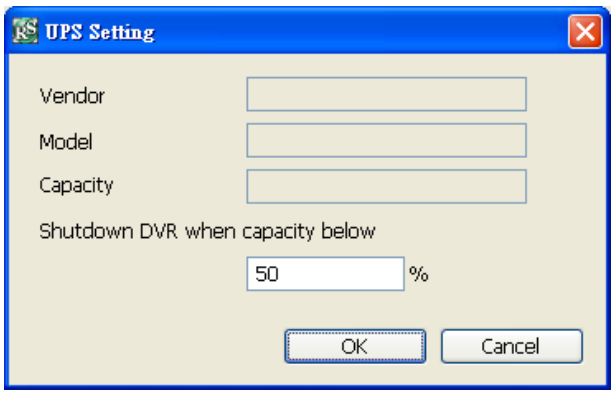
Enable **Multiple windows** for viewing multi-channels of real time iPOS data. To save the real time of iPOS data window position on the UI, mark the **Save window Position**. To select all channels, mark **All** check box.



(9) UPS (Uninterruptible Power Supply)

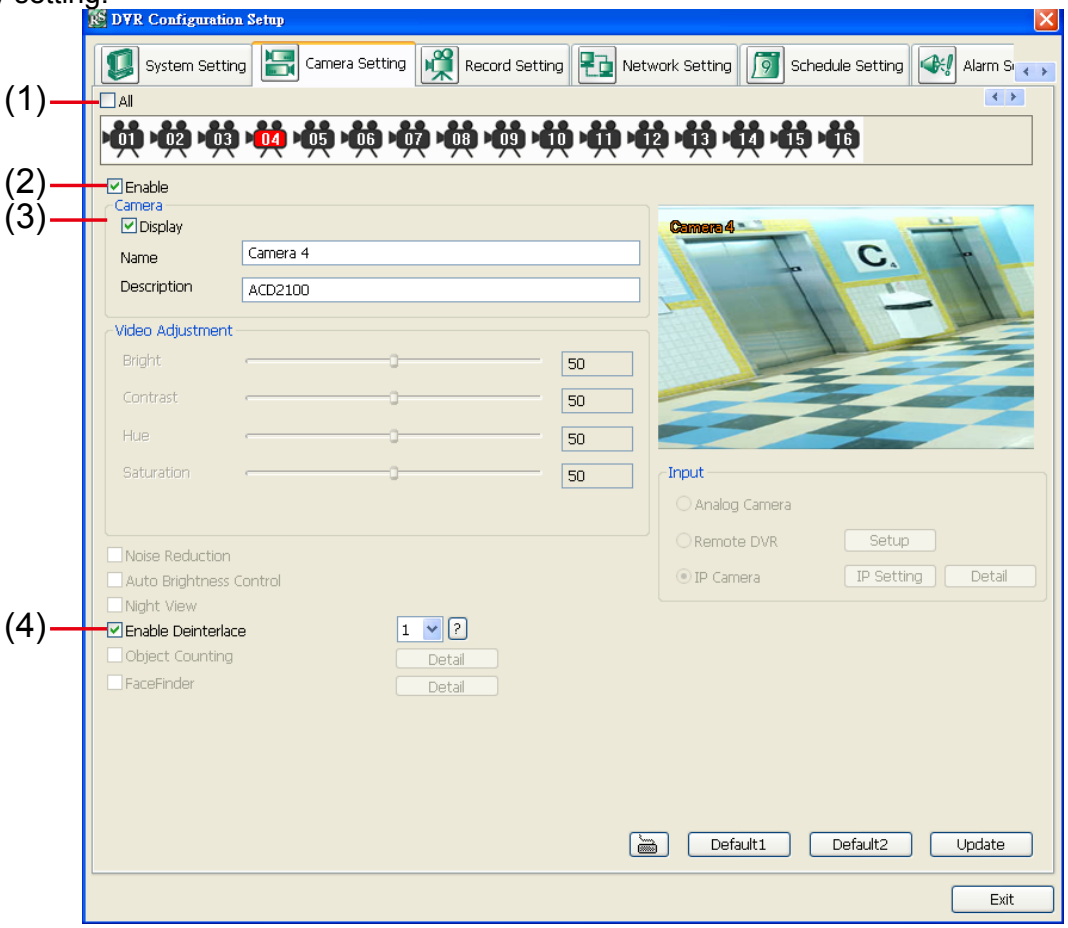
Protect the system from damaging, such as power surges or brownouts. Mark **Enable** and click **Setting** to setup the **Shutdown when capacity below** percentage level for NV DVR to showdown properly when the battery backup power has reached the setting. The UPS device must be connected to your computer (refer to your UPS user's guide).

The UPS application must meet Windows XP or Windows Vista system requirements.



Camera Setting

Select the camera from remote DVR servers to modify settings. In the Camera Setting windows, click **Update** to save and apply the new settings, click **Exit** to exit without saving, and click **Default1/ Default2** to revert back to original factory setting.



(1) Camera Icons

Select the camera number you want to adjust the video setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, Right click on the camera icon. To select one camera only, Left click on the camera icon. The camera icon turns red when it is selected.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Camera

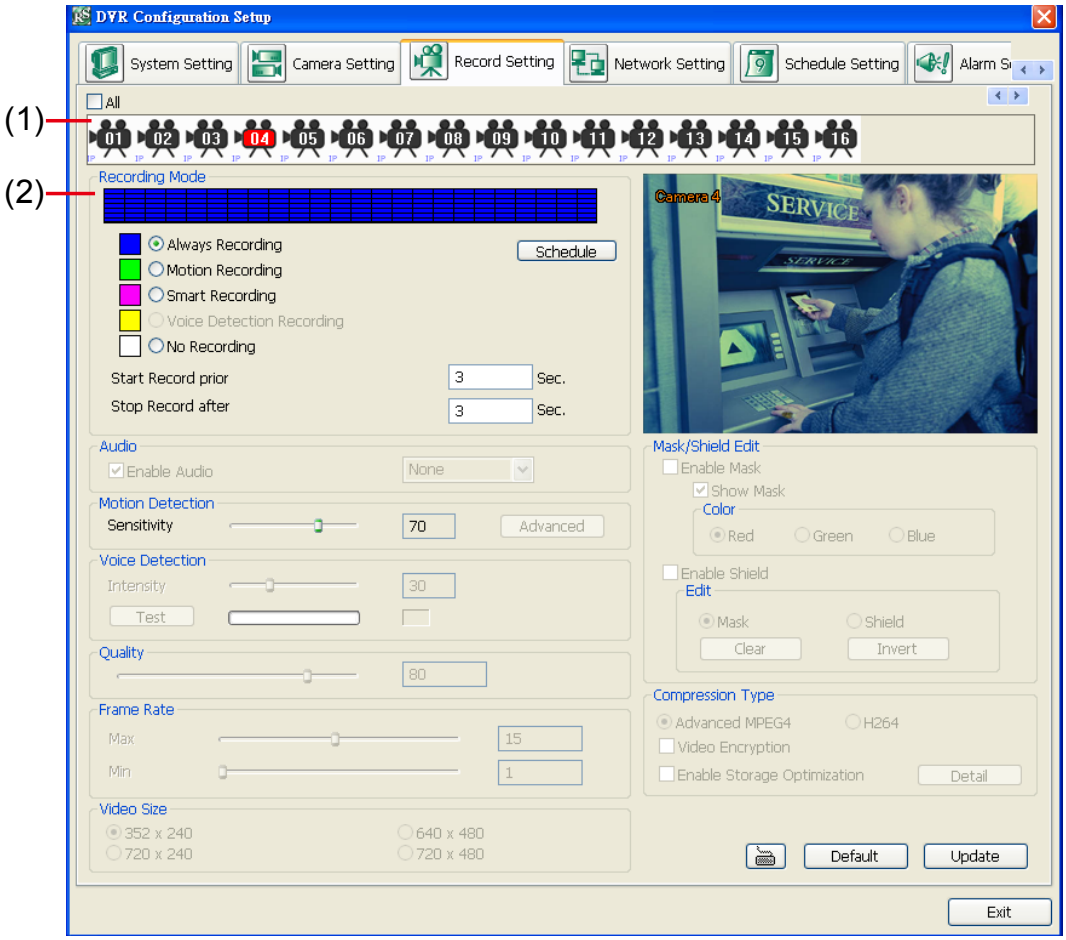
- **Display**
  Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- **Name**
  Change the camera name.
- **Description**
  Add a short comment.

(4) Enable Deinterlace

To enhance the video quality. Set the deinterlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

Record Setting

In the Recording setup windows, click **OK** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.

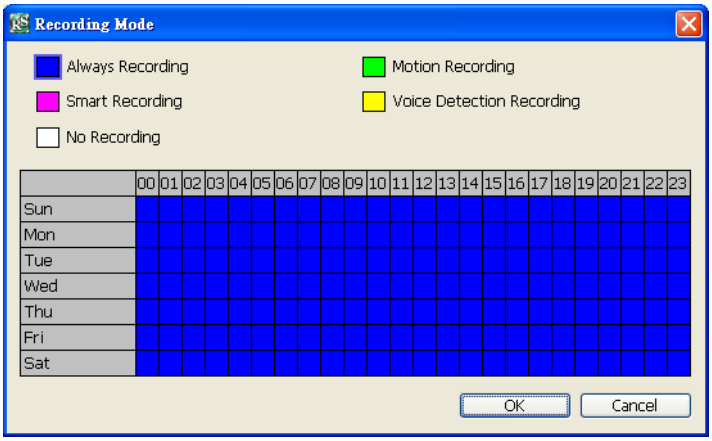


(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Recording Mode

The blocks from 00 to 23 represent the time in 24-hour clock. To record in full 24 hours, select the recording mode and click the ⊙ button. If you want to only record at a particular time, click **Schedule** and select the colored block, and then, click on the time blocks.



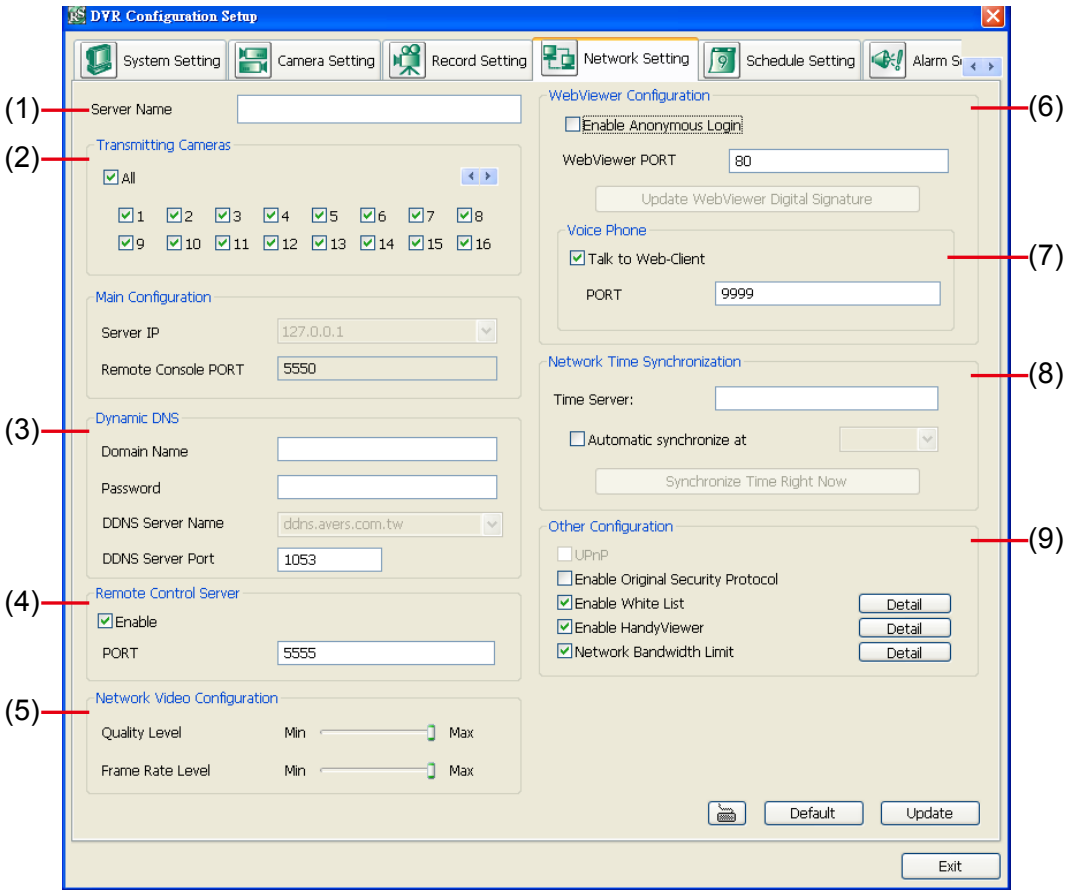
When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- **Always Recording**
  Record the video from the selected camera and save it to the designated storage path
- **Motion Recording**
  Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.

- **Smart Recording**
  Automatically switch to recorded at the maximum frame rate setting once a motion is detected and if there is no motion, it records at the minimum frame rate.
- **Voice Detecting Recording**
  DVR system will record when the voice exceeds the intensity value in **Voice Detection** setting.
- **No Recording**
  The system won't do any recording.

Network Setting

In the Network Setting dialog box, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting. For the network service ports that use by DVR server, please see Appendix A.



(1) Server Name
Assign a name for the DVR unit. Letters of the alphabet and numbers only.

(2) Transmitting Cameras
Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using WebViewer, Remote Console, PDAViewer and HandyViewer (still image). To select all the cameras, enable the **ALL** check box.

(3) Dynamic DNS (Domain Name System)
Enter the Domain Name and Password. To use this feature, go to http://ddns.avers.com.tw and register. (see also Appendix A) You will be prompted to enter CD key number, product name, password, and user information. Use this service if the IP address changes each time when you connect to internet.

(4) Remote Control Server
Enable/disable remote control from remote application (ex. CMS). Enter the remote accessing port in **Port** column.

(5) Network Video Configuration
Set up the video quality and frame rate for viewing and transmitting to the remote program. Scrolling adjust bar to set the **Quality level** and **FrameRate level**.

(6) WebViewer Configuration
Activate **Enable Anonymous Login** to remotely access the DVR server without the need of password. The default of WebViewer port is 80.

(7) Voice Phone
Voice Phone is a 2-Way Talk feature that allows the client and server to talk via internet using microphone. Make sure both microphone and speakers work before using this feature. If the **Talk to Web-Client** is disabled,

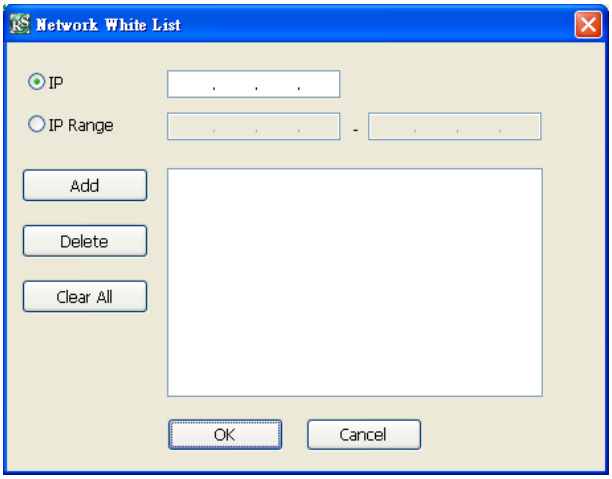
the person in the DVR server side can only hear the voice from the client side that is when the WebViewer 2-Way Talk button is activated. The default port of voice phone is 9999.

(8) Network Time Synchronization

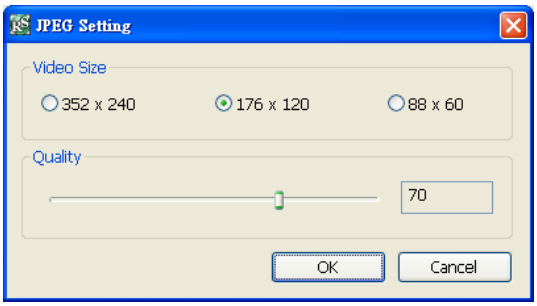
Adjust the DVR system time same as network time server. Fill in the **Time Server** IP address or domain name. Select **Automatic Synchronize** time to set automatic synchronize time on a daily basis.

(9) Other Configuration

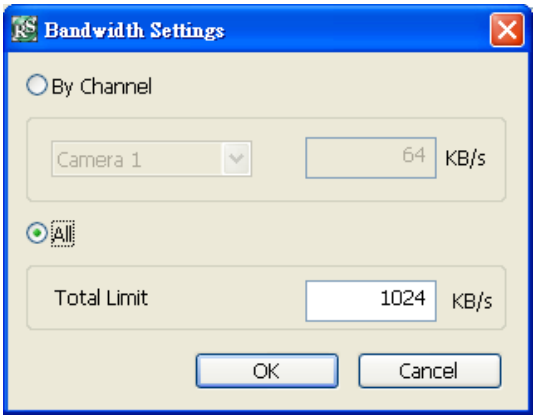
- **UPnP**
  Enable UPnP function to automatically configure the port setting on the local network. This function is available when there is UPNP device in the same network. It will write the DVR port information into the router or other network device
- **Enable Original Security Protocol**
  Enable new version DVR system to accept remote software with former version. For example, if user uses CMS version 7.1 and connect to DVR server with version 7.3, and then, user has to enable this option to make it work. It is due to that DVR system has some new security protocol in DVR with version 7.3 and newer version, and it's not compatible with old remote software.
- **Enable White List**
  An access permit list for the remote accessing of DVR server. Enter the IP address and click **Add**. Or, enter a range of IP address and click **Add**. To delete the IP from the list, select the IP and click **Delete** button. To reset the input, click **Clear** button.



- **Enable HandyViewer**
  Enable remote users to use a PDA or a mobile phone to access DVR server and select the video size and quality. (See also Chapter 6.5 and 6.6)

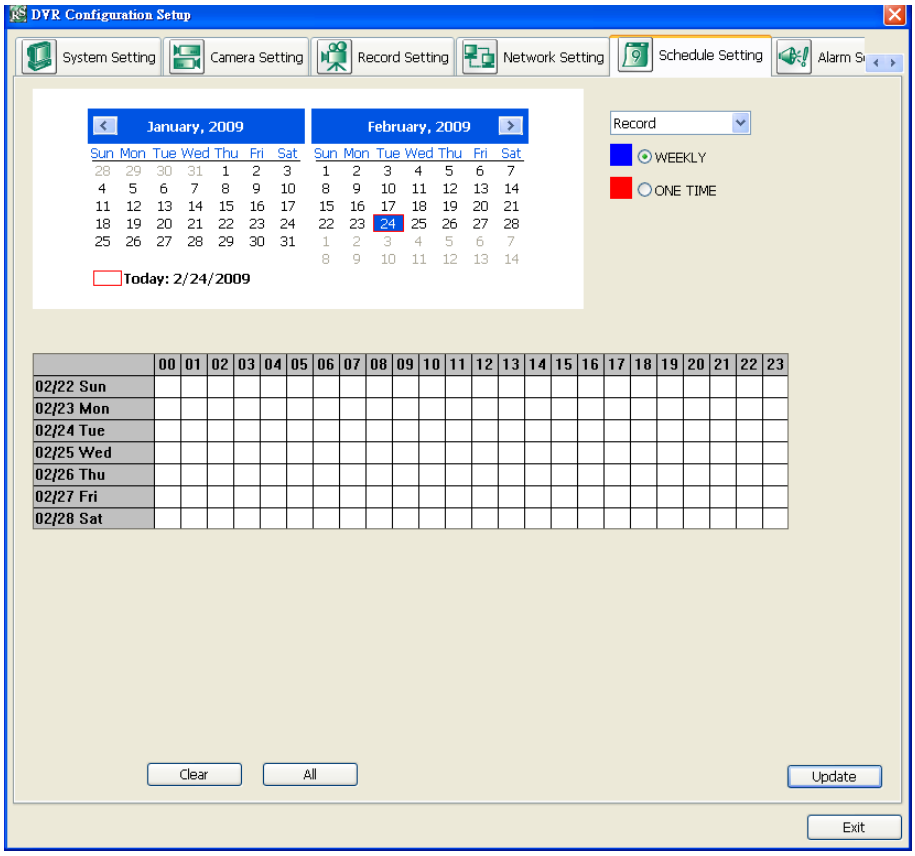


- **Network Bandwidth Limit**
  - ✓ **By Channel:** Set the network bandwidth by each channel.
  - ✓ **All:** Set the total network bandwidth consumption limit.



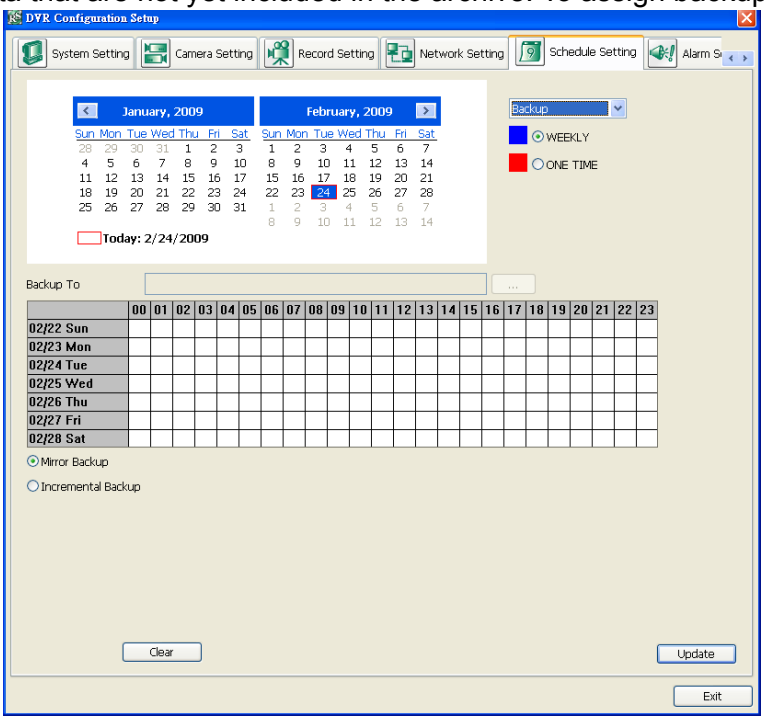
Schedule Setting

Schedule to record, backup, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.



To Set the Schedule Setting:

1. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
2. Select the condition you want to schedule in the drop down list.
   - **Record**
     Activate all the cameras to start video recording at the set time based on the Recording setting (see also Chapter 3.5).
   - **Backup**
     Save another copy of all the data at the set time and specified backup path. DVR automatically updates and only backup the data that are not yet included in the archive. To assign backup path, click ….



✓ **Mirror Backup:** Save a copy of all the data at the set time and specified backup path.

✓ **Incremental Backup:** Only backup the data that are not yet included in the archive from last time.

- **Network**
  Activate DVR remote system to access at the set time. After the appointed time, the Network function will be disabled. If the Network function is already enabled, the Network function will not be disabled when the appointed time has ended.
- **Reboot**
  Restart the PC at the appointed time.

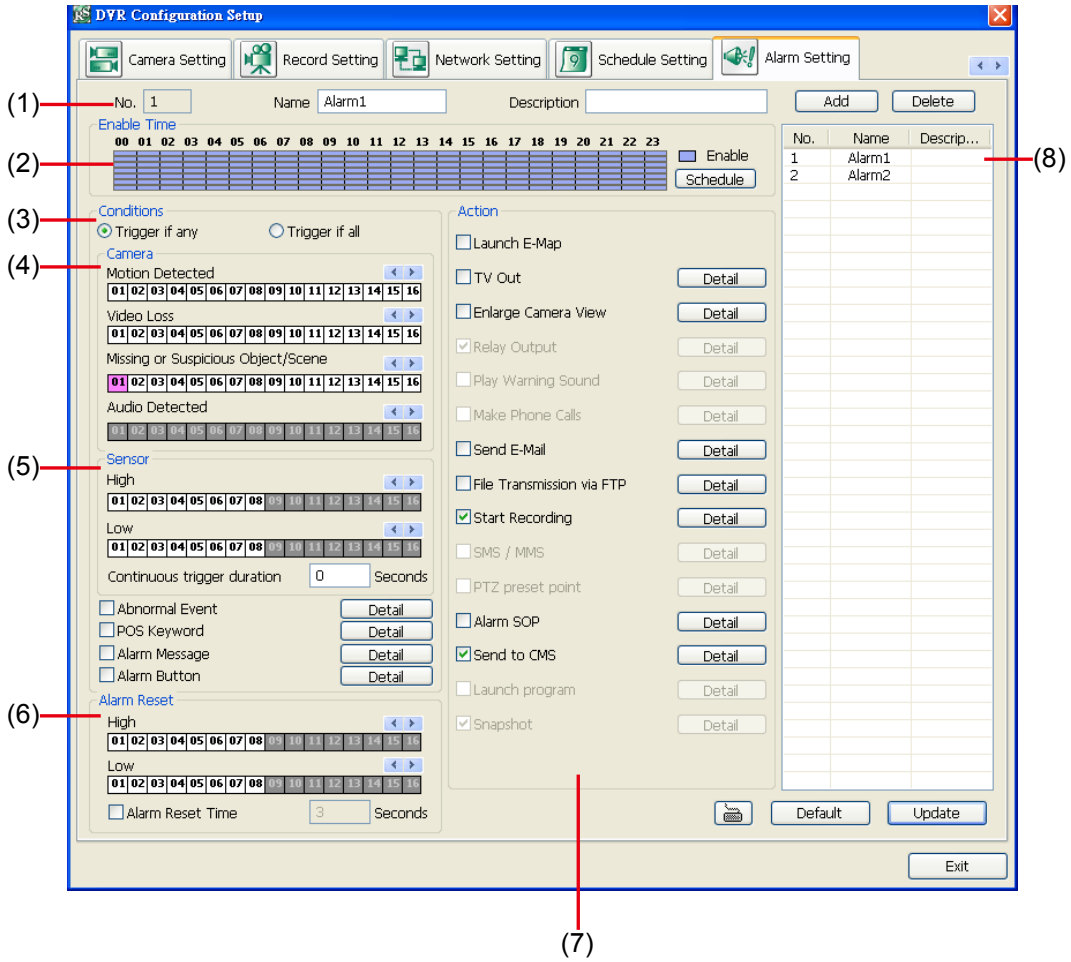
Make sure the Windows operating system is set **NOT** to require you to login user name and password. This way the system will be able to run DVR program.

- **Disable Alarm**
  Deactivate the alarm at the set time temporarily.

3. Specify to either schedule it weekly or one time. Click ⊙ to make a selection.
4. Click on the blocks to set the schedule (see also Chapter 3.5.1). Or click **All** to select all. To store the setting, click **Save**. To remove the settings, click **Clear**.
5. To end Schedule Setting, click **Update** to exit and accept the setting and **Exit** to exit without saving the setting.

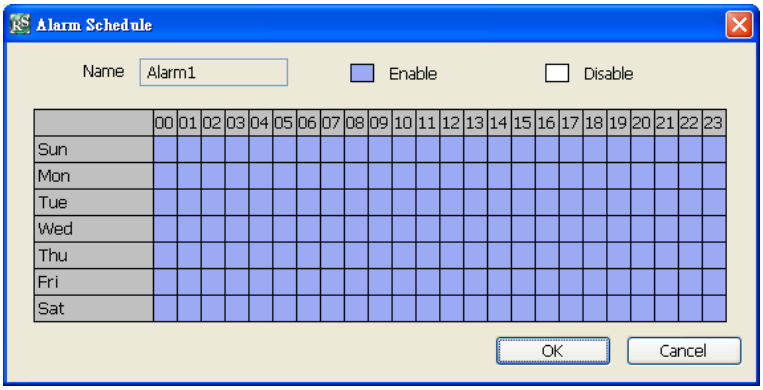
Alarm Setting

In the Alarm Setting dialog box, click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **OK** to exit and save the setting, **Cancel** to exit without saving, and **Default** to revert back to original factory setting.

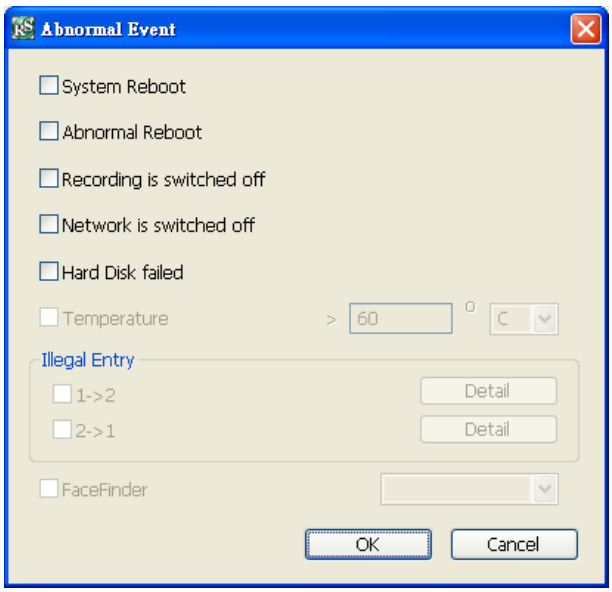


To set the Alarm Setting:

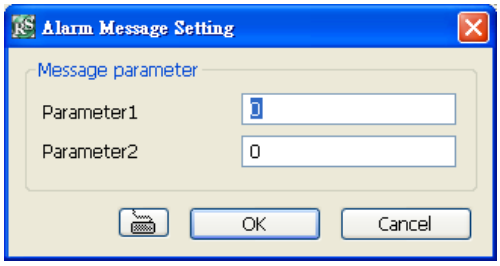
1. Click **Add** to insert and set a new alarm setting. Click the items in the **(8) Alarm Setting List**, if you want to modify the alarm setting.
2. In **(1) Alarm Setting number/Name/Description**, display the selected alarm setting number in the list below. Enter alarm name and description.
3. In **(2) Enable Time**, the number from 00 to 23 represent the time in 24-hour clock. Click **Schedule** and select the time and click the block you want to activate or deactivate the alarm function. When it is deactivated the color of the block turns white.



4. In **(3) Conditions**, you can set "**Trigger if any**" to activate if it falls to one of the conditions or "**Trigger if all**" to activate if it falls to all conditions.
5. In **(4) Camera section:**
   - ✓ Select and click on the camera number (01 to 32) in **Motion Detected** and **Video Loss** to set the condition for the system to alarm.
   - ✓ In **Missing and Suspicious Object Detected**, click the camera number (01 to 32) and select the certain object on the screen, and when the certain object is missing or doubtful, the system will alarm. (see also Chapter 3.9.12) In **Scene Change**, when the camera has been moved, the system will alarm, too.
   - ✓ In **Audio Detection**, click the camera number (01 to 32) to the system to alarm when detect the abnormal voice.
6. In **(5) Sensor**, select and click on the sensor number (use ◀ and ▶ to select the sensor) to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low.
   - ✓ **Abnormal Event:** Enable/disable to set the condition of the event for system to alarm.
     - **System Reboot:** when the DVR system reboot without abnormal condition, the system will send out the alarm message.
     - **Abnormal Reboot:** when the DVR system reboot in irregular condition, the system will send out the alarm message.
     - **Recording is switched off:** when the recording has been stopped, the system will send out the alarm message.
     - **Network is switched off:** when the network connection of DVR system is lost, the system will send out the alarm message.
     - **Hard Disk failed:** when the hard disk can't work normally, the system will send out the alarm message.



   - ✓ **POS Keyword:** Enable/disable to scan the data from the POS if it matches the keyword (see also Chapter 3.9.11).
   - ✓ **Alarm Message:** Enable/disable to active with external alarm message by your own program. For the detail configuration, please contact the local reseller.



- ✓ **Alarm Button:** Enable/disable to active manual alarm function (see also Chapter 2.2#(19)). To define alarm message of manually alarm trigger. Click alarm button and select the alarm button # and fill in the description of alarm button.

7. In **(6) Alarm Reset**, click the camera number (use ◀ and ▶ to select the alarm) to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the sensor condition to low.
8. In **(7) Action**, you may now set the alarm action for the system to perform when the alarm condition is activated.
   - ✓ **Launch E-Map**
     Display mini Emap screen.
   - ✓ **TV Out**
     Switch to only display the video on TV from where the alarm is activated.
   - ✓ **Enlarge Camera View**
     Switch to only display video in Preview/Advanced mode from where the alarm is activated.
   - ✓ **Send E-mail**
     Send an electronic text message. To setup click **Detail** (see also To Setup Send E-mail).
   - ✓ **File Transmission via FTP**
     Upload file to remote computer thru FTP (File Transfer Protocol). To setup click **Detail** (see also To Setup FTP).
   - ✓ **Start Recording**
     Record the video from the selected camera. To setup click **Detail** (see also To Setup Alarm Recording).
   - ✓ **Alarm SOP (Standard Operation Procedure)**
     List the instructions to inform the person of what to do when the alarm is activated. To setup click **Detail** (see also To Setup Alarm SOP).
   - ✓ **Send to CMS (Central Management System)**
     Enable/disable the selected camera to send video to CMS when the alarm is activated (see also To Setup CMS Setting)

To Setup Send E-mail Setting

Beside the Send Email check box, click **Detail**. In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.

(1) Mail Server

Enter the SMTP Server and port. If your e-mail system requires user identification, enable **Authentication** check box and enter User ID and Password.

(2) Mail

To check if it is working, click **Test Account** button.

From: Enter the sender e-mail address.

To and CC: Enter the recipient email address and separate it with comma or a semicolon (;).

Subject: Enter the message title.

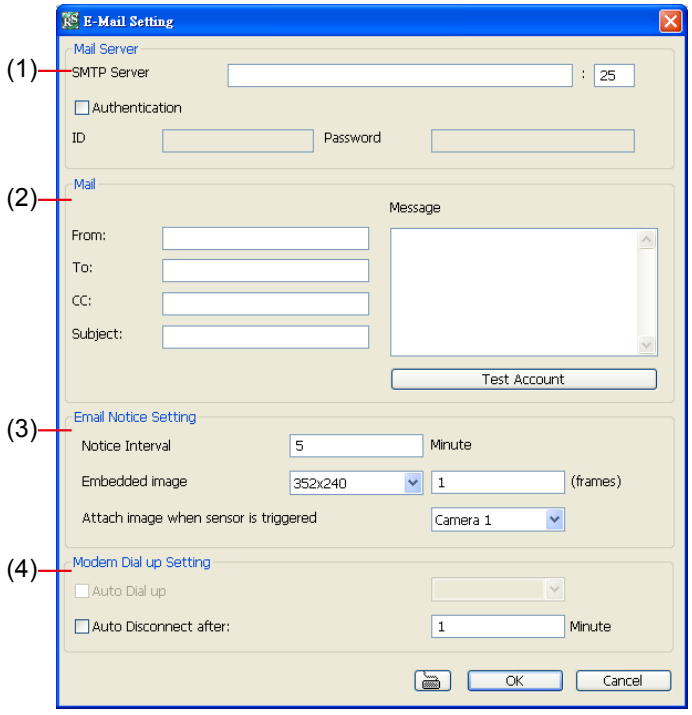
Message: Type the message.

(3) Email Notice Setting

- ✓ **Notice Interval:** Set the period of time before it sends another e-mail notice.
- ✓ **Embedded image** **:** Select the image size and set the number of frames.
- ✓ **Attach image when sensor is triggered:** When the sensor is triggered, the system will capture the image and send the image to the certain e-mail address with the alarm message.

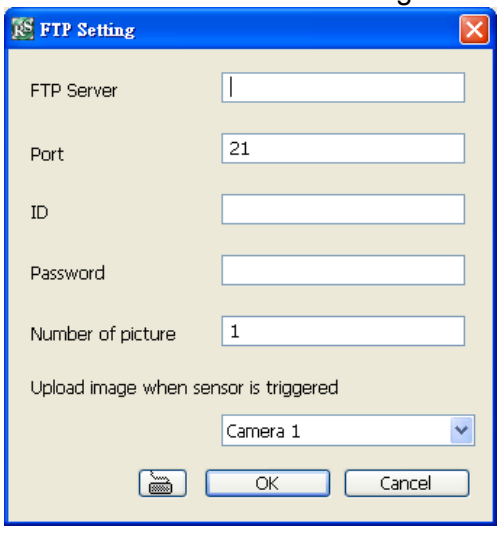
(4) Modem Dial up Setting

User may set the time to disconnect automatically, just enable the **Auto Disconnect after** check box and set time.



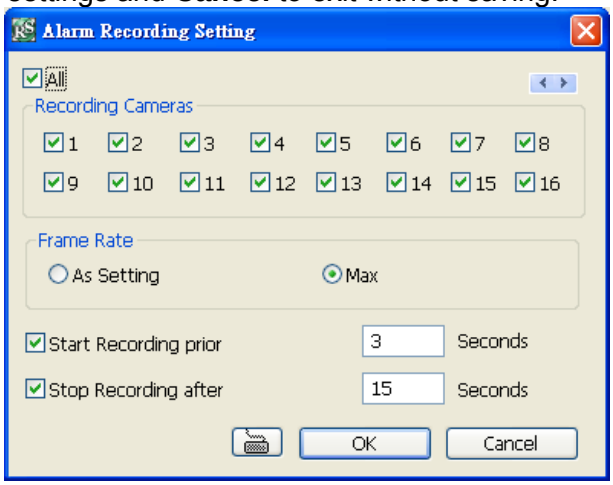
To Setup FTP Setting

1. Beside the File Transmission via FTP check box, click **Detail**.
2. In the FTP Setting dialog box, enter the FTP IP, port, user ID and password.
3. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



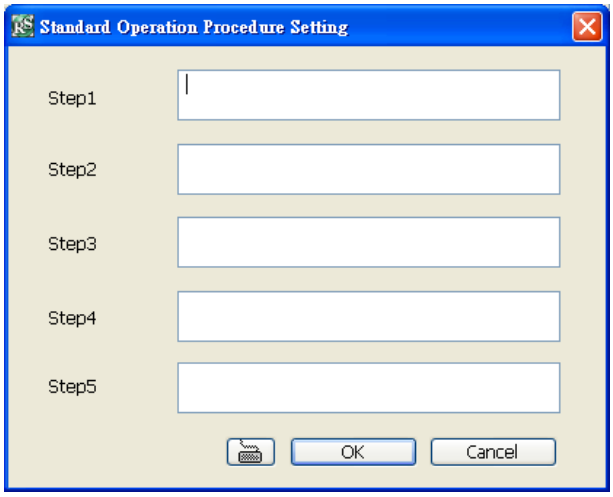
To Setup Alarm Recording Setting

1. Beside the Start Recording check box, click **Detail**.
2. In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable **All** to select all cameras.
3. In the Frame Rate selection, select **As Setting** to record the number of frames based on the Recording Setting or **Max** to record the maximum of frames based on the available speed.
4. In the **Stop Recording after** text box, set the number in second for the program to continue recording after the alarm has ended.
5. Click **OK** to accept the new settings and **Cancel** to exit without saving.



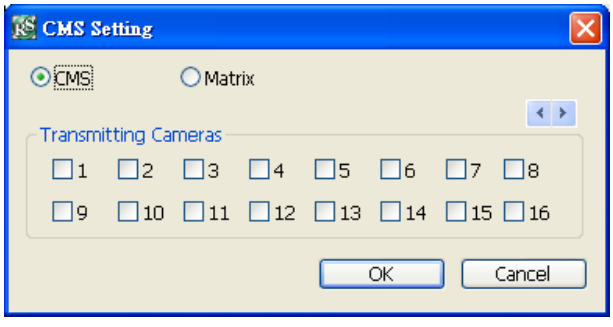
To Setup Alarm SOP

Beside the Alarm SOP check box, click **Detail**. In the step text boxes, type the standard protocol when the alarm is activated. When the alarm is activated, the Standard Operation Procedure dialog box will appear. Just click **Next** to see the next instruction, **Back** to see the previous instruction, **Finish** to end and **Abort** to terminate.



To Setup CMS Setting

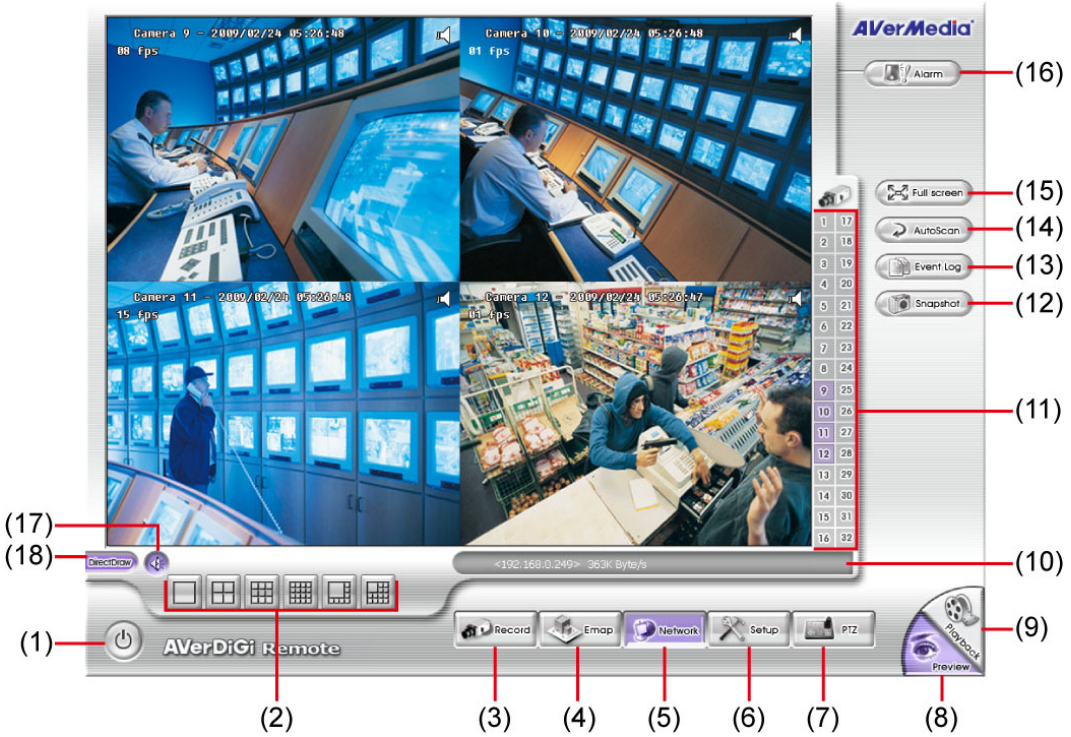
Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.



6.2 Familiarizing the WebViewer PTZ Buttons

Name	Function
(1) Direction buttons	Adjust and position the focal point of the PTZ camera. Click the center to pan automatically.
(2) Select PTZ	Choose to enable/disable the PTZ camera. In the Select PTZ dialog box, Select column, click to enable/disable viewing and controlling the PTZ camera. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.
(3) AutoPan Groups	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Camera preset position number	Move the PTZ camera to the preset point. The camera position number is setup in DVR site(see 2.12#4)
(5) Zoom +/-	Zoom in and out the image.
(6) Focus +/-	Adjust the focus manually to produce clear image.

6.3 Familiarizing the Remote Console Buttons



Name	Function
(1) Exit	Close the Remote Console.
(2) Split Screen Mode	Select from 6 kinds of split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. To view 32 channels, click 16 split screen button to switch channel display.

- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To change the video quality, right-click on the screen and select between High, Normal or Low.

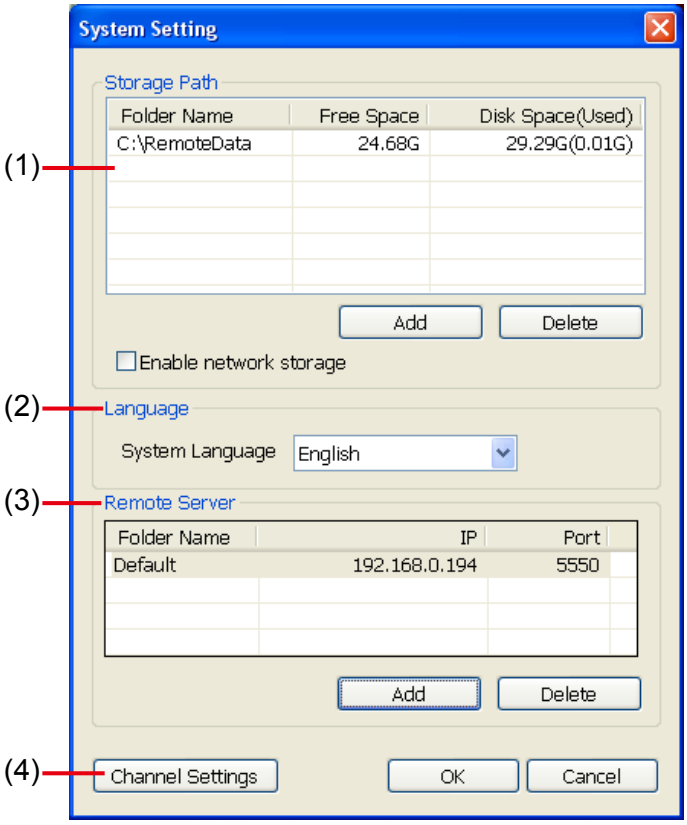
(3) Record	Start/stop video recording.
(4) Emap	Display the map in each area, the camera/sensor/relay location and the warning event. (see also 2.6)
(5) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection.
(6) Setup	Configure the Remote Console setting. (see also 6.3.1)
(7) PTZ	Access PTZ control panel(see also 6.4)
(8) Preview	Switch to Preview/Advanced mode. This allows you to view live camera display.
(9) Playback	Switch to Playback mode. This allows you to view the recorded video file. (see 6.5)
(10) Status Bar	Display the current date, time and hard disk free space.
(11) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(12) Snapshot	Capture and save the screen shot either in *.jpg or *.bmp format.
(13) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(14) Auto Scan	Start/Stop video screen cycle switch
(15) Full screen	Use the entire area of the screen to only display the video. To return, Right click the mouse or press ESC on the keyboard.
(16) Alarm	Alert and display warning info. Only Administrator-level can reset and turn on, off and trigger the Sensor and Relay by right-clicking the item in the Sensor and Relay list.
(17) Volume	Enable/disable the sound.

Name	Function
(18) Direct Draw	Enhance the video quality.

Not all graphic cards can support this function.

6.3.1 To Setup Remote Console Setting

Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



(1) Storage Path

Set the directory on where to save the data. When there is not enough free space to record one hour data, the system automatically replaces the oldest data. In case you have more than one storage path, the system automatically saves the data to the next storage path.

By default the data is stored in C:\RemoteData, to insert another storage path, click **Add**. To remove the selected path, click **Delete**.

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box.

(2) Language

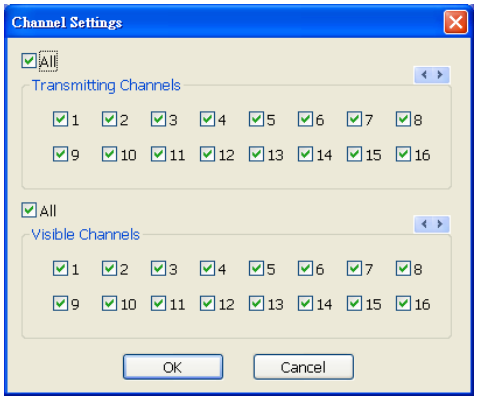
Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.

(3) Remote Server

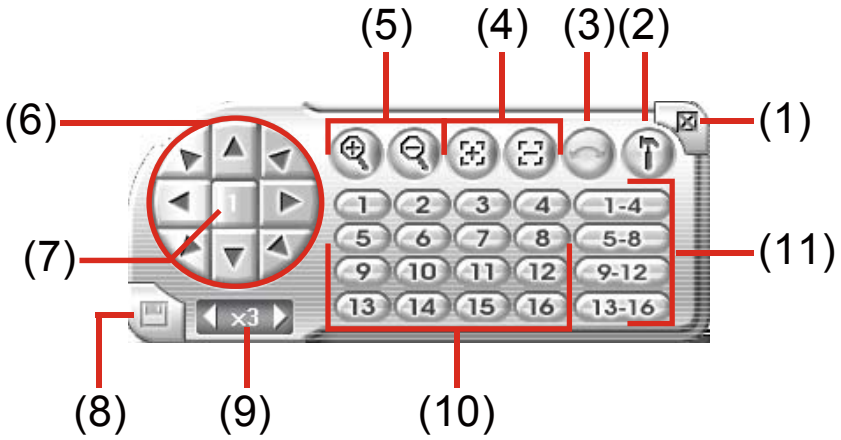
Enter the DVR Server IP and Port number.

(4) Channel Settings

The numbers from 01 to 16 represent the camera ID. In Transmitting Channels section, enable the camera number to receive the camera signal from the server. In Visible Channels section, enable the camera number to view the camera signal on Remote Console screen. To select all the cameras, enable the **ALL** check box.



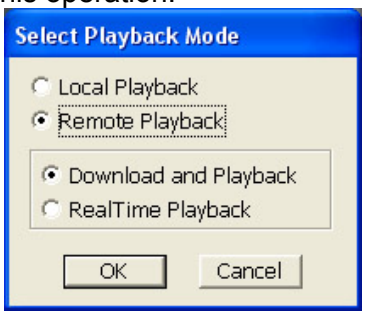
6.4 Familiarizing the Buttons in PTZ Camera Controller



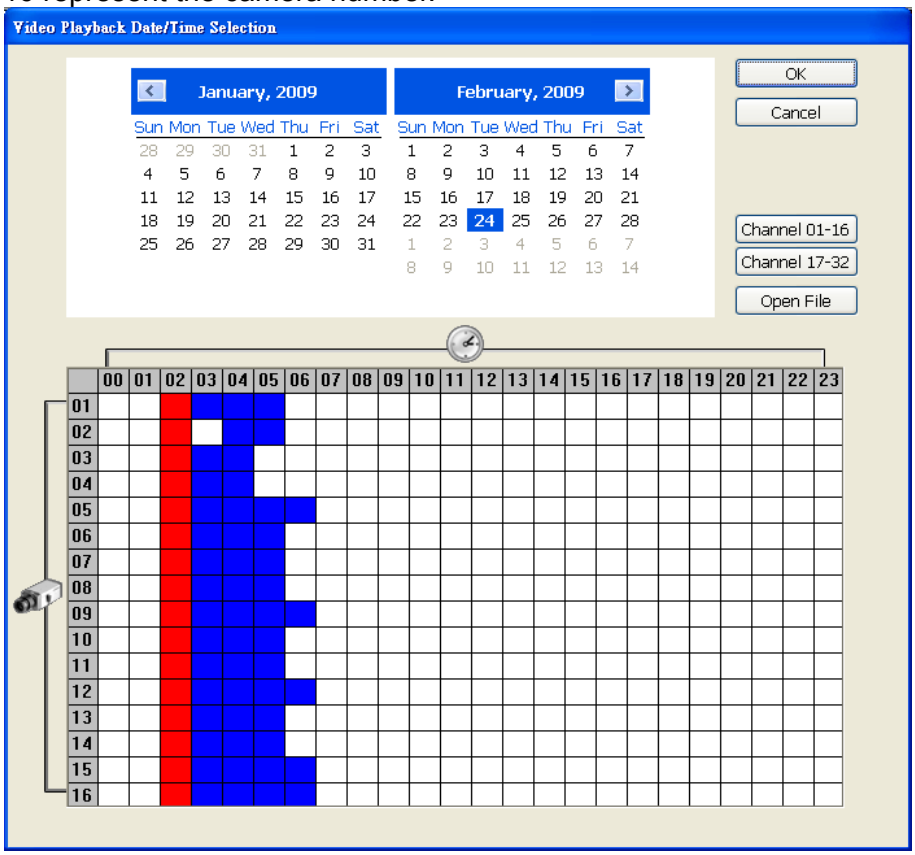
Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Configure PTZ cameras.
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Save Camera preset position	Save the PTZ camera preset position number. Select the camera and click the preset position number and save it.
(9) Camera lens speed controller	Adjust the moving speed of the PTZ camera lens.
(10) Camera preset position number	Move the PTZ camera to the preset point.
(11) Group AutoPan	Select to automatically operate PTZ camera in group.

6.5 Using the Remote Playback

To use this feature, first you need to select the source of the file. In the Select Playback Mode dialog box, choose **Local Playback** to open the file that is recorded in the Remote Console, and **Remote Playback** to open the file that is recorded in the DVR server. When you choose Remote Playback, select **RealTime Playback** if your internet bandwidth is fast and big enough, otherwise choose **Download and Playback**.
Click **OK** to proceed and **Cancel** to void this operation.

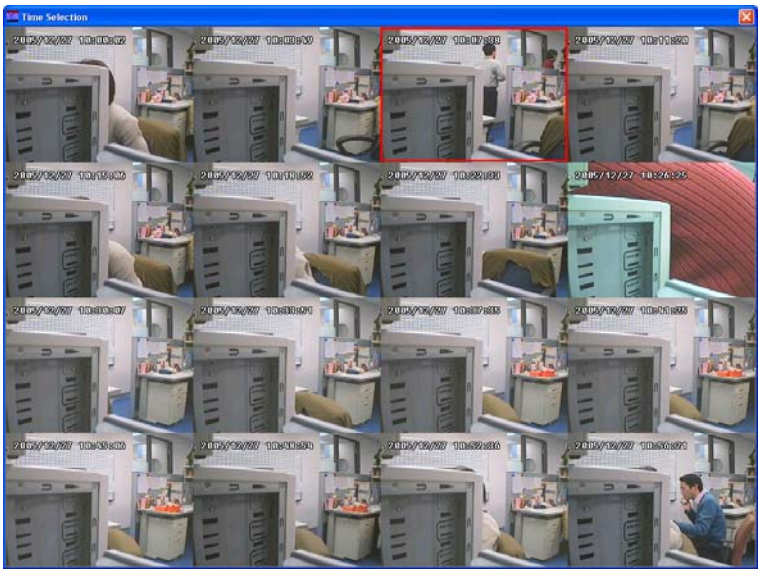


In the Video Playback Date/Time Selection, the number from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera number.

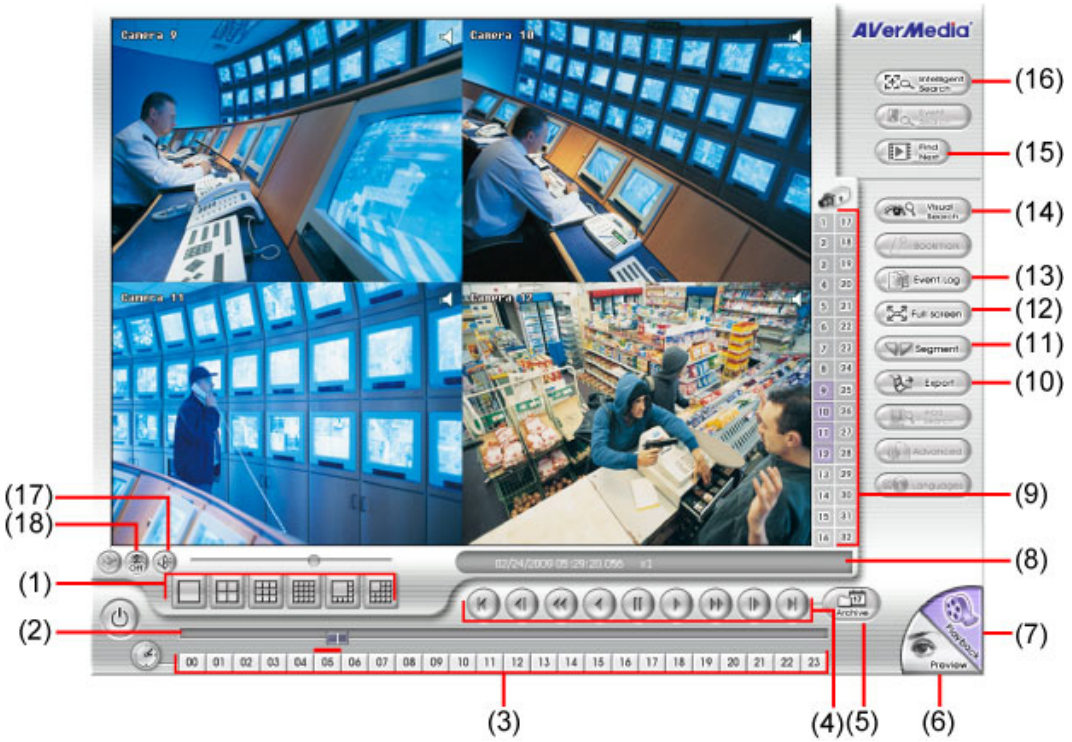


To Make a Selection:

1. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
2. In the table below, click on the blue block to select and open the recorded file. The blue block turns red when it is selected. The block that appears in white doesn't have data. You can only select one block when you choose Download and Playback.
3. Click **OK** to proceed and **Cancel** to void this operation.
4. If you select Download Playback and after making the selection, the system divides the selected hour into 16 video thumbnails. In the Time Selection screen, click on the video thumbnail you want to download and open (see also 6.5.2).



6.5.1 Familiarizing the Local Playback Buttons



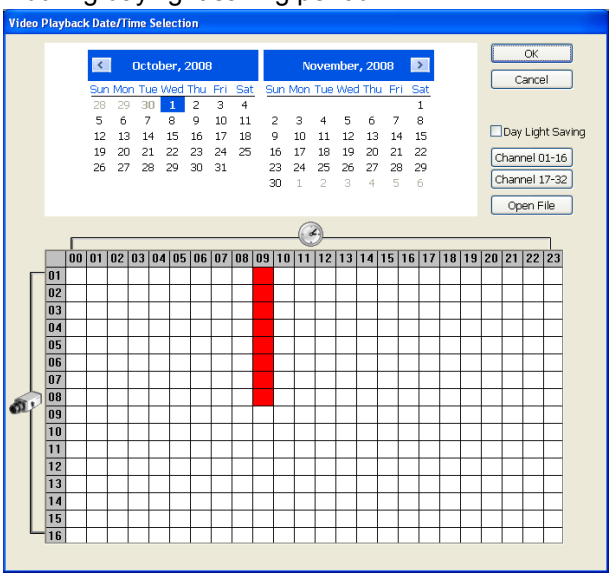
Name	Function
(1) Split Screen Mode	Select from 6 kinds of split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. To view 32 channels, click 16 split screen button to switch channel display.

- If there are only 4 cameras, you won't be able to switch to 9, 16, and 13 split screen mode.
- To zoom in an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.

(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.

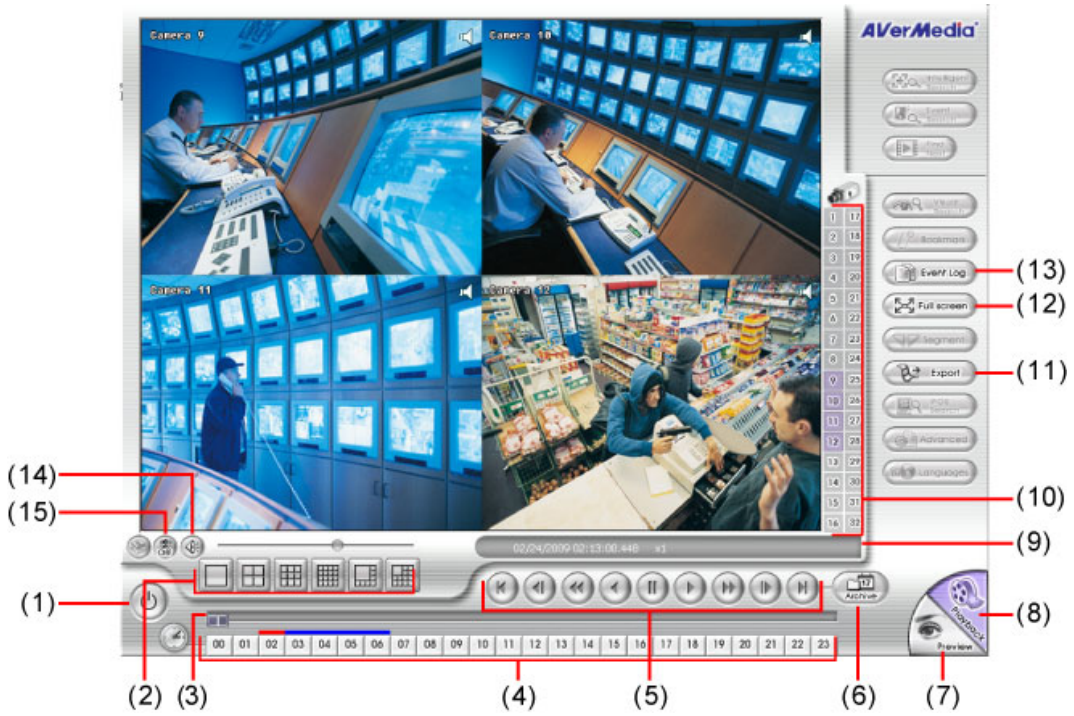
(4) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of ½x, ¼x, or ⅛x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.

Name	Function
(5) Archive	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file. – Also, user can open the recorded file from certain location by click **OPEN FILE** button – Click **Channel 01~ 16** and **Channel 17 ~ 32** button to switch to different channel group of playback calendar. – Mark **Day Light Saving**, the playback calendar will show the available playback records during day light saving period. 

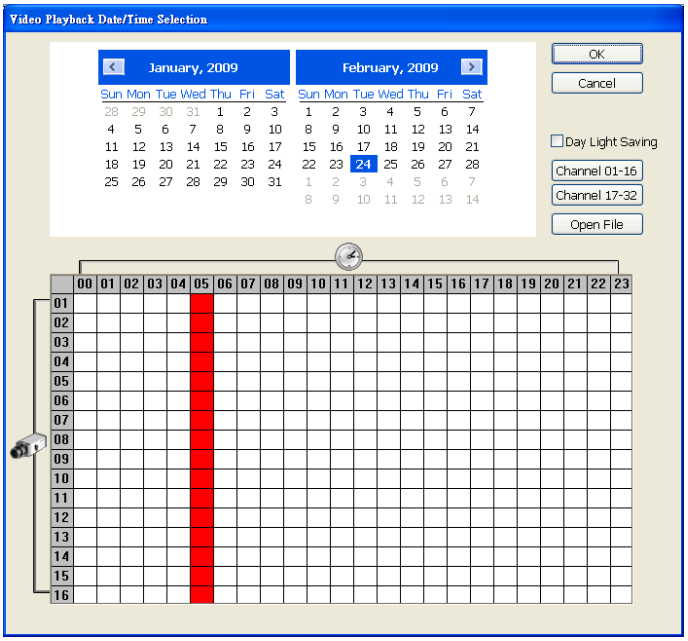
The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.

(6) Preview	Switch to Preview/Advanced mode.
(7) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(8) Status bar	Display the recorded date, time and play speed.
(9) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(10) Export	Export includes Snapshot, Print, and Output Video Clip function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output Video Clip:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also 2.7).
(11) Segment	Keep a portion of the recorded video you want (see also 2.7).
(12) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(13) Event Log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(14) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also 2.9)
(15) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(16) Intelligent Search	Search the changes in the motion detector frame (See also 2.11)
(17) Audio	Enable/disable audio play
(18) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

6.5.2 Familiarizing the RealTime Playback Buttons



Name	Function
(1) Exit	Close the program
(2) Split Screen Mode	Select from 6 different split screen type to playback the recorded video file of all the camera, or one camera. To view all channels, click 4 split screen button to switch channel display.
ⓘ To zoom in an area on the screen, **Right** click and **Drag** a square on the area you want to enlarge.	
(3) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(4) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
ⓘ The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.	
(5) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of ½x, ¼x, or ⅛x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.

Name	Function
(6) Date	– Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file. – Also, user can open the recorded file from certain location by click **OPEN FILE** button – Click **Channel 01~ 16** and **Channel 17 ~ 32** button to switch to different channel group of playback calendar. – Mark **Day Light Saving**, the playback calendar will show the available playback records during day light saving period. 

The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.

(7) Preview	Switch to Preview/Advanced mode.
(8) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(9) Status bar	Display the recorded date, time and play speed.
(10) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(11) Export	Export includes Snapshot, Print, and Output Video Clip function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output Video Clip:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also 2.7).
(12) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(13) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(14) Audio	Enable/disable audio play
(15) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

6.5.3 Familiarizing the Download and Playback Buttons

Name	Function
(1) Exit	Close the program
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.

(4) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of ½x, ¼x, or ⅛x. **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.
(5) Status bar	Display the recorded date, time and play speed.
(6) Language	Select the language of function tips
(7) Export	Export includes Snapshot, Print, and Output Video Clip function. ■ **Snapshot:** Capture and save the screen shot either in *.jpg or *.bmp format. ■ **Print:** Print the screen shot. ■ **Output Video Clip:** Save the segmented file in *.mpg, *.avi, or *.dvr format (see also 2.7).
(8) Segment	Keep a portion of the recorded video you want (see also 2.7).
(9) Full screen	View in Playback-compact mode. To return, press the right button of the mouse or ESC on the keyboard. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(10) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or POS.
(11) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second. (See also

Name	Function
	2.9)
(12) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Intelligent Search or Event Search function.
(13) Event Search	Search from the recorded activities that take place in the system (i.e., Sensor, Motion, Video Loss, POS). (See also 2.10)
(14) Intelligent Search	Search the changes in the motion detector frame (See also 2.11)
(15) Audio	Enable/disable audio play

6.6 Using HandyViewer to Access DVR Server

Users can use a mobile phone to access the DVR through Internet. Make sure your mobile phone support IE browser and is connected to the internet. To access the DVR server, open IE browser and enter http://enter server IP or domain name here/mobile. You can see the latest screen shot. Click **<<** **>>** to change the channel or camera and **Refresh** to reload new screen shot.

6.7 Using PDAViewer to Access DVR Server

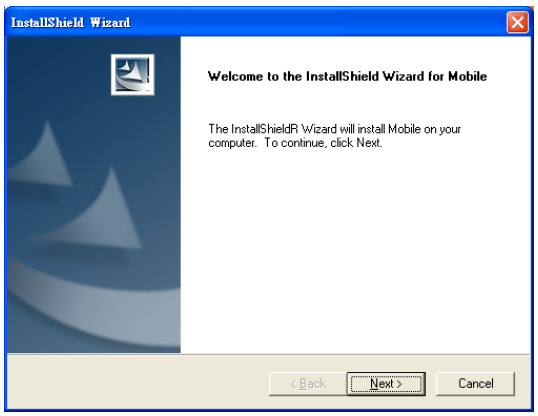
Users can also use a PDA to access the DVR through Internet. Make sure your PDA support IE browser and is connected to the internet. To use this feature, you need to install the PDAViewer software either thru ActiveSync connection or download it from the internet. Please check if your PDA meets the 2 requirements below.

OS: MS Windows CE 4.0, PocketPC 2002/2003, Mobile 5 PDA version CPU: ARM architecture

6.7.1 To Install PDAViewer thru ActiveSync

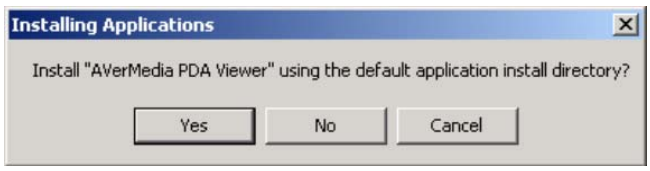
1. Connect your PDA to your PC. Place the CD into the CD-ROM drive then click **Install PDA Viewer**. And follow the on screen instructions.

2. Click Next to continue.

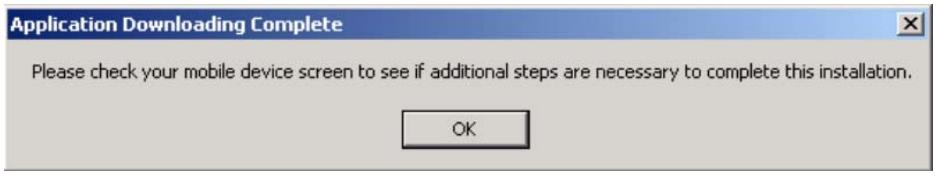


3. Read the license agreement and click **Yes** to accept all the terms. The system will then automatically install the application.

4. When you are prompted, click **Yes** to install the application using the default directory.

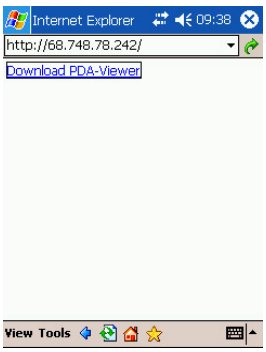


5. When done, click OK.



6.7.2 To install PDAViewer from the Internet

1. Make sure you are connected to the internet.
2. Open the web browser and enter the server IP. Then click the hyperlink Download PDAViewer.

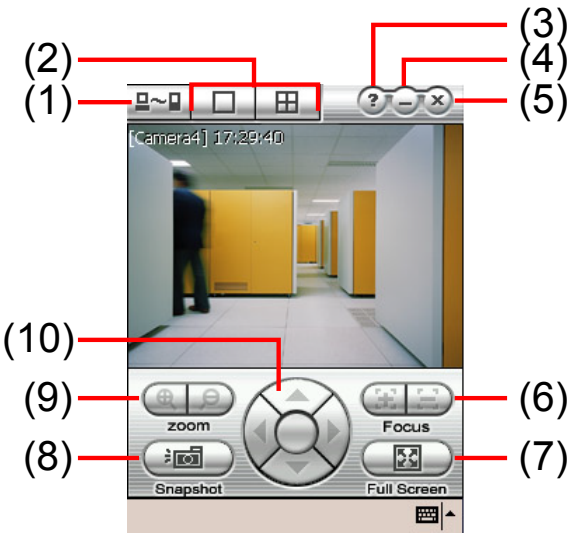


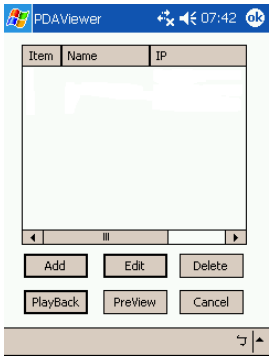
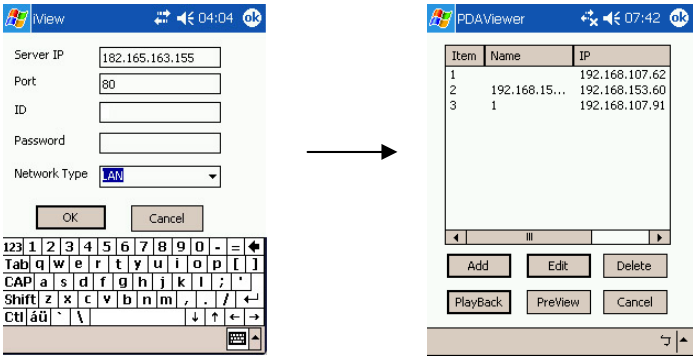
3. When the Download dialog box appears, enable Open file after download and click **Yes**.

4. After the installation, the PDAViewer application icon will appear in the Programs list.

6.7.3 To Use the PDAViewer

1. Run the PDAViewer in the Programs.
2. Familiarizing the PDAViewer buttons.



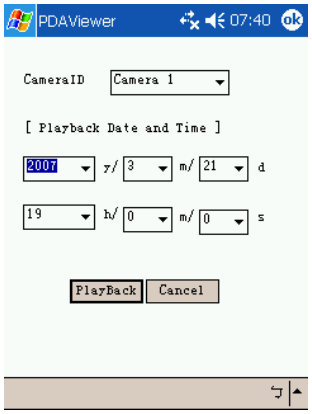
Name	Function
(1) Connect	Hook up to the DVR server. Make sure you are connected to internet. When the iView screen appears, click Add to add DVR server.  Enter the server IP, port, user ID, password and select the connection type. Then, click **OK**.  User can playback the recorded video from remote DVR server in PDAViewer.(see Chapter 6.7.4)
(2) Split Screen Mode	Select between 2 screen display types. It also allows you to switch and view different camera number or channels.
(3) About	Display the PDAViewer software version.
(4) Minimize	Reduce the size to taskbar.
(5) Exit	Close the PDAViewer.
(6) Focus	Adjust the focus of PTZ camera to produce clear image.
(7) Full Screen	Use the entire screen to only display the video.
(8) Snapshot	Capture and save the screen shot in *.bmp format.
(9) Zoom	Zoom in and out the PTZ camera image.

Name	Function
(10) Direction buttons	Adjust and position the focal point of the PTZ camera.

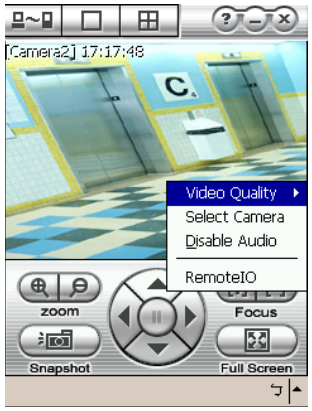
3. To change the video quality, enable/disable audio, and select to display different camera, tap on the video screen longer the popup menu will appear.

6.7.4 To Playback in PDAViewer

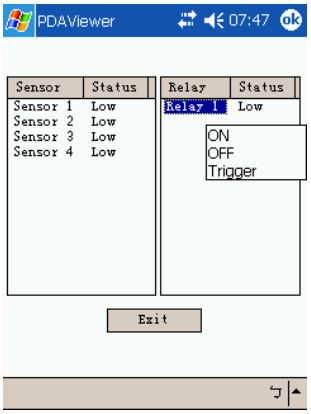
1. Run the **PDAViewer** in the Programs.
2. Hook up to the DVR server.
3. Click **Connect** icon and select the DVR server
4. Click **Playback** to enter playback option screen
5. Select the **camera**, **data**, and **time**
6. Click **Playback** to start playing the recorded video



7. While playback, user can view and change status of I/O devices
8. On the playback screen, tap on video screen longer the pop up menu will appear
9. Select the **Remote IO**



10. The sensor and relay devices will list as below:



11. User can change the relay status. Select the relay and tap on video screen longer the pop up menu will appear, and then, select the status (ON, OFF, Tigger)

6.8 Using JavaViewer to Access DVR Server

Using the mobile phone within Symbian Smart Phone OS to access the DVR through Internet. Make sure your mobile phone supports Symbian Smart Phone OS and can be connected to the internet. To use this feature, you need to install the JAVA Viewer program that it can be downloading it from the DVR server through the internet.

6.8.1 To install JAVAViewer from the DVR Server

1. Open the web browser and enter the DVR server IP (http://DVR server IP: port/JAVA-Viewer.html). Then click **Connect**.
2. When the Download screen appears, select **JAVA-Viewer.jad** and download it to your mobile phone.
3. After the installation, the JAVAViewer will be in your mobile phone system. To find the JAVAViewer program where is located, please refer to your mobile phone user's manual.

6.8.2 To Use the JAVAViewer

1. Run the JAVAViewer program.

2. Enter the DVR IP address, port number, user ID, and password. Please refer to your DVR server setting for that information.

3. And then, select the Connect to connect to DVR server.

4. Click **Yes** to accept the data from DVR server.

5. When connection is success, you will see the camera video on the screen.

6. To switch to different camera view, select menu and select the channel.

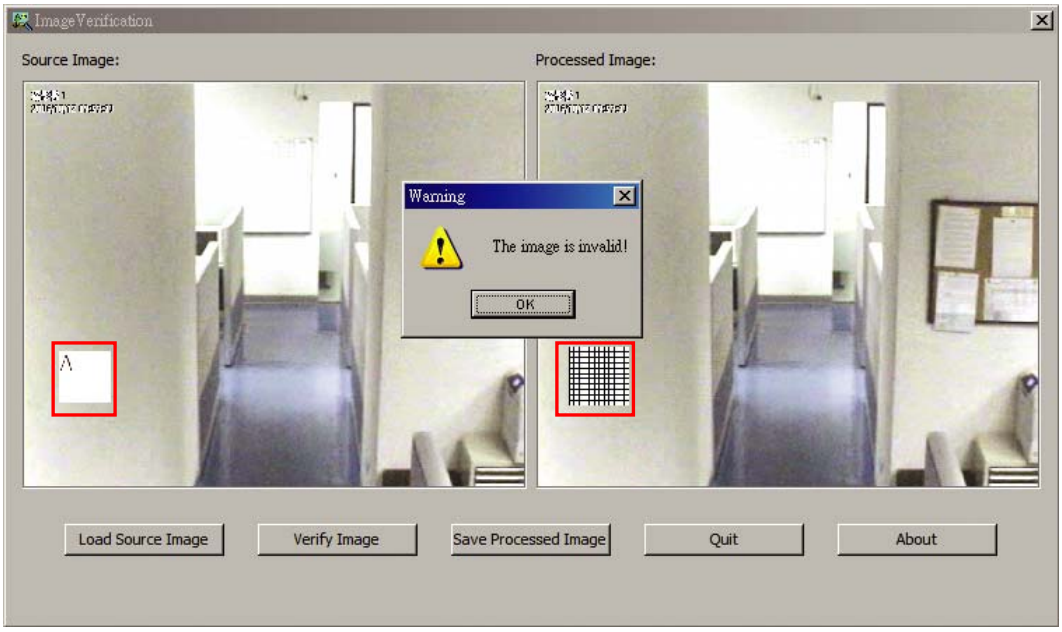
7. The JAVAViewer support PTZ control function, you can refer to **Help** file for detail function control key. Select **menu** and go the way down to select the **Help** file.

Chapter 7 Image Verification

ImageVerification is a watermark-checking program to identify the authenticity of a saved image (e.g. by snapshot). This program can only verify uncompressed bmp image files.

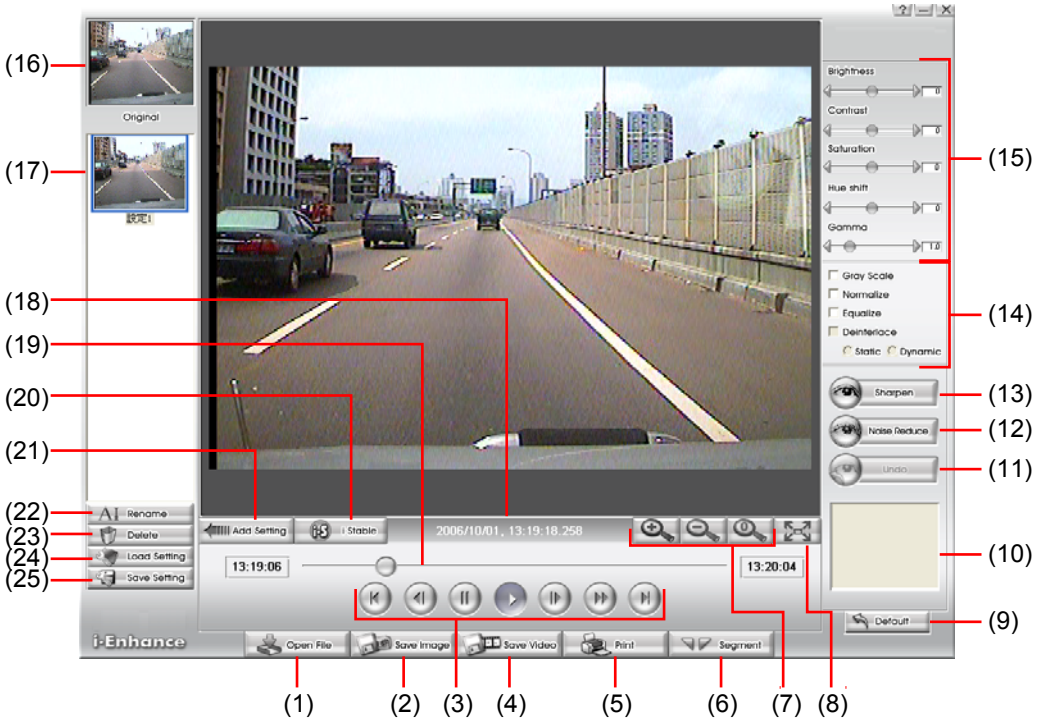
7.1 To Run the ImageVerification program

1. Click **Start** > **Programs** > **DSS** > **ImageVerification.**
2. In the ImageVerification screen, click **Load Source Image** and locate the image source.
3. Click **Verify Image** to begin the process.
4. Check the result in the Processed Image screen. If the picture is unmodified, the image in the Source Image and Processed Image screen would be exactly the same. If the picture is being modified, a warning dialog box would prompt you and the modified area is highlighted.



Chapter 8 iEnhance

The bundled iEnhance is a video editing tool and can only be used with *.dvr video file. It allows you to adjust the video picture quality, segment and save the wanted portion of the video, zoom in and out the image, and print or save the screen shot. You can also save the setting and apply it on other files.



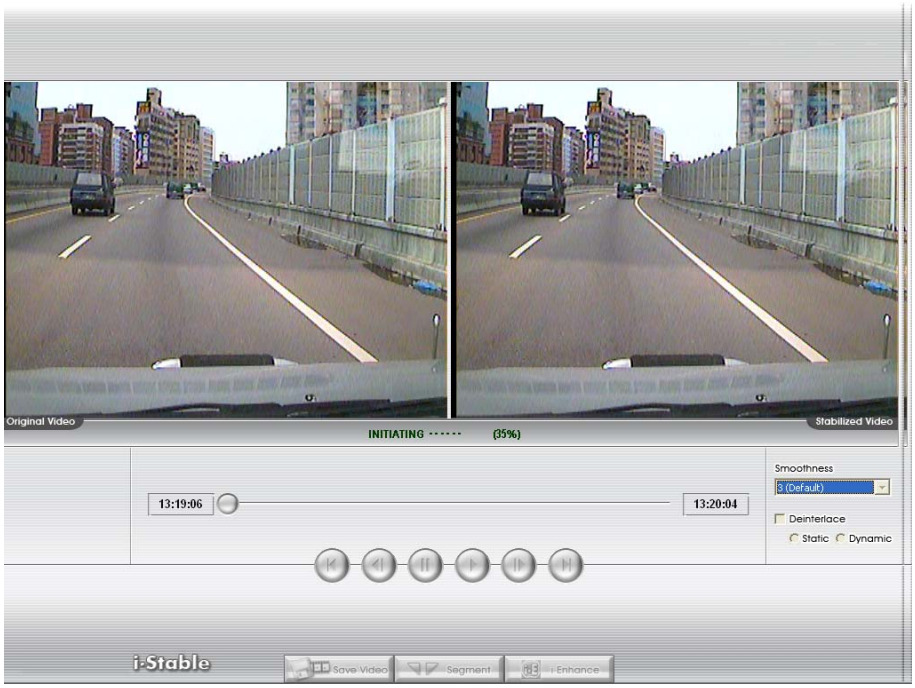
Name	Function
(1) Open File	Access *.dvr video file.
(2) Save Image	Capture and save the screen shot in *.bmp format.
(3) Playback Control Buttons	**Begin:** Move at the beginning of the video file. **Previous:** Go back to previous frame. **Pause:** Briefly stop playing the video file. **Play:** Play the video file. **Faster:** Play the video file at the faster speed. **Next:** Go to the next frame. **End:** Go to the end of the video file.
(4) Save Video	Save the edited or segmented video in *.avi format.
(5) Print	Print the screen shot.
(6) Segment	Mark the beginning and the end of the wanted portion of the video. Two triangle marks will appear on the slider. To cancel video segmentation, click this button again.
(7) Zoom Buttons	Enlarge, reduce, and set the image back to normal size.
(8) Full Screen	Use the entire screen to only display the video.
(9) Default	Set the video back to original state and delete all the changes in the history box.
(10) History Box	List all the actions.
(11) Undo	Delete the last action.
(12) Noise Reduce	Adjust the softness and repair the damaged colours.
(13) Sharpness	Improve the overall image by enhancing edges. This gives the image more depth.
(14) Effects	• **Gray Scale**: convert the image into black and white (monochrome). • **Normalize:** adjust the brightness intensity. • **Equalize:** automatically adjust the images that are too dark. • **De-interlace:** smooth out the overlying frames. ✓ **Static:** de-interlace for motionless scene. ✓ **Dynamic:** de-interlace for moving scene.

Name	Function
(15) Picture Adjustment	Adjust the Brightness, Contrast, Saturation, Hue and Gamma.
(16) Original Screen	Display the original state of the image.
(17) Temporary Setting Block	Display the sample settings. Click the sample to apply the setting on the current video.
(18) Status Bar	Display the date, and time of the video.
(19) Progress Bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(20) iStable	To reduce the jolt in the recorded video.(also see 8.1)
(21) Add Setting	Include the new setting to the temporary setting block.
(22) Rename	Change the name of the selected setting in the temporary setting block.
(23) Delete	Permanently remove the selected setting in the temporary setting block.
(24) Load Setting	Call the saved settings.
(25) Save Setting	Store the settings in the temporary setting block.

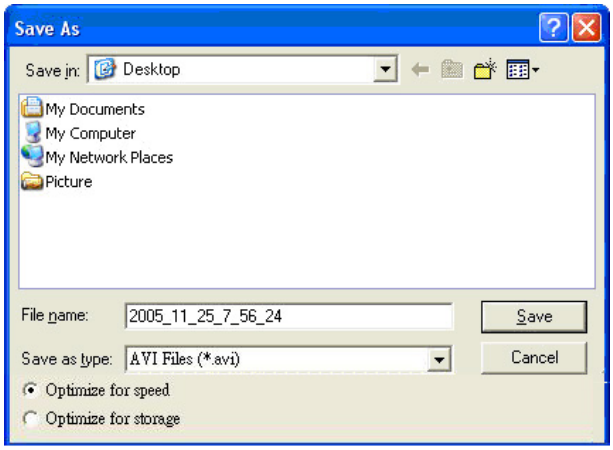
8.1 To Use iStable

The iStable function can reduce the jolt in the recorded video.

1. Click Open File button and select the recorded video.
2. And then, click **iStable** button.
3. iStable windows will show up.
4. Select the smoothness level – 1(Low), 2, 3, 4, and 5(High). The default value is 3.
5. Click Play button, and then iStable function will start to initial the recorded video.
6. When the initialize is done, user will see the original and stabilized recorded video play in two windows.



7. While the video is playing, user can select a portion of video to play and save. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click **Segment** to set the begin mark. And, Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click **Segment** to set the end mark. To cancel segmentation or set the segment marks from the start, click **Segment** button again.
8. Click **Save Video** button to save the wanted clip.
9. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video compress mode – **Optimize for speed** or **Optimize for storage**.



10. To switch back to iEnhance interface, click **iEnhance** button

Chapter 9 Web Tools

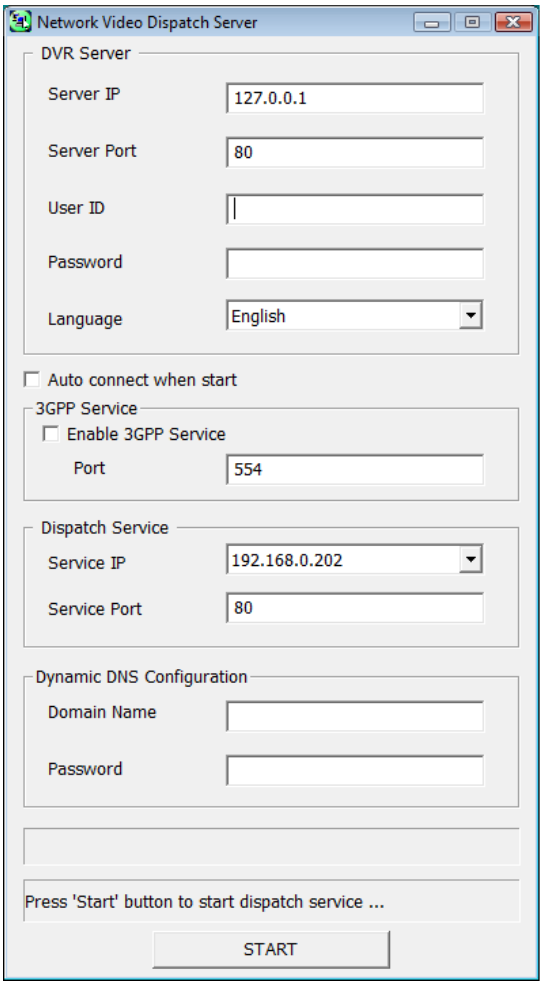
The bundled Web Tools includes Dispatch Server and Remote Backup program. To install Web Tools, place the CD into the CD-ROM drive then click **Install Web Tools**.

9.1 Dispatch Server

Dispatch is designed to reduce the network traffic of the DVR server. Instead of connecting directly to the DVR server, the client can connect to the computer that is connected to the DVR server using the Dispatch program.

To Run Dispatch program:

1. Make sure you are connected to the internet.
2. Click **Start**>**Programs** >**DVR** >**Web Tool** > **iDispatch Server**.
3. In the DVR Server section, enter the DVR server IP, port, user ID and password. You can also select to display the language you prefer.
4. **Auto connect when star**
   Enable to automatically connect the dispatch server when start up
5. **3GPP Service**
   Enable to allow user using 3GPP service to receive video stream from Dispatch server. The **Service Port** must same as RTSP port of 3GPP on DVR server.
6. In the **Dispatch Service** section, if you have installed more than one network card, select the Service IP number.
7. In the **Dynamic DNS Configuration** section, enter the DNS server Name and Password. The DNS server can be the remote storage server for sharing the DVR system loading.
8. Click **START** to connect.

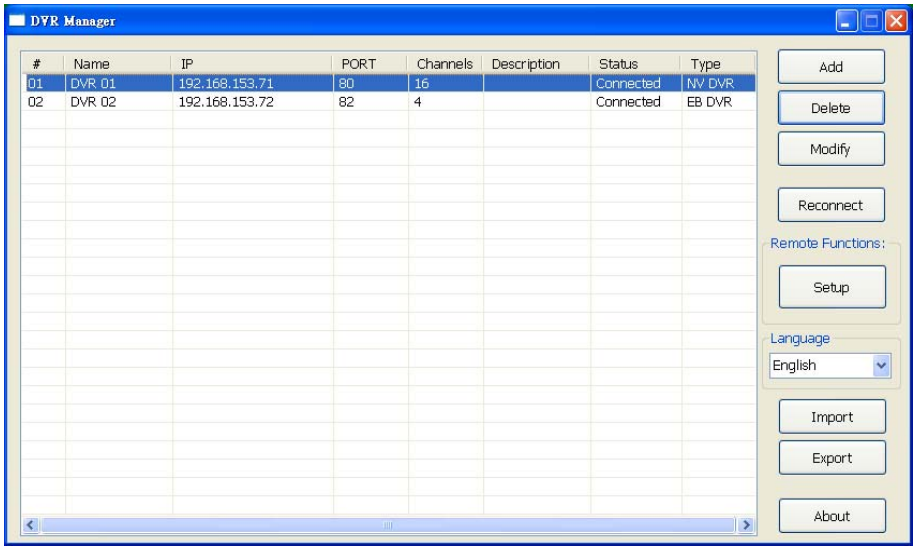


9.2 Remote iSetup

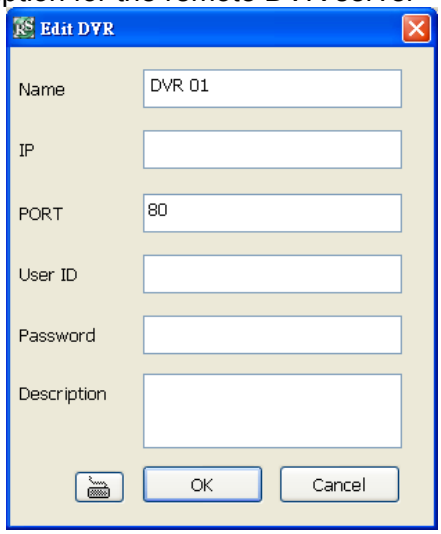
Remote iSetup is a tool for configuring DVR server from remote site. To install Remote iSetup application, insert the Installation CD into CD-ROM drive and click **Install Web Tools**. After installation, click to start the Remote iSetup application.

9.2.1 To Add DVR server

User need to add a DVR server and make connection in order to setup remote DVR server.



1. Click **Add**
2. In Edit DVR windows, fill in the following items:
   - **Name:** give a name for remote DVR server for easy managing
   - **IP:** fill in remote DVR server's IP address
   - **Port:** the port use to connect to remote DVR server. The port number is same the Webviewer port on the remote DVR server. The default is 80.
   - **User ID:** fill in the remote DVR server's login account
   - **Password:** fill in the remote DVR server's login password
   - **Description:** fill in a short description for the remote DVR server



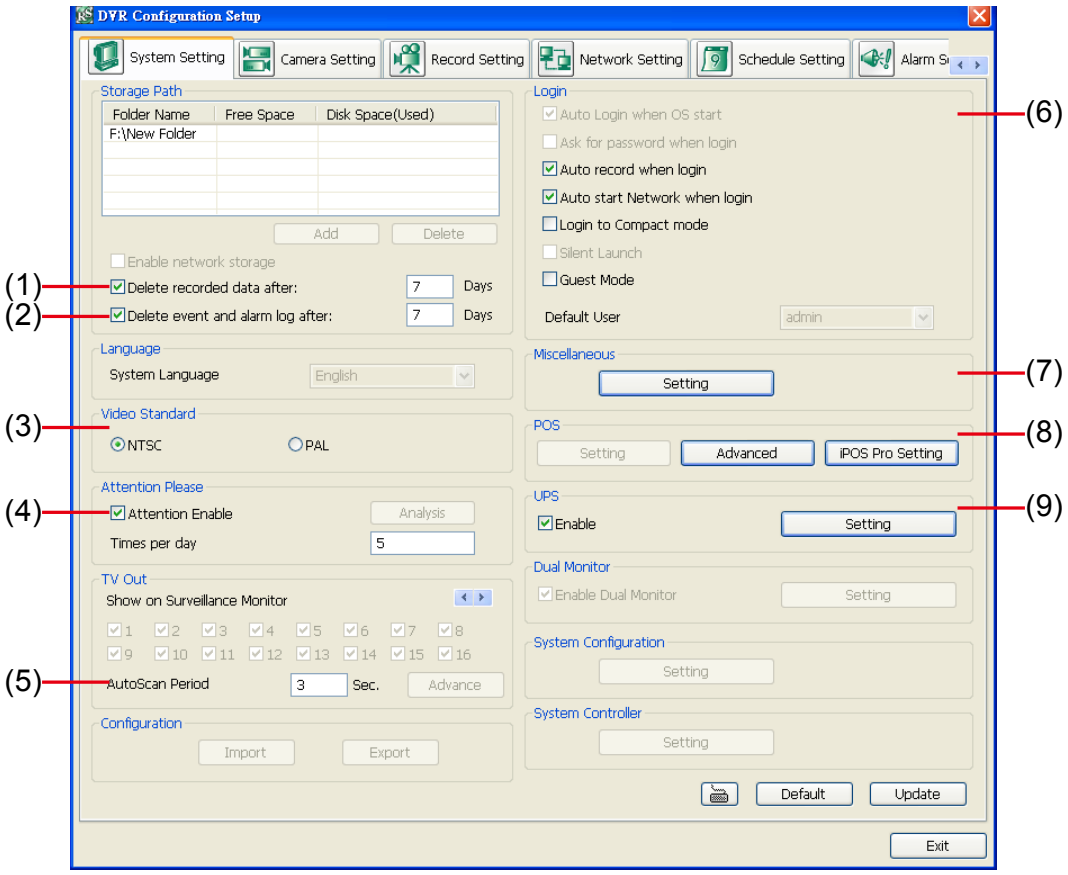
3. Click **OK** to complete adding remote DVR server.
4. The added DVR server will be listed and auto connects to DVR server.
5. Once the connecting is success, user can start to configure DVR server.
6. When connection is lost, click **Reconnect** to connect again.
7. To modify or delete the added DVR server, select the DVR server from listing and click **Modify** to change the setting and click **Delete** to remove the DVR server.
8. User also can import the setting by clicking **Import** button. To save the setting to local hard disk, click **Export** button.

9.2.2 To Setup Remote DVR Server

Select the DVR server from listing and click **Setup** to configure remote DVR server.

System Setting

In the System Setting windows, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.



(1) Delete recorded data after

If you want the system to automatically erase the data after a certain days, enable the **Delete recorded data after** check box and enter the numbers of days in **Days** text box.

(2) Delete event and alarm log after

If you want the system to automatically erase the event and alarm log files after a certain days, enable the **Delete event and alarm log after** check box and enter the numbers of days in **Days** text box.

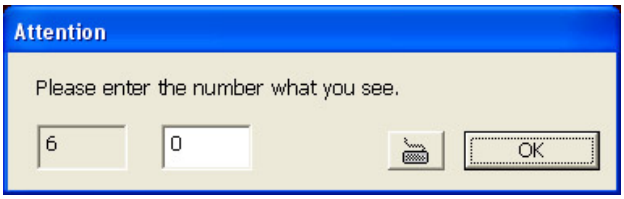
(3) Video Standard

Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.

(4) Attention Please

Check the attentiveness of the person who is monitoring the system. You may set the number of times the Attention dialog box to appear in a day in **Times per day** text box.

When this feature is enabled, the **Attention** dialog box would appear. The person who is monitoring the system must enter the same number that appears from the left box at the right text box and then click **OK**.



(5) AutoScan Period

Set the TV Out display time gap from 3 to 10 sec. before it switches to the next camera.

(6) Login

Enable the conditions in Login section you want the system to automatically carry out.

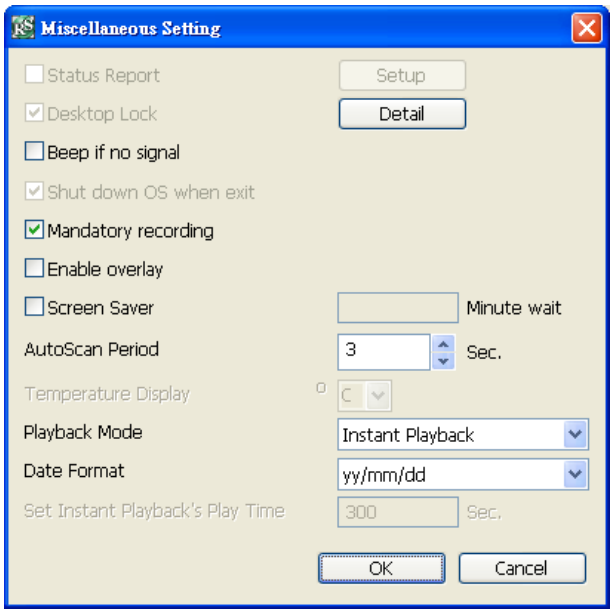
- **Auto record when login**
  Automatically start video recording when the DVR is executed.
- **Auto start Network when login**
  Automatically connect to network when the DVR is executed.
- **Login to compact mode**
  Switch to compact mode directly when the DVR is executed.

- **Guest Mode**
  Automatically log in Guest mode when the DVR is executed. In guest mode, the functions are limited to preview and playback only.

(7) Miscellaneous

Enable the conditions in **Miscellaneous** section you want the system to perform.

- **Beep if no signal**
  Make sound when the video signal is lost.
- **Mandatory Record**
  Always record video when software is running
- **Enable Overlay**
  To enhance video signal for better video quality.
- **Screen Saver**
  Set a period time to enter screen saver mode when system idle.
- **Auto Scan Period**
- Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.
- **Playback Mode**
  Select the mode of playback the video.
  - ✓ **Select date and time:** Select the date and time which user wants to playback.
  - ✓ **Play the last file:** Automatically playback the video from the last hour
  - ✓ **Instant Playback:** Automatically playback the video which has just recorded
- **Date Format**
  Select the date format which wants to display in **Select date and time** playback mode

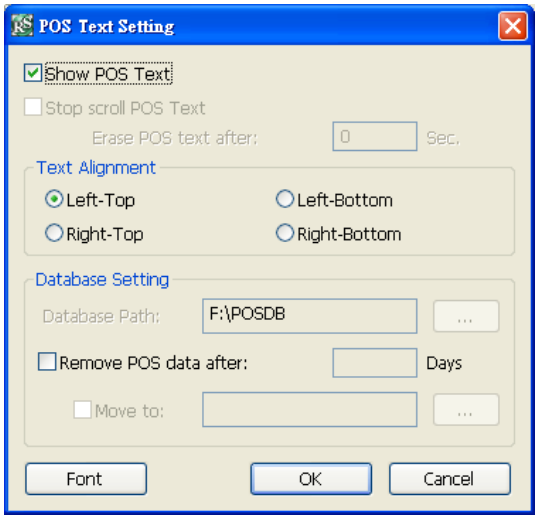


(8) POS

■ **Advanced**

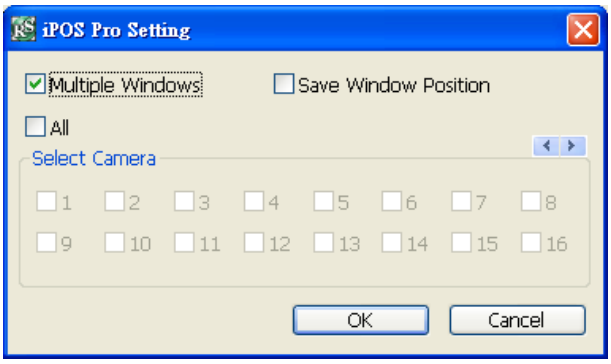
Set from which camera screen to display the data from the POS equipment. To set the text flow, color format, and POS database export, click **Advanced**.

6. Mark **Show POS Text** to allow POS data to be display on surveillance screen.
7. If user doesn't want POS data to be scroll up, mark **Stop scroll POS Text** and enter the time to delete POS text at **Erase POS text after** column.
8. Select the POS data display position on surveillance screen – Left-Top, Left-Bottom, Right-Top, or Right-Bottom.
9. To change the POS data font and color, click **Font**.
10. Mark **Remove POS data after** the POS data will be delete from DVR hard disk on the day that user has setup.



■ **iPOS Pro Setting**

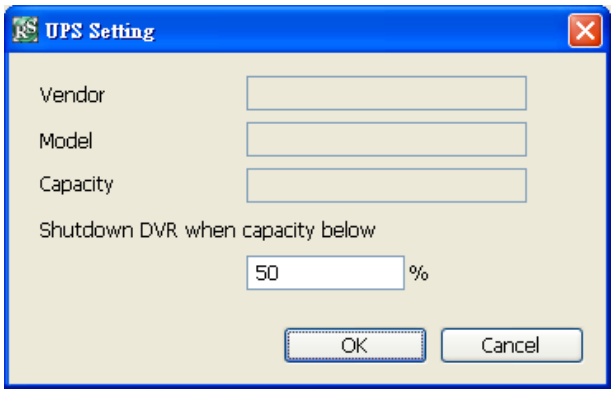
Enable **Multiple windows** for viewing multi-channels of real time iPOS data. To save the real time of iPOS data window position on the UI, mark the **Save window Position**. To select all channels, mark **All** check box.



(9) UPS (Uninterruptible Power Supply)

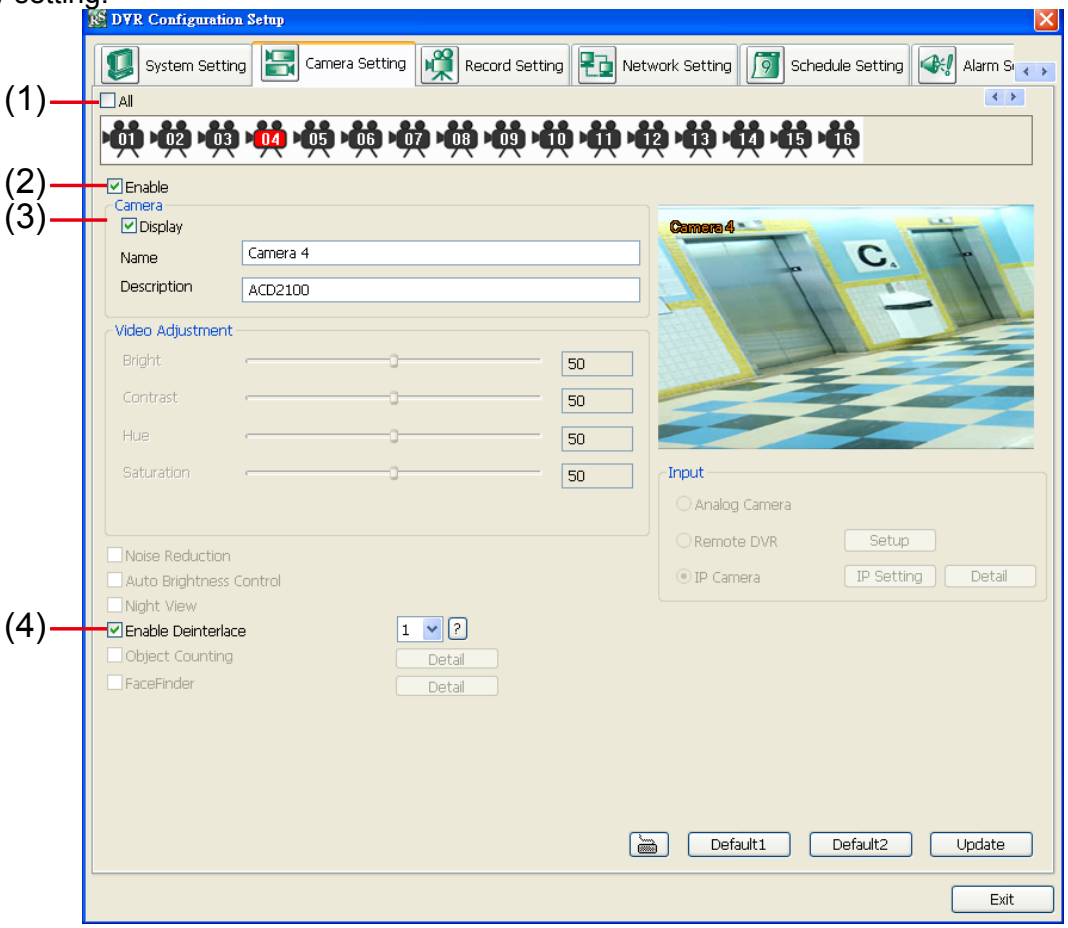
Protect the system from damaging, such as power surges or brownouts. This automatically gives time to close the DVR properly when the battery backup power has reached the Shutdown when capacity below percentage level setting. The UPS device must be connected to your computer (refer to your UPS user's guide).

ⓘ The UPS application must meet Windows XP or Windows Vista system requirements.



Camera Setting

Select the camera from remote DVR servers to modify settings. In the Camera Setting windows, click **Update** to save and apply the new settings, click **Exit** to exit without saving, and click **Default1/ Default2** to revert back to original factory setting.



(1) Camera Icons

Select the camera number you want to adjust the video setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, Right click on the camera icon. To select one camera only, Left click on the camera icon. The camera icon turns red when it is selected.

(2) Enable

Set to enable/disable the selected camera. When there is no video source on the camera, we suggest disabling it so that the system won't detect it as video loss error.

(3) Camera

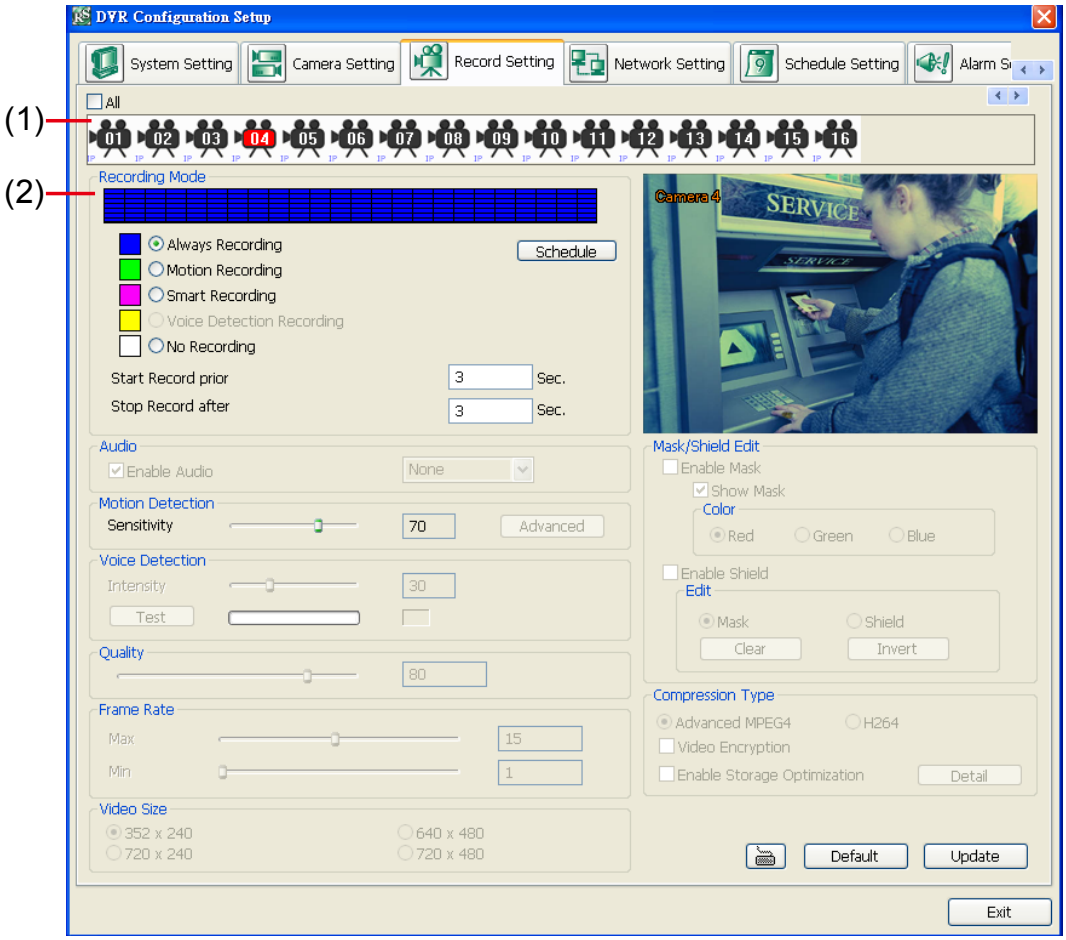
- **Display**
  Enable/disable to show the video. Even if the video of the selected camera is hidden you can still record the video and preview it in playback mode.
- **Name**
  Change the camera name.
- **Description**
  Add a short comment.

(4) Enable Deinterlace

To enhance the video quality. Set the deinterlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.

Record Setting

In the Recording setup windows, click **OK** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting.

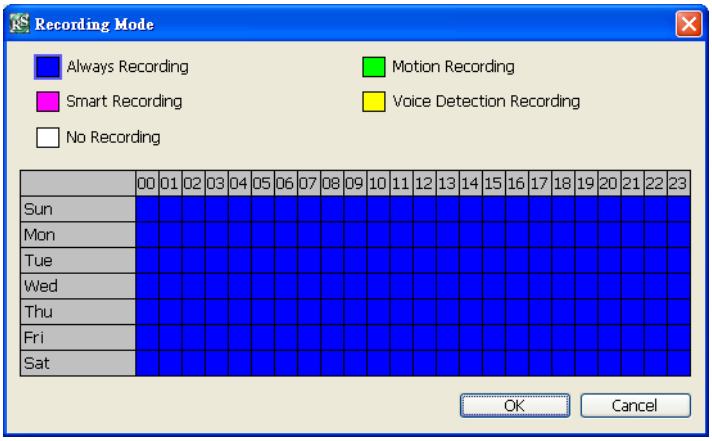


(1) Camera Icons

Select the camera number you want to set the recording setting. To select all the cameras, enable the **ALL** check box. To select more than one camera, **Right click** on the camera icon. To select one camera only, **Left click** on the camera icon. The camera icon turns red when it is selected.

(2) Recording Mode

The blocks from 00 to 23 represent the time in 24-hour clock. To record in full 24 hours, select the recording mode and click the ⊙ button. If you want to only record at a particular time, click **Schedule** and select the colored block, and then, click on the time blocks.



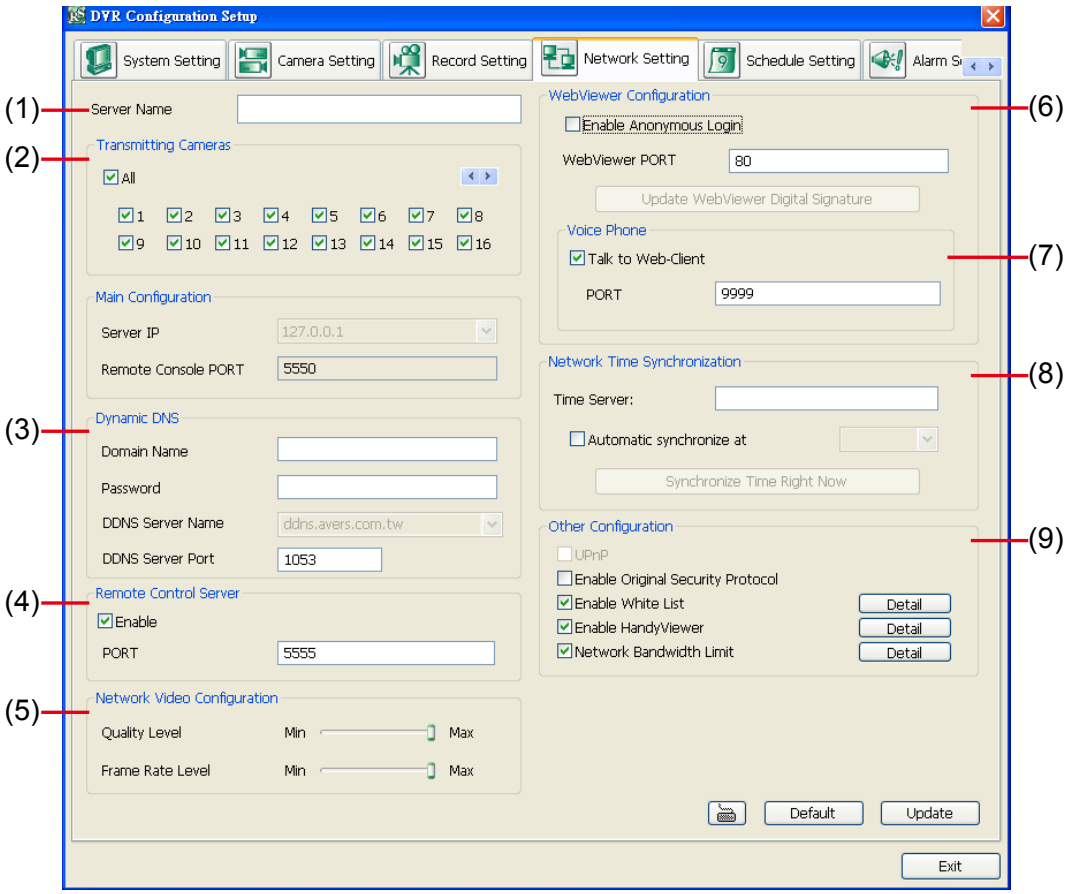
When the system starts recording a red triangle mark would appear at the upper left corner of the screen. The recording modes are listed below:

- **Always Recording**
  Record the video from the selected camera and save it to the designated storage path
- **Motion Recording**
  Start recording the video from the selected camera only when the system detects movement. Once a motion is detected, the system automatically saves the previous frames and stop based on the **Start Record Prior** and **Stop Record After** settings.

- **Smart Recording**
  Automatically switch to recorded at the maximum frame rate setting once a motion is detected and if there is no motion, it records at the minimum frame rate.
- **Voice Detecting Recording**
  DVR system will record when the voice exceeds the intensity value in **Voice Detection** setting.
- **No Recording**
  The system won't do any recording.

Network Setting

In the Network Setting dialog box, click **Update** to accept the new settings, click **Exit** to exit without saving, and click **Default** to revert back to original factory setting. For the network service ports that use by DVR server, please see Appendix A.



(1) Server Name
Assign a name for the DVR unit. Letters of the alphabet and numbers only.

(2) Transmitting Cameras
Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using WebViewer, Remote Console, PDAViewer and HandyViewer (still image). To select all the cameras, enable the **ALL** check box.

(3) Dynamic DNS (Domain Name System)
Enter the Domain Name and Password. To use this feature, go to http://ddns.avers.com.tw and register. (see also Appendix A) You will be prompted to enter CD key number, product name, password, and user information. Use this service if the IP address changes each time when you connect to internet.

(4) Remote Control Server
Enable/disable remote control from remote application (ex. CMS). Enter the remote accessing port in **Port** column.

(5) Network Video Configuration
Set up the video quality and frame rate for viewing and transmitting to the remote program. Scrolling adjust bar to set the **Quality level** and **FrameRate level**.

(6) WebViewer Configuration
Activate **Enable Anonymous Login** to remotely access the DVR server without the need of password. The default of WebViewer port is 80.

(7) Voice Phone
Voice Phone is a 2-Way Talk feature that allows the client and server to talk via internet using microphone. Make sure both microphone and speakers work before using this feature. If the **Talk to Web-Client** is disabled,

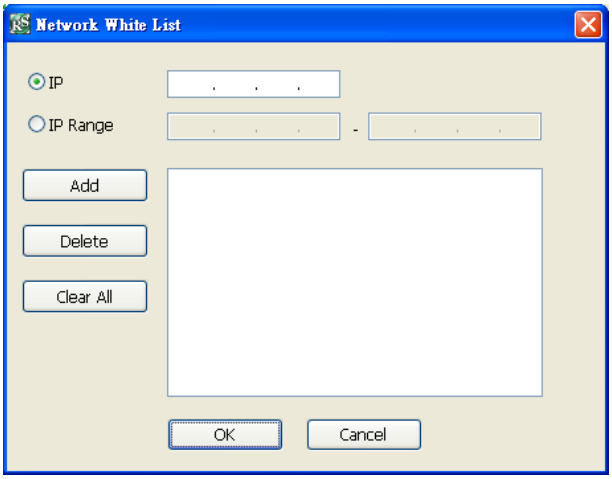
the person in the DVR server side can only hear the voice from the client side that is when the WebViewer 2-Way Talk button is activated. The default port of voice phone is 9999.

(8) Network Time Synchronization

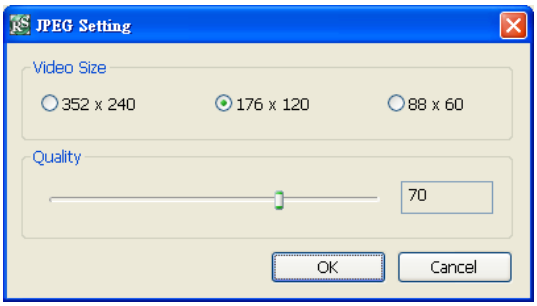
Adjust the DVR system time same as network time server. Fill in the **Time Server** IP address or domain name. Select **Automatic Synchronize** time to set automatic synchronize time on a daily basis.

(9) Other Configuration

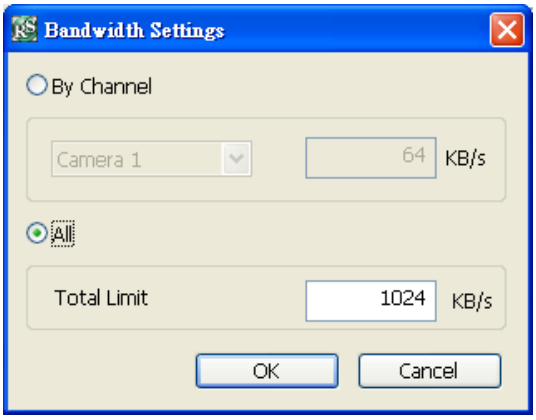
- **UPnP**
  Enable UPnP function to automatically configure the port setting on the local network. This function is available when there is UPNP device in the same network. It will write the DVR port information into the router or other network device
- **Enable Original Security Protocol**
  Enable new version DVR system to accept remote software with former version. For example, if user uses CMS version 7.1 and connect to DVR server with version 7.3, and then, user has to enable this option to make it work. It is due to that DVR system has some new security protocol in DVR with version 7.3 and newer version, and it's not compatible with old remote software.
- **Enable White List**
  An access permit list for the remote accessing of DVR server. Enter the IP address and click **Add**. Or, enter a range of IP address and click **Add**. To delete the IP from the list, select the IP and click **Delete** button. To reset the input, click **Clear** button.



- **Enable HandyViewer**
  Enable remote users to use a PDA or a mobile phone to access DVR server and select the video size and quality. (See also Chapter 6.5 and 6.6)

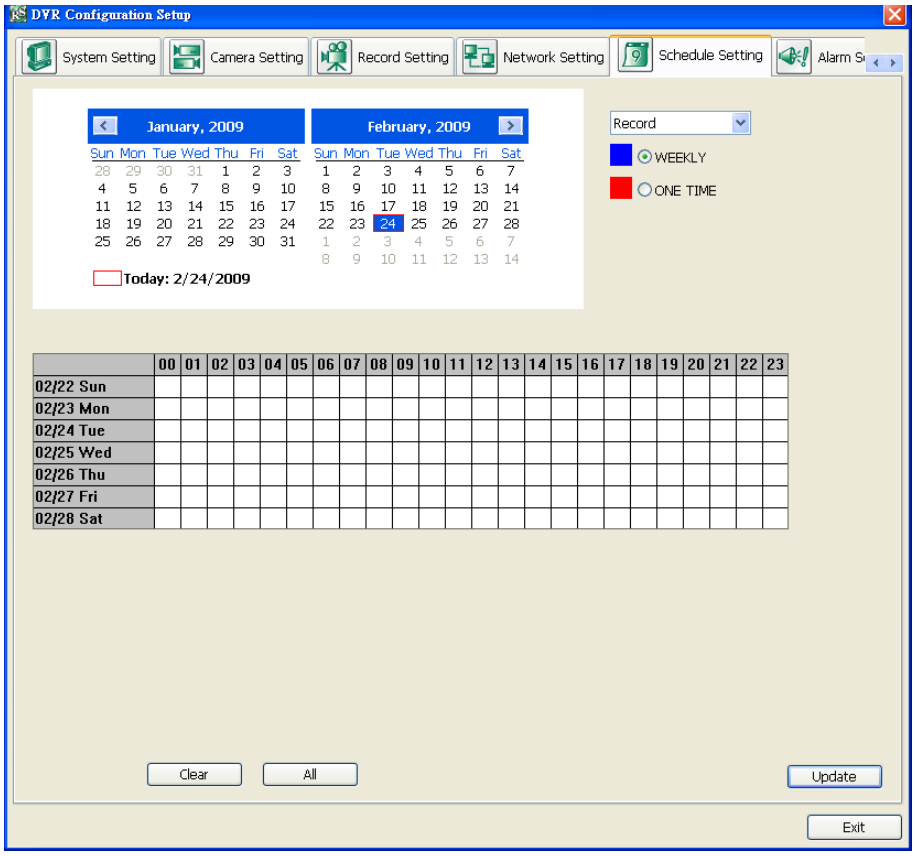


- **Network Bandwidth Limit**
  - ✓ **By Channel:** Set the network bandwidth by each channel.
  - ✓ **All:** Set the total network bandwidth consumption limit.



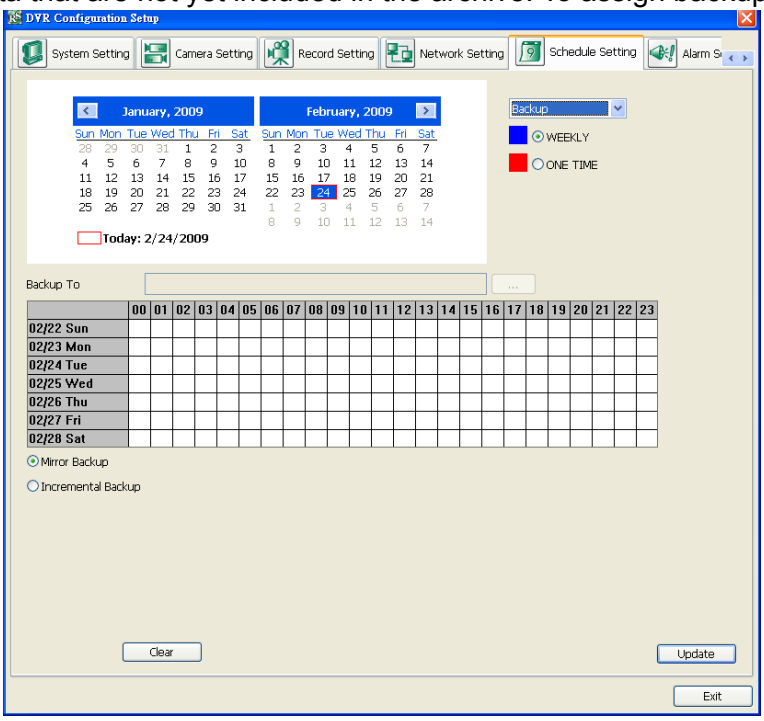
Schedule Setting

Schedule to record, backup, enable network, reboot and disable alarm of all the cameras either weekly or one time. The number from 00 to 23 represent the time in 24-hour clock. The left most column display the days in a week.



To Set the Schedule Setting:

6. Select the date in the calendar. Use ◄ and ► buttons to shift the calendar to the left or right.
7. Select the condition you want to schedule in the drop down list.
   - **Record**
     Activate all the cameras to start video recording at the set time based on the Recording setting (see also Chapter 3.5).
   - **Backup**
     Save another copy of all the data at the set time and specified backup path. DVR automatically updates and only backup the data that are not yet included in the archive. To assign backup path, click ...



✓ **Mirror Backup:** Save a copy of all the data at the set time and specified backup path.

✓ **Incremental Backup:** Only backup the data that are not yet included in the archive from last time.

- **Network**
  Activate DVR remote system to access at the set time. After the appointed time, the Network function will be disabled. If the Network function is already enabled, the Network function will not be disabled when the appointed time has ended.
- **Reboot**
  Restart the PC at the appointed time.

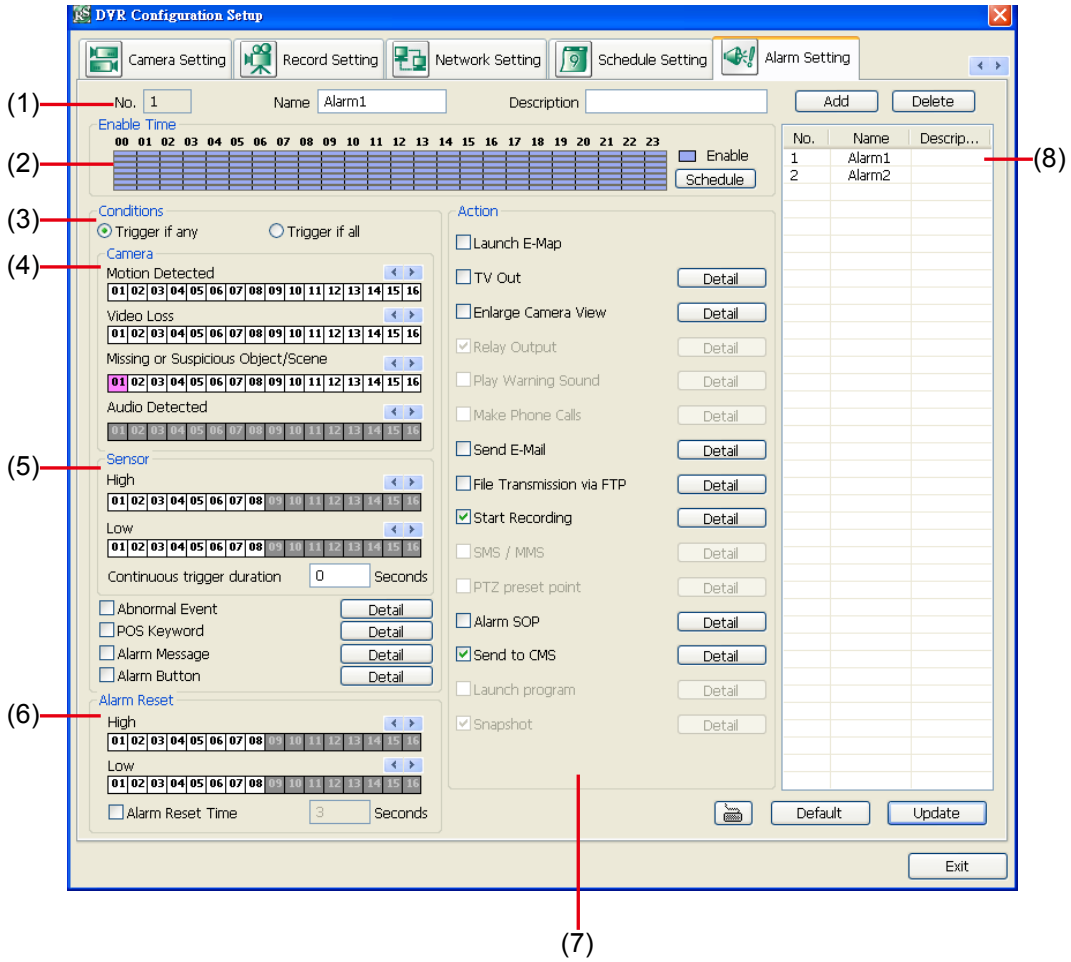
Make sure the Windows operating system is set **NOT** to require you to login user name and password. This way the system will be able to run DVR program.

- **Disable Alarm**
  Deactivate the alarm at the set time temporarily.

8. Specify to either schedule it weekly or one time. Click ⊙ to make a selection.
9. Click on the blocks to set the schedule (see also Chapter 3.5.1). Or click **All** to select all. To store the setting, click **Save**. To remove the settings, click **Clear**.
10. To end Schedule Setting, click **Update** to exit and accept the setting and **Exit** to exit without saving the setting.

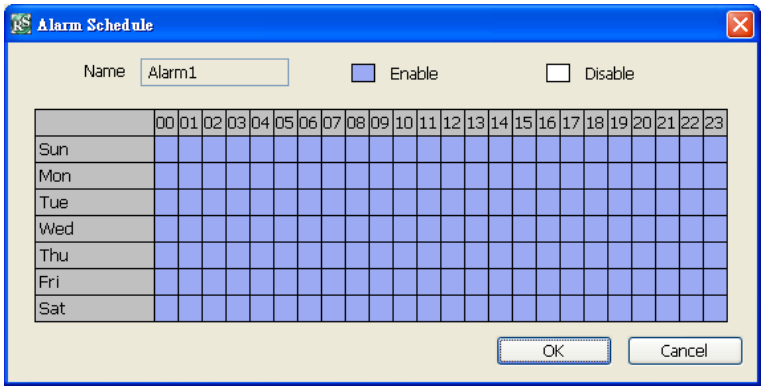
Alarm Setting

In the Alarm Setting dialog box, click **Add** to insert and set new alarm setting, click **Delete** to remove the selected alarm setting, click **OK** to exit and save the setting, **Cancel** to exit without saving, and **Default** to revert back to original factory setting.

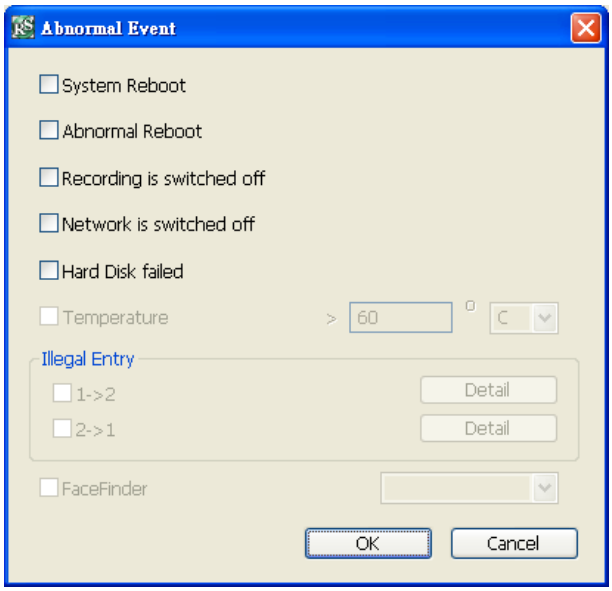


To set the Alarm Setting:

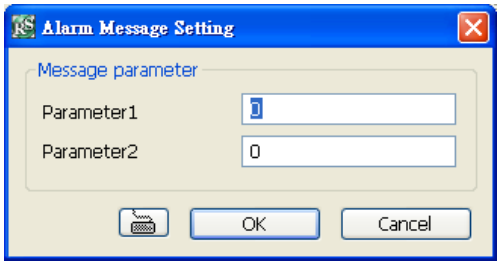
9. Click **Add** to insert and set a new alarm setting. Click the items in the **(8) Alarm Setting List**, if you want to modify the alarm setting.
10. In **(1) Alarm Setting number/Name/Description**, display the selected alarm setting number in the list below. Enter alarm name and description.
11. In **(2) Enable Time**, the number from 00 to 23 represent the time in 24-hour clock. Click **Schedule** and select the time and click the block you want to activate or deactivate the alarm function. When it is deactivated the color of the block turns white.



12. In **(3) Conditions**, you can set "**Trigger if any**" to activate if it falls to one of the conditions or "**Trigger if all**" to activate if it falls to all conditions.
13. In **(4) Camera section**, select and click on the camera number (01 to 32) in **Motion Detected** and **Video Loss** to set the condition for the system to alarm.
    - ✓ In **Missing and Suspicious Object Detected**, click the camera number (01 to 32) and select the certain object on the screen, and when the certain object is missing or doubtful, the system will alarm. (see also Chapter 3.9.12) In **Scene Change**, when the camera has been moved, the system will alarm, too.
    - ✓ In **Audio Detection**, click the camera number (01 to 32) to the system to alarm when detect the abnormal voice.
14. In **(5) Sensor**, select and click on the sensor number (use ◀ and ▶ to select the sensor) to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low.
    - ✓ **Abnormal Event:** Enable/disable to set the condition of the event for system to alarm.
        - **System Reboot:** when the DVR system reboot without abnormal condition, the system will send out the alarm message.
        - **Abnormal Reboot:** when the DVR system reboot in irregular condition, the system will send out the alarm message.
        - **Recording is switched off:** when the recording has been stopped, the system will send out the alarm message.
        - **Network is switched off:** when the network connection of DVR system is lost, the system will send out the alarm message.
        - **Hard Disk failed:** when the hard disk can't work normally, the system will send out the alarm message.



    - ✓ **POS Keyword:** Enable/disable to scan the data from the POS if it matches the keyword (see also Chapter 3.9.11).
    - ✓ **Alarm Message:** Enable/disable to active with external alarm message by your own program. For the detail configuration, please contact the local reseller.



- ✓ **Alarm Button:** Enable/disable to active manual alarm function (see also Chapter 2.2#(19)). To define alarm message of manually alarm trigger. Click alarm button and select the alarm button # and fill in the description of alarm button.

15. In **(6) Alarm Reset**, click the camera number (use ◀ and ▶ to select the alarm) to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the sensor condition to low.
16. In **(7) Action**, you may now set the alarm action for the system to perform when the alarm condition is activated.
    - ✓ **Launch E-Map**
      Display mini Emap screen.
    - ✓ **TV Out**
      Switch to only display the video on TV from where the alarm is activated.
    - ✓ **Enlarge Camera View**
      Switch to only display video in Preview/Advanced mode from where the alarm is activated.
    - ✓ **Send E-mail**
      Send an electronic text message. To setup click **Detail** (see also To Setup Send E-mail).
    - ✓ **File Transmission via FTP**
      Upload file to remote computer thru FTP (File Transfer Protocol). To setup click **Detail** (see also To Setup FTP).
    - ✓ **Start Recording**
      Record the video from the selected camera. To setup click **Detail** (see also To Setup Alarm Recording).
    - ✓ **Alarm SOP (Standard Operation Procedure)**
      List the instructions to inform the person of what to do when the alarm is activated. To setup click **Detail** (see also To Setup Alarm SOP).
    - ✓ **Send to CMS (Central Management System)**
      Enable/disable the selected camera to send video to CMS when the alarm is activated (see also To Setup CMS Setting)

To Setup Send E-mail Setting

Beside the Send Email check box, click **Detail**. In the E-mail Setting dialog box, click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.

(1) Mail Server

Enter the SMTP Server and port. If your e-mail system requires user identification, enable **Authentication** check box and enter User ID and Password.

(2) Mail

To check if it is working, click **Test Account** button.

From: Enter the sender e-mail address.

To and CC: Enter the recipient email address and separate it with comma or a semicolon (;).

Subject: Enter the message title.

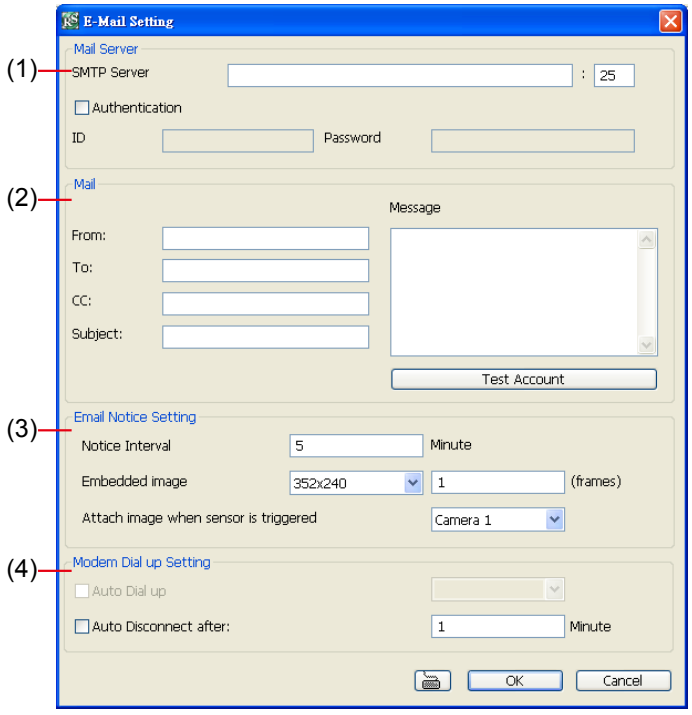
Message: Type the message.

(3) Email Notice Setting

- ✓ **Notice Interval:** Set the period of time before it sends another e-mail notice.
- ✓ **Embedded image** **:** Select the image size and set the number of frames.
- ✓ **Attach image when sensor is triggered:** When the sensor is triggered, the system will capture the image and send the image to the certain e-mail address with the alarm message.

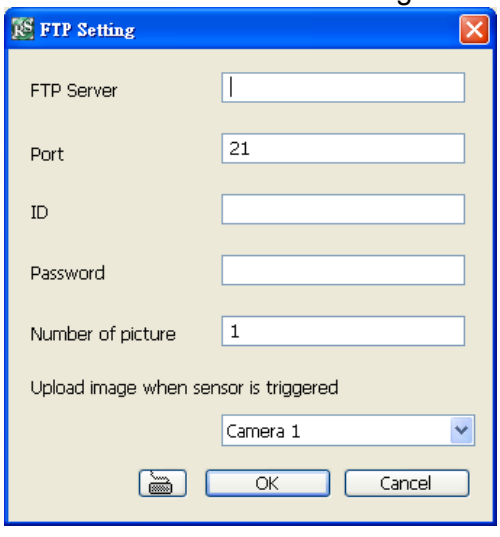
(4) Modem Dial up Setting

User may set the time to disconnect automatically, just enable the **Auto Disconnect after** check box and set time.



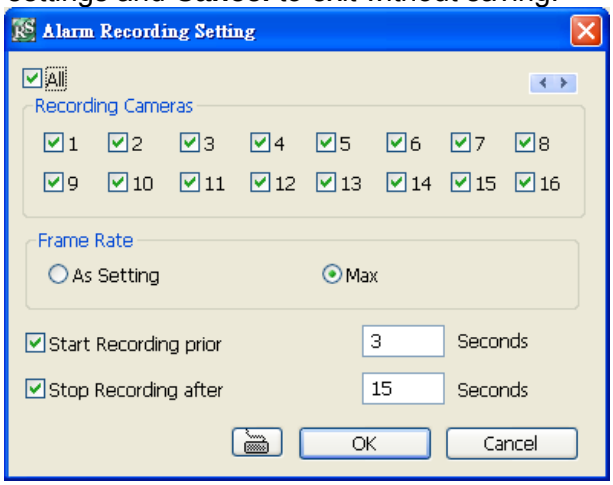
To Setup FTP Setting

4. Beside the File Transmission via FTP check box, click **Detail**.
5. In the FTP Setting dialog box, enter the FTP IP, port, user ID and password.
6. Click **OK** to exit and save the setting and **Cancel** to exit without saving the setting.



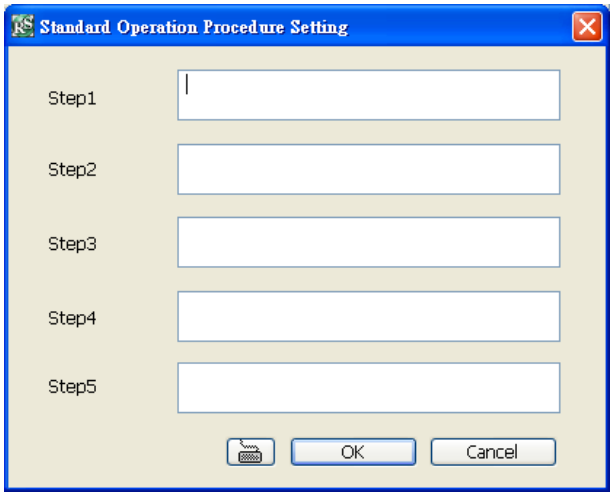
To Setup Alarm Recording Setting

6. Beside the Start Recording check box, click **Detail**.
7. In the Alarm Recording Setting dialog box, select the camera to enable/disable video recording. Enable **All** to select all cameras.
8. In the Frame Rate selection, select **As Setting** to record the number of frames based on the Recording Setting or **Max** to record the maximum of frames based on the available speed.
9. In the **Stop Recording after** text box, set the number in second for the program to continue recording after the alarm has ended.
10. Click **OK** to accept the new settings and **Cancel** to exit without saving.



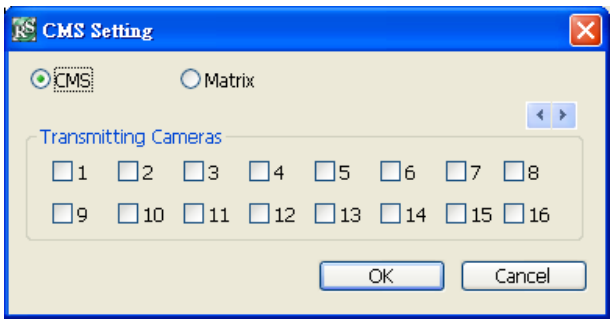
To Setup Alarm SOP

Beside the Alarm SOP check box, click **Detail**. In the step text boxes, type the standard protocol when the alarm is activated. When the alarm is activated, the Standard Operation Procedure dialog box will appear. Just click **Next** to see the next instruction, **Back** to see the previous instruction, **Finish** to end and **Abort** to terminate.



To Setup CMS Setting

Beside the Send to CMS check box, click **Detail**. In the CMS Setting, select the camera to enable/disable sending the video to CMS. Enable **All** to select all cameras. Then, click **OK** to accept the new settings and **Cancel** to exit without saving.



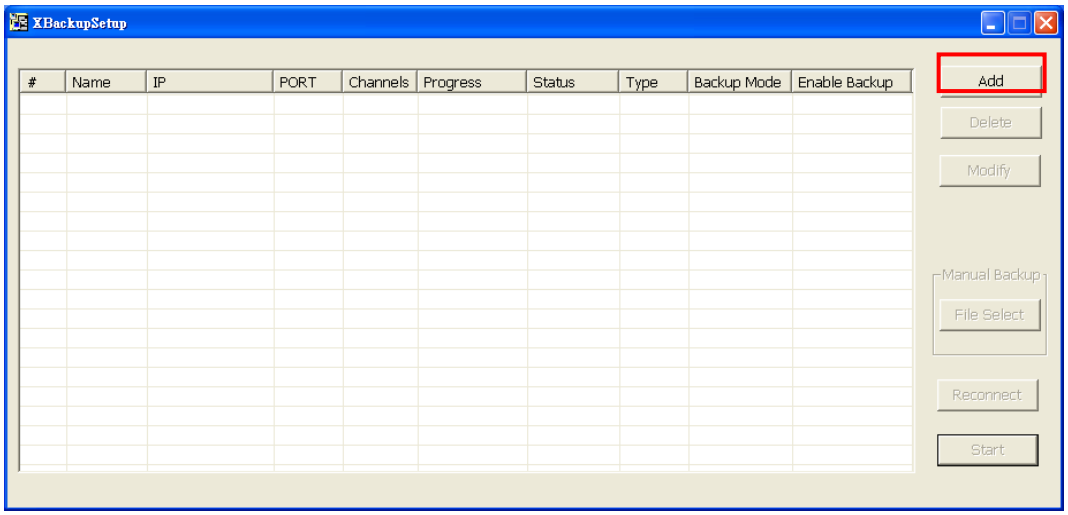
9.3 Remote iBackup

Remote iBackup is purely for backing up the *.dvr file from the DVR sever. You can select between Auto Backup and Manual Backup. Auto Backup continuously archives one hour of the recorded data at a time, starting from the specified date. As for Manual Backup, it only archives the recorded data of selected date.

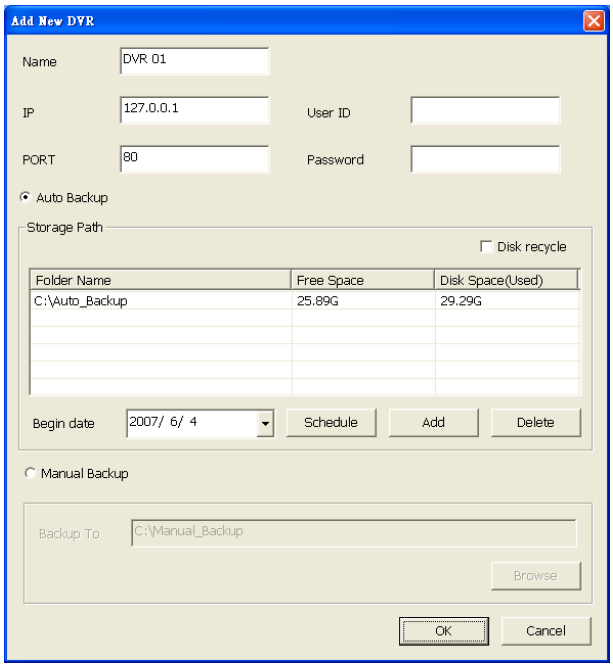
To back up the data, you must have at least 2G hard disk space.

To back up the recoded data from the DVR server:

1. Make sure you are connected to the internet.
2. Click **Start** >> **Program** >> **DVR** >> **Web Tool** >> **Remote iBackup**
3. To add the DVR server, click **Add**



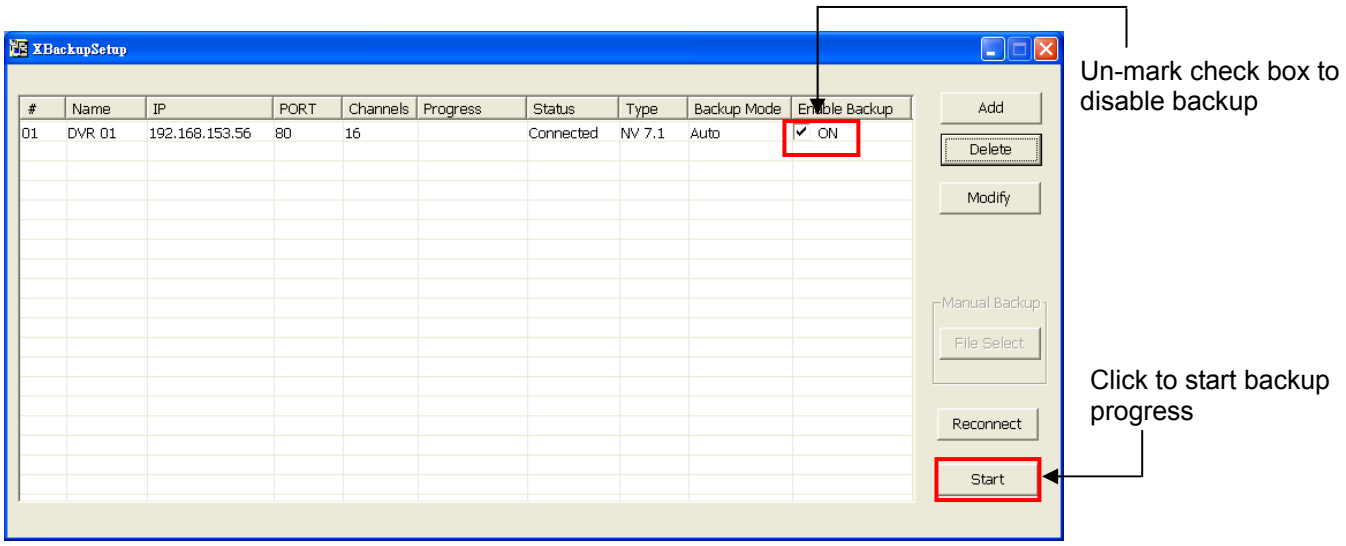
4. In the Add New DVR windows, enter the Name, IP, user ID, and password.



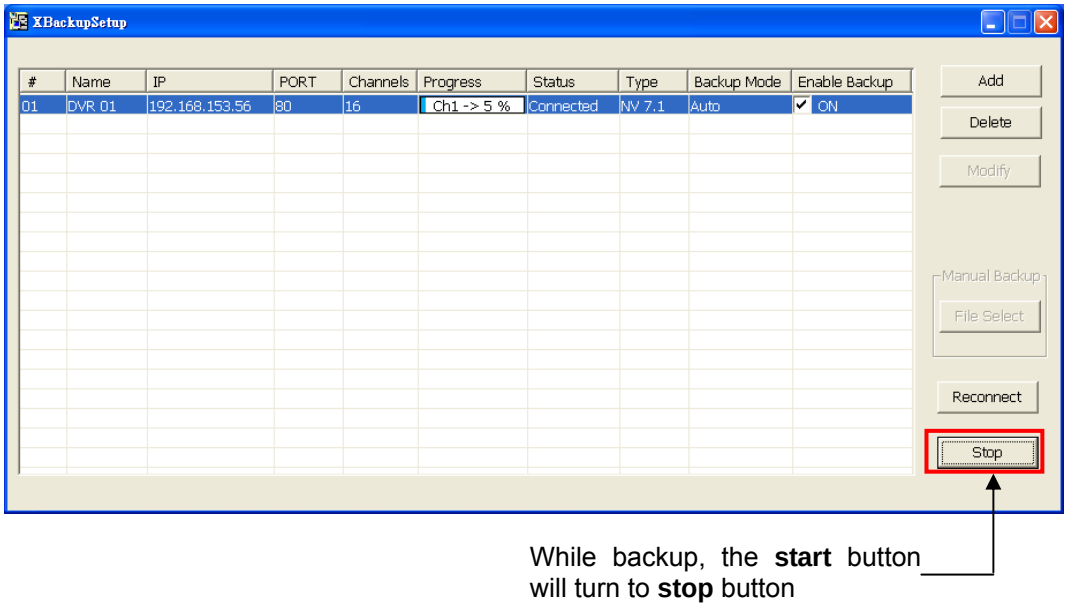
5. Select the Backup mode:
   Auto Backup mode: the backup will automatically execute when the setup is completed
   - In Begin Date drop down calendar, select the date from where to start
   - Click **Add** to set the storage path.
   - Click **Delete** to remove the selected storage path.
   - Click **Schedule** to select/unselect the time you want to backup. The red block turns white when it is unselected.
   - Enable/disable **Disk Recycle** check box, to automatically overwrite the oldest file when there is not enough free space to backup the file.

   Manual Backup mode: the backup progress will start when user press the backup button
   - Click **File Select** to choose the date, time and camera you want to back up.
   - Click **Browse** to set the storage path.
6. Click **OK** to complete the adding DVR server. The added DVR server will display in Remote Backup main

windows.



7. Click **Start** to begin backup and click Stop to stop backup progress.

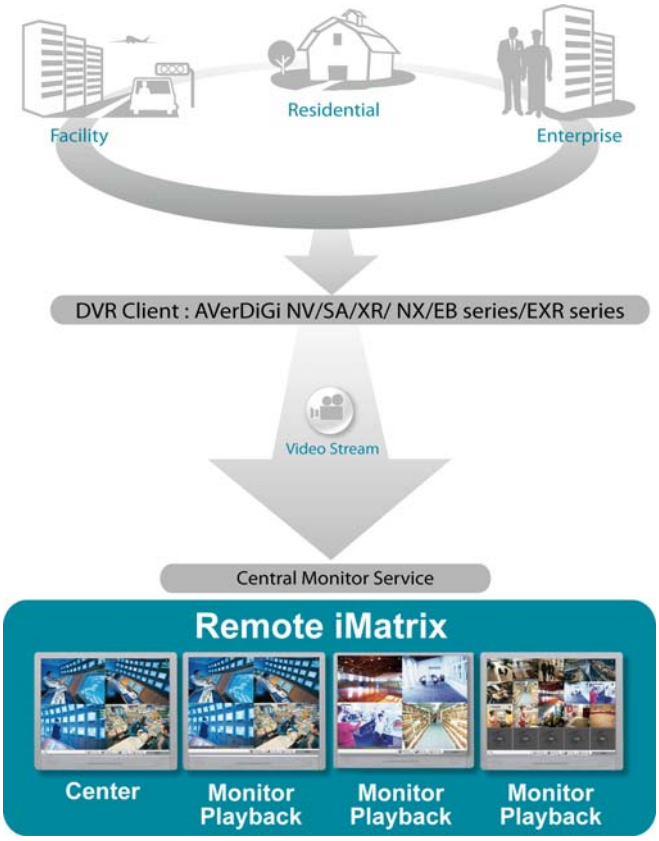


8. For manually backup, click **file select** button and select the DVR wants to backup.

9.4 iMatrix Application

The AVerMedia® iMatrix is a monitoring system that enables user to monitor DVR servers through an internet connection. iMatrix can monitor and playback the video of remote DVR servers.

iMatrix playback deosn't support on EB series.



The iMatrix program supports Single, Dual, Triple and Four monitor displays. Please refer to 9.4.4 for dual monitor setting.

9.4.1 Software Installation

This chapter describes how to install the iMatrix software.

Before installing the software, make sure the Windows OS patches are up to date and the video graphic card driver is up to date.

9.4.2 Minimum System Requirements

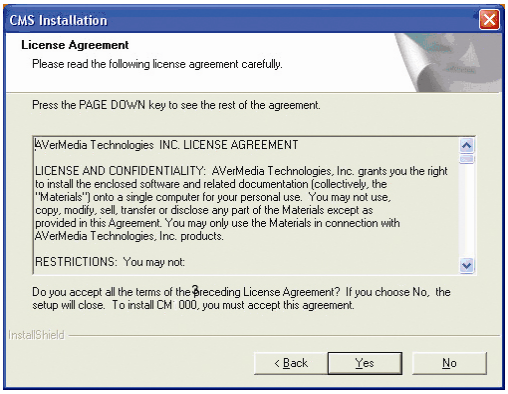
First, must verify if the computer meets the minimum system requirements.

☐ CPU	Pentium® 4 3.0GHz or above recommended
☐ OS	Windows XP Professional / Vista
☐ RAM	512MB for dual display,1GB for Quad display
☐ Hard disk	120GB or higher
☐ Media	CD-ROM drive
☐ VGA	32-bit high color SVGA graphics card with 128MB video memory and DirectDraw® / YUV Rendering Capability
☐ Audio	Sound card and speakers
☐ Internet capacity	10/100 Base-T Ethernet card or Gigabit Ethernet

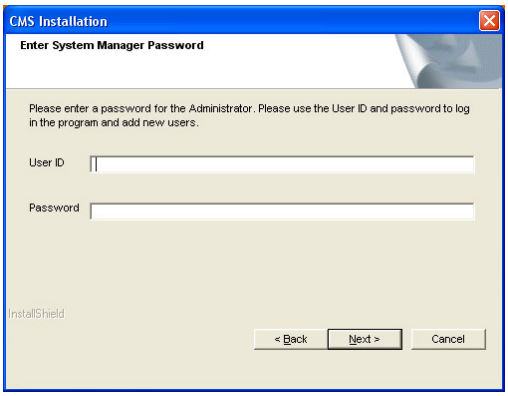
9.4.3 Installing the iMatrix Software in Windows XP/Vista

1. Place the installation CD into the CD-ROM drive then click **Install Web Tools**.

2. Please carefully read the license agreement. Click **Yes** to accept the agreement.



3. Enter the administrator ID and password and click **Next**.



4. Select the install destination path if user wants install in different path beside default. Click **OK** and follow the on-screen instructions to complete the installation.
5. User may now run the iMatrix program. To run the application, click on your PC desktop or click **Start** > **Programs** > **iMatrix** > **iMatrix**

9.4.4 Dual Monitors Setup

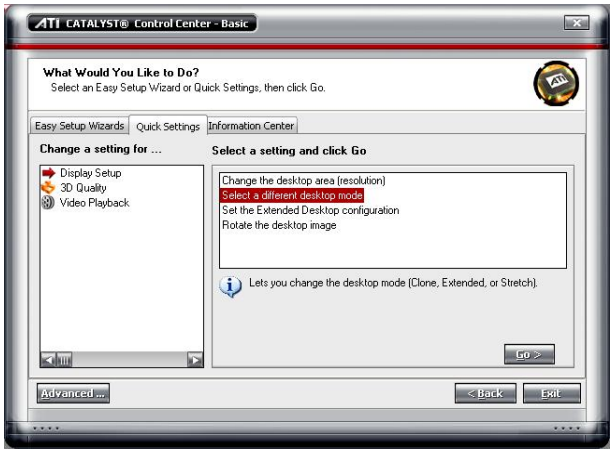
The iMatrix system Supports Single and Dual monitor displays. The Video configuration is different for each different VGA chipsets. Please follow the steps below to setup the dual monitors display.

Graphic card with ATi chipset

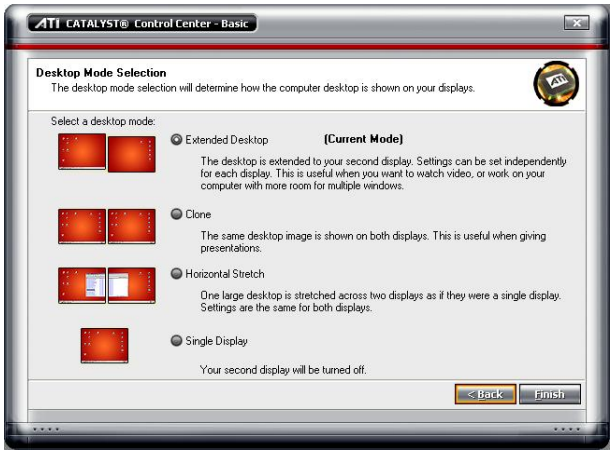
1. Enter the ATI Catalyst Control Center, user can click the short-cut or right click on the screen.

2. There are two modes to select — Basic and Advanced.

3. If user selected Basic mode, press the **Quick Settings** tab. Then select the **Select a different desktop mode** and click **Go**.



4. Select the **Extended Desktop** and then click **Finish**.

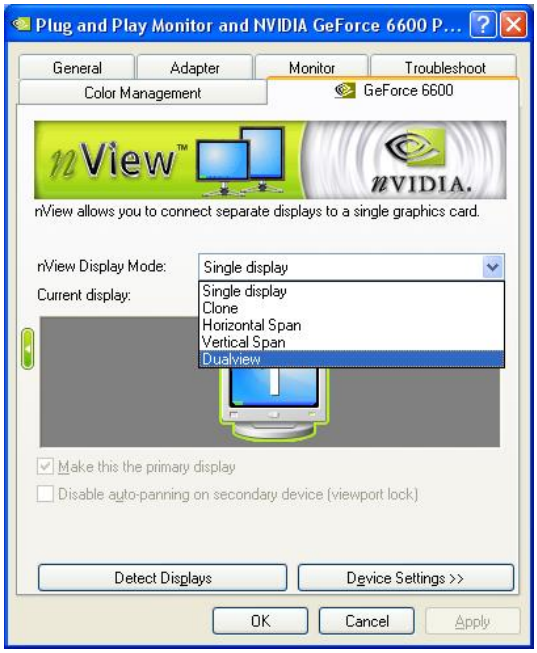


5. If user selected the Advanced mode, click the **View** button.
6. In **Display Manager**, right click on the second Display on the right side and select **Extend Main onto monitor**.

7. Adjust each monitor resolution to 1024x768, 1440x900, 1680x1050, or 1920x1200

Graphic card with NVIDIA chipset

1. Click the NVIDIA nView, and select the **Dualview** mode.
2. Adjust each monitor resolution to 1024x768, 1440x900, 1680x1050, or 1920x1200



3. To review if the display mode is correct, you can check the task bar. The task bar will show on the first monitor only.

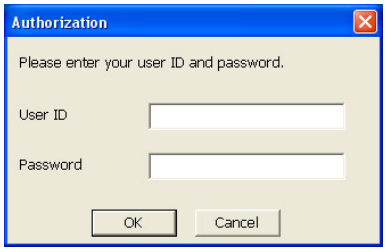
Monitor 1 Monitor 2

9.4.5 Using the iMatrix

Running the iMatrix Software

To run the application, double-click on your PC desktop or click **Start** > **DVR** > **Web Tool** > **Remote iMatrix**.

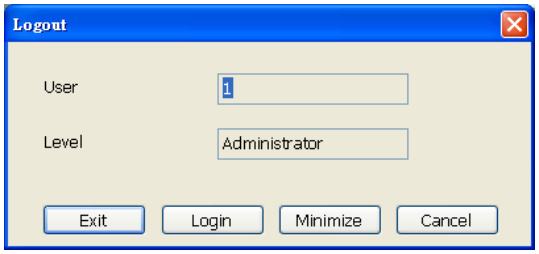
For security purposes, iMatrix requires user to enter a User ID and Password before they can be accessed. When the Authorization dialog box appears, key in your User ID and Password. (If this is the first time, enter the one you have registered when installing the software.)



Using the iMatrix Application

iMatrix can remote monitor and playback recorded video of DVR servers and receive matrix events from remote DVR servers.

- Click right mouse button and drag on screen can enlarge viewing. Click right mouse button again to back to normal view.
- Press F1 will display DVR information on upper right corner of channel screen. Press F1 again to hide.

Name	Function
(1) Exit	Call up the Logout dialog box. In the logout dialog box, you may do the following:  - Click **Exit** to close the iMatrix program. Only the administrator is authorized to access this command. - Click **Login** to sign-in as a different user. - Click **Minimize** to reduce the iMatrix to taskbar button. - Click **Cancel** to close the Logout dialog box.

Name	Function
(2) Setup	Configure the iMatrix settings. Only the administrator is authorized to access this command. (see also 9.4.6)
(3) Monitor Controller	Call out monitor set selection window to select the monitor set for monitoring (see also Using Monitor Controller).
(4) PTZ	Call out PTZ control panel (see also Familiarizing the Buttons in PTZ Camera Controller)
(5) Audio	Enable/Disable audio play
(6) DVR Name bar	Display the name of monitor DVR
(7) Preview icon	The icon indicates the channel is in preview status.

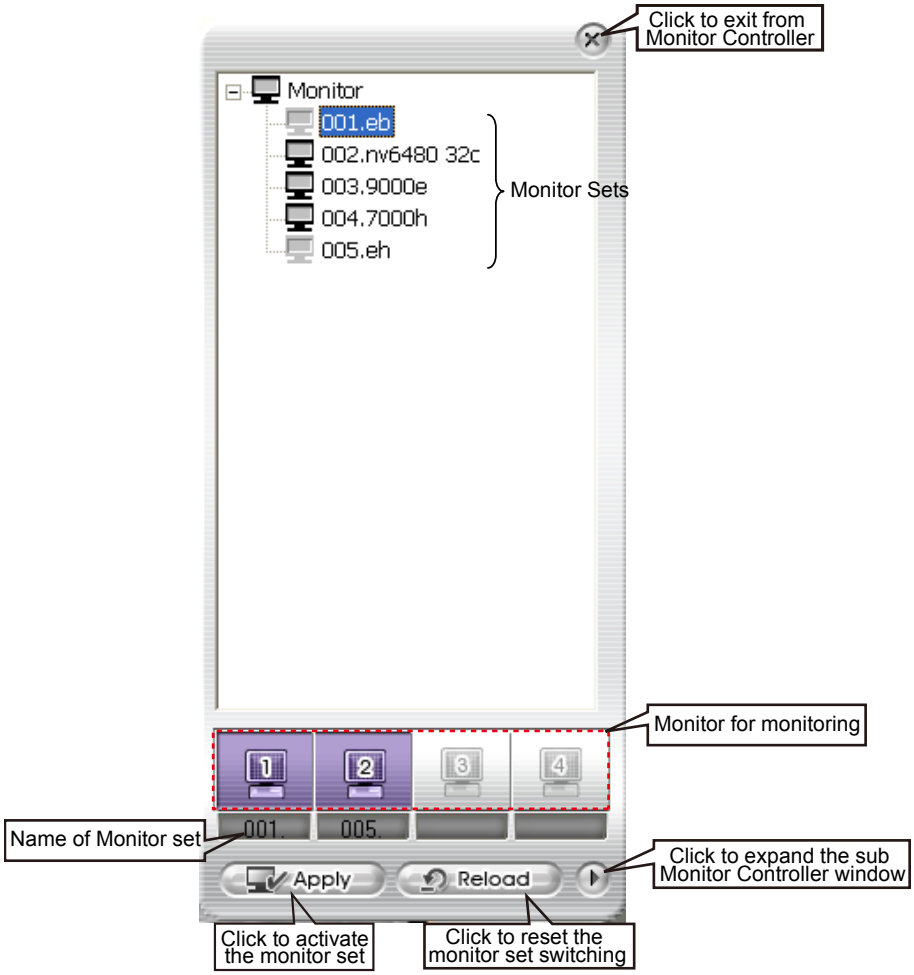
Using Monitor Controller

User can use Monitor Controller to switch different monitor set for monitoring and add/delete the channel in monitor set.

User needs to create monitor set in order to using Monitor Controller. To create monitor set, please go to Setup > Camera (see also Camera setup)

1. Click

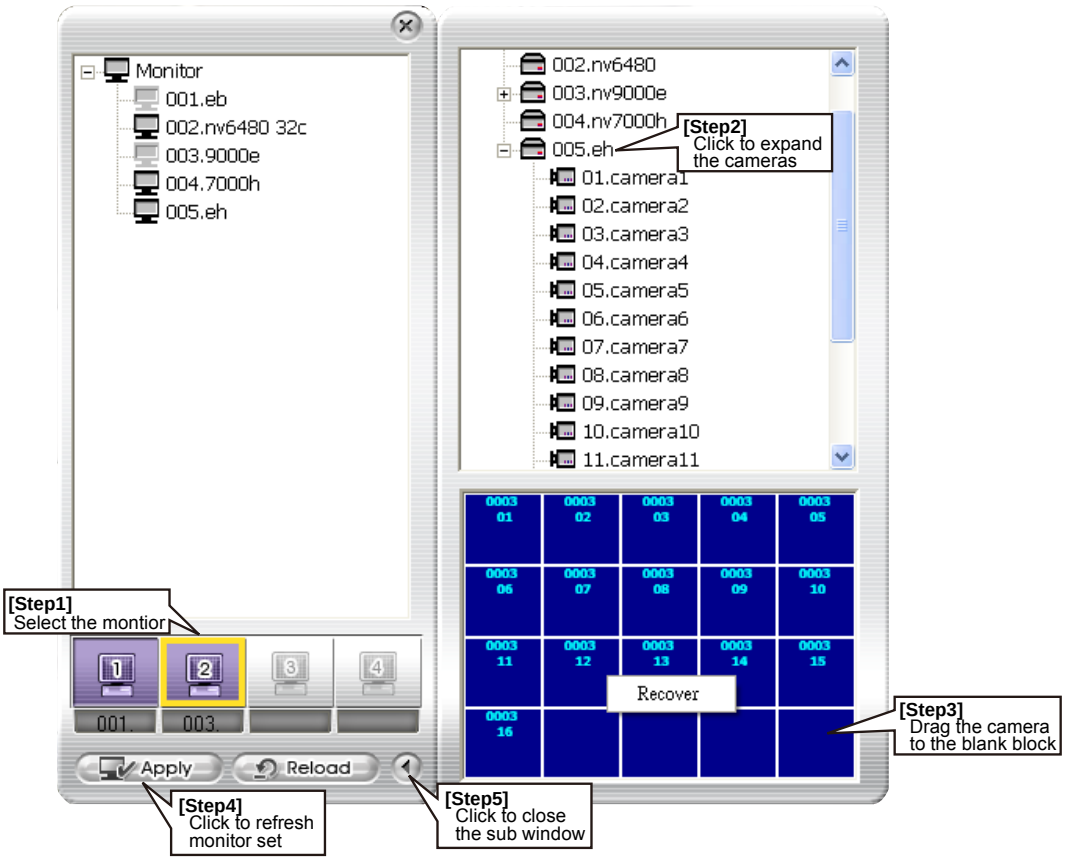
2. The Monitor Controller window will show up as below shown:



- Right-click on monitor set and select **Recover** to un-select the monitor set.
- The monitor set is gray that indicates the monitor set is selected and been monitored
- The monitor 1 ~ 4 are purple that indicate the monitor is monitoring.
- Right-click on monitor and select the **Recover** to reset the monitor.

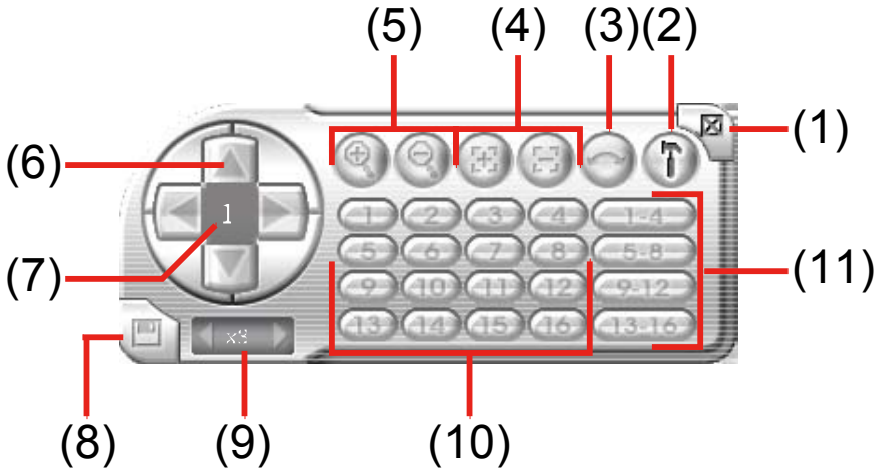
3. Drag the monitor set from monitor list to the monitor (1 ~ 4) and click **Apply** to activate it. To reset the monitoring group, click **Reload**.
4. To configure monitor set, click arrow button to expand the sub Monitor Controller window.
5. Select the monitor. The DVR servers are included in the monitor set will list on sub Monitor Controller window. The lower part of window display all monitored channels in the monitor set.
6. To add new channels, click the DVR server to un-fold the available cameras. Drag the camera to the blank channel block that has no channel number and name display.
7. Click **Apply** to refresh the monitor set.

8. To delete channels from monitor set, right-click on channel and select **Recover**.
9. Click arrow button to close the sub window.



Right-click on channel block and select **Recover** to delete the channel form monitor set.

Familiarizing the Buttons in PTZ Camera Controller

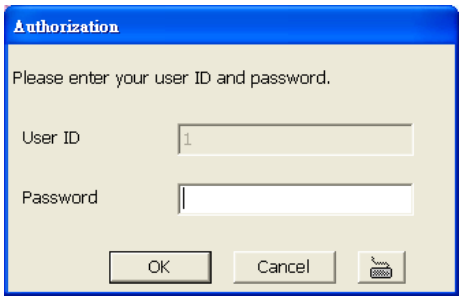


Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Select PTZ cameras.
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Save Camera preset position	Save the PTZ camera preset position number. Select the camera and click the preset position number and save it.
(9) Camera lens speed controller	Adjust the moving s1peed of the PTZ camera lens.

Name	Function
(10) Camera preset position number	Move the PTZ camera to the preset point.
(11) Group AutoPan	Select to automatically operate PTZ camera in group.

9.4.6 Customizing the iMatrix System

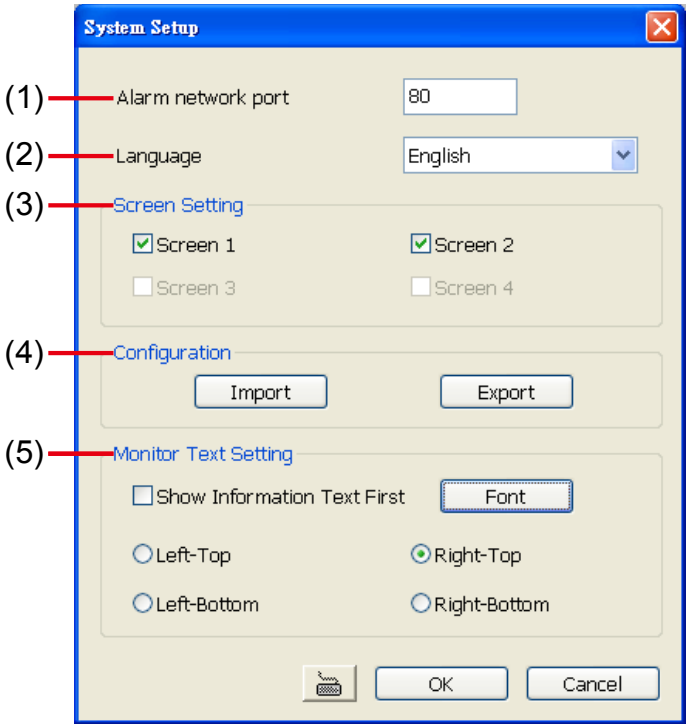
In the iMatrix application, click the Setup button to customize the iMatrix system. In the Authorization dialog box, enter the administrator User ID and Password.



When the iMatrix configuration setup selection appears, select and click the buttons you want to change the setting.

System Setting

In the System Setting dialog box, click **OK** to accept and start to reload the new setting, and **Cancel** to exit without saving.



(1) Alarm Network Port

Select a port for receiving alarm video from DVR server. Any network service port can be assigned as long as the port doesn't conflict with current network service.

(2) Language

Customize the system to display the tool tips and dialogs based on the selected language. By default the set language is in English.

(3) Screen Setting

Enable/disable monitor for monitoring. Only the monitors that connect with iMatrix system are available for enable/disable.

(4) Configuration
Import / Export the iMatrix system configuration

(5) Monitor Text Setting
Enable/disable the camera information display and display position on the monitor screen.
Show Information Text First: Enable/disable the DVR information display on monitor screen. Click **Font** to select the text font and colour.

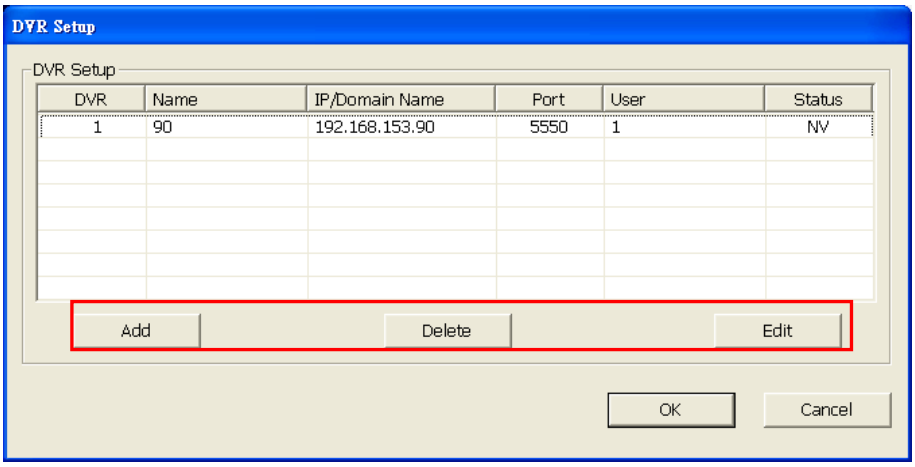
DVR Setup

Add the DVR servers for monitoring.

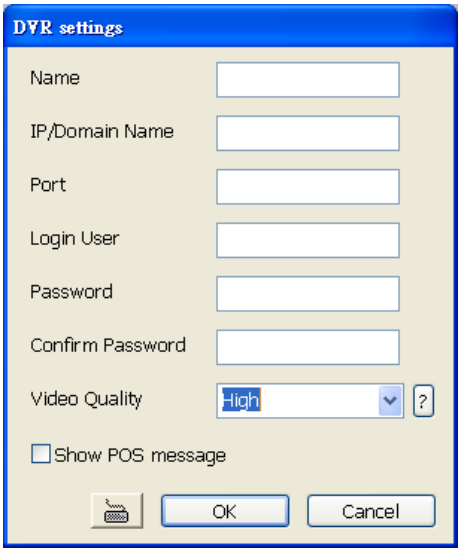
iMatrix only supports 16 DVR servers

To Add and Remove DVR Server

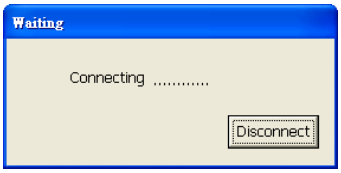
1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **DVR**.
4. In the DVR Setup section, click **Add** to insert, **Delete** to remove and **Edit** to modify DVR server setting.



5. To continue adding a DVR, in the text box, enter the name, IP/Domain, Login User, Password, Confirm Password of the remote DVR server.
6. Select the **Video Quality** for video display on the iMatrix system monitor screen. When the video quality is high, user can enable **Show POS message** box and the POS message will also display on the iMatrix system monitor screen.

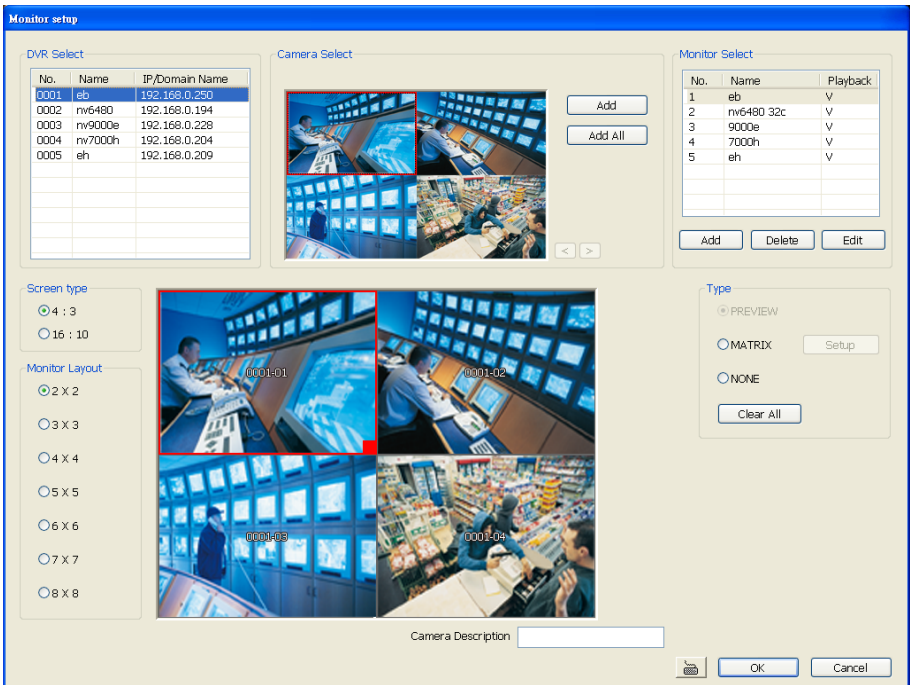


7. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.
8. And then, the iMatrix system will try to connect with DVR server. If the connecting time takes too long, user can click **Disconnect** button to cancel the connect action.

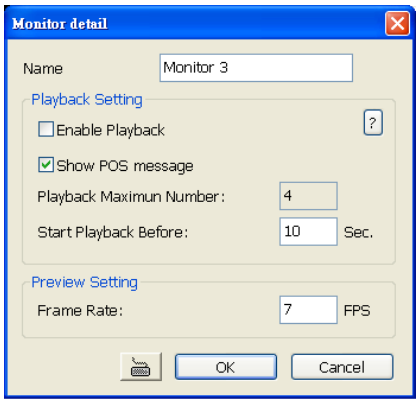


Camera Setup

Select the camera from different DVR servers in order to monitor in one group. The selected cameras will be played on **Monitor** screen (see Using the iMatrix Application).



1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **Camera**.
4. Click **Add** to create a monitor set. The monitor set can be added up to 1000 monitor set. Click **OK** to save the setting.
   - **Name:** Enter a name for the monitor set (12 characters only).
   - **Playback Setting**
     - **Enable Playback:** Enable/disable to allow playback on monitor screen.
     - **Show POS message:** Enable/disable display POS information on monitor screen.
     - **Start Playback Before:** Enter the time (sec.) when start playback will start from the present time backward the time user has setup.
   - **Preview Setting**
     - **Frame Rate:** User can set the camera transmitting **Frame Rate** for preview, but the real transmitting frame rate depends on camera setting.



5. After the Monitor set has been created, select the DVR server. And then the camera channels of the DVR server will display on the **Camera Select** window. User can combines different cameras from different DVR servers as a monitor set. And all camera channels can be selected by different Monitor set raptly. Click **<** and **>** to go back previous and go to next camera screen.
6. User can depend on the monitor size to select the screen type – **4:3** (regular screen monitor) or **16:10** (width screen monitor). The 4:3 and 16:10 screen type support different monitor layout.
7. Select the camera that user wants to add, and then click **Add** button. To add all the cameras, click **Add All**. The selected camera channel will be added to **Monitor Layout** window. User can add up to 64 cameras in 4:3 screen type and 80 cameras in 16:10 screen type. To remove the camera from the **Monitor Layout** window, select the camera and right-click to select **Recover**. To delete all cameras, click **Clear All** button. User can enter a description for a channel. Click a camera in **Monitor Layout** window and enter the description in **Camera Description**. The camera description will display on the channel of the monitor screen.

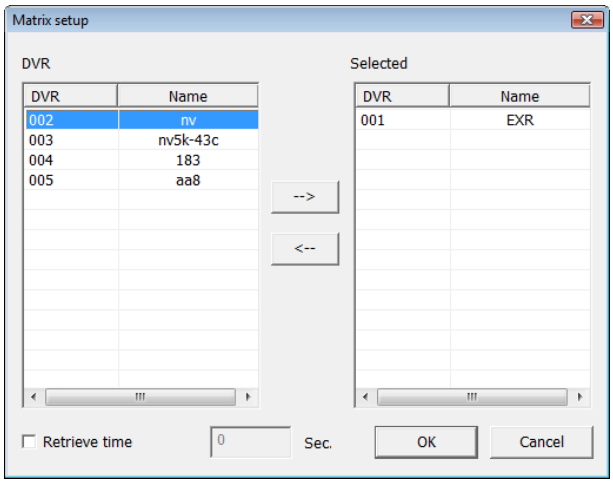
User can drag the camera channel to Monitor Layout window without using **Add** button.

---

8. In Monitor Layout window, user also can set the channel to receive the alarm events from DVR server.
   - **Matrix:** set the selected channel to receive and display the alarm event from selected DVR servers. Click **Setup** to select the DVR servers. Enable the **Retrieve time** to set a period time (0 ~ 255 sec) for alarm event to display. If the retrieve time doesn't enable, the alarm event will display on screen until

next alarm event come in.

On the DVR site, user need to enable and configure the matrix to send iMatrix (please refer to ***Alarm Setting*** of DVR manual).



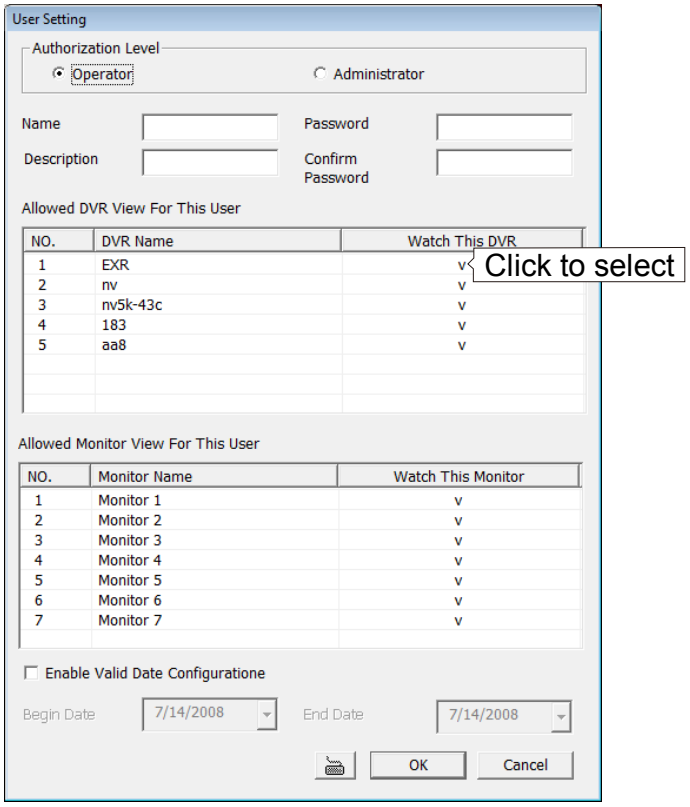
9. Click **OK** to save the setup. To exit without saving, click **Cancel**.
10. To delete the monitor set, select the monitor set in **Monitor Select** windows and click **Delete** button.
11. To modify the monitor set, select the monitor set in **Monitor Select** windows and click **Edit** button.
12. To viewer different monitor set, click **Monitor Controller** from iMatrix main UI and drag the monitor set to the monitor and press **Apply** button.
13. Also, user can call up the PTZ camera control panel by click **PTZ** button and select the PTZ camera to operate. The PTZ icon will be available when there are PTZ cameras in Monitor set.

- Click right mouse button and drag on screen can enlarge viewing. Click right mouse button again to back to normal view.
- Press F1 will display DVR information on upper right corner of channel screen. Press F1 again to hide.
- Click on channel to view in full screen. Press **Esc** to back to multiple channel screens.
- The icon indicates the channel is in preview status.
- The icon indicates the channel is in playback status.

User Setting

iMatrix supports 256 user account that includes operator and administrator account.

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **User**
4. Select the Authorization Level – **Operator** or **Administrator**. User can define each operator/administrator account's authority of DVR server and Monitor set. **Only the administrator is authorized to close and customize the iMatrix system**.
5. Enter the **Name**, **Description**, **Password**, and **Confirm password** of the account.
6. Select the DVR servers that allow this account user to preview and playback. The DVR server with check mark means is selected.
7. Select the Monitor set that allow this account user to view. The Monitor set with check mark means is selected.
8. User can assign a valid date for Operator user. Select **Being Date** and **End Date** to assign a valid date for operator account. **The account only will be available during the assigned date.**
9. Click **OK** to accept the new settings and **Cancel** to exit without saving.



9.4.7 Using the Playback Function

User can playback recorded video from the remote side of the DVR server.

- Playback function must be enabled. Please go to **Setup** > **Camera** and select the monitor set and enable the playback function (see also Camera setup)
- iMatrix playback doesn't support on EB series.

1. Double-click the preview icon of channel and the channel will start playback.

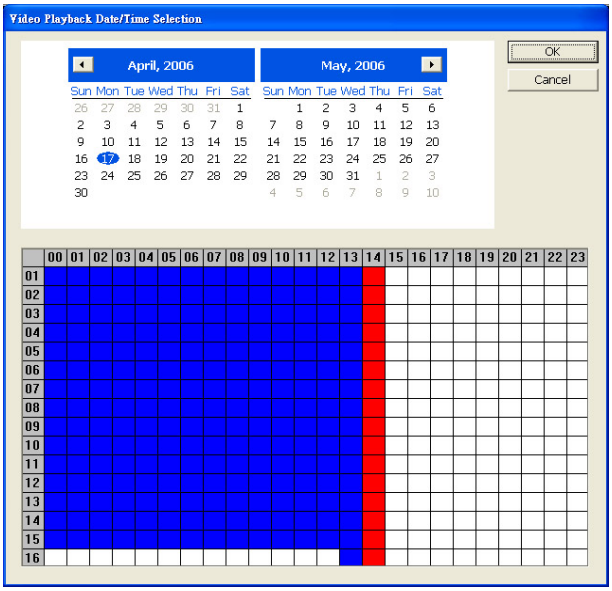
The icon indicates the channel is in playback status.

2. User can use the playback control button to operate the playback.

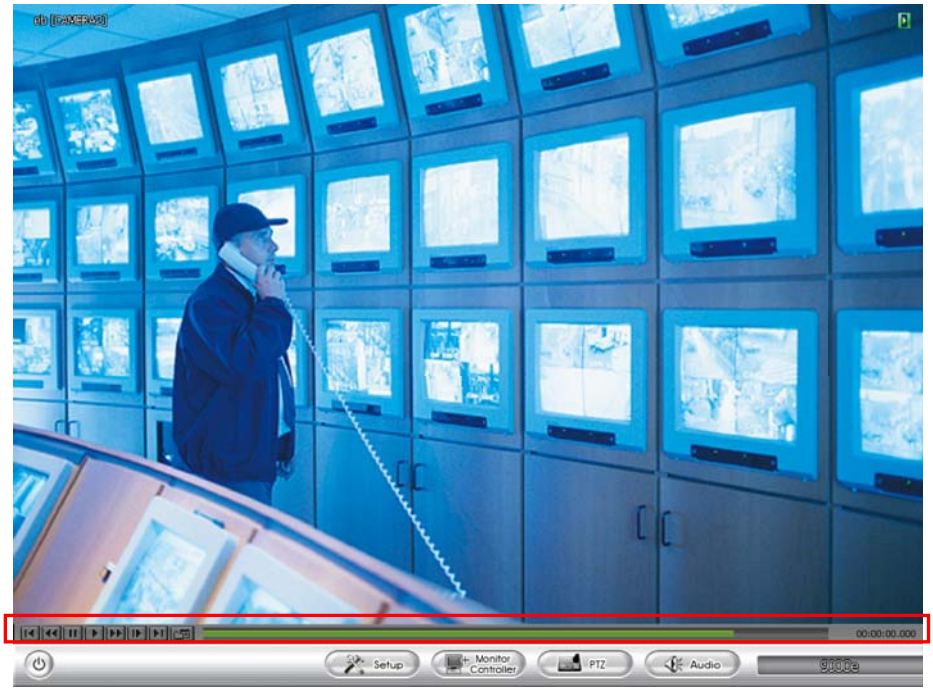
- Click channel to switch to full screen mode for operating playback control button easily.
- iMatrix only supports 4 channel playback at the same time.

Button	Function
	Begin: Move at the beginning of video.
	Slower: Play the recorded video file at the speed of 1/2X, 1/4X, 1/8X, 1/16X, or 1/32X.
	Pause: Briefly stop playing
	Play: Play the video
	Next: Go to the next frame.
	Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x.
	End: Go to the end of the video.

Button	Function
	Select recorded vide to playback from remote DVR server hard disk. Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.

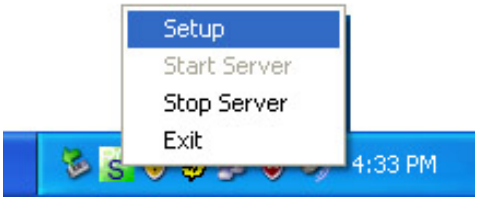


x1 10:00:01	Display playback speed and recoding time.



Chapter 10 Using the Remote Control Server

The bundled Remote Control Server enables the PC with Central Management System program (CM1000) installed in it remotely access the DVR server. You many need to manually run this program for CMS access the DVR server. To run, click **start** > **Programs** > **DSS** > **DVR** > **Remote Control Server**.
The remote control server icon appears on the taskbar when the remote control server is enabled. To change the port setting or stop server, right-click icon and then make a selection.



User can also setup Remote Control Server in DVR **Network** setting, please see Chapter 3.4 #(5).

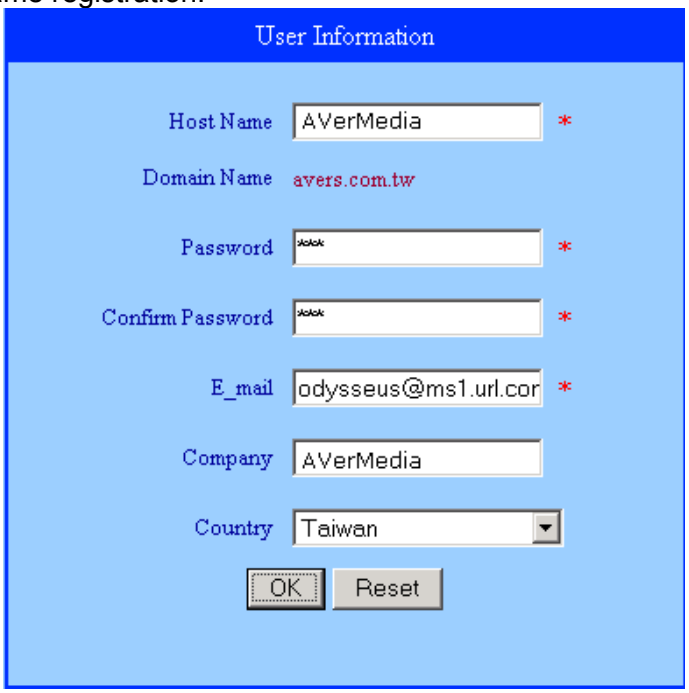
Appendix A Registering Domain Names

DDNS (Dynamic Domain Name Service) is a data query service mainly used on the Internet for translating domain names into Internet addresses. It allows remote clients to intelligently search dynamic servers without any previous enquiring for servers' Internet addresses.
In order to take advantage of this intelligent service, first register your domain name on the following Web site **http://ddns.avers.com.tw**

1. **User Login**
   Browse the website ddns.avers.com.tw with Microsoft IE or Netscape Navigator to access the following dialog.

   First input the serial number and select the product name. The serial number is located on accessories box. The serial number input format should be 12 digits without colon (:) or hyphen (-).

2. **User Information**
   Please provide the following user information, **Host Name** (user can choose any name he/she likes except the one violence with other users), **Password**, **E-mail**, **Company**, and **Country**. And then, click **OK** to complete the domain name registration.



Warranty Notice

LIMITED WARRANTY

AVerMedia® TECHNOLOGIES, Inc. warrants that this product to be free of defects resulting from faulty manufacturing or components under the following terms:

WARRANTY LENGTH

Labor is warranted for 15 months from the date of purchase. Replacement products will be warranted for the remainder of the 15-month warranty period or 30 days, whichever is longer.

WHO IS PROTECTED

This warranty is enforceable only by the first consumer purchaser.

WHAT IS AND IS NOT COVERED

Except as specified below, this warranty covers all defects resulting from faulty manufacturing of this product. The following are not covered by the warranty.

1. Any product on which the serial number has been defaced, modified, or removed.
2. Damage, deterioration, or malfunction resulting from:
   a. Accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, commercial or industrial use, unauthorized product modification, or failure to follow instructions included with the product.
   b. Misapplication of service by someone other than the manufacturer's representative.
   c. Any shipment damages. (Claims must be made with carriers.)
   d. Any other cause that does not relate to a product defect.
3. Cartons, cases, batteries, cabinets, tapes, or accessories used with the product.
4. AVerMedia TECHNOLOGIES, Inc. does not warrant that this product will meet your requirements; it is your responsibility to determine the suitability of this product for your purpose.

WHAT WE WILL AND WILL NOT PAY FOR

We will pay labor and material expenses for covered items. However, we will not pay for the following:

1. Removal or installation charges.
2. Shipping charges.
3. Any incidental charges.

EXCLUSION OF DAMAGES

THE MANUFACTURER'S SOLE OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT AT OUR OPTION. THE MANUFACTURER SHALL NOT, IN ANY EVENT, BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE (INCLUDING, BUT NOT LIMITED TO, DAMAGES RESULTING FROM INTERRUPTION OF SERVICE AND LOSS OF BUSINESS) OR LIABILITY LIMITATIONS OF IMPLIED WARRANTIES.

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STATE LAW AND YOUR WARRANTY

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