

Network Recording Software Professional

SOL6720-Pro/ SOL6360-Pro/ SOL6160-Pro/ SOL6090-Pro/ SOL6040-Pro

User's Manual



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Software Version: V3.3.14

Content

Content	1
1. Preface	4
2. System Requirements	5
3. Software Installation and Un-installation	8
3.1. Software Installation.....	8
3.2. Install KeyPro (USB Dongle)	11
3.3. Change Language of User Interface	13
3.4. Software Un-Installation.....	14
4. Add Cameras and Video Servers	15
4.1. Add Multiple Devices in "Config" Page	16
4.2. Add Devices in "Channel" Page.....	19
5. Configure the Recording Function	30
5.1. Configure Recording Storage	30
5.2. Configure Recording Schedule.....	34
5.3. Backup and Restore Recorded Files.....	38
6. Live View	43
6.1. Operating the Specific Channel	46
6.2. Digital Zoom.....	48
6.3. Mask Area	50
7. Video Playback	52
7.1. Play Back Video	53
7.2. Export Video.....	56
7.3. Playback/Download from SD Card	58
7.4. Smart Search	59
8. Configure the Event Function	62
8.1. Configure Hardware Motion Detection	62

8.2. Configure Digital I/O.....	66
9. Configure the Intelligent Video System	71
9.1. Add the IVS Detection	73
9.2. Configure "Normal Motion" Detection	74
9.3. Configure "Missing Object" Detection	76
9.4. Configure "Foreign Object" Detection	78
9.5. Configure "Loss Focus" Detection	80
9.6. Configure "Occlusion" Detection	82
9.7. Configure "Redirection" Detection.....	84
9.8. Configure "Boundary" Detection	86
9.9. Configure "Video Loss" Detection	88
9.10. Configure "Counting" Function	89
9.11. Trigger Action of IVS Detection.....	93
10. Configure the PTZ Function.....	96
11. Manage User Accounts.....	102
12. Configure Screen Layout.....	106
13. Configure and Enable E-Mail Function.....	109
14. Other Configuration	112
14.1. Configure Multiple Monitors.....	113
14.2. Configure the Startup Options.....	114
14.3. Other System Configurations	116
14.4. View System Status	119
15. E-Map	121
15.1. Configure E-Map.....	121
15.2. E-Map Live-View.....	124
16. Remote Access.....	126
16.1. Enable the Remote Access Function	126
16.2. Live-View with IE Browser	129

16.3.	Live-View with "RemoteLite"	132
16.4.	Live-View with 3G Mobile Phone	136
16.5.	Accessed with "Remote" Program	137
17.	Configure System Environment.....	142
17.1.	Backup and Restore Configurations.....	145
18.	Product Specifications	147

1. Preface

Network Recording Software Professional series (includes 4, 9, 16, 36 and 72 channels) is a video recording software which supports IP Camera and Video Server. People use this recording software to monitor the real-time video, record the video on PC then play the recorded video when necessary.

Network Recording Software supports vary ways to record the video, including normal recording, schedule recording, motion-triggered recording, alarm-triggered recording, IVS-triggered recording (Intelligent Video System) and manual recording. In addition, E-Map and Multi-Monitor are the built-in functions to make this recording software handy.

Through activating the function of Web server, remote AP server and 3GPP server, Network Recording Software provides remote controlled by CMS (Central Management Software) and Remote Program; also provides live-view by web browser, , Remote Lite program and 3G mobile phone for user's demand.

2. System Requirements

The following lists the recommended PC specification, please note:



The PC performance, brand of camera, camera's resolution and FPS, will affect the maximum simultaneous live-view channels.

Recording Software	SOL6720-Pro			
PC Specification	CPU: Intel I7-2600 3.4GHz			
	RAM: 4GB			
	Display Card: Independent display card with 1GB RAM on board, ATI or nVidia chipset is recommended, such as ATI-5450 or above			
	Monitor Resolution: This software will automatic adjust to apply the monitor resolution, from 1024x768 up to 1920x1200			
	Recording Hard Disk Drive <ul style="list-style-type: none"> ● Internal: SATA II 7200rpm, File System: NTFS ● External: DAS (Direct Attached Storage) connected via eSATA or USB2.0 			
	Operating System: Windows 7 / Vista / XP			
	RAM: 4GB			
Resolution	CIF (320x240)	D1 (720x480)	1.3M (1280x1024)	2M (1600x1200)
Bitrate	H.264 512Kbps (CBR)	H.264 1Mbps (CBR)	H.264 1.5Mbps (CBR)	H.264 2Mbps (CBR)
Frame Rate	30 FPS	30 FPS	10 FPS	15 FPS
Simultaneous Recording Channels	Up to 72 CH	Up to 72 CH	Up to 72 CH	Up to 72 CH
Simultaneous Live-View Channels (with Asoni H.264 Camera)	Up to 72 CH	Up to 72 CH	Up to 72 CH	Up to 72 CH
Simultaneous Live-View Channels (with other brand H.264 Camera)	Up to 64 CH	Up to 32 CH	Up to 25 CH	Up to 18 CH

Recording Software	SOL6360-Pro
PC Specification	CPU: Intel I5-2500 3.3GHz

	RAM: 4GB			
	Display Card: Independent display card with 1GB RAM on board, ATI or nVidia chipset is recommended, such as ATI-5450 or above			
	Monitor Resolution: This software will automatic adjust to apply the monitor resolution, from 1024x768 up to 1920x1200			
	Recording Hard Disk Drive <ul style="list-style-type: none"> ● Internal: SATA II 7200rpm, File System: NTFS ● External: DAS (Direct Attached Storage) connected via eSATA or USB2.0 			
	Operating System: Windows 7 / Vista / XP			
Resolution	CIF (320x240)	D1 (720x480)	1.3M (1280x1024)	2M (1600x1200)
Bitrate	H.264 512Kbps (CBR)	H.264 1Mbps (CBR)	H.264 1.5Mbps (CBR)	H.264 2Mbps (CBR)
Frame Rate	30 FPS	30 FPS	10 FPS	15 FPS
Simultaneous Recording Channels	Up to 36 CH	Up to 36 CH	Up to 36 CH	Up to 36 CH
Simultaneous Live-View Channels (with Asoni H.264 Camera)	Up to 36 CH	Up to 36 CH	Up to 36 CH	Up to 36 CH
Simultaneous Live-View Channels (with other brand H.264 Camera)	Up to 36 CH	Up to 25 CH	Up to 20 CH	Up to 14 CH

Recording Software	SOL6160-Pro / SOL6090-Pro / SOL6040-Pro
PC Specification	CPU: Intel I3-2100 3.1GHz
	RAM: 4GB
	Display Card: Independent display card with 1GB RAM on board, ATI or nVidia chipset is recommended, such as ATI-5450 or above
	Monitor Resolution: This software will automatic adjust to apply the monitor resolution, from 1024x768 up to 1920x1200
	Recording Hard Disk Drive <ul style="list-style-type: none"> ● Internal: SATA II 7200rpm, File System: NTFS ● External: DAS (Direct Attached Storage) connected via eSATA or USB2.0
	Operating System: Windows 7 / Vista / XP

Resolution	CIF (320x240)	D1 (720x480)	1.3M (1280x1024)	2M (1600x1200)
Bitrate	H.264 512Kbps (CBR)	H.264 1Mbps (CBR)	H.264 1.5Mbps (CBR)	H.264 2Mbps (CBR)
Frame Rate	30 FPS	30 FPS	10 FPS	15 FPS
Simultaneous Recording Channels	Up to 16 CH	Up to 16 CH	Up to 16 CH	Up to 16 CH
Simultaneous Live-View Channels (with Asoni H.264 Camera)	Up to 16 CH	Up to 16 CH	Up to 16 CH	Up to 16 CH
Simultaneous Live-View Channels (with other brand H.264 Camera)	Up to 16 CH	Up to 11 CH	Up to 9 CH	Up to 6 CH

3. Software Installation and Un-installation

3.1. Software Installation

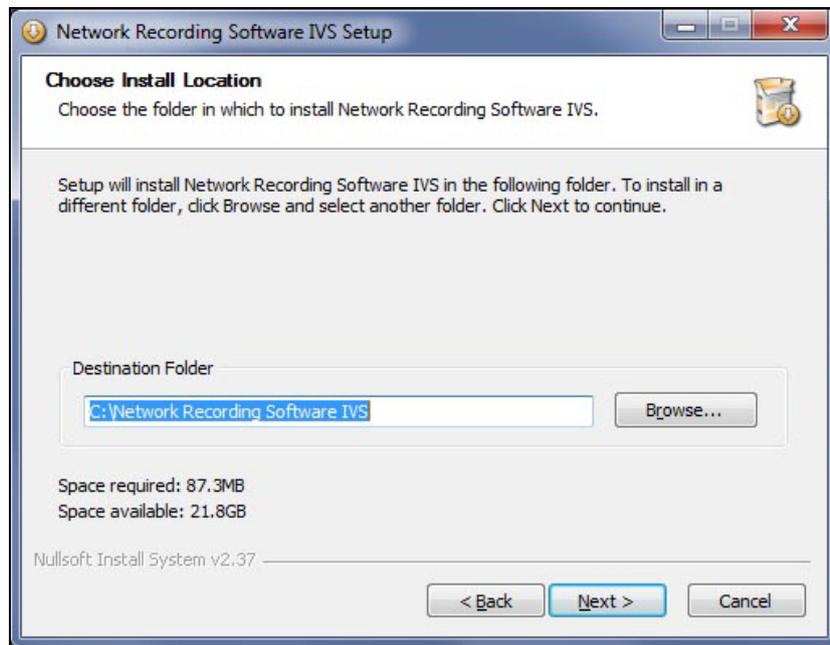
1. Insert the CD-ROM, click on **[SOL6XX0-Pro - XXCH Network Recording Software Professional]** to start the installation.
2. Select the language you would like to use.



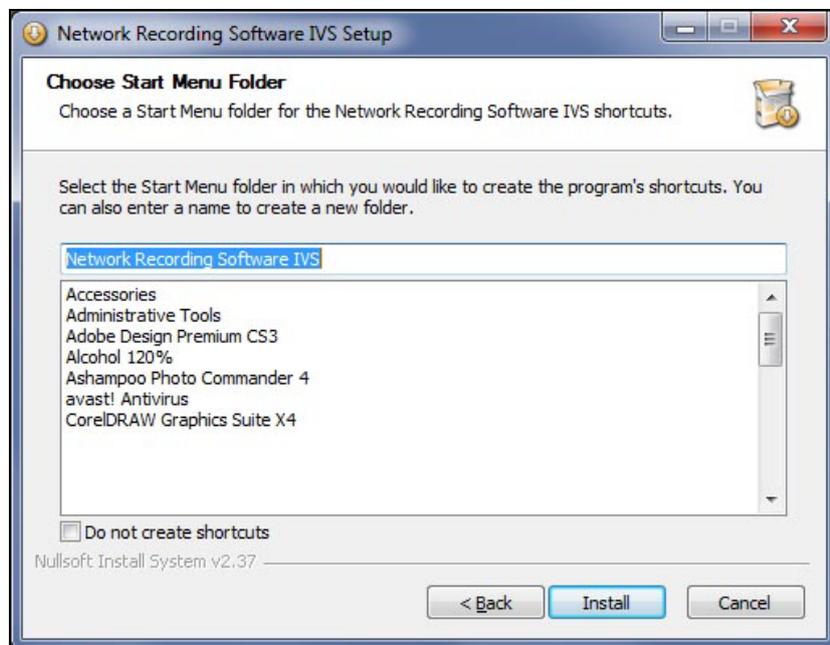
3. Click **[I Agree]** button under the License Agreement for the next step.



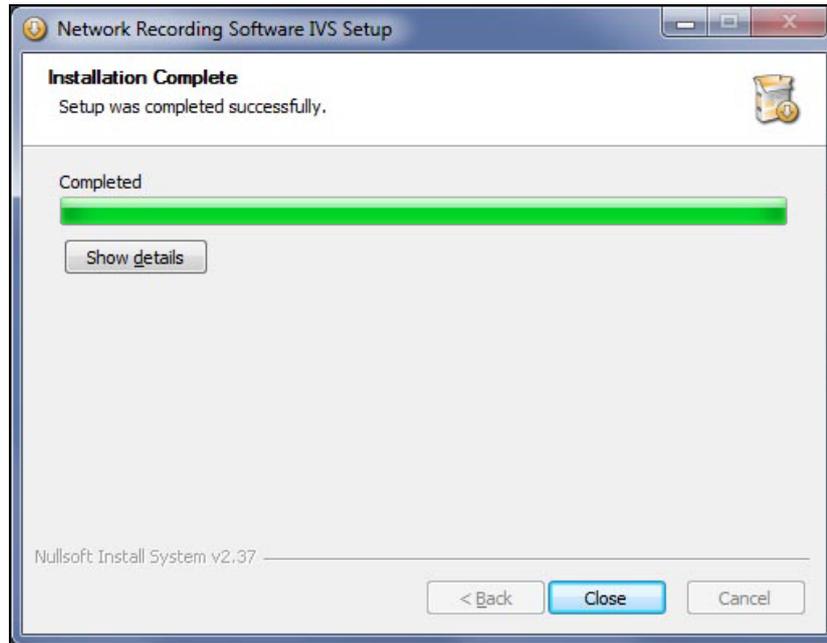
4. Select the location to install the software. The default folder is "C:\Network Recording Software IVS". Click **[Next]**.



5. Change the name of the program folder in Start Menu if necessary. Click **[Install]** to start the installation.



6. When finish, click [**Close**] to close the procedure of the installation.



7. The software is installed and you will see two new added icons on the desktop:

 <p>Network Recording Software IVS</p>	<p><u>Network Recording Software IVS</u> : This is the main program of the recording software.</p>
 <p>Configure Tool</p>	<p><u>Configure Tool</u> : This utility provides multiple functions for "Search and add cameras", "Configure the recording software", and "Backup/restore the settings of recording software"</p>

3.2. Install KeyPro (USB Dongle)

KeyPro is a USB dongle provided for protecting the license of software. Before run the software, please plug the KeyPro in the USB port of PC, and the software will work properly.

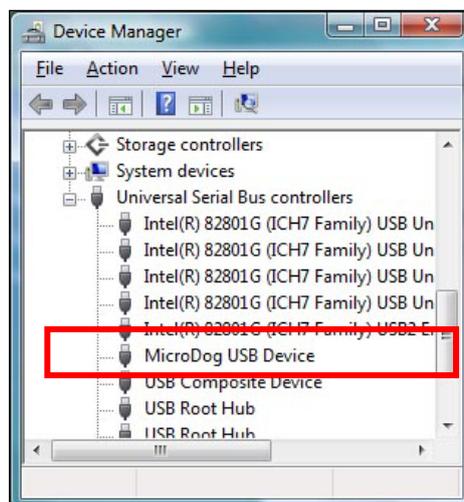


Different channel version of software needs different KeyPro. For example, the 36CH Recording Software needs a 36CH KeyPro, the 16CH Recording Software needs a 16CH KeyPro.

Please see the code on the stick of KeyPro to ensure you are using the correct one.

Code on Stick	Applied Channel Version
CEXP-SOL04xxx	4-CH Network Recording Software IVS
CEXP-SOL09xxx	9-CH Network Recording Software IVS
CEXP-SOL16xxx	16-CH Network Recording Software IVS
CEXP-SOL36xxx	36-CH Network Recording Software IVS
CEXP-SOL72xxx	72-CH Network Recording Software IVS

After complete the installation of Network Recording Software, plug in the KeyPro, the system will automatically install the device driver for the KeyPro, you can find the "MicroDog USB Device" device under "Device Manager" → "Universal Serial Bus Controllers".



Without the KeyPro, Network Recording Software will freeze the video, and stop display the video afterward.



To let the software works properly, please close the software, plug in the KeyPro, and then run the software again.

3.3. Change Language of User Interface

To change the language of the user interface, close and exit the software, and then click "Start" → "All Programs" → "Network Recording Software IVS" → "Language" → "Language – *your language*".



After start up this software, you will see the language of user interface has been changed.

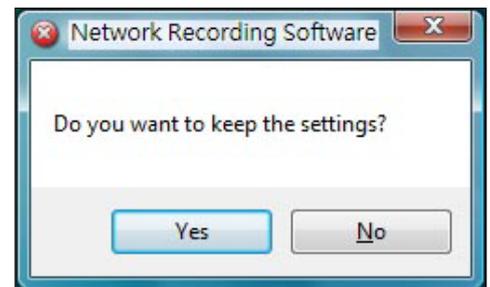
3.4. Software Un-Installation

To uninstall the software, click “Start” → “All Programs” → “Network Recording Software IVS” → “Uninstall”.

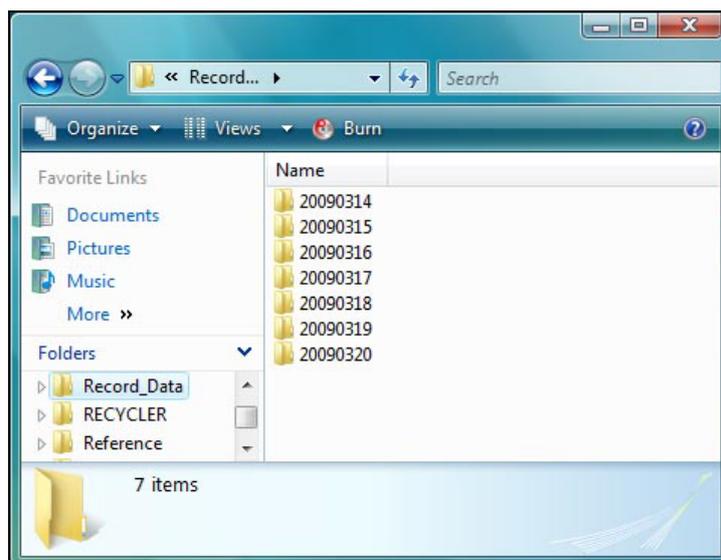


During the progress, a pop-up message asks whether keep the settings.

- Click **[Yes]** will keep the settings for upgrade or re-install the software later.
- Click **[No]** will remove the software completely.



After complete, the software will be removed, but the recorded data is still reserved. After you install the upgraded software, the recorded data can be added and for store. Please see [Configure the Recording Function → Configure Recording Storage](#) for the detail.

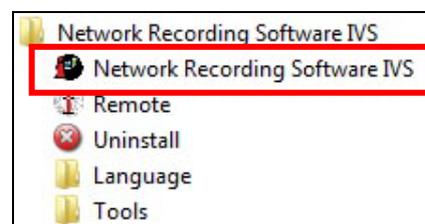


4. Add Cameras and Video Servers

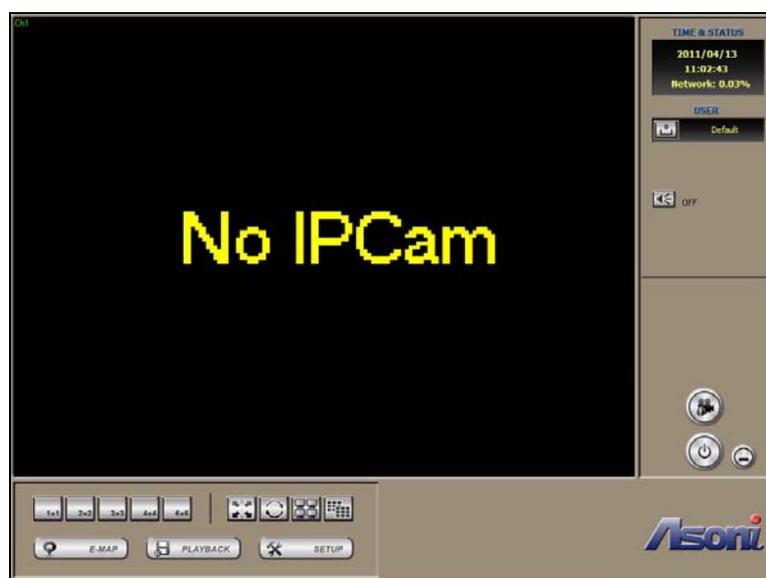
To start using the software, please add and configure the network camera or network video server. To run the software, double-click the desktop icon - "Network Recording Software IVS". Or, click "Start" → "All Programs" → "Network Recording Software IVS" → "Network Recording Software IVS".



In Windows 7 / Vista, please right-click on the desktop icon or the short-cut in Start Menu, then select "Run as administrator" to start the program.



The Live-View screen of Network Recording Software IVS showed as below:



Click  **SETUP** [Setup] to enter the Setup screen. A Login window appears, input user name and password and then click  [OK] to confirm. The default user name and password are "admin" and "admin".



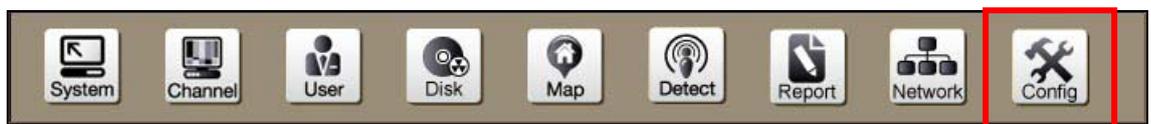
There are 2 ways to add and configure the IP camera / IP video server:

- Add and manage multiple devices in the "Config" page.
- Add and manage the device one by one in "Channel" page.

4.1. Add Multiple Devices in "Config" Page

The "Config" page provides an easy way to search, add and manage the devices.

1. Click **[Config]** button on the top to enter the "Config" page.

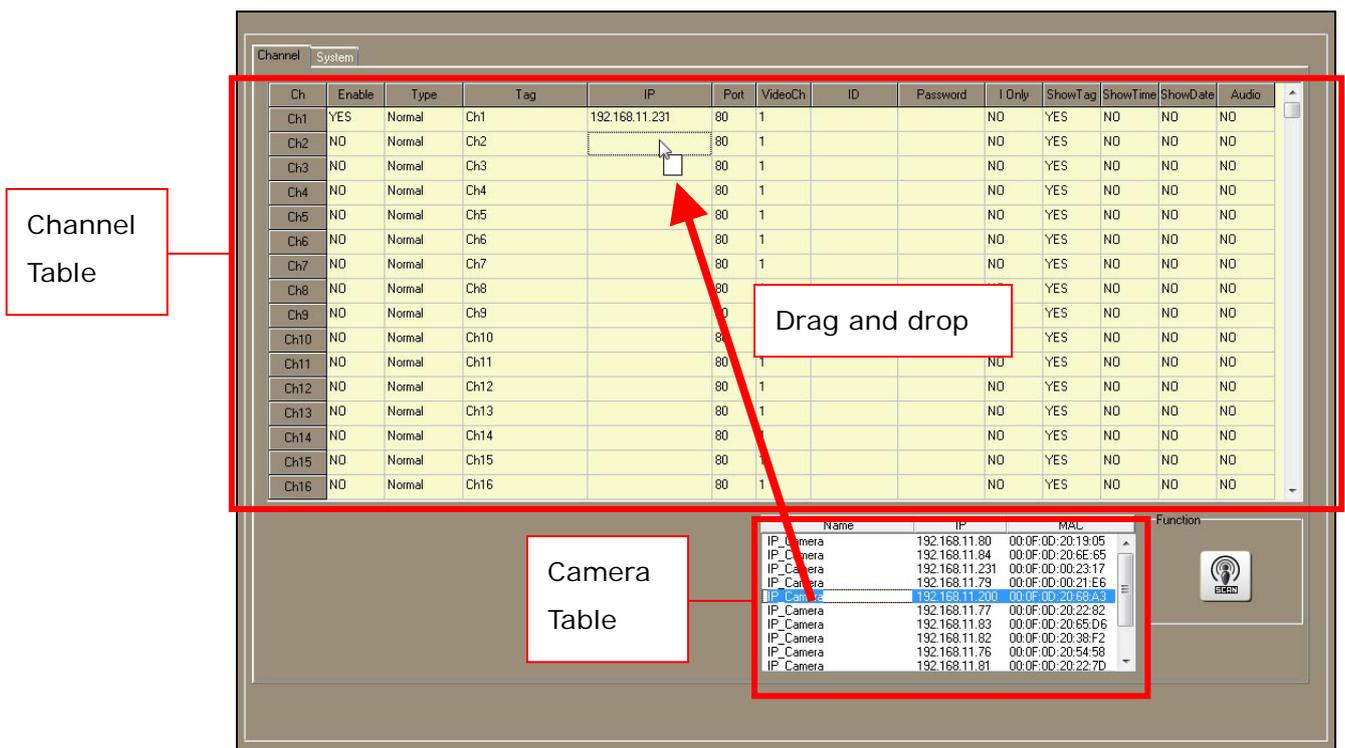


2. When go into this page it will automatic search the devices in LAN, the found devices will be listed in Camera Table. To re-search the device, click



[Scan] button.

3. Click to select the camera in Camera Table, drag and drop it into any channel of the Channel Table. If the channel is empty, the camera will be added to that channel; if the channel has been assigned for other camera, the new camera will replace the old one.



Channel Table

Ch	Enable	Type	Tag	IP	Port	VideoCh	ID	Password	I Only	ShowTag	ShowTime	ShowDate	Audio
Ch1	YES	Normal	Ch1	192.168.11.231	80	1			NO	YES	NO	NO	NO
Ch2	NO	Normal	Ch2		80	1			NO	YES	NO	NO	NO
Ch3	NO	Normal	Ch3		80	1			NO	YES	NO	NO	NO
Ch4	NO	Normal	Ch4		80	1			NO	YES	NO	NO	NO
Ch5	NO	Normal	Ch5		80	1			NO	YES	NO	NO	NO
Ch6	NO	Normal	Ch6		80	1			NO	YES	NO	NO	NO
Ch7	NO	Normal	Ch7		80	1			NO	YES	NO	NO	NO
Ch8	NO	Normal	Ch8		80	1			NO	YES	NO	NO	NO
Ch9	NO	Normal	Ch9		80	1			NO	YES	NO	NO	NO
Ch10	NO	Normal	Ch10		80	1			NO	YES	NO	NO	NO
Ch11	NO	Normal	Ch11		80	1			NO	YES	NO	NO	NO
Ch12	NO	Normal	Ch12		80	1			NO	YES	NO	NO	NO
Ch13	NO	Normal	Ch13		80	1			NO	YES	NO	NO	NO
Ch14	NO	Normal	Ch14		80	1			NO	YES	NO	NO	NO
Ch15	NO	Normal	Ch15		80	1			NO	YES	NO	NO	NO
Ch16	NO	Normal	Ch16		80	1			NO	YES	NO	NO	NO

Camera Table

Name	IP	MAC	Function
IP_Camera	192.168.11.80	00:0F:0D:20:19:05	
IP_Camera	192.168.11.84	00:0F:0D:20:6E:65	
IP_Camera	192.168.11.231	00:0F:0D:00:23:17	
IP_Camera	192.168.11.73	00:0F:0D:00:21:E6	
IP_Camera	192.168.11.200	00:0F:0D:20:16:8A	
IP_Camera	192.168.11.77	00:0F:0D:20:22:82	
IP_Camera	192.168.11.83	00:0F:0D:20:65:D6	
IP_Camera	192.168.11.82	00:0F:0D:20:38:F2	
IP_Camera	192.168.11.76	00:0F:0D:20:54:58	
IP_Camera	192.168.11.81	00:0F:0D:20:22:7D	

Drag and drop

4. Configure the following settings for the added cameras:

- **Enable:** Click the box to switch "YES" and "NO". Select "YES" to connect this camera; select "NO" to disconnect this camera.
 - **Type:** Click the box and then select the channel type.
 - "**Normal**": Connect the camera with normal method, can be used for the camera which has been integrated by the recording software.
 - "**Attached**": This channel will not connect the camera directly, instead of display the video from an exist channel. The "Attach Channel" will not cost any loading of camera. Please see [Add Cameras and Video Servers → Add/Manage Devices in "Channel" Page → Channel Type](#) for the detail.
 - "**RTSP**": Connect the camera with RTSP streaming. If the camera is not integrated with this software, but it supports "RTSP Streaming", you can try using this type to get the video.
 - "**JPEG Stream**": Connect the camera with MJPEG streaming. If the camera is not integrated with this software, but it supports "JPEG Streaming", you can try using this type to get the video.
 - **Tag:** The tag will be displayed on the video in Live View screen to identify the channel. Double-click the box and then input the name if necessary.
 - **IP and Port:** The IP address and HTTP port of the camera. After you drag and drop the camera to add it, these two parameters will be added automatically.
 - **Video CH:** Click the box and then select which video stream from the camera will be displayed.

For dual streaming camera and 1CH video server, "Video CH 1" means the video streaming 1; "Video CH 2" means the video streaming 2.

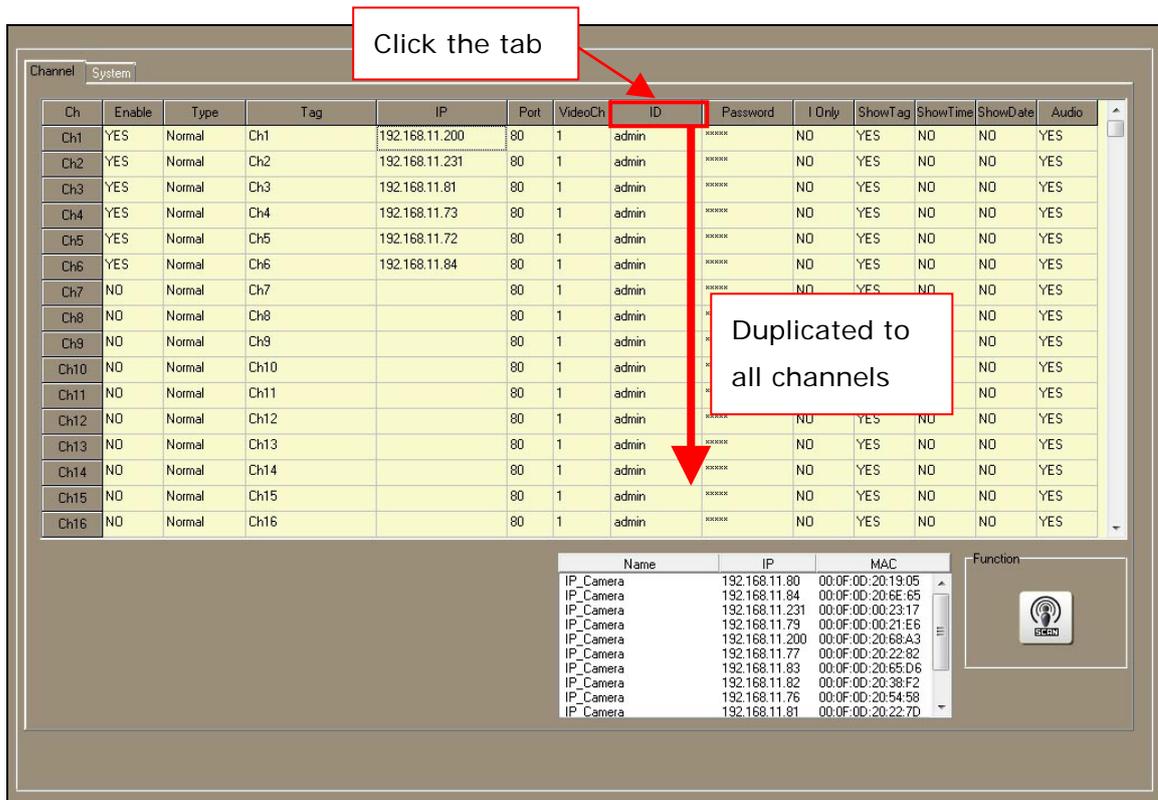
For multi-channel video server, "Video CH 1" means the video of channel 1 of video server; "Video CH 2" means the video of channel 2 of video server.....
 - **ID and Password:** Double-click the box and then input the administrator's login account and password for the camera.
 - **I Only:** Click the box to switch "YES" and "NO". "YES" means display the I-Frame video only; "No" means display the video normally. Please see [Add Cameras and Video Servers → Add/Manage Devices in "Channel" Page → I-Only](#) for the detail.
 - **Show Tag / Show Time / Show Date:** Click the box to switch "YES" and
-

“NO”, to select what information will be displayed on the video.

- **Audio:** Click the box to switch “YES” and “NO” to enable or disable the audio from this channel for live view and recording.

Tips:

If you want to add multiple cameras and they have same configuration, after drag and drop all cameras into Channel Table, configure the channel 1, click the tab on the top of each column, the setting of channel 1 will be duplicated to all channels.



Ch	Enable	Type	Tag	IP	Port	VideoCh	ID	Password	I Only	ShowTag	ShowTime	ShowDate	Audio
Ch1	YES	Normal	Ch1	192.168.11.200	80	1	admin	*****	NO	YES	NO	NO	YES
Ch2	YES	Normal	Ch2	192.168.11.231	80	1	admin	*****	NO	YES	NO	NO	YES
Ch3	YES	Normal	Ch3	192.168.11.81	80	1	admin	*****	NO	YES	NO	NO	YES
Ch4	YES	Normal	Ch4	192.168.11.73	80	1	admin	*****	NO	YES	NO	NO	YES
Ch5	YES	Normal	Ch5	192.168.11.72	80	1	admin	*****	NO	YES	NO	NO	YES
Ch6	YES	Normal	Ch6	192.168.11.84	80	1	admin	*****	NO	YES	NO	NO	YES
Ch7	NO	Normal	Ch7		80	1	admin	*****	NO	YES	NO	NO	YES
Ch8	NO	Normal	Ch8		80	1	admin	*****	NO	YES	NO	NO	YES
Ch9	NO	Normal	Ch9		80	1	admin	*****	NO	YES	NO	NO	YES
Ch10	NO	Normal	Ch10		80	1	admin	*****	NO	YES	NO	NO	YES
Ch11	NO	Normal	Ch11		80	1	admin	*****	NO	YES	NO	NO	YES
Ch12	NO	Normal	Ch12		80	1	admin	*****	NO	YES	NO	NO	YES
Ch13	NO	Normal	Ch13		80	1	admin	*****	NO	YES	NO	NO	YES
Ch14	NO	Normal	Ch14		80	1	admin	*****	NO	YES	NO	NO	YES
Ch15	NO	Normal	Ch15		80	1	admin	*****	NO	YES	NO	NO	YES
Ch16	NO	Normal	Ch16		80	1	admin	*****	NO	YES	NO	NO	YES

Name	IP	MAC
IP_Camera	192.168.11.80	00:0F:0D:20:19:05
IP_Camera	192.168.11.84	00:0F:0D:20:6E:65
IP_Camera	192.168.11.231	00:0F:0D:00:23:17
IP_Camera	192.168.11.79	00:0F:0D:00:21:E6
IP_Camera	192.168.11.200	00:0F:0D:20:68:A3
IP_Camera	192.168.11.77	00:0F:0D:20:22:82
IP_Camera	192.168.11.93	00:0F:0D:20:65:06
IP_Camera	192.168.11.82	00:0F:0D:20:38:F2
IP_Camera	192.168.11.76	00:0F:0D:20:54:58
IP_Camera	192.168.11.81	00:0F:0D:20:22:7D

5. After finish the configuration, click  **[Save]** button to complete the configuration.

6. Now you can go to the “Channel” page to check and configure the detail settings.

4.2. Add Devices in “Channel” Page

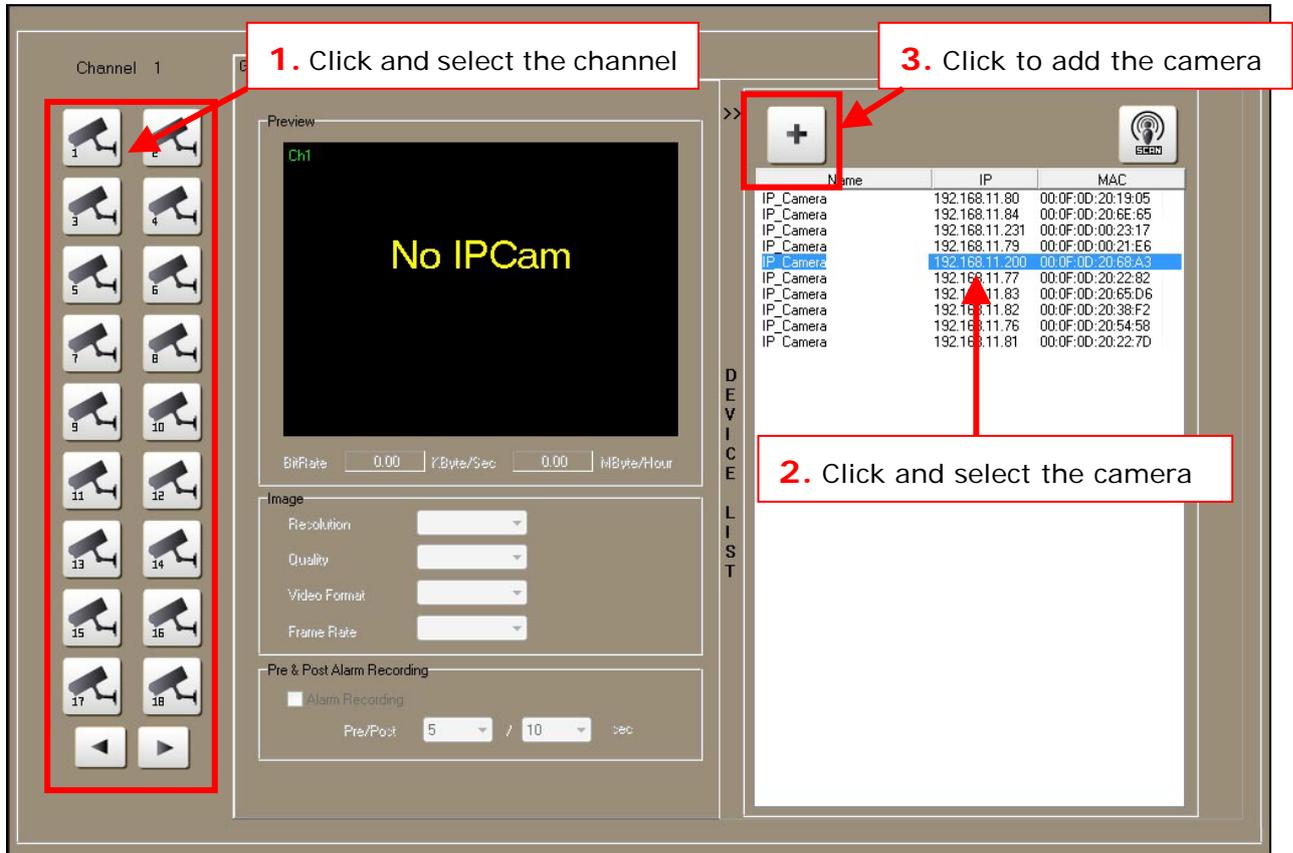
You can add, manage channel one by one in “Channel” page, it also provides more detailed configuration for each channel.

1. Click **[Channel]** on the top to enter the “Channel” page.



2. If the IP camera / Video server are located in LAN, you can use “Device List” page to scan and add the device.
3. Click the button on the left side to select channel. You can click   to display the previous or next 18 channels for select.
4. Click **[<<]** icon on the right-side to open the “Device List” page, it will automatic search the devices in LAN, the found devices will be listed. To

re-search the device, click  **[Scan]** button.



1. Click and select the channel

2. Click and select the camera

3. Click to add the camera

Name	IP	MAC
IP_Camera	192.168.11.80	00:0F:0D:20:19:05
IP_Camera	192.168.11.84	00:0F:0D:20:6E:65
IP_Camera	192.168.11.231	00:0F:0D:00:23:17
IP_Camera	192.168.11.79	00:0F:0D:00:21:E6
IP_Camera	192.168.11.200	00:0F:0D:20:68:A3
IP_Camera	192.168.11.77	00:0F:0D:20:22:82
IP_Camera	192.168.11.83	00:0F:0D:20:65:D6
IP_Camera	192.168.11.82	00:0F:0D:20:38:F2
IP_Camera	192.168.11.76	00:0F:0D:20:54:58
IP_Camera	192.168.11.81	00:0F:0D:20:22:7D

5. Click and select camera in the list, and then click  **[Add]** button to add the camera to the concurrent channel.



If the channel has been assigned for other camera, the old one will be replaced.

6. Please select the channel type.



If you want to add the camera manually, click  **Enable Channel** first to enable and configure this channel.

- **Normal:** This channel is a normal channel and connects to the camera.
- **Attached:** This channel will not connect the camera directly, instead of display the video from an exist channel. If user selects one channel (ex. CH2) as attached channel type, then user is capable to attach one different channel (ex CH1) to CH2. It will result CH2 as the same as CH1. Also, CH2 is not physically

linked to any camera; therefore, CH2 will not cost any loading of camera.

Please refer to [How to Setup "Attached Channel"](#) section for the instruction.

- **RTSP:** If the camera is not integrated with this software, but it supports "RTSP Streaming", you can try using this type to get the video.
- **JPEG Stream:** If the camera is not integrated with this software, but it supports "JPEG Streaming", you can try using this type to get the video.

7. With "Normal" channel type, input the following fields in "Basic Setting":

- **Channel Tag:** The tag will be displayed on the video in Live View screen to identify the channel. Input the name if necessary.
- **IP and Port:** The IP address and HTTP port of the camera. If this channel is added by "Device List", these 2 fields will be filled automatically.
- **Streaming:** Select which video stream from the camera will be displayed.
- **ID and Password:** Input the administrator's login account and password for the camera.



Enable Channel Channel Type Normal

Basic Setting

Channel Tag Ch1

IP 192.168.11.200

Port 80 Streaming 1

ID admin

Password *****

Auto Auto

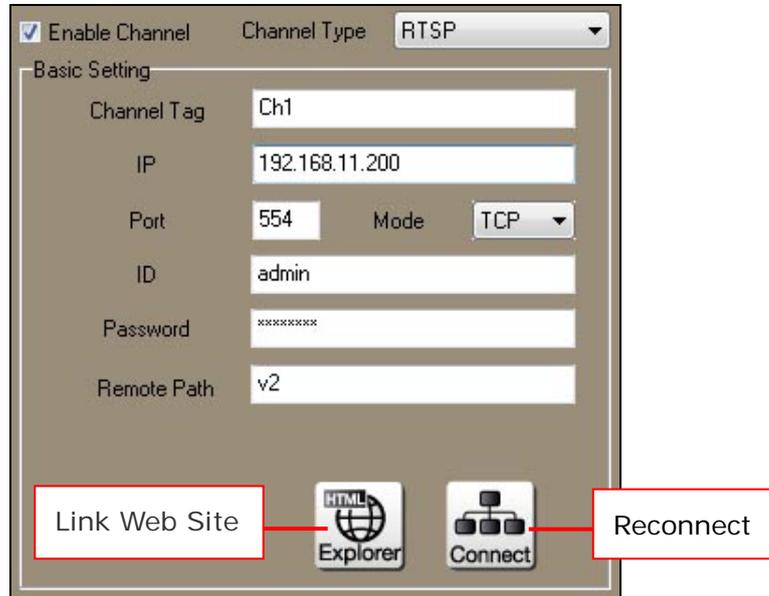
Encryption Key

Link Web Site   Reconnect

8. With "RTSP" channel type, input the following fields in "Basic Setting":

- **Channel Tag:** The tag will be displayed on the video in Live View screen to identify the channel. Input the name if necessary.
- **IP:** The IP address of the camera.
- **Port:** The RTSP port of the camera.
- **Mode:** Select the mode of the RTSP video streaming.

- **ID and Password:** Input the administrator's login account and password for the camera.
- **Remote Path:** Input the path of the RTSP video stream.



9. With "JPEG Stream" channel type, input the following fields:

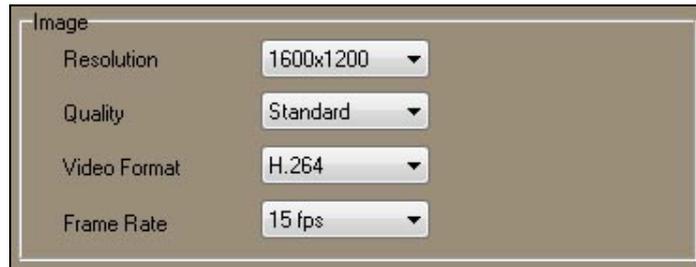
- **Channel Tag:** The tag will be displayed on the video in Live View screen to identify the channel. Input the name if necessary.
- **IP and Port:** The IP address and HTTP port of the camera.
- **ID and Password:** Input the administrator's login account and password for the camera.
- **Remote Path:** Input the path of the JPEG video stream.



10. After input the above, click **[Reconnect]** to connect the camera. (Click **[Link Web Site]** will open the web page of camera via IE browser)
11. In "Image" setting as shown below, you can change video Resolution, Quality, Video Format, and Frame Rate.



If the channel type is "Attached", "RTSP" or "JPEG Stream", you can't adjust the "Image" setting.



12. In "Pre & Post Alarm Recording" setting as shown below, you can change the recording time interval. If the camera has been configured as Event Recording in recording schedule, once an event (Motion Detection, Digital Input or IVS Detection) is triggered, the recording will begin at the Pre-time before the trigger, and stop at the Post-time after the trigger.



13. In "Information" setting as shown below, configure whether display Tag / Date / Time on the live video. Click **[Apply to all channel]** button will apply the settings to all channels.



14. In "Display" setting as shown below, you can select display mode.



- **Display I-Frame Only:** If the box is checked, only I-Frame will be

transferred and displayed in live view. Usually, I-Frame means the first picture when the image is changed. If the box is un-checked, the video is displayed normally.

- **Disable Digital Zoom:** If the box is checked, the video will be displayed with its original size, and it can't be resized by the Digital Zoom function. If the box is un-checked, the video will be enlarged to fit the live view window, and it can be resized by the Digital Zoom function.

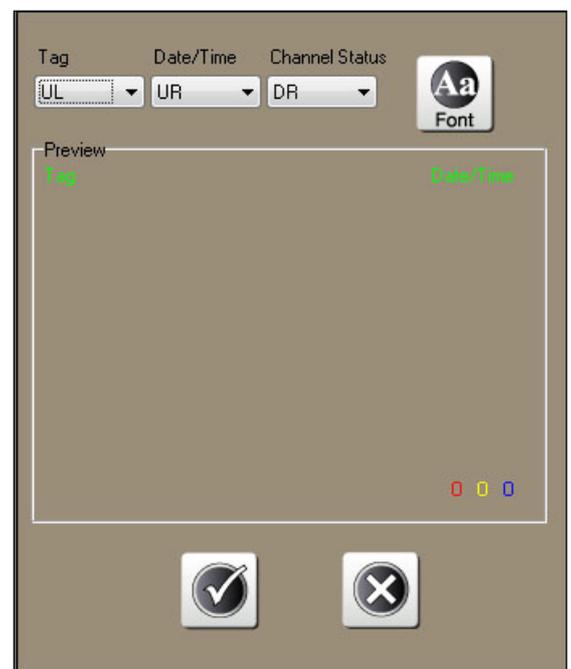
15. In "Audio" setting as shown below, check "Enable Audio" to enable the audio for both live view and recording.



16. In "Security" setting as shown below, check "Hide Camera" will hide camera images on Live-View screen, but the recording will not be disabled.



17. In "Advanced Setup", click  **[Advanced]** button to configure the location of Tag, Date / Time and Status Indicator. Click  **[Font]** within advanced setting can setup such as the size, format and color of tag, Date/Time and status.



 The advanced setting will apply to all channels.

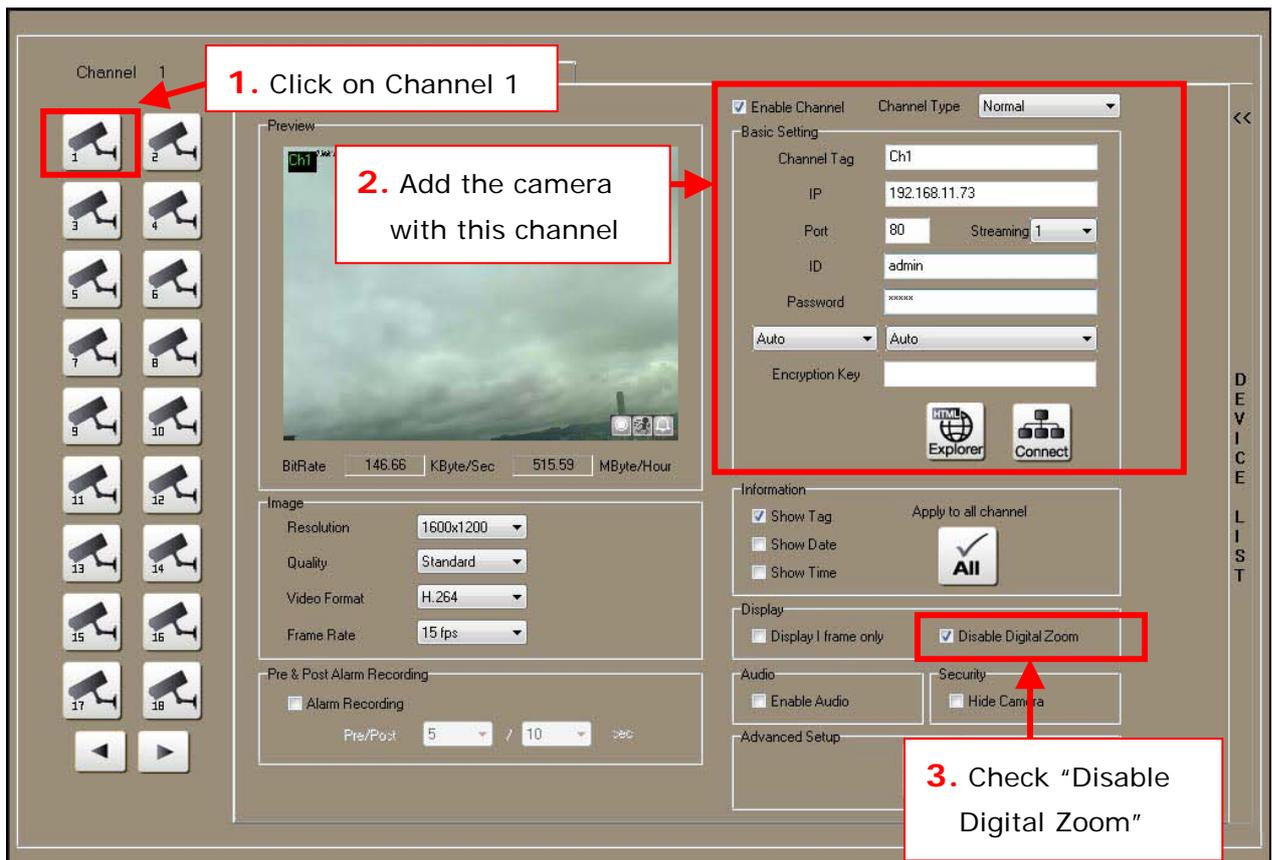
18. Click  **[Save]** button to save the settings, the configuration will be updated immediately.

How to Setup “Attached Channel”

Usually, the image will be shrink to let you view the whole image in a split window. If you wish to view the original size of image, the “Attached Channel” function allows you to view the different part of image in various channels.

The following steps instruct how to configure 4 channels to display four parts of a camera image. CH1 connects to the camera physically and display the upper-left part of image; CH2 is attached to CH1 and display the upper-right part of image; CH3 is attached to CH1 too and display the bottom-left part of image; CH4 is attached to CH1 too and display the bottom-right part of image.

1. Refer to the previous section to add the camera to CH1. The “Channel Type” must be set as “Normal”, and check the “Disable Digital Zoom” option to disable the Digital Zoom function.



The screenshot shows the Asoni software interface for configuring a camera channel. The interface is divided into several sections:

- Channel List:** A grid of 18 camera icons, numbered 1 to 18. Channel 1 is highlighted with a red box and a red arrow pointing to it from a text box that says "1. Click on Channel 1".
- Preview:** A central video preview window showing a camera feed. A red arrow points from a text box that says "2. Add the camera with this channel" to the preview window.
- Basic Setting:** A configuration panel on the right. It includes fields for Channel Tag (Ch1), IP (192.168.11.73), Port (80), Streaming (1), ID (admin), Password (xxxxxx), and Encryption Key. A red box highlights this section.
- Image:** A section with dropdown menus for Resolution (1600x1200), Quality (Standard), Video Format (H.264), and Frame Rate (15 fps).
- Pre & Post Alarm Recording:** A section with a checkbox for Alarm Recording and a Pre/Post time setting (5 / 10 sec).
- Information:** A section with checkboxes for Show Tag, Show Date, and Show Time. A red box highlights the "Disable Digital Zoom" checkbox, which is checked. A red arrow points from a text box that says "3. Check 'Disable Digital Zoom'" to this checkbox.
- Audio:** A section with checkboxes for Enable Audio and Hide Camera.
- Advanced Setup:** A section with various advanced configuration options.



Disable Digital Zoom function will let the software displays the original size of image of this channel in Live-View screen. This function only affects the Live-View screen, it won't change the actual image size for record.

- Refer the below figures to configure the other channels (CH2, CH3 and CH4) as "Attached Channel".

1. Click on Channel 2

2. Configure the following:

- Channel Type: Attached
- Attached Channel: Select "CH1"

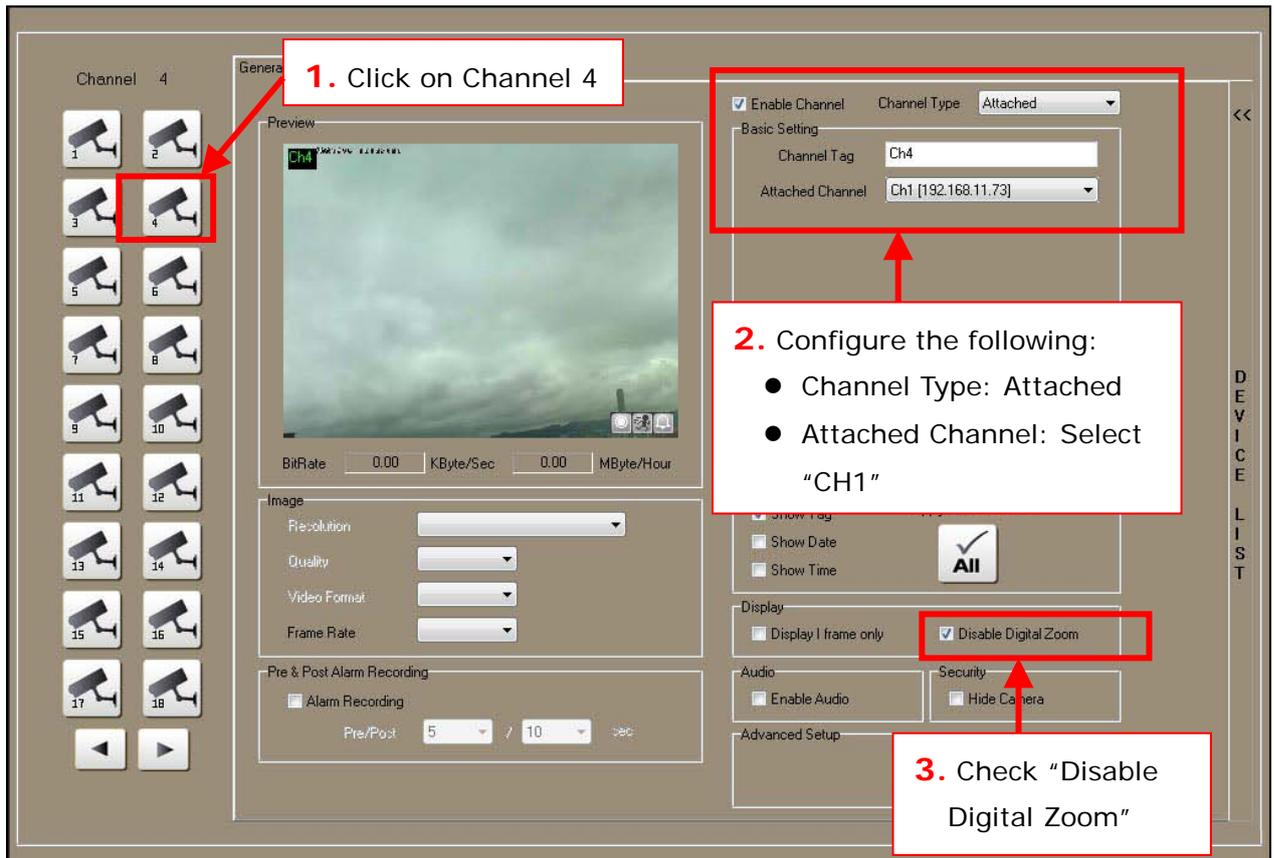
3. Check "Disable Digital Zoom"

1. Click on Channel 3

2. Configure the following:

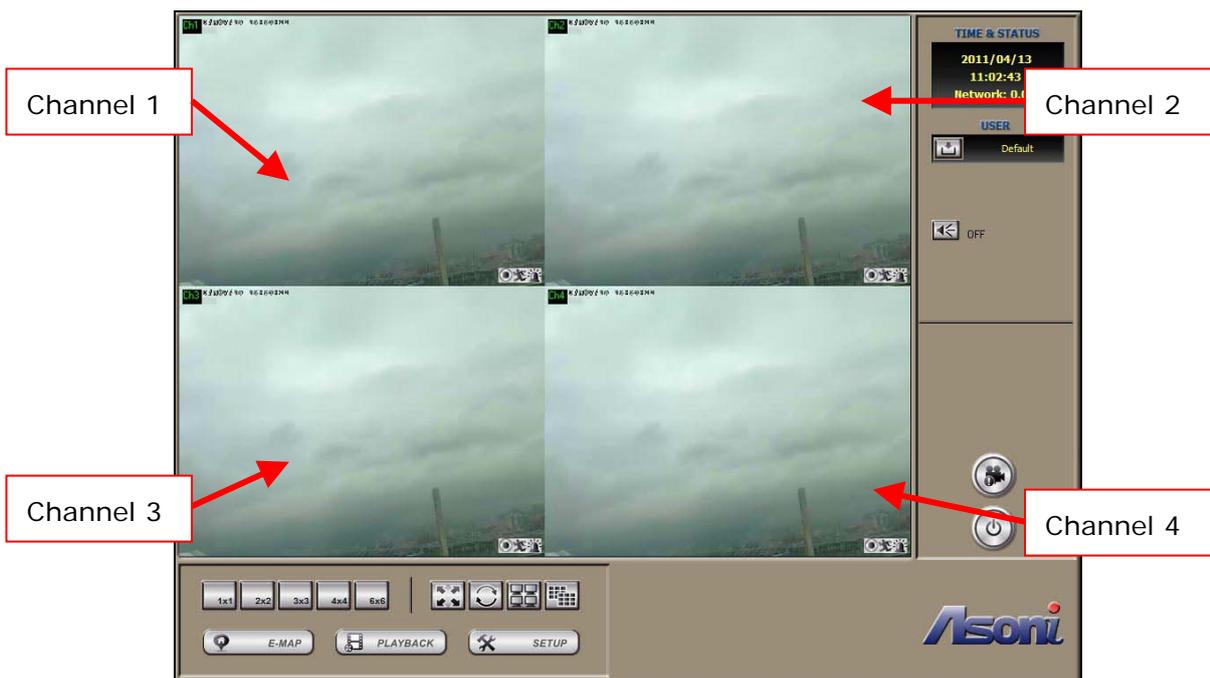
- Channel Type: Attached
- Attached Channel: Select "CH1"

3. Check "Disable Digital Zoom"



3. Click  **[Save]** button to save the above settings.

4. In Live-View screen, these 4 channels will be displayed with same image.



- To make these channels display the different part of image, double-click on the image of channel to enlarge it, and then drag the red frame on the bottom-left corner to define the view area.





6. After the above configuration, these 4 channels will be displayed as the following:



5. Configure the Recording Function

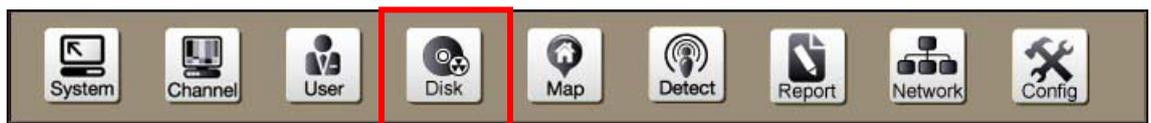
To use the recording function, please configure the following:

- Configure the storage for store the data.
- Configure the recording schedule and recording method for each channel.

5.1. Configure Recording Storage

This software allows store the recorded data onto multiple storages by sequence, if the current storage is full, the recorded data will be stored to the next storage.

Click the **[Disk]** on the top to enter the "Disk Setup" page.

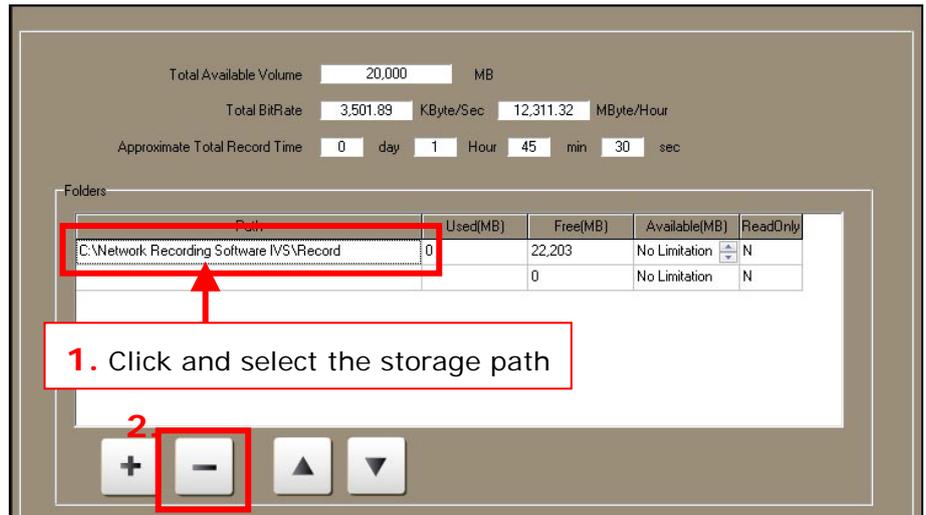


The "Disk Setup" page provides the following configurations:

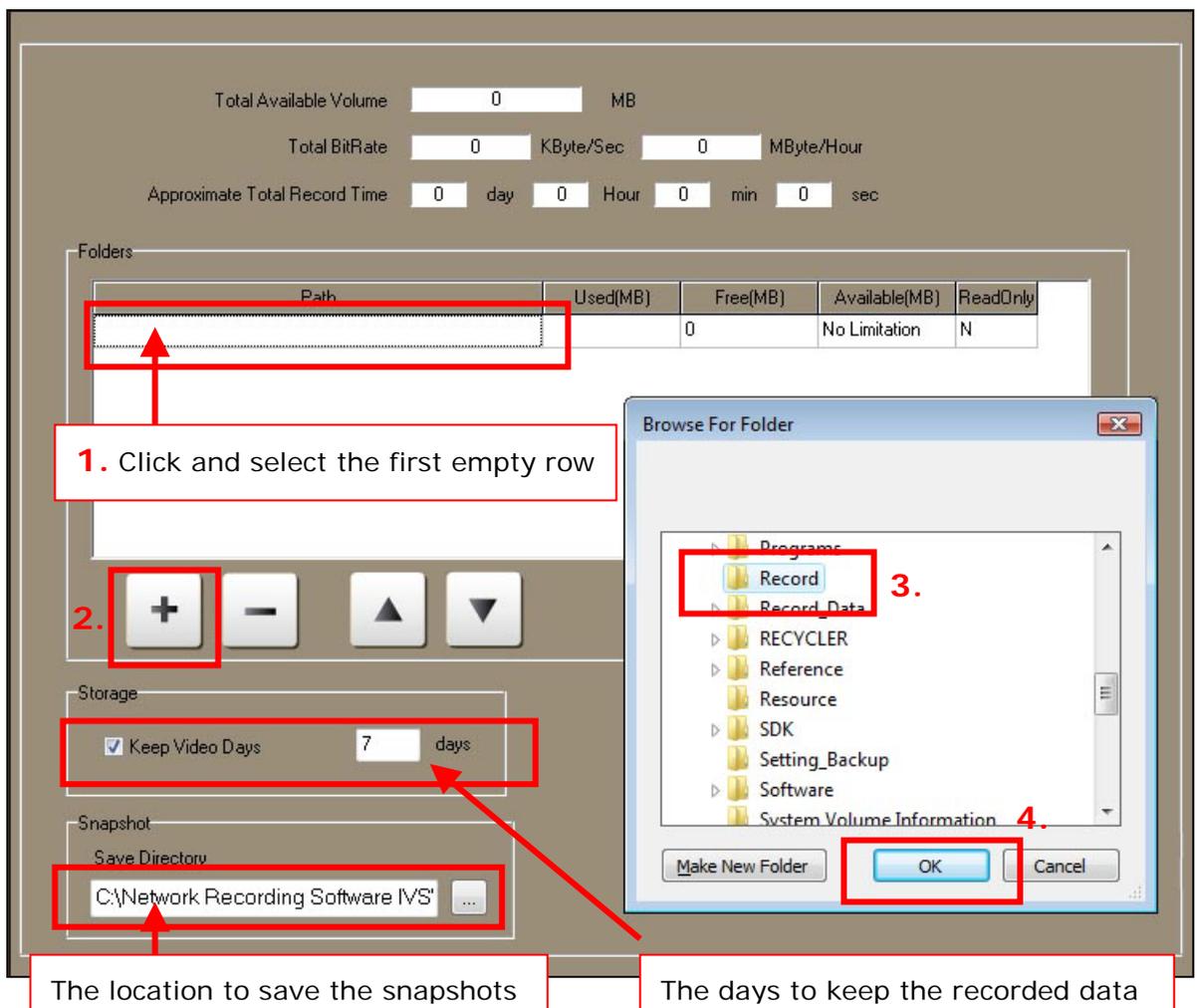
- Add storages to the Path list for store the recorded data.
- Adjust the capacity of storage for store the recorded data.
- Adjust the sequence of storages for store the recorded data.
- Remove storage from the Path list and stop recording data on it.
- Indicate the location to save the snapshots.

1. At the first time running, a default storage is already added in the Path list.

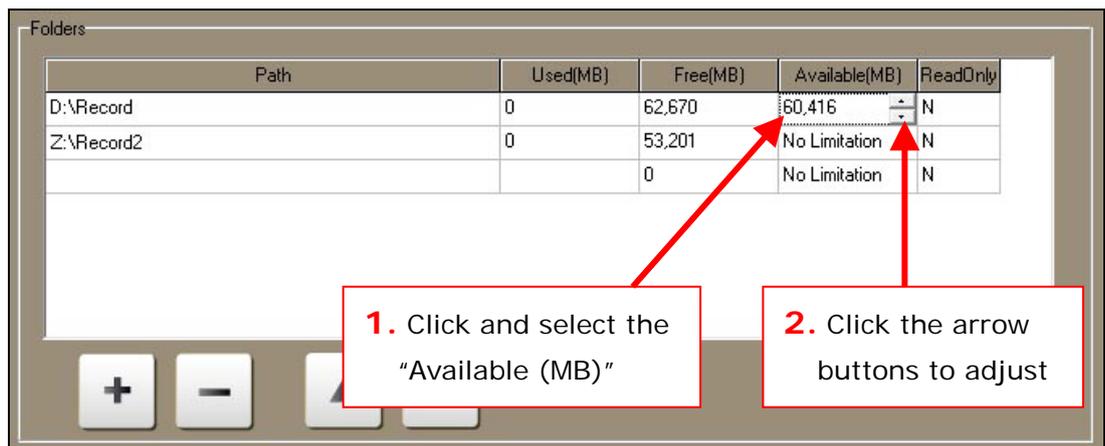
Click and select it from the Path list, and then click  to remove it.



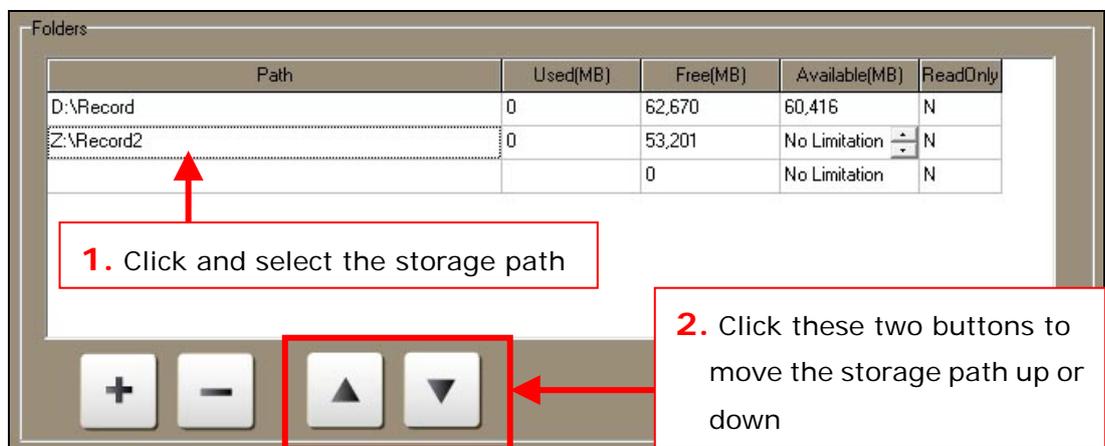
- To add the storage path, click and select the first empty row from the Path list, and then click , select the folder from the pop-up window and then click **[OK]**, the folder will be added to the Path list.



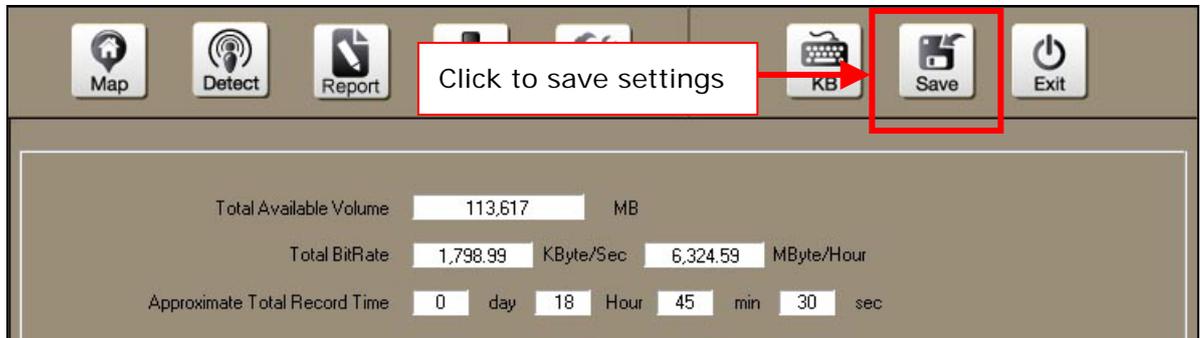
3. To add more storage, just repeat the above steps.
4. The “Keep Video Days” option is to determine the recorded data should be reserved for how many days. If you enable this option, when the recorded data is expired, the software will delete the earlier recorded data. This will save more space of storage.
5. After adding the storages, adjust the capacity of storage for store the recorded data. The unit of adjustment is 1024MB (1GB).
 - **Used (MB):** The space of the recorded data.
 - **Free (MB):** The total free space of the storage.
 - **Available (MB):** The available space that assigned for recording.
 - **Read Only:** Set the attribute of the recorded data as read-only or not.



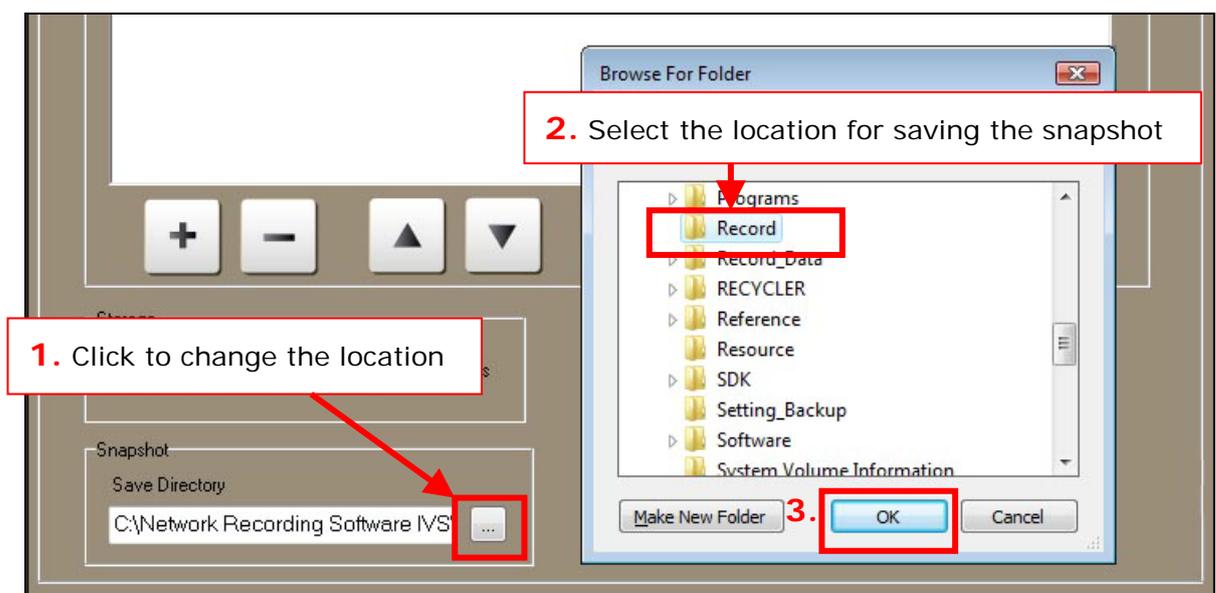
6. You can also adjust the sequence of storages for store the recorded data.



7. Click  **[Save]** button to save the settings, the following information will be updated.



- **Total Available Volume:** The total assigned space for recording.
 - **Total BitRate:** The total bitrate of all connected cameras or video server.
 - **Approximate Total Record Time:** The software will estimate the available record time according to the total assigned space of storage and the bitrate of all connected cameras (including the cameras are not recording).
8. This software provides the Snapshot function during Live-View, the snapshots will be saved to the pre-defined location. Refer to the figure below to change the location if necessary.



5.2. Configure Recording Schedule

This software provides 2 kinds of recording schedule:

- **Weekly Schedule:** The schedule will be done and repeated weekly.
- **Specific Time Schedule:** You can set a special schedule for specific date/time.



If the configured time of these two kinds of schedule is conflict, the priority of "Specific Time Schedule" is higher than "Weekly Schedule".

Click **[Channel]** on the top, and then click **[Schedule]** tab to enter the "Schedule" sub-page.

Channel 1

General | **Schedule** | Motion | Mask | PTZ | I/O

Weekly Schedule

All	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon.	Record																							
Tue.	Record																							
Wed.	Record																							
Thu.	Record																							
Fri.	Record																							
Sat.	Record																							
Sun.	Record																							

Start Time: 8/20/2010 16:00 End Time: 8/20/2010 23:00

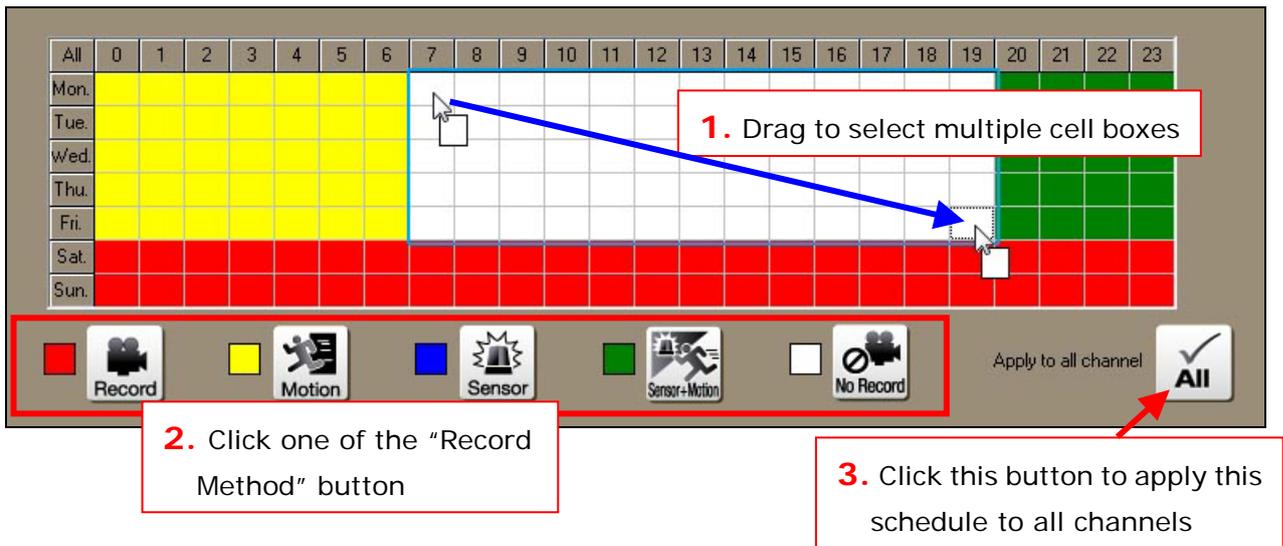
Start Date	Time	End Date	Time	Mode
2010/8/20	16	2010/8/20	23	Normal

Specific Time Schedule

Click and select the channel (click the arrow buttons to switch the previous-18 and next-18 channels)

1. You can configure different schedule for each channel. Click  **[Channel Number]** button and select the channel for configure.

2. To configure the Weekly Schedule, use mouse to drag the multiple cell boxes (time), the selected cell boxes is flashing, then, click "Record Method" button to set it. Click **All** button on the upper-left of Weekday table can select all cell boxes.



Weekday & Hour Table	
<input type="checkbox"/> All	ALL : Click this button to select all weekday and hours.
<input type="checkbox"/> Mon. ~ <input type="checkbox"/> Sun.	Weekday : The weekday from Monday to Sunday. Each row means one weekday. Click the button to select all hours of this weekday.
<input type="checkbox"/> 0 ~ <input type="checkbox"/> 23	Hours : The hours from 0:00AM to 23:59PM. Each column means one hour (i.e. 1:00AM ~ 1:59AM). Click the button to select this hour of all weekdays.
Record Method	
	To record the audio, please enable the "Enable Audio" option in "General" sub-page.
	Normal Record : Always recording the video and audio.
	Motion Record : Recording the video and audio when the following detections are triggered:

- Hardware Motion Detection (detected by camera itself): Except configure the schedule, you need also configure the motion function in Motion sub-page, please refer to [Configure the Event Function → Configure Hardware Motion Detection](#)
- IVS Motion Detection (detected by IVS of this software): Except configure the schedule, you need also configure the motion function in Detect page, please refer to [Configure the Intelligent Video System → Configure Normal Motion Detection](#)



Sensor Record : Recording the video and audio when the following detections are triggered:

- Digital Input of camera (the sensor connected to camera): Except configure the schedule, you need also configure the I/O function in I/O sub-page, please see [Configure the Event Function → Configure Digital I/O](#) .
- IVS Detection (detected by IVS of this software): Except configure the schedule, you need also configure the IVS function in Detect page, please refer to [Configure the Intelligent Video System](#)



Sensor/Motion Record : Enable both “Motion Record” and “Sensor Record”. When one of “Hardware Motion Detection”, “IVS Motion Detection”, “Digital Input of camera” or “IVS Detection” is triggered, recording the video and audio



No Record : Stop recording on the selected time.



Apply to All Channel : If you want all channels use same schedule, click this button to apply this schedule to all channels



To do the pre and post-alarm recording when an event is triggered, please enable the “Pre & Post Alarm Recording” option in “General” sub-page, and setup the period.

- To add a specific period for recording, click the arrow buttons on “Start Time” and “End Time” to select the date/time, and then click  **[Add Schedule]** button to add it. Click and select the schedule in the list and then click “Record Method” button to set it.

1. Select start and end date/time

2

3. Click and select the added schedule

4. Click and select "Record Method"

Start Date	Time	End Date	Time	Mode
2010/8/20	16	2010/8/20	23	Normal
2010/8/22	0	2010/8/22	23	Motion & Event

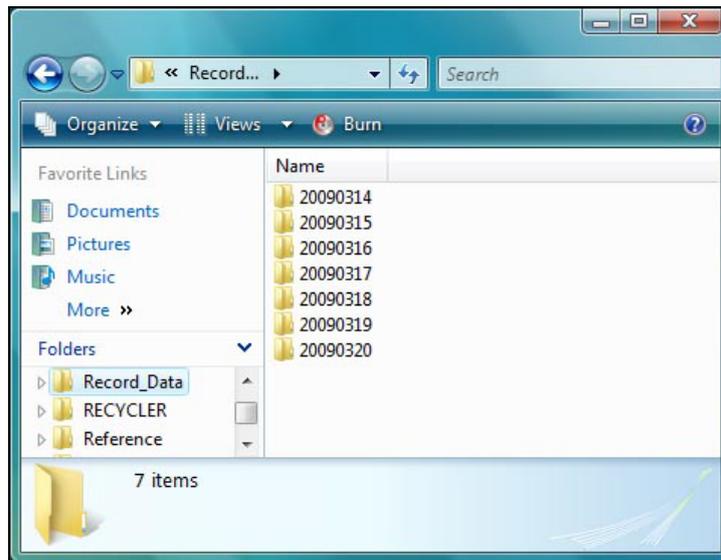
4. After complete the configuration, click  **[Save]** to save the settings.

5. Now the recording is starting, click  **[Exit]** go back to Live-View screen.

5.3. Backup and Restore Recorded Files

Backup the Recorded Files

In the recording storage of recording software, each day has a folder for recording the video, the folder name is "YearMonthDay" (i.e. the folder name of 14th, March, 2009 is "20090314"), backup this "Date folder" is equal to backup the video of this day.



You can manually copy the folders contains recorded files to a safety place for backup.



If the recording software is running, because the software is always recording data into the concurrent day, please DO NOT copy the folder of concurrent day, otherwise, the software will not work properly.

Restore the Recorded Files

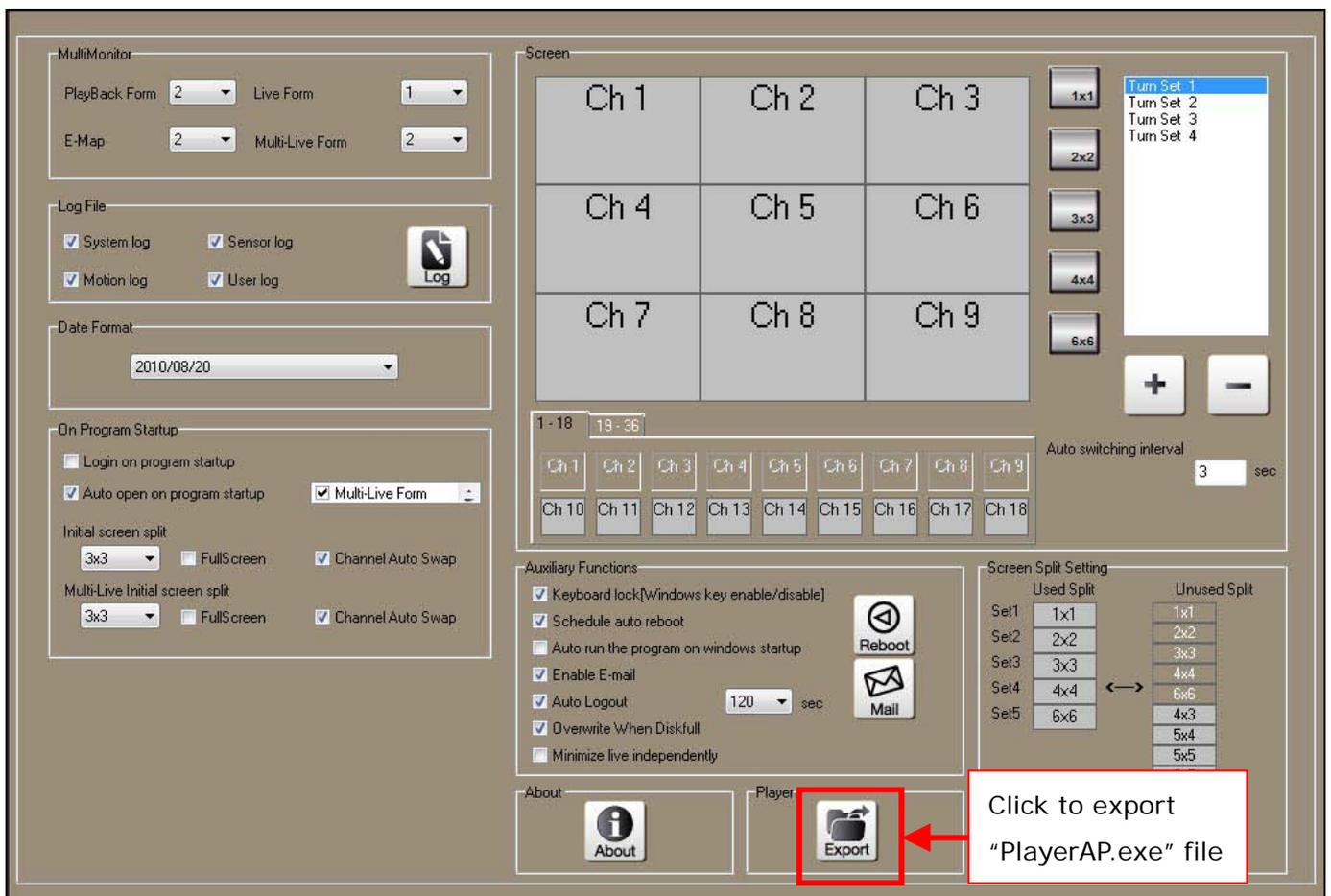
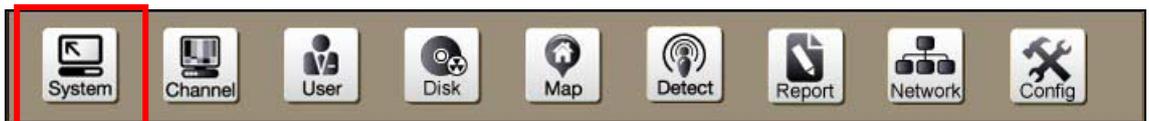
To restore the recorded files, close and exit the recording software first, and then copy the backup folders into the recording storage of the software.

If you want to add the backup folders into the software, create a new folder (assume the folder name is "Record") and copy the backup "Date folder" into the "Record" folder just created, and then add the "Record" folder as a storage path for the software, please see [Configure the Recording Function → Configure Recording Storage](#) for the detail.

Play Back the Recorded Files without Recording Software

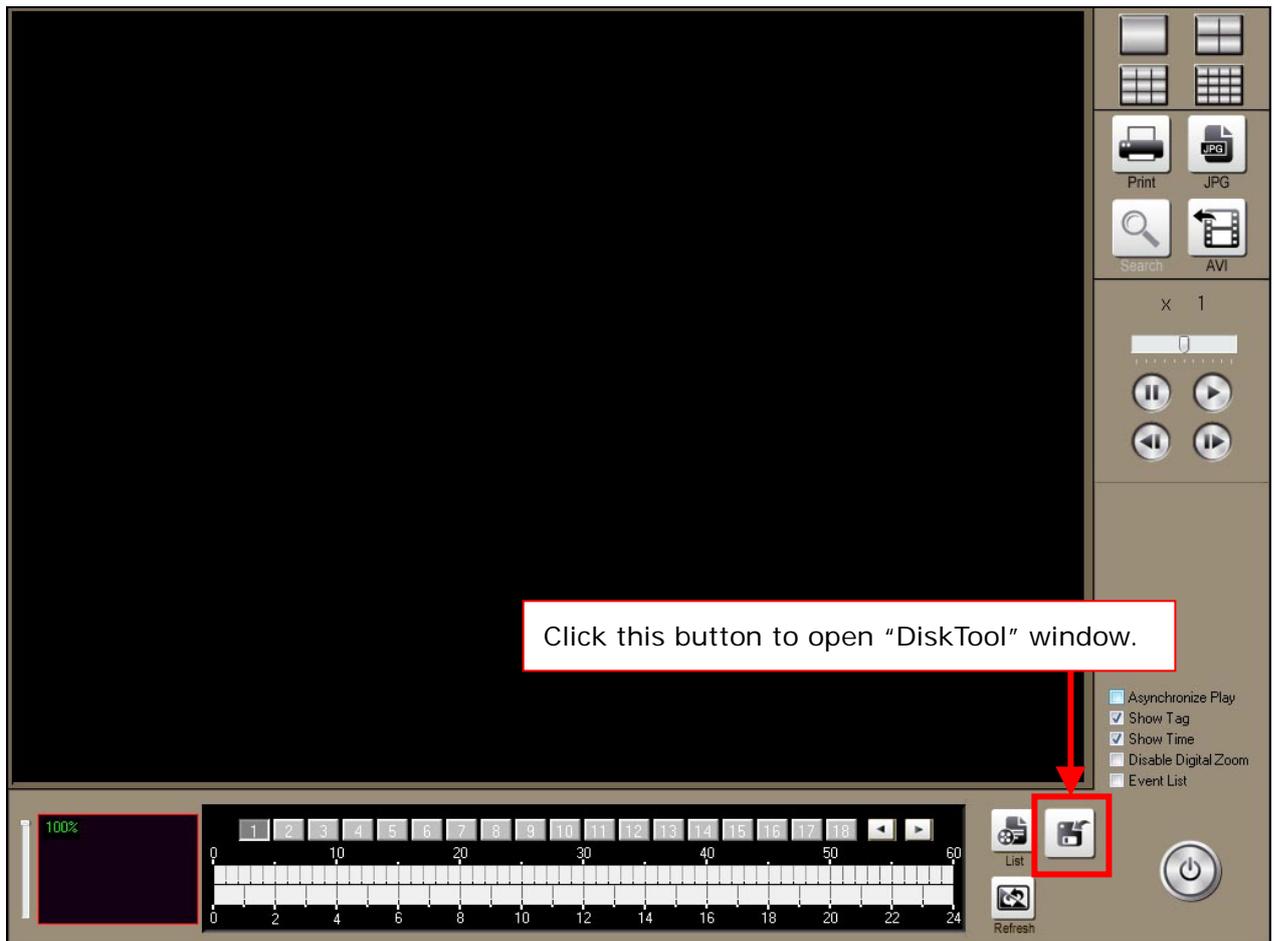
If you want to play back the backup recorded files in another PC without recording software installed, the "PlayerAP.exe" software can do this.

1. First, get the "PlayerAP.exe" from the installed recording software. Click **[System]** on the top to enter the "System Setup" page. Click **[Export]** and save the "PlayerAP.exe" file.

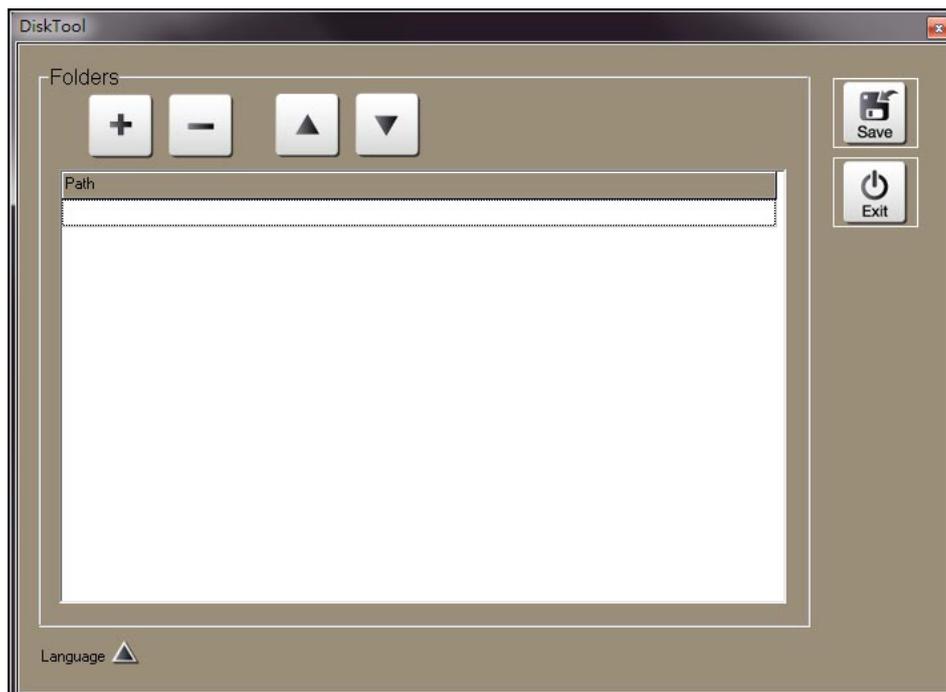


2. In another PC, make sure the backup recorded files can be accessed by this PC.
3. Copy the "PlayerAP.exe" to this PC and run it.

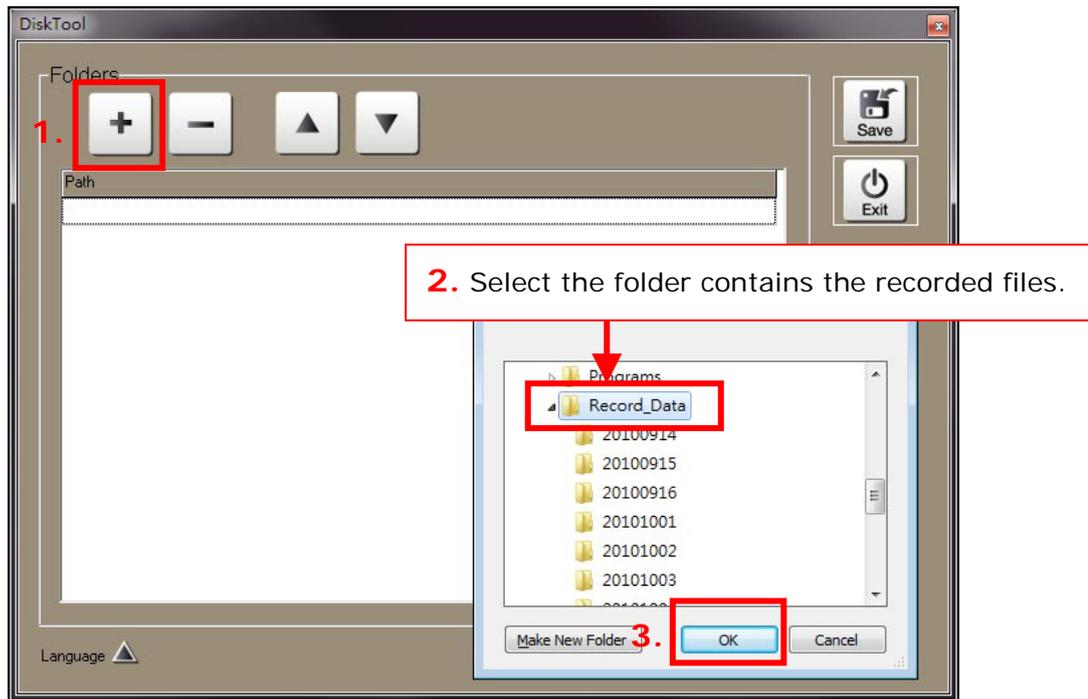
4. Select the language. Then, the PlayerAP appears as below.



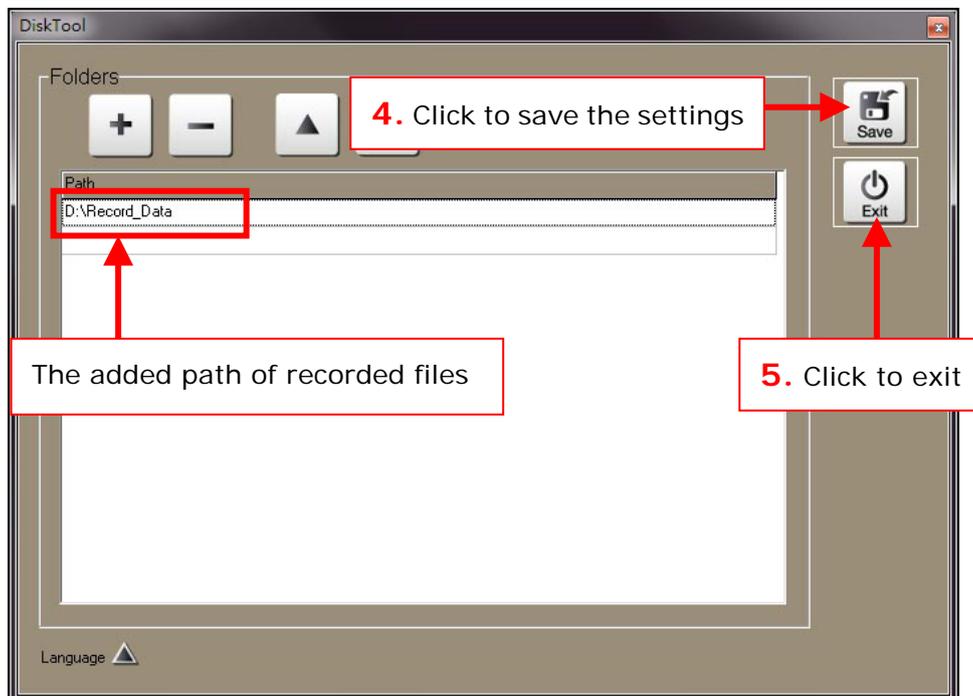
5. Click the button that indicated on above figure to open "DiskTool".



6. Refer to the below figure to add the recorded files.



Do not select the "Date folder" directly, you should select the upper layer of folder (the "Record_Data" folder that indicated on above figure).



7. Now you can select and view the recorded files. The operation is same as Playback screen in Network Recording Software, please see [Video Playback](#) page for the detail.



6. Live View

From Live-View screen, you can:

- View the live video and hear the live audio of channels.
- Monitor the status of channels.
- Chatting with one channel.
- Broadcasting to all channels.
- Turn on/off the Digital Output.
- Operate the PTZ device.



This software provides various layouts for viewing the channels:



You can define the view layout for each split window, please see [Configure Screen Layout](#) for the detail.

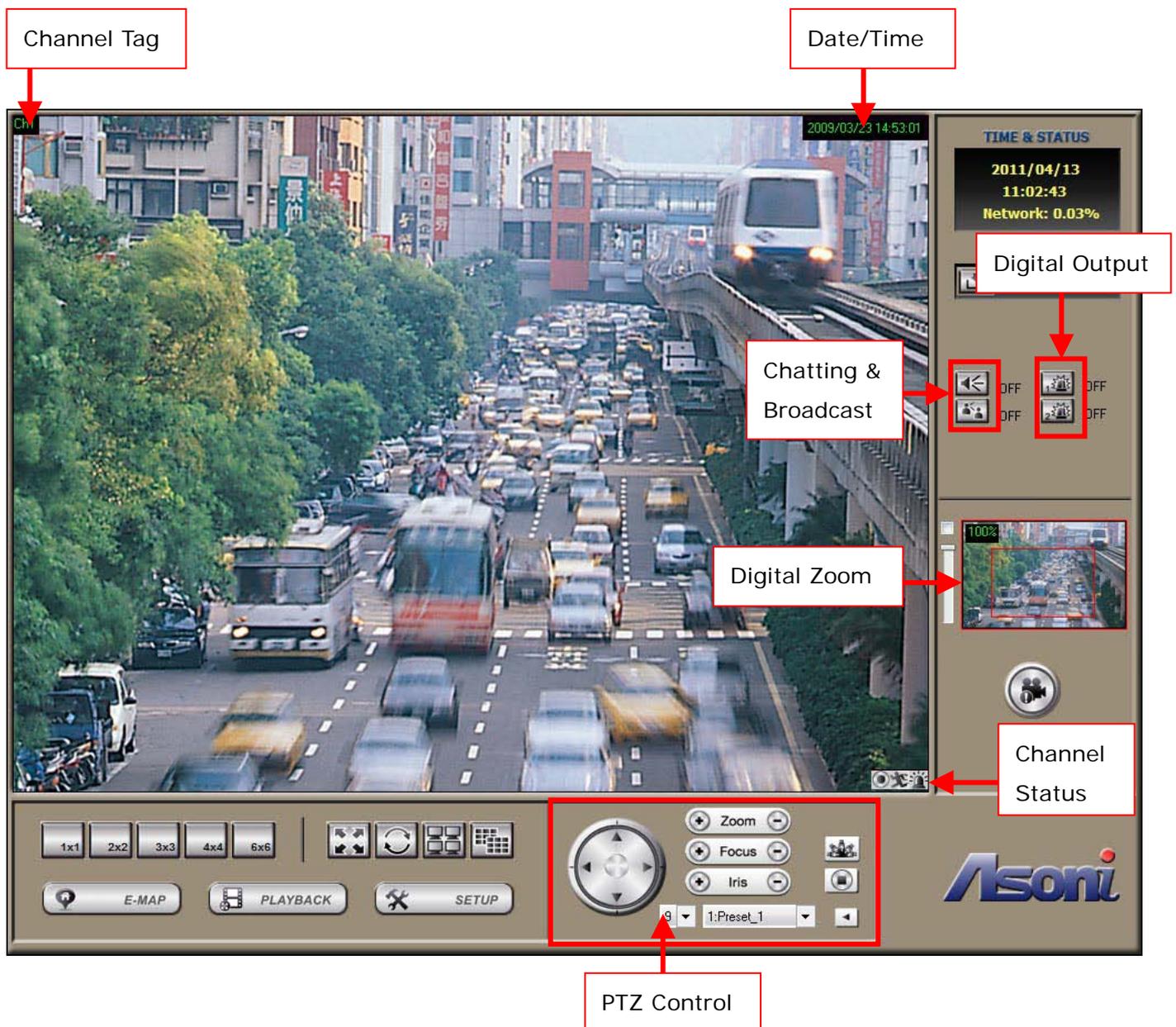
	<p><u>NxN-Window View</u> : Shows a NxN video channels at once. If this view layout can't show all channels, the channels will be split into multiple pages. Click this button again will show the next page. The screen layout can be configured in Configure Screen Layout.</p>
<p>Double Click</p>	<p><u>Enlarge Channel</u> : Double-click the channel can enlarge it. Double-click it again to resume the split-view.</p>
	<p><u>Full Screen</u> : Full screen mode. To exit the full screen mode, right-click the mouse or press the Esc key on keyboard.</p>
	<p><u>Minimize</u> : Minimize the software. To resume the software screen, double-click  icon on the taskbar.</p>
	<p><u>Channel Auto Swap</u> : Automatically show the next pages of channels. The interval time can be configured in Configure Screen Layout</p>
	<p><u>Turn On/Off Multiple Monitors</u> : If the computer equips multiple monitors, click this button to turn on/off the multiple monitors function. The screen arrangement for multiple monitors can be configured in Other Configuration → Configure Multiple Monitors</p>
	<p><u>Arrange Channels for Dual Monitors</u> : This button is available when Multiple Monitors is turned on. The channels will be arranged for 2 monitors automatically:</p>
	<p><u>Login / Logout</u> : Login or logout the current user. The default username and password are "admin" and "admin".</p>
	<p><u>Audio Broadcast</u> : Click this button to turn on/off the audio broadcast function. When this function is ON, if the cameras equips Audio Output and connects an amplified speaker, the voice from the microphone of PC can be heard from the audio out of all channels.</p>
	<p><u>Emergency Record</u> : Manually record the video and audio of all channels, click it again to stop the recording.</p>
	<p><u>E-Map</u> : Click this button to turn on/off the E-Map screen.</p>
	<p><u>Playback</u> : Enter the Playback screen for playing back the recorded video. Please see Video Playback page for the detail.</p>

 SETUP	<u>Setup</u> : Enter the Setup screen for configuration.
	<u>Exit</u> : Close and exit the software. If you didn't login previously, a pop-up window appears and asks you to input the username and password.

6.1. Operating the Specific Channel

To operate the channel, you have to select the channel by one of the following ways:

- Click and select the channel, a white frame will be displayed around the channel.
- Double-click the channel to enlarge the video.
- Click  [1x1] button and change to the channel.



Information on the Video

Channel Tag	Tag : Shows tag on video to identify the channel.
Date & Time	Date & Time : Shows date & time on video.
 (Inactive)  (Active)	Channel Status : Shows the status of each channel. <ul style="list-style-type: none"> ●  : Status indicator for recording. ●  : Status indicator for Motion Detection. ●  : Status indicator for Digital Input / IVS detection.

Control the Channel

	Audio Broadcast : Click this button to turn on/off the audio broadcast function. When this function is ON, if the cameras equip Audio Output and connects an amplified speaker, the voice from the microphone of PC can be heard from the audio out of all channels.
	Chatting : Click this button to turn on/off the audio chatting function. When this function is ON, if the cameras equips Audio Output and connects an amplified speaker, the voice from the microphone of PC can be heard from the audio out of concurrent channel.
	Digital Output : Click this button to turn on/off the Digital Output or Relay Output of concurrent channel.
	Digital Zoom : This function allows digitally zoom in/out the video, and select the area for viewing. Please see Live View → Digital Zoom for the detail.
	PTZ Control : If the concurrent channel is a PT/PTZ camera or video server, this panel appears for operation. Depending on the feature that camera supports, the panel provides Pan, Tilt, Zoom, Focus, Iris, Pan/Tilt speed (select the speed from the pull-down list on the left side), Go preset point (select the preset point from the pull-down list on the

	<p>right side) and Auto patrol.</p> <p>The pull-down list on the right side is for selecting the preset point. If this channel has been setup with "PTZ Custom Commands", click  [Switch List] to switch the "Preset Point List" and "PTZ Custom Commands List".</p> <p>The PTZ function can be configured in Configure the PTZ Function</p>
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Right-Button Functions

Click the right-button of mouse on the specific channel, you can do the following operations:

Record	This option allows you to immediately start or stop the "Schedule Recording", "Normal Recording" or "Event Recording" of this channel.
Snapshot	This option allows you to take a snapshot of this channel. The picture will be saved in the pre-defined location. You can indicate the location in "Disk Setup" page, please see Configure the Recording Function → Configure Recording Storage for the detail.
Detect	This option allows you to immediately start or stop the "IVS Detect" function of this channel.
Chat	This option allows you to turn on/off the audio chatting function of this channel.
Output	This option allows you to turn on/off the Digital Output or Relay Output of this channel.

6.2. Digital Zoom

When enable the Digital Zoom function, user can zoom in/out the image to get proper view. If the channel is "Attached Channel", use this function to select the area for viewing.

Digital zoom can be functionalized in live-view and playback view.



1. Click and check the "Zoom Status" box to enable the Digital Zoom function. Click it again will uncheck the box and disable the Digital Zoom function.
2. Shift the "Ratio Bar" upward or downward, the video in live-view window and preview window will be zoomed in or out. The zoom ratio is from 100% to 1000%.
3. Use mouse to drag "View Area" (red frame) to select the area for viewing, you can see the video is moving in live-view window.

6.3. Mask Area

This software provides mask for privacy protection, there are 3 mask areas can be setup in each channel. After setup the mask areas, the areas will be hidden in Live-View, Playback screen and the exported video clip.

Click **[Channel]** on the top, and then click **[Mask]** tab to enter the "Mask" sub-page.

The screenshot shows the software's main navigation bar with icons for System, Channel, User, Disk, Map, Detect, Report, Network, and Config. Below it is a sub-menu with tabs for General, Schedule, Motion, Mask, PTZ, and I/O. The 'Mask' tab is selected. The main interface displays 'Channel 1' and a grid of 18 camera icons. A central video window shows a city scene with three colored mask areas (blue, green, and red) overlaid. To the right, the 'Mask Area Setting' panel is visible, containing three checked checkboxes for 'Mask Area 1', 'Mask Area 2', and 'Mask Area 3', along with 'All' and 'X' buttons. A red box highlights the 'Mask Area Setting' panel. A text box at the bottom left of the interface reads: 'Click to select the channel (click the arrow buttons to switch the previous-18 and next-18 channels)'. A red arrow points to the left and right arrow buttons at the bottom of the camera icon grid.

1. Select channel to configure the mask areas.
2. Check and select the "Mask Area 1", then use mouse to draw the area.

3. If you want to setup the second or third mask area, check and select the "Mask Area 2" or "Mask Area 3", then use mouse to draw the area.

4. Click  **[Save]** to save the settings.

 Please save the settings of the concurrent channel before leave this page, or the Mask Areas will not be saved.

5. In the Live-View, Playback screen and the exported video clip, the video will be hidden with the mask areas:



7. Video Playback

Click **PLAYBACK** [Playback] to enter the Playback screen.

The Playback screen provides the following functions:

- Select and play back the recorded data.
- Export the selected range of recorded data to video file.
- Take the snapshot of the video image.
- Playback and download the recorded file from camera's SD card.

The screenshot shows a video playback interface with four camera channels (Ch1, Ch2, Ch3, Ch4) displaying a train station. The interface includes a control panel on the right with various functions and a timeline at the bottom.

Annotations in the image:

- Split-view windows**: Points to the four camera channels.
- Playback Control**: Points to the play/pause and stop buttons.
- Calendar**: Points to the date selection interface.
- Digital Zoom**: Points to the zoom level indicator (100%).
- Channel Selector & Time Table of Recorded Data**: Points to the timeline and channel selection area.

7.1. Play Back Video

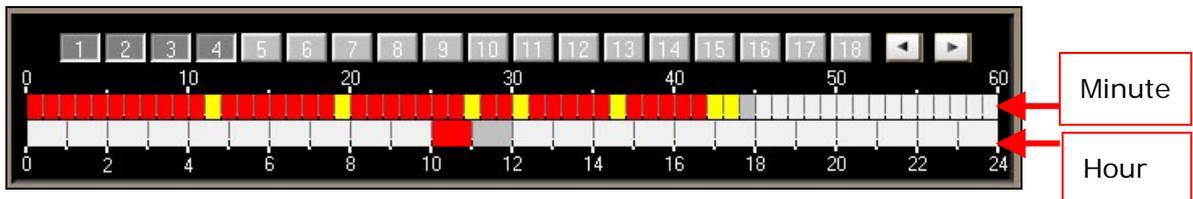
1. Click channel number to select the channel you want to view the playback, up to 16 channels can be selected simultaneously.



2. Click on the video to select and highlight a channel, the "day" has recorded videos will be shown in the calendar.



3. Click and select the date in calendar, it will show the time table of recorded data.

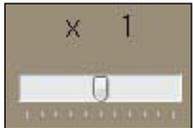
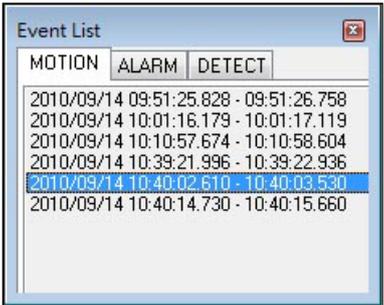


The time table uses colorful boxes identify the data which was recorded by different recording schedule:

- **Light Gray:** No recorded data.
- **Red:** Normal recording data.
- **Yellow:** Recorded data contains Motion Detection event video.
- **Blue:** Recorded data contains Digital Input event video.
- **Dark Gray:** The time you choose to play.

4. Click and select a box in time table, and then click  to start playback.

Click  will stop the playback.

5. Drag and shift the "Speed" bar to adjust the playback speed. Provides 1x, 2x, 4x, 8x, 16x, 32x forward and backward playback (depends on the PC performance and the number of channels).
 
6. Use   to display the previous/ next frame.
7. Click  **[Refresh]** will update the time table of recorded data.
8. Check "Asynchronize Play" means play the video of the highlighted channel.
9. Uncheck "Asynchronize Play" can enable the "Synchronize Play", the video of multiple channels will be played at the same recorded time simultaneously.
10. Check "Show tag", "Show time" to show title & time on each channel.
11. Check "Disable Digital Zoom" to see the original size of the video.
12. Check "Event List" to display the list of event records. Click and select the event record to play the video clip for preview.
 

There are three types of event records:

 - **Motion:** Recorded when "Hardware Motion Detection" (detected by camera itself) is triggered.
 - **Alarm:** Recorded when "Digital Input of camera" is triggered.
 - **Detect:** Recorded when "IVS Motion Detection" or "IVS Detection" (detected by IVS of this software) is triggered.



The video clip selected from "Event List" is for preview only, to play the whole event video, select the video from the time table of recorded data and play it.

13. Check "Image Enhancement" to open the "Image Enhancement" window, and you can adjust the image quality.

7.2. Export Video

Recorded video data can be exported as snapshot or video file.

Export as Snapshot (JPEG Format)

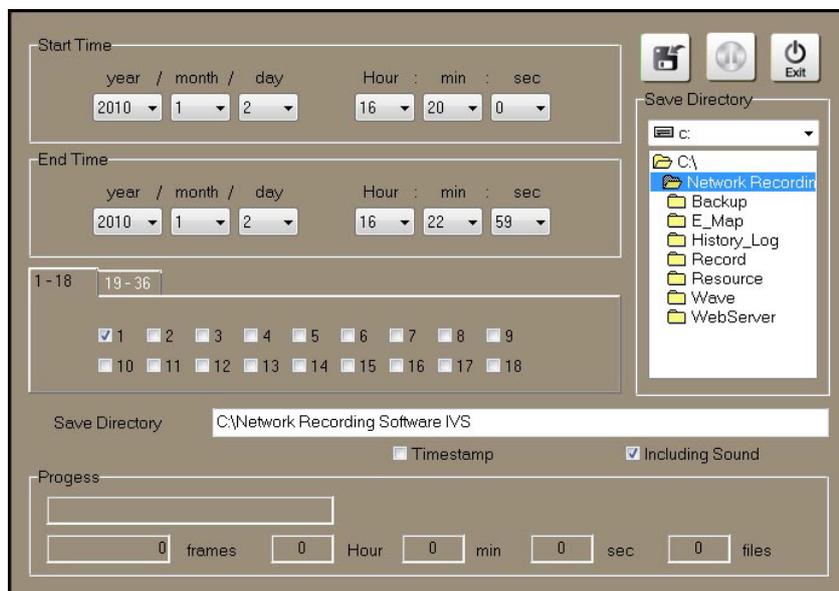
Pause the playback, click  **[Save to JPEG]** and the following appears.

Select a path to save the file. The filename will be: "channel number_yyyymmdd_hhmmss.jpg".



Export as Video File (AVI Format)

1. Stop the playback, click  **[Save to AVI]** and the below page appears.



2. Select "Start Time" and "End Time", check to select the channel or multiple channels, and the folder to save the video file.
3. If you want to export the video including timestamp or audio, check the following options.



4. Click  **[Start AVI Save]** to start the procedure.
5. If multiple channels have been selected, the selected range of video will be exported to different AVI files for each channel.
6. Click  **[Exit AVI Save]** to close the window.



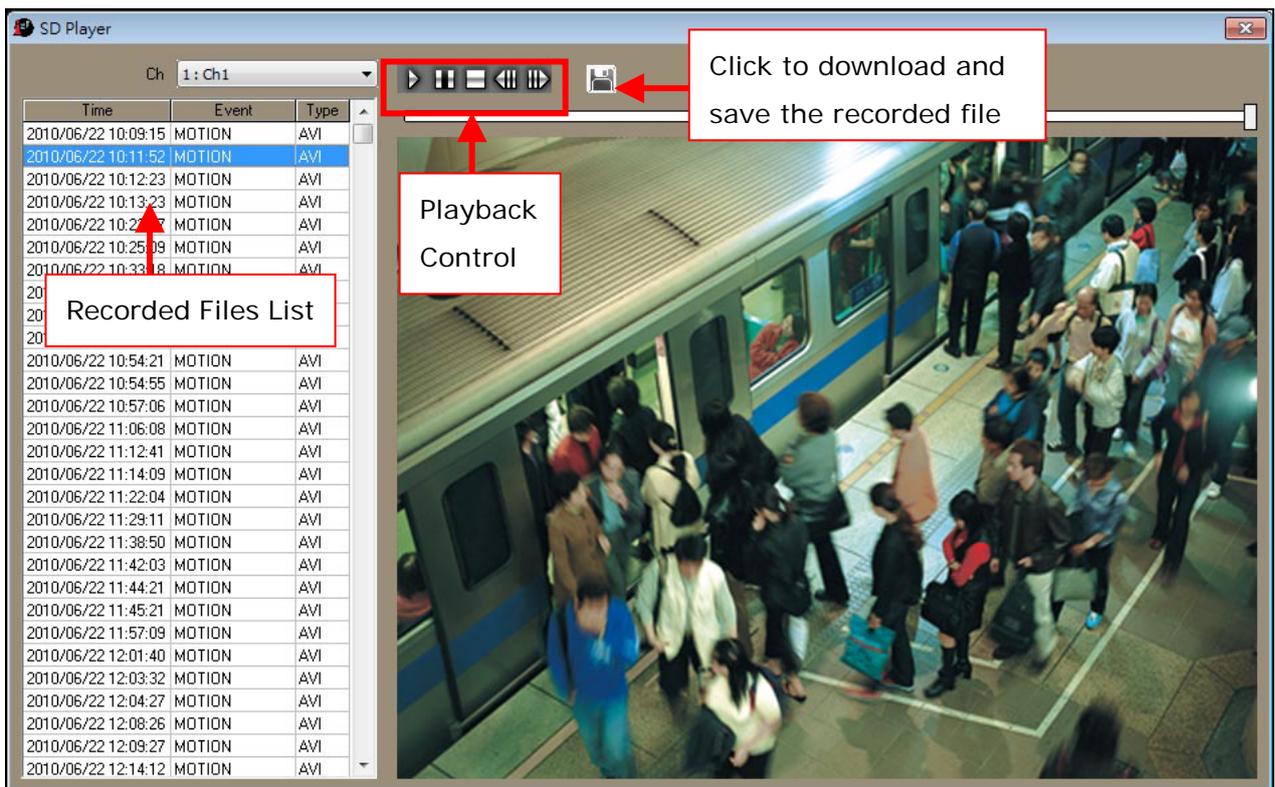
The encode format of exported video is same as the connected camera. For example, if the video stream from the connected camera is H.264, the exported video will be H.264 too.

To play back the exported video file, the PC must install the H.264/MPEG-4 decoder (such as "FFdshow", you can install this decoder from the included CD), and then play the file with Windows Media Player.

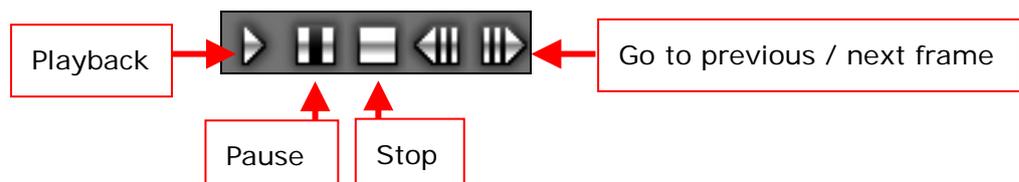
7.3. Playback/Download from SD Card

If the selected camera equips SD Card slot and the SD Card is inserted, you can play back or download the recorded files in Playback screen.

1. After select channel, click  [SD] to open "SD Player" window.



2. The recorded files in SD Card are listed in the table on left side, click and select the file to play it. You can use the control buttons to control the playback.



3. Click  to download the file from camera's SD Card and save it into local drive.

7.4. Smart Search

“Smart Search” provides the following functions:

- Indicate a range of recorded video, the software will redo the motion detection from the video and find out the video clips. The motion detection by Smart Search is more precise than the detection by camera.
- Indicate a range of recorded video, the software will use the IVS (Intelligent Video System) to analyze the video and find out the video clips.
- Export the found video as a video file (AVI format).

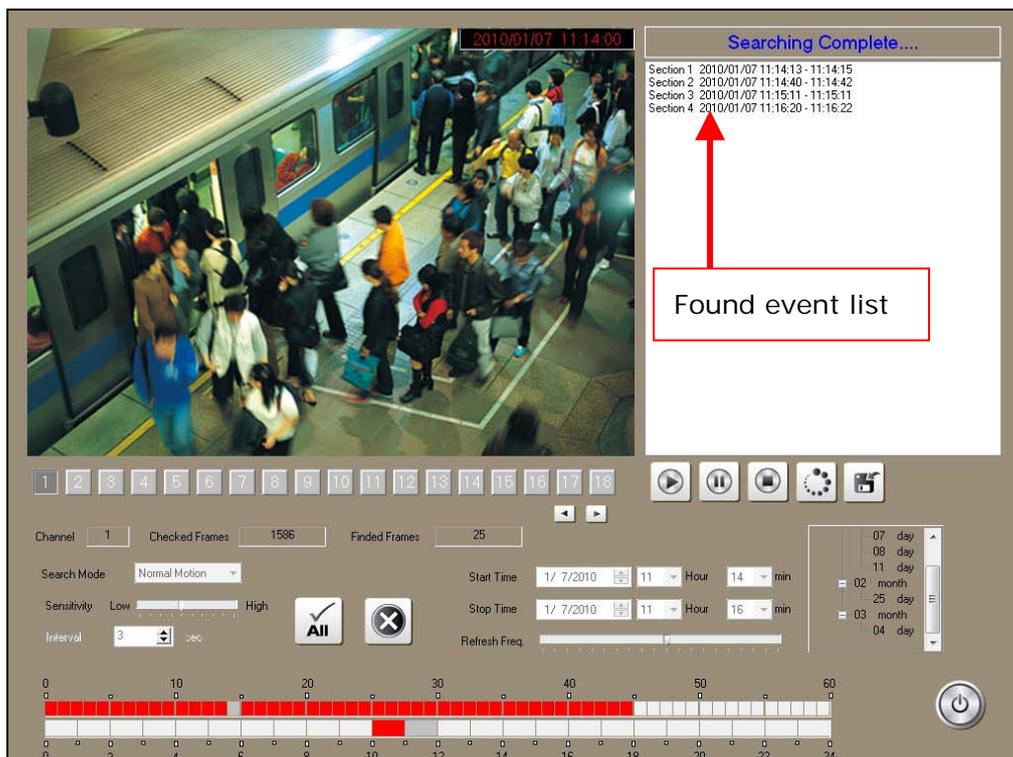
Click  [Smart Search] to enter the sub-page:

The screenshot shows the Smart Search interface with the following components and callouts:

- 1. Select channel:** A red box highlights the channel selection buttons (1-18) at the bottom left.
- 2. Select the time range of video:** A red box highlights the Start Time and Stop Time fields (1/7/2010 11:14) at the bottom right.
- 3. Select "Search Mode" and adjust the Sensitivity:** A red box highlights the Search Mode dropdown (Normal Motion), Sensitivity slider (Low to High), and Interval (3 sec) at the bottom left.
- 4. Use mouse to draw the area for detect:** A red box highlights the video preview area with a green rectangle drawn around a person, and a red arrow points to the text.
- 5. Click this button starts search:** A red box highlights the search button (magnifying glass icon) at the bottom right.

Refer to the above figure to use “Smart Search”:

1. Select the channel.
2. Select the range of date and time. (You can also select the range by clicking the calendar on right side, and then click the time table on bottom to select the range.)
3. Select the "Search Mode". The "Sensitivity" can be adjusted with some "Search Mode".
4. Use mouse to drag and determine the area for search, there are 3 areas can be set. Click  will select the whole screen for search; click  will unselect all.
5. Click  **[Start]** to start the search. During searching time, you can change refresh frequency by adjusting "Refresh Freq". (Higher "Refresh Frequency" will slow down the searching, and is possible to get more search results)
6. The searched results are listed in the event list.



7. Click and select the result to play the video.
8. To export the result as a video file (AVI format), select one or more result and click  **[Save]** button, then choose the folder to save the files.
9. To do another search, click  **[Initial]** button, and then repeat the above steps.



The video clip selected from “Found Event List” is for preview only, to play the whole event video, select the video from the time table of recorded data and play it.

8. Configure the Event Function

Network Recording Software provides three kinds of event functions:

- Hardware Motion detection (detected by camera itself).
- Digital Input detection (the sensor connected to camera).
- IVS (Intelligent Video System) detection (detected by this software).

8.1. Configure Hardware Motion Detection

Configure the Motion Detection Area and Sensitivity

Click **[Channel]**, and then click **[Motion]** tab to enter the “Motion” sub-page.

Channel 1

General Schedule Motion Mask PTZ I/O

Preview

Ch1

Detection Area Setting

- Motion Area 1
- Motion Area 2
- Motion Area 3

All X

Motion Sensitivity

Motion Area 1 Low High

Motion Area 2 Low High

Motion Area 3 Low High

Motion Sensitivity

Click to select the channel (click the arrow buttons to switch the previous-18 and next-18 channels)

1. Select channel to configure the motion detection areas.
2. Check and select the "Motion Area 1", then use mouse to draw the area for detect.
3. If you want to setup the second or third motion area, check and select the "Motion Area 2" or "Motion Area 3", then use mouse to draw the area for detect.
4. To adjust the sensitivity of motion detection, shift the bar of "Motion Sensitivity".
5. Click  **[Save]** to save the settings.

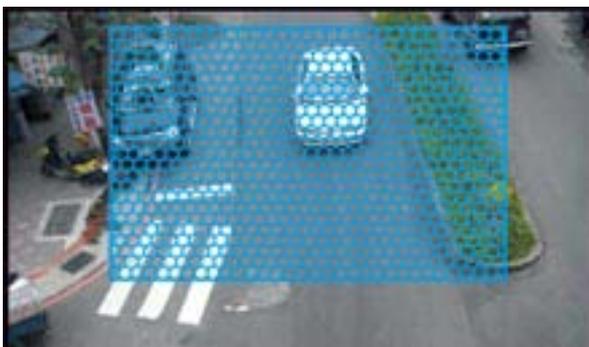


Please save the settings of the concurrent channel before leave this page, or the Motion Detection Area will not be saved.

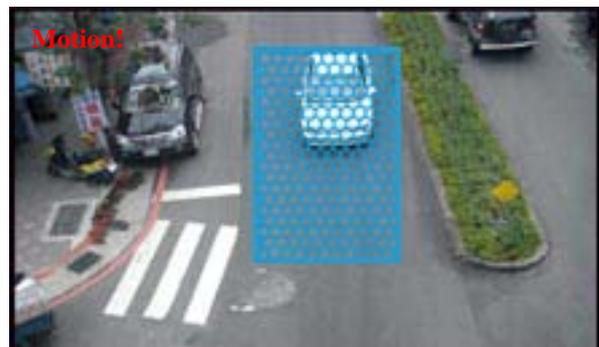
Recommendation of Motion Detection Area

To ensure the Motion Detection works well, and avoid unnecessary trigger, please follow the rules to draw the Motion Detection Areas:

- The moving object larger than the 50% of the Motion Detection Area, it will be detected, and the Motion Detection is triggered.
- The moving object smaller than the 50% of the Motion Detection Area, it will not be detected, and the Motion Detection will not be triggered.
- Recommend use 3 smaller Motion Detection Areas to replace a large area.

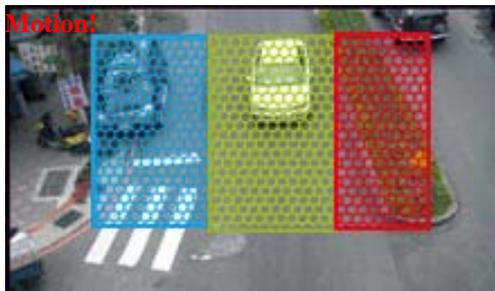


The moving object smaller than the 50% of the motion area, it will not be detected!



The moving object larger than 50% of the motion area, it will be detected, and the motion is triggered!

To detect the smaller moving object, use 3 motion areas to replace a large motion area, refer the figure below:



The moving object will be detected when it is in any of the 3 motion areas, and the motion is triggered!

Configure the Notification from Hardware Motion Detection

Once the Hardware Motion Detection is triggered, the software may take the following actions depending on the configuration:

- Recording the event video as the configuration in recording schedule ([Configure the Recording Function](#) → [Configure Recording Schedule](#))
- Send E-mail with attached image.
- Play sound to notify the operator in live-view screen.
- Enlarge the video to notify the operator in live-view screen.

Click [**I/O**] tab to enter the “I/O” sub-page, and then click [**Motion Message**].



1. Select channel to configure the notification from Motion Detection.
2. To let the software send E-mail when Motion Detection is triggered, check and enable the “E-Mail”. You should also create the recipient’s E-mail address and enable the E-mail function in [Configure and Enable E-Mail Function](#) .

3. To let the software plays the warning sound when Motion Detection is triggered, check and enable the "Play Sound", also configure the following settings:

- **Sec:** How many seconds the sound will be lasting.



"0 sec" means the sound is continuing played and will not back to the split screen mode, until user double-click on the video.

- **Buzzer:** Play the sound from the buzzer of PC.
- **Sound File:** Play the sound from the speaker of PC, and the sound file can be selected by clicking  **[Alarm Sound File]**. Moreover, after complete the sound file setting, you may click  **[Play Sound]** to play the sound for test.

4. To let the software enlarge the video when Motion Detection is triggered, check and enable the "Pop Up", and configure lasting time.



"0 sec" means the enlarged video is continuing displayed and will not back to the split screen mode, until user double-click on the video.

5. Click  **[Apply to all channel]** can apply the above settings to all channel.

6. Click  **[Save]** to save the settings.

8.2. Configure Digital I/O

Configure the Type of Digital Output

Click [**Channel**] on the top, and then click [**I/O**] tab to enter the “I/O” sub-page.

Channel 1

General Schedule Motion Mask PTZ I/O

Output

On/Off Switch

Delay Switch

Interval 10 [1 ~ 60] sec

Output Setting

Output 1 N.O.

Output 2 N.O.

Output 3 N.O.

Output 4 N.O.

Motion Message

E-Mail

Play Sound 0 sec

Buzzer

Sound File C:\Program Files\Netwc

Pop Up 5 sec

Type of Digital Output

Click to select the channel (click the arrow buttons to switch the previous-18 and next-18 channels)

1. Select channel to configure the Digital Output.
2. Check and select the type of Digital Output switch:
 - **On/Off Switch:** This type of switch will be triggered to On or Off constantly.

- **Delay Switch:** This type of switch will be triggered to “On” and lasting for a period time, and then “Off” automatically.
 - **Interval:** If the Digital Output switch is a “Delay Switch”, the lasting time of the “On” period can be set here.
3. Click and select the ON/Off mode from the pull-down list for the Digital Output switch:
- **N.C:** This mode means “Normally Closed” when the switch is turned off.
 - **N.O:** This mode means “Normally Opened” when the switch is turned off.

Configure the Notification from Digital Input Detection

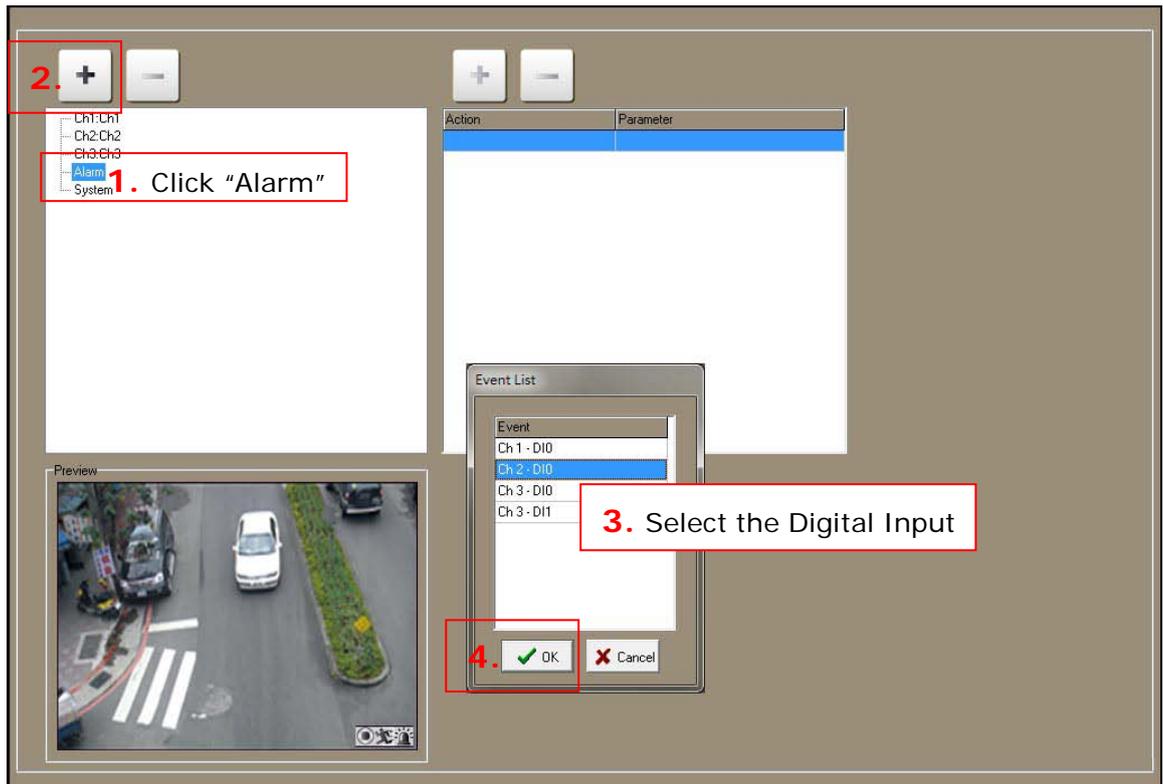
Once the Digital Input Detection is triggered, the software may take the following actions depending on the configuration:

- Recording the event video as the configuration in recording schedule ([Configure the Recording Function](#) → [Configure Recording Schedule](#))
- Send E-mail with attached image.
- Play sound to notify the operator in live-view screen.
- Enlarge the video of the selected channel (this channel or the other channel) to notify the operator in live-view screen.
- Move the selected Pan/Tilt channel (this channel or the other channel) to the preset point(s).

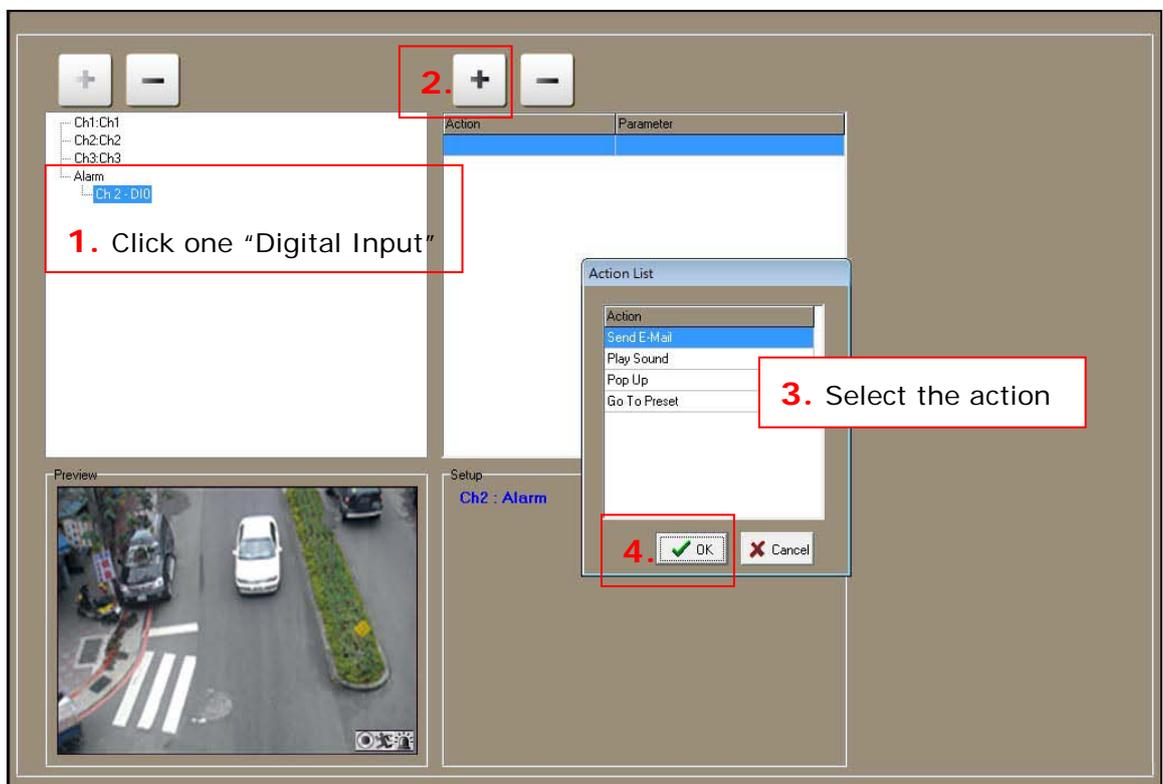
Click **[Detect]** on the top to enter the “Detect” page.



1. At the first, you have to select the channel and Digital Input for detect.
Refer to the below figure, click “Alarm” and then click  **[Add]** button on the top-left corner.
2. In the pop-up window, click and select the channel and Digital Input, and then click **[OK]** to add it into the “Detection Table” on the left side.



3. After add the Digital Input for detect, you have to select the action will be taken once it is triggered.



4. Refer to the above figure, click one Digital Input and then click  [Add] button on the top of "Action Table" on the right side.
5. In the pop-up window, click and select the action and then click [OK] to add it into the "Action Table". You can add multiple actions for this trigger.
6. To let the software send E-mail when Digital Input Detection is triggered, add "Send E-Mail" as the action. You should also create the recipient's E-mail address and enable the E-mail function in [Configure and Enable E-Mail Function](#) .
7. To let the software plays the warning sound when Digital Input Detection is triggered, add "Play Sound" as the action, and then configure the following settings:

- **Play Time:** How many seconds the sound will be lasting.



"0 sec" means the sound is continuing played and will not back to the split screen mode, until user double-click on the video.

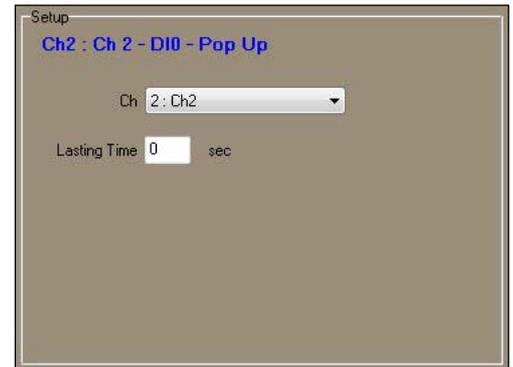


- **Buzzer:** Play the sound from the buzzer of PC.
- **Sound File:** Play the sound from the speaker of PC, and the sound file can be selected by clicking  [Alarm Sound File]. Moreover, after complete the sound file setting, you may click  [Play Sound] to play the sound for test.

- To let the software enlarge the video (this channel or the other channel) when Digital Input Detection is triggered, add "Pop Up" as the action, and then select the channel will be pop-up, and configure the lasting time.



"0 sec" means the enlarged video is continuing displayed and will not back to the split screen mode, until user double-click on the video.



- To let the software move the Pan/Tilt camera (this channel or the other channel) to selected preset point(s) when Digital Input Detection is triggered, add "Go To Preset" as the action, and then select the Pan/Tilt channel, and select the preset point(s).



- After configure the Digital Inputs, click  **[Save]** to save the settings.

9. Configure the Intelligent Video System

The IVS (Intelligent Video System) function provides various intelligent detections to enhance the event management capability, which increase the flexibility of handling different applications in many circumstances.

This software provides the following IVS functions:

- **Normal Motion Detection:** This method will make the IVS analyze the video stream and detect the motion. This kind of detection is precise than the camera's detection but must spend more resource of PC.
- **Missing Object Detection:** Use to protect the concerned object. While the object is missing, it will trigger the response action which is select.
- **Foreign Object Detection:** Use to keep an eye on the protected area. While the un-belonged object appear and left in the detected area, it will trigger the response action which is select.
- **Loss Focus Detection:** Use to detect the loss focus circumstance of the camera, if the lens is adjusted and the picture becomes unclear due to focus lost, it will trigger the response action which is select.
- **Occlusion Detection:** Use to detect the occlusion circumstance of the camera, when the camera is suffering from malicious attack, e.g. sprayed, painted or covered, it will trigger the response action which is select.
- **Redirection Detection:** Use to detect the redirection circumstance of the camera, if the direction of camera has been changed, it will trigger the response action which is select.
- **Boundary Detection:** Use to protect the concerned area. While an object is crossing the area, it will trigger the response action which is select.
- **Video Loss Detection:** While the IP camera is disconnected, or the IP video server loses the video of connected analog camera, it will trigger the response action which is select.
- **Counting:** Use for counting the flow rate of people, and display the IN and OUT counting result separately.

Once the IVS detection (except "Counting" function) is triggered, the software may take the following actions depending on the configuration:

- **Warning Message on Live Video:** The warning message of IVS detection

will be displayed on the live-view video to remind you.

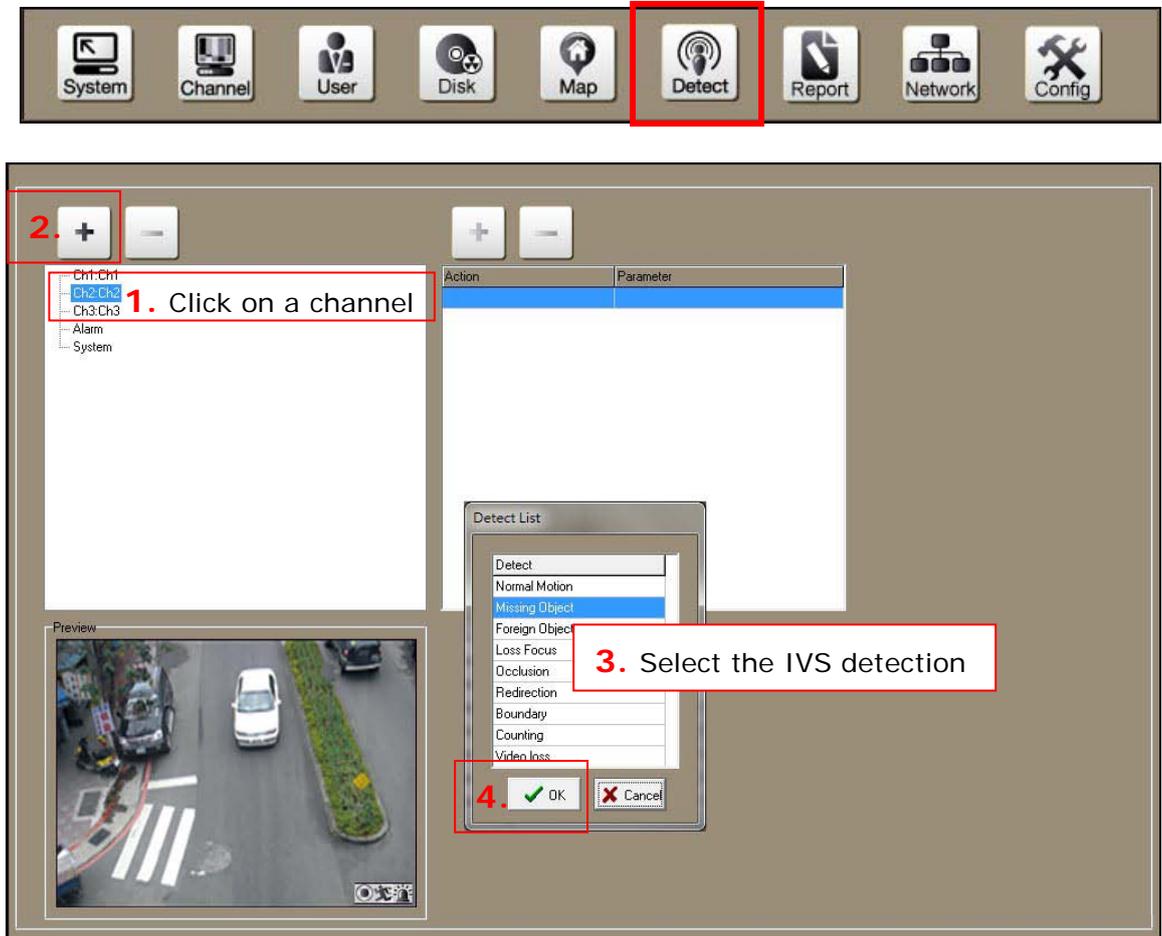
- **Recording Video and Audio:** If the channel has been configured with “Sensor Record” or “Sensor/Motion Record” in recording schedule ([Configure the Recording Function → Configure Recording Schedule](#)) (note, “IVS Motion Detection” should set “Motion Record”), the video and audio will be recorded after the trigger. This action is not available for “Video Loss Detection”.
- **Send E-Mail:** Send E-mail with attached image.
- **Play Sound:** Play sound to notify the operator in live-view screen.
- **Pop Up:** Enlarge the video of the selected channel (this channel or the other channel) to notify the operator in live-view screen. This action is not available for “Video Loss Detection”.
- **Go To Preset:** Move the selected Pan/Tilt channel (this channel or the other channel) to the preset point(s).

To add and configure the IVS functions, please refer to the following sections.

To add and configure the trigger actions of IVS function, please see [Configure the Intelligent Video System → Trigger Action of IVS Detection](#) for the detail.

9.1. Add the IVS Detection

On Setup screen, click **[Detect]** on the top to enter the Detect page.



1. At the first, you have to select the channel for detect. Refer to the above figure, click and select a channel and then click  **[Add]** button on the top-left corner.
2. In the pop-up window, click and select the IVS detection and then click **[OK]** to add it into the "Detection Table" on the left side.
3. Follow the following related segment to enable and configure the IVS detection.

9.2. Configure “Normal Motion” Detection

This method will make the IVS analyze the video stream and detect the motion. This kind of detection is precise than the camera’s detection but must spend more resource of PC.



If you decide use the IVS to detect the motion, please disable the motion detection function in [Configure the Event Function](#) → [Configure Hardware Motion Detection](#) page.

The screenshot shows the configuration interface for 'Normal Motion' detection. It includes a 'Detection Table' with a tree view on the left, a 'Preview' window showing a street scene with three red-drawn detection areas, and a 'Setup' panel on the right. The 'Setup' panel has a checked 'Enable Detect' checkbox, a 'Sensitivity' slider set between 'Low' and 'High', an 'Interval' of 3 seconds, and a 'Detect Area' section with radio buttons for 'Detect Area/Line' and 'Size Filter'. The 'Detect Area/Line' section has 'All' and 'Clear' buttons. A legend box explains that 'All' selects the whole screen and 'Clear' clears all areas.

1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.

2. Click and check Enable Detect to enable this detection.

3. Use mouse to draw the area on video for detect. There are 3 areas can be

configured.

4. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

5. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.

6. After complete configuration, click  **[Save]** to save the settings.

9.3. Configure “Missing Object” Detection

Use to protect the concerned object. While the object is missing, it will trigger the response action which is select.

The screenshot shows the following configuration steps:

- 1. Select the detection for configure:** The 'Missing Object' option is selected in the left-hand tree view under 'Ch2:Ch2'.
- 2. Check to enable the detection:** The 'Enable Detect' checkbox is checked in the 'Setup' panel.
- 3. Draw the area(s) for detect:** Three red-drawn rectangular areas are visible on the video preview, indicating the detection zones.
- 4. Adjust the sensitivity and interval:** The 'Sensitivity' slider is set to a middle position, and the 'Interval' is set to 3 seconds.

The 'Detect Area' section in the setup panel includes the following options:

- Detect Area/Line:
 - All: Select whole screen
 - Clear: Clear all areas
- Not Detect

1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.

2. Click and check Enable Detect to enable this detection.

3. Use mouse to draw the area on video for detect. There are 3 areas can be configured.



If the size of detect area is similar with the detected object, it will increase the accuracy of the detection.

4. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

5. According to different applications, you can adjust different interval time. The default interval time is 3 seconds, it means while the IVS detects the object is missing longer than 3 seconds the alarm will be triggered.
6. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.
7. After complete configuration, click  **[Save]** to save the settings.

9.4. Configure “Foreign Object” Detection

Use to keep an eye on the protected area. While the un-belonged object appear and left in the detected area, it will trigger the response action which is select.

The screenshot shows the following configuration steps:

- 1. Select the detection for configure:** In the 'Detection Table', the 'Foreign Object' option under 'Ch2:Ch2' is selected.
- 2. Check to enable the detection:** In the 'Setup' panel, the 'Enable Detect' checkbox is checked.
- 3. Draw the area(s) for detect:** In the 'Preview' window, three red rectangles are drawn on the video feed to indicate detection areas.
- 4. Adjust the sensitivity and interval:** In the 'Setup' panel, the 'Sensitivity' slider is adjusted from 'Low' to 'High', and the 'Interval' is set to 3 seconds.

Additional options in the 'Detect Area' section include:

- All:** Select whole screen
- Clear:** Clear all areas

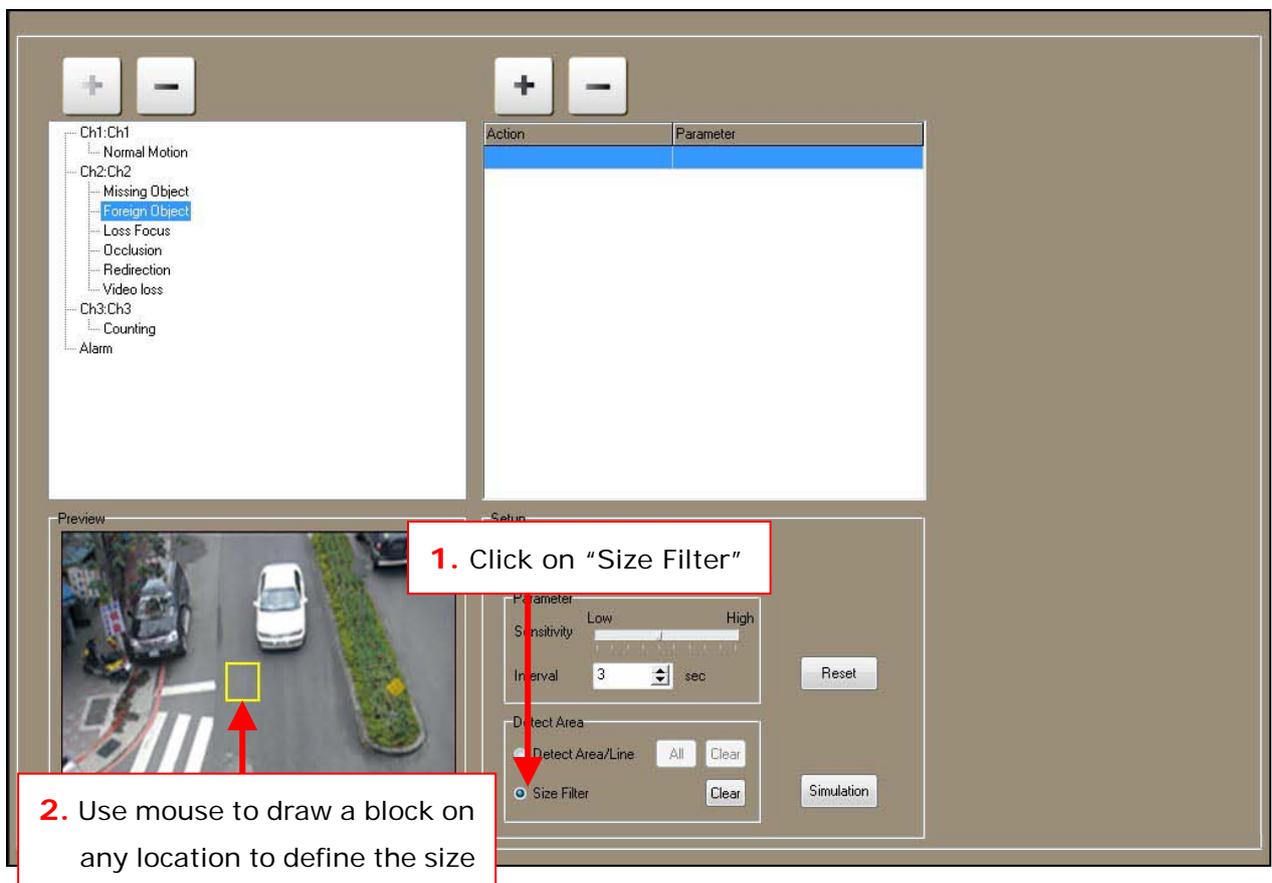
1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.
2. Click and check Enable Detect to enable this detection.
3. Use mouse to draw the area on video for detect. There are 3 areas can be configured.
4. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be

triggered.

5. According to different applications, you can adjust different interval time. The default interval time is 3 seconds, it means while the foreign object appears in the detected area longer than 3 seconds the alarm will be triggered.
6. You can define the "Size Filter" to ignore the smaller object detection. Please refer to the below figure to draw a block, afterward, the object smaller than the size of this block will not be detected.



1. Click on "Size Filter"

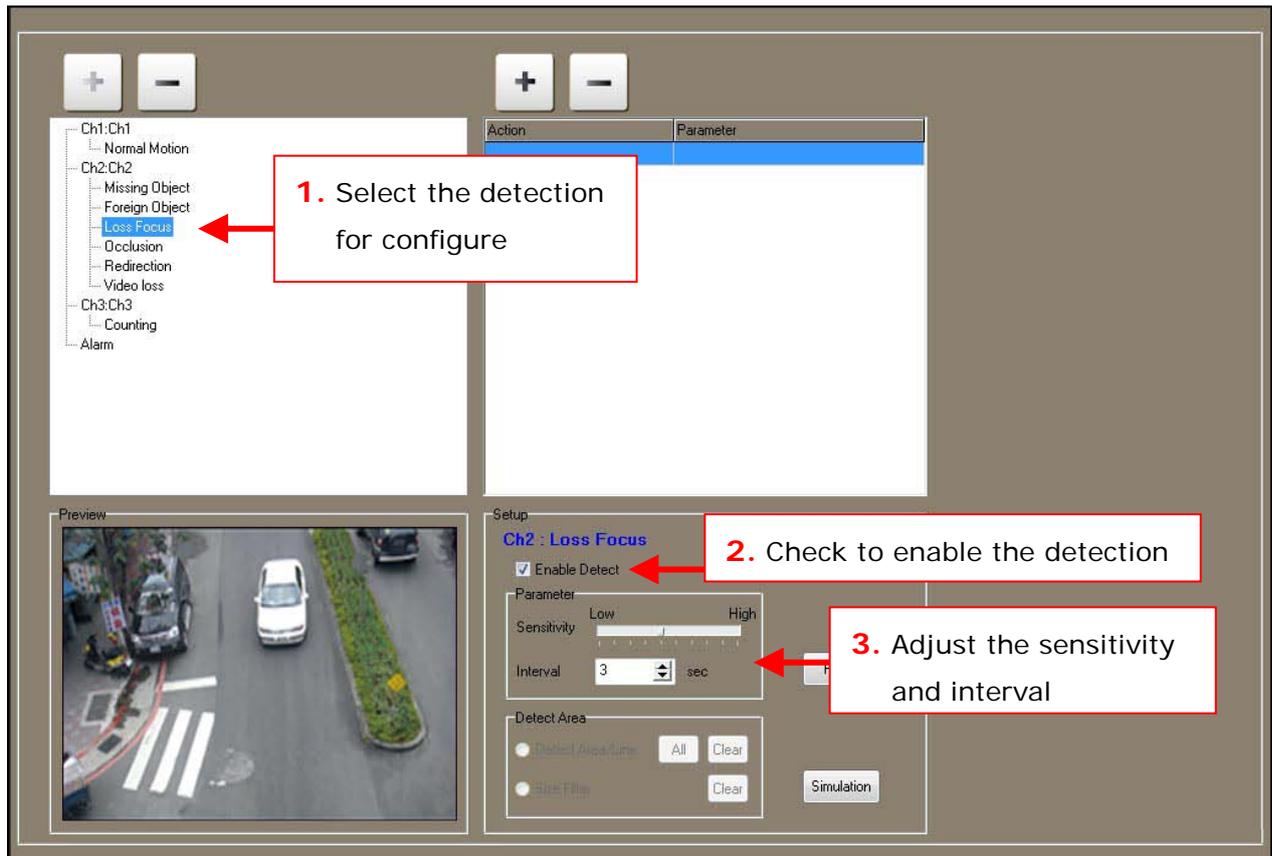
2. Use mouse to draw a block on any location to define the size

7. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.

8. After complete configuration, click  **[Save]** to save the settings.

9.5. Configure “Loss Focus” Detection

Use to detect the loss focus circumstance of the camera, if the lens is adjusted and the picture becomes unclear due to focus lost, it will trigger the response action which is select.



The screenshot shows the configuration interface for the 'Loss Focus' detection. It includes a detection table, a video preview, and a configuration panel. Three red callout boxes provide step-by-step instructions:

1. Select the detection for configure (pointing to 'Loss Focus' in the table)
2. Check to enable the detection (pointing to the 'Enable Detect' checkbox)
3. Adjust the sensitivity and interval (pointing to the sensitivity slider and interval dropdown)

1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.

2. Click and check Enable Detect to enable this detection.

3. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

4. According to different applications, you can adjust different interval time. The default interval time is 3 seconds, it means while the loss focus circumstance is detected on the operating camera longer than 3 seconds the alarm will be triggered.
5. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.
6. After complete configuration, click  **[Save]** to save the settings.

9.6. Configure “Occlusion” Detection

Use to detect the occlusion circumstance of the camera, when the camera is suffering from malicious attack, e.g. sprayed, painted or covered, it will trigger the response action which is select.

The screenshot shows the Asoni IVS configuration interface. On the left, a tree view lists detection types: Ch1:Ch1 (Normal Motion), Ch2:Ch2 (Missing Object, Foreign Object, Loss Focus, Occlusion, Redirection, Video loss), and Ch3:Ch3 (Counting, Alarm). The 'Occlusion' option under Ch2:Ch2 is highlighted with a red box and an arrow pointing to it, with the text '1. Select the detection for configure'. Below this is a 'Preview' window showing a street scene with a white car. To the right of the preview is the 'Setup' panel for 'Ch2: Occlusion'. It features a checked 'Enable Detect' checkbox with a red box and arrow pointing to it, and the text '2. Check to enable the detection'. Below the checkbox is a 'Sensitivity' slider ranging from 'Low' to 'High', with a red box and arrow pointing to it, and the text '3. Adjust the sensitivity and interval'. The 'Interval' is set to '3 sec'. There are also 'Detect Area' options for 'Detect Area Line' and 'Mask Filter', each with 'All' and 'Clear' buttons, and a 'Simulation' button.

1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.

2. Click and check Enable Detect to enable this detection.

3. To adjust the sensitivity of detection, shift the bar of

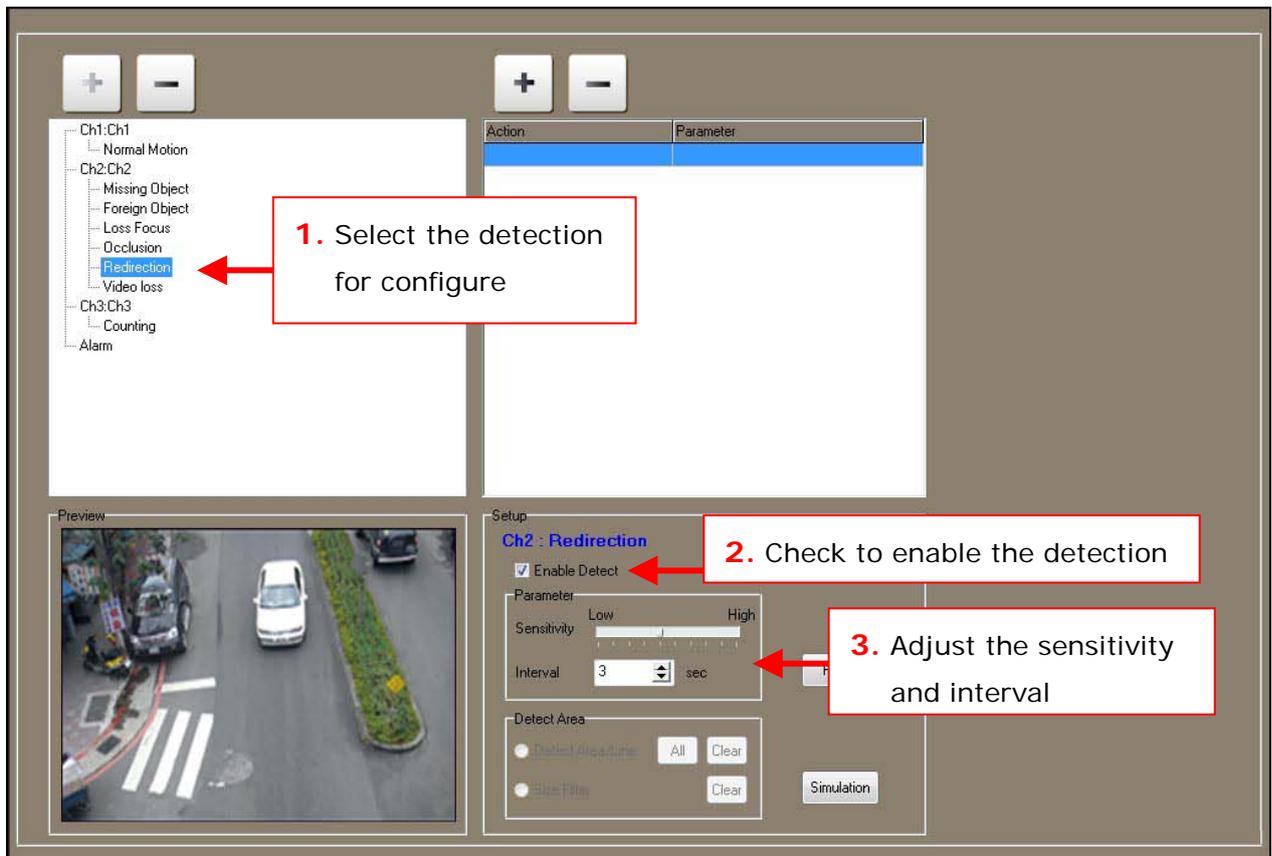


. When the sensitivity is higher, it is easier to be triggered.

4. According to different applications, you can adjust different interval time. The default interval time is 3 seconds, it means while the occlusion circumstance is detected on the operating camera longer than 3 seconds the alarm will be triggered.
5. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.
6. After complete configuration, click  **[Save]** to save the settings.

9.7. Configure “Redirection” Detection

Use to detect the redirection circumstance of the camera, if the direction of camera has been changed, it will trigger the response action which is select.



1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.

2. Click and check Enable Detect to enable this detection.

3. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

4. According to different applications, you can adjust different interval time.

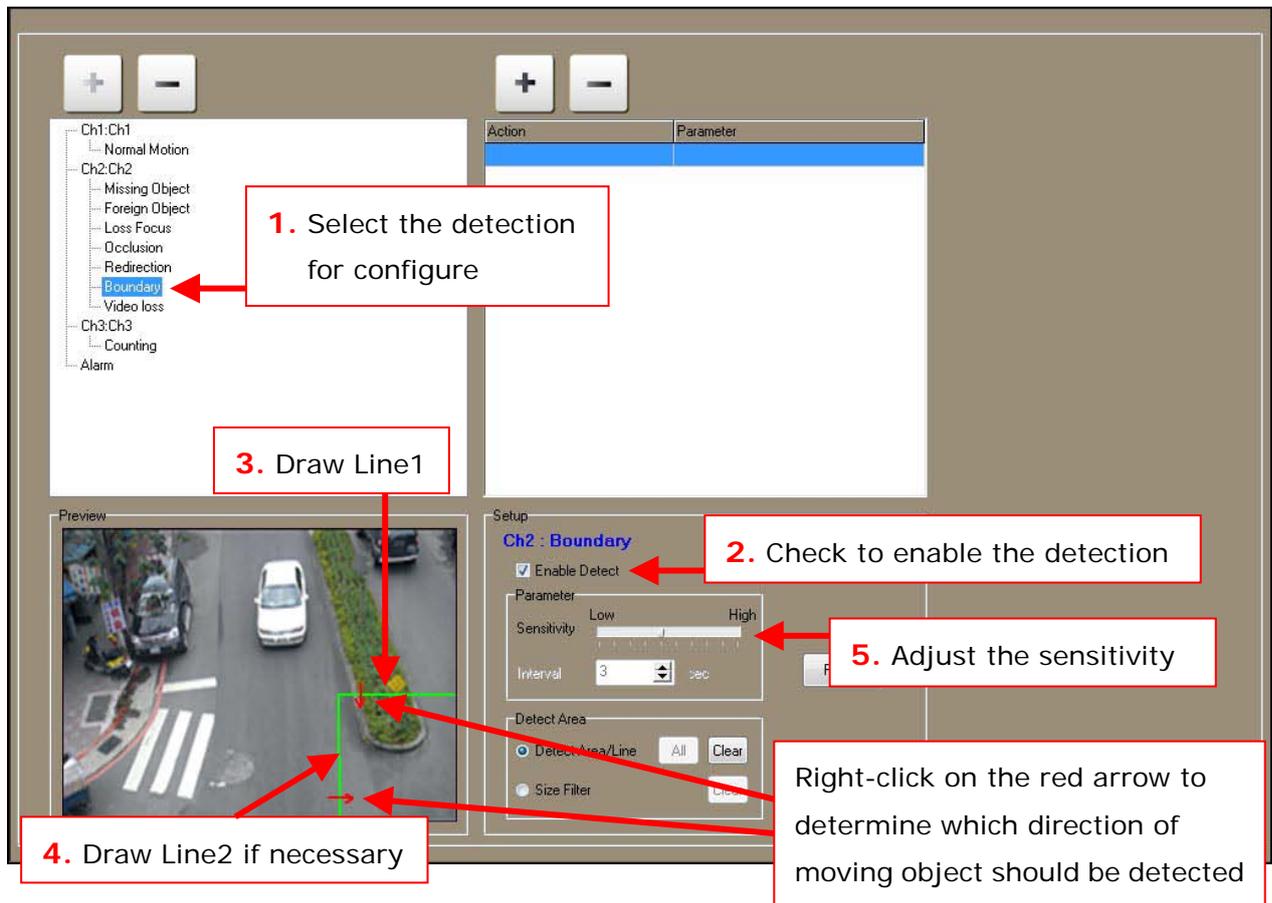
The default interval time is 3 seconds, it means while the redirection circumstance is detected on the operating camera longer than 3 seconds the alarm will be triggered.

5. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.

6. After complete configuration, click  **[Save]** to save the settings.

9.8. Configure “Boundary” Detection

Use to protect the concerned area. While an object is crossing the area, it will trigger the response action which is select.



The screenshot shows the Asoni software interface with the following components and annotations:

- Tree View (Left):** A list of detection types including Normal Motion, Missing Object, Foreign Object, Loss Focus, Occlusion, Redirection, **Boundary** (highlighted), Video loss, Counting, and Alarm.
- Action Table (Top Right):** A table with columns for Action and Parameter.
- Setup Panel (Bottom Right):**
 - Ch2: Boundary:** Section header.
 - Enable Detect** (Annotated with '2. Check to enable the detection')
 - Parameter:**
 - Sensitivity: A slider from Low to High (Annotated with '5. Adjust the sensitivity')
 - Interval: 3 sec
 - Detect Area:**
 - Detect Area/Line (Annotated with '4. Draw Line2 if necessary')
 - Size Filter
- Preview Window (Bottom Left):** Shows a video feed of a road with a white car. A green line is drawn across the road, and a red arrow points to it (Annotated with '3. Draw Line1').
- Callout Box (Bottom Right):** "Right-click on the red arrow to determine which direction of moving object should be detected"

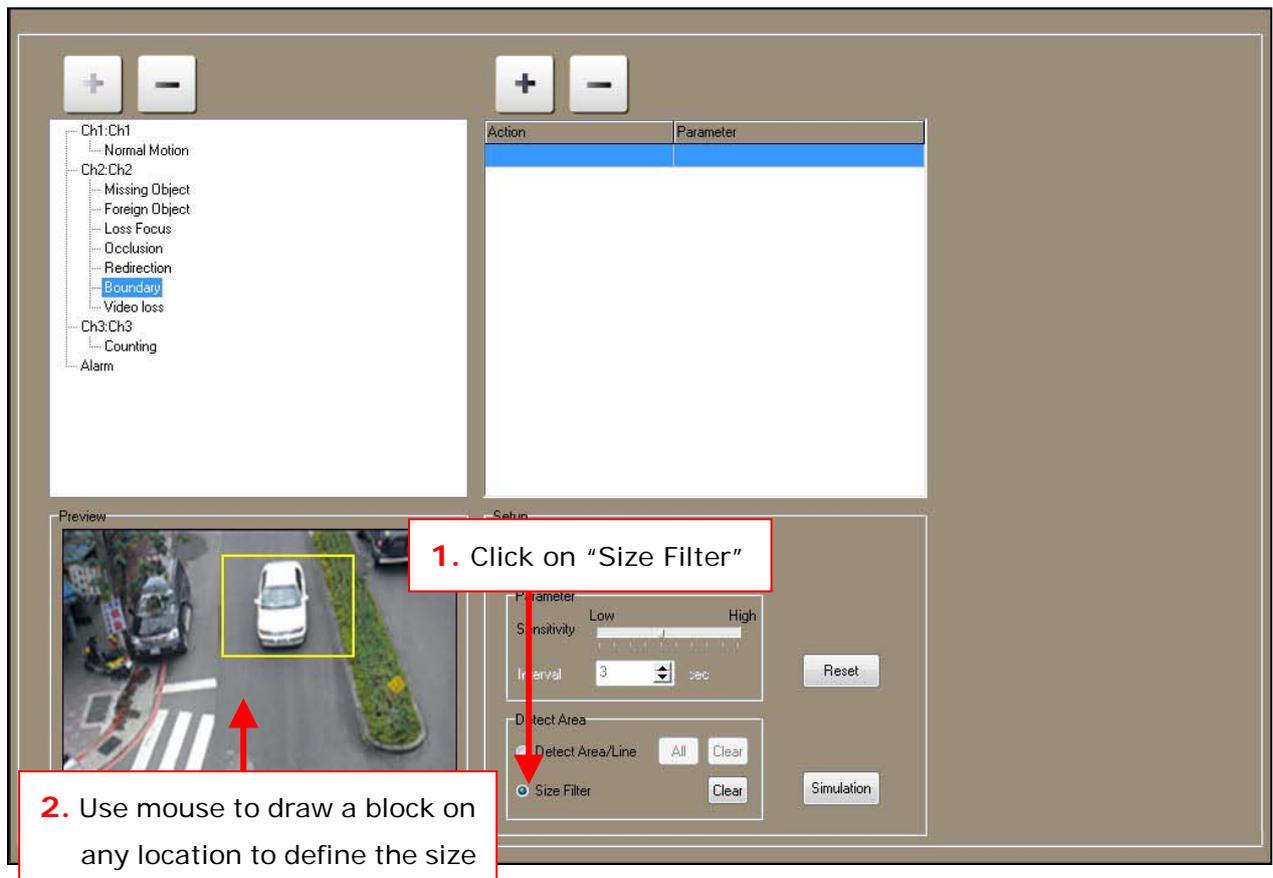
1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.
2. Click and check **Enable Detect** to enable this detection.
3. Use mouse to draw one or two lines on video to define the boundary. Right-click on the red arrow on the line can select which direction of moving object should be detected.

4. To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

5. You can define the "Size Filter" to ignore the smaller object detection. Please refer to the below figure to draw a block, afterward, the object smaller than the size of this block will not be detected.



1. Click on "Size Filter"

2. Use mouse to draw a block on any location to define the size

6. You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.

7. After complete configuration, click  **[Save]** to save the settings.

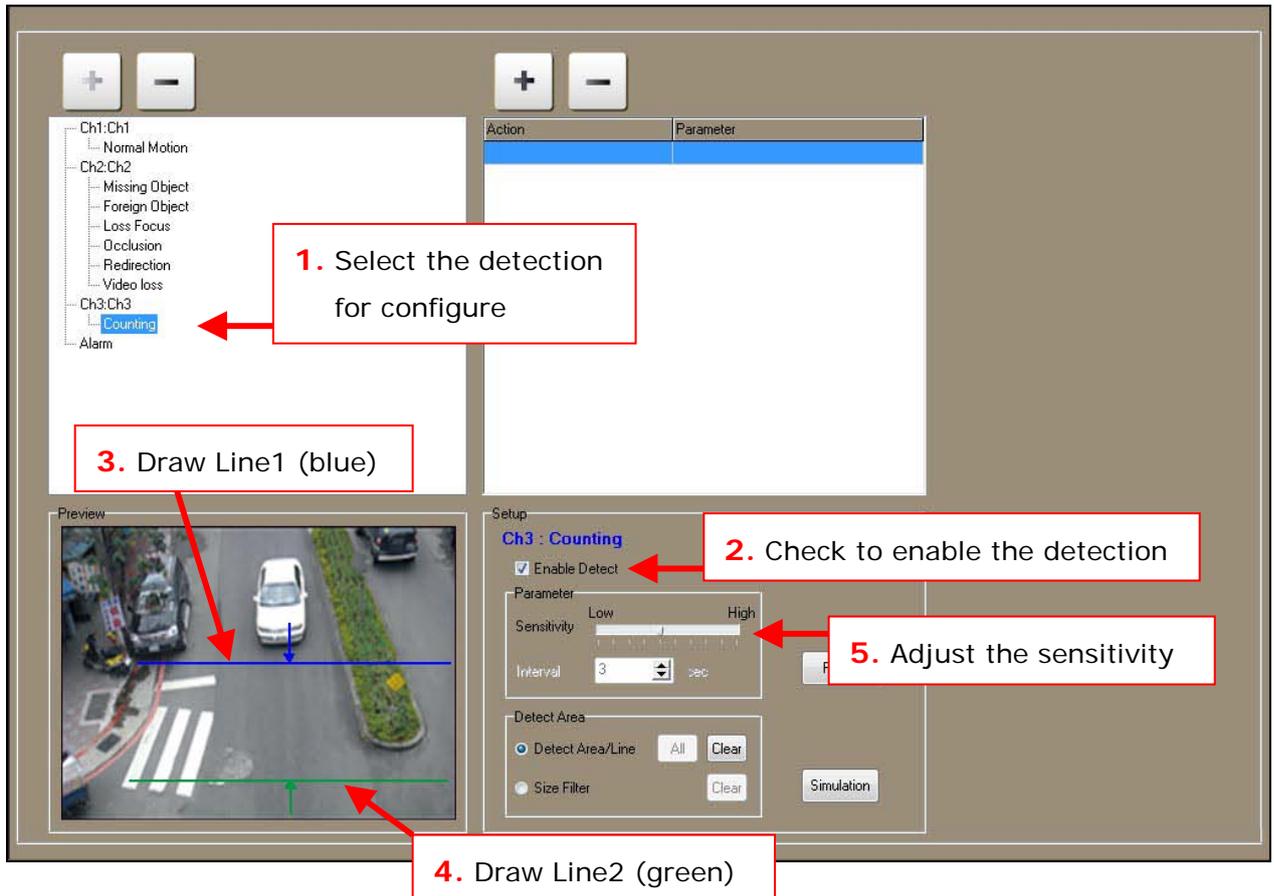
9.9. Configure “Video Loss” Detection

While the IP camera is disconnected, or the IP video server loses the video of connected analog camera, it will trigger the response action which is select.

You don't need to configure the “Video Loss” detection, it will be activated after added to the “Detection Table.

9.10. Configure “Counting” Function

Use for counting the flow rate of people, and display the IN and OUT counting result separately.



The screenshot shows the configuration interface for the 'Counting' function. The interface includes a detection table, a preview window, and a setup panel. The following steps are highlighted with red arrows and callout boxes:

1. Select the detection for configure
2. Check to enable the detection
3. Draw Line1 (blue)
4. Draw Line2 (green)
5. Adjust the sensitivity

1. Click and select the IVS detection from the “Detection Table”, the video and configuration will be shown on the bottom.
2. Click and check Enable Detect to enable this detection.
3. Use mouse to draw two lines on video for detect. While the people cross over these two lines, the IVS will count it automatically. The first-draw line (blue line) is defined as the first line and the post-draw line is defined as second line. When people cross over the first line (blue line) and then the

second line (green line), it will be identified as "OUT"; in opposite way, it will be identified as "IN".



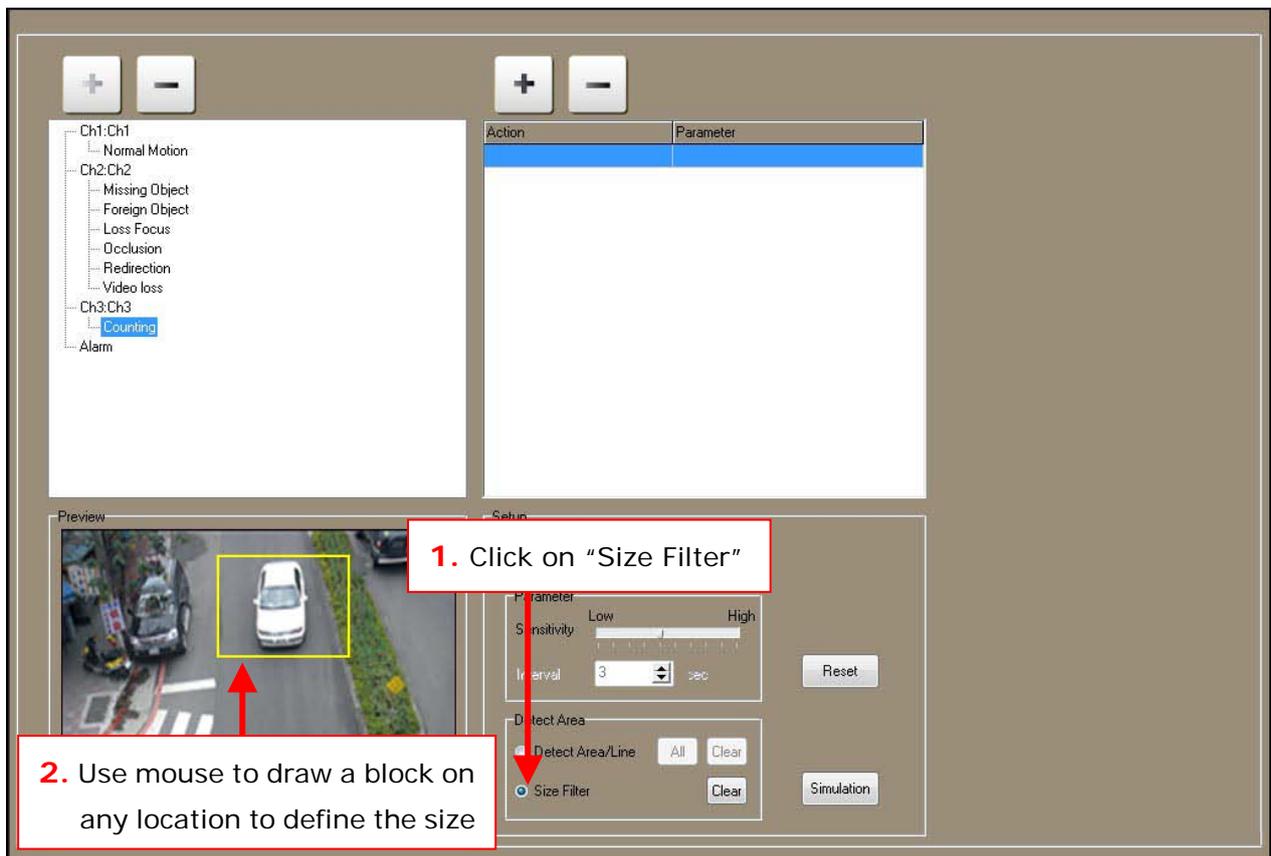
These two lines should not be drawn too close and please make them stay parallel.

- To adjust the sensitivity of detection, shift the bar of



. When the sensitivity is higher, it is easier to be triggered.

- You can define the "Size Filter" to ignore the smaller object detection. Please refer to the below figure to draw a block, afterward, the object smaller than the size of this block will not be detected.



1. Click on "Size Filter"

2. Use mouse to draw a block on any location to define the size

- You can click **Simulation** button to test the above setting and confirm the results whether you need or not. Click **Simulation** button again will stop the simulation.

7. After complete configuration, click  **[Save]** to save the settings.

Tips:

1. When the color of detected object is similar with the color of background, the accuracy of the counting may be decrease.
2. The recommended distance between camera and detected object is more than 1 meter, and the mounted camera to the ground is more than 3 meters.
3. Make sure the light of the detected area is stable.
4. Camera's image resolution must larger than CIF (352 x 240).
5. Camera's video frame rate must higher than 5 FPS. The higher FPS to set, the better detect result to get.
6. The size of the detected object is at least 5% of the whole image.

View Counting Result

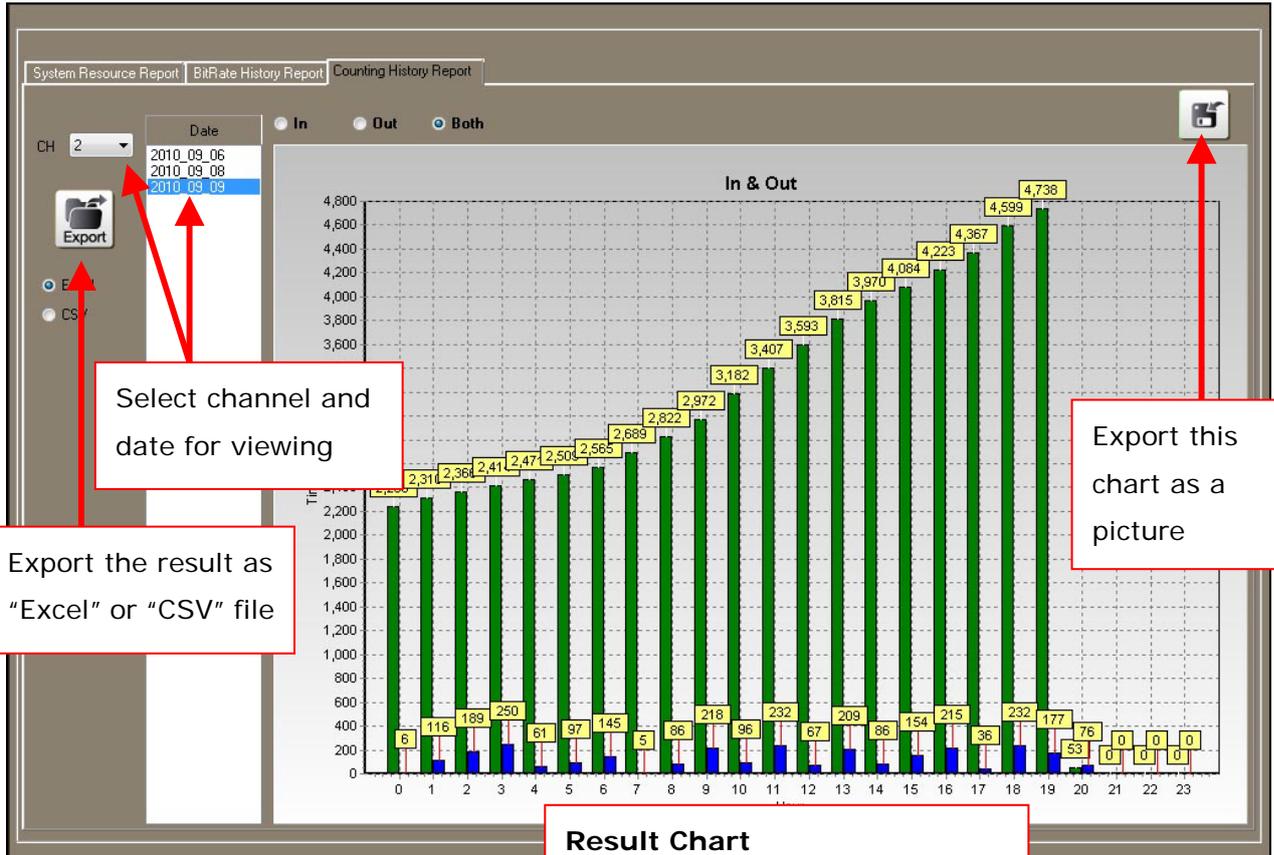
In Live-View screen, you can see the instant counting result as the figure:

- **I**: Counting "IN" objects.
- **O**: Counting "OUT" objects.



You can view the history of counting result for each hour. In Setup screen, click **[Report]** on the top, and then click **[Counting History Report]** tab to enter the sub-page.





Export the result as "Excel" or "CSV" file

Select channel and date for viewing

Export this chart as a picture

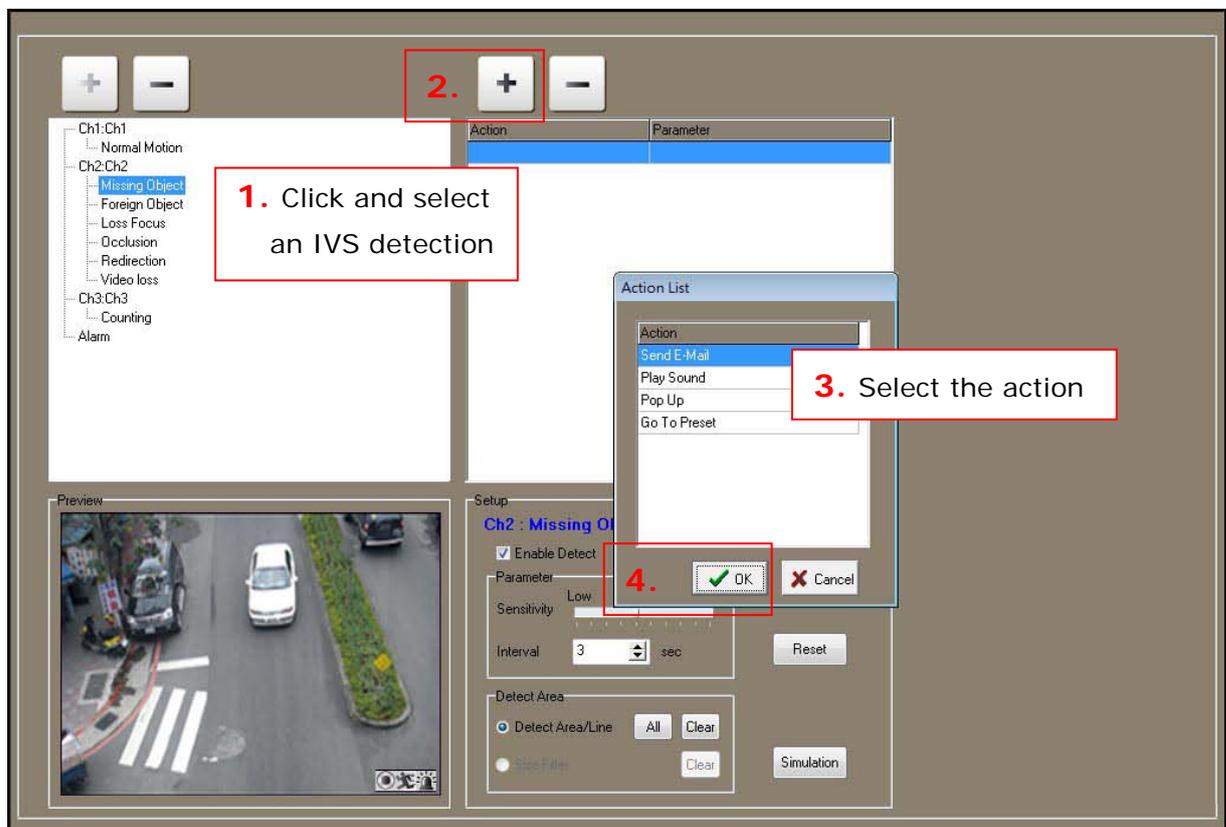
Result Chart
 Green: Counting "IN" objects
 Blue: Counting "OUT" objects

9.11. Trigger Action of IVS Detection

Once the IVS detection is triggered, the software may take the following actions depending on the configuration:

- **Warning Message on Live Video:** The warning message of IVS detection will be displayed on the live-view video to remind you.
- **Recording Video and Audio:** If the channel has been configured with "Sensor Record" or "Sensor/Motion Record" in recording schedule (**note, "Normal Motion Detection" should set "Motion Record"**), the video and audio will be recorded after the trigger.
- **Send E-Mail:** Send E-mail with attached image.
- **Play Sound:** Play sound to notify the operator in live-view screen.
- **Pop Up:** Enlarge the video of the selected channel (this channel or the other channel) to notify the operator in live-view screen.
- **Go To Preset:** Move the selected Pan/Tilt channel (this channel or the other channel) to the preset point(s).

To add the action for each IVS detection, follow the steps:



1. Click and select the IVS detection from the "Detection Table" and then click  **[Add]** button on the top of "Action Table" on the right side.
2. In the pop-up window, click and select the action and then click **[OK]** to add it into the "Action Table". You can add multiple actions for this trigger.
3. To let the software send E-mail when IVS detection is triggered, add "Send E-Mail" as the action. You should also create the recipient's E-mail address and enable the E-mail function in [Configure and Enable E-Mail Function](#) .
4. To let the software plays the warning sound when IVS detection is triggered, add "Play Sound" as the action, and then configure the following settings:

- **Play Time:** How many seconds the sound will be lasting.



"0 sec" means the sound is continuing played and will not back to the split screen mode, until user double-click on the video.



- **Buzzer:** Play the sound from the buzzer of PC.
- **Sound File:** Play the sound from the speaker of PC, and the sound file can

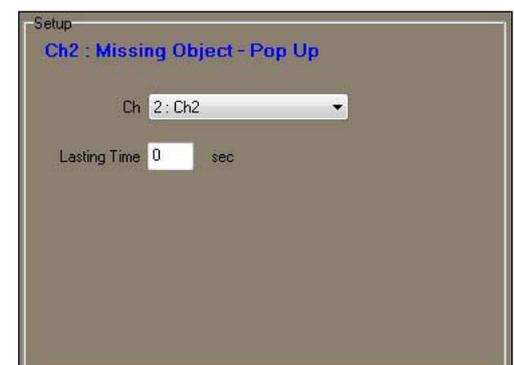
be selected by clicking  **[Alarm Sound File]**. Moreover, after

complete the sound file setting, you may click  **[Play Sound]** to play the sound for test.

5. To let the software enlarge the video (this channel or the other channel) when IVS detection is triggered, add "Pop Up" as the action, and then select the channel will be pop-up, and configure the lasting time.



"0 sec" means the enlarged video is continuing displayed and will not back



to the split screen mode, until user double-click on the video.

6. To let the software move the Pan/Tilt camera (this channel or the other channel) to selected preset point(s) when IVS detection is triggered, add "Go To Preset" as the action, and then select the Pan/Tilt channel, and select the preset point(s).



7. After complete the configuration, click  **[Save]** to save the settings.

10. Configure the PTZ Function

If the camera or video server equips PT or PTZ function, configure the function in this page.

Click **[Channel]** on the top, and then click **[PTZ]** tab to enter the PTZ sub-page.



Channel 1

General | Schedule | Motion | Mask | **PTZ** | I/O

Preview

Ch1

Function

Zoom

Focus

Iris

Pan/Tilt/Zoom, Focus & Iris control

Communication Option

Type: PELCO-D

Device ID: 1

Baud Rate: 2400

Speed: 9

Communication Option (PTZ protocol)

Preset Setup

Point 1: [dropdown]

Point Name: Preset-01

Preset Points Setting

Custom Commands Group

Commands Group: Custom_1

Command: Flip

PTZ Custom Commands

Auto Patrol

Timer [checkbox]

3 min

Auto Patrol Setting (only for specific camera models)

Click to select the channel (click the arrow buttons to switch the previous-18 and next-18 channels)

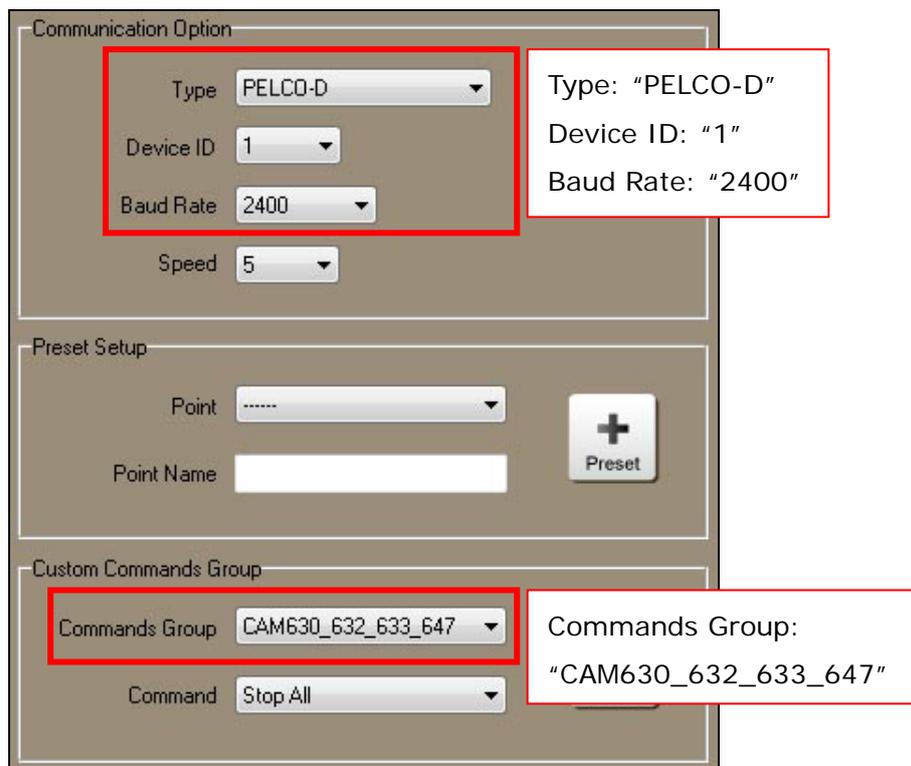
This page provides the following functions:

- Configure the PTZ protocol of the PTZ device.
- Setup preset points.
- Operate the PTZ device.

- Customize PTZ commands, to add more PTZ control commands, or create a set of commands to control the PTZ model which has not been supported by the software.
- Configure Auto Patrol function (only for specific camera models).



If you are using CAM630, CAM632, CAM633 or CAM647, please follow the below figure to configure the “Communication Option” and “Custom Commands Group”, and then, you can use more functions (such as “OSD Menu” and “Flip”) with the speed dome when in Live-View screen.

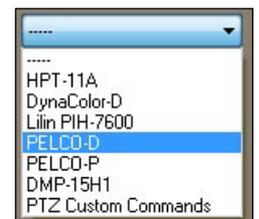


The screenshot shows the PTZ configuration interface with the following settings:

- Communication Option:**
 - Type: PELCO-D
 - Device ID: 1
 - Baud Rate: 2400
 - Speed: 5
- Preset Setup:**
 - Point:
 - Point Name: [Empty]
 - + Preset
- Custom Commands Group:**
 - Commands Group: CAM630_632_633_647
 - Command: Stop.All

With the other model of PTZ devices, follow the below instructions:

1. Select channel to configure the PTZ function.
2. Select the PTZ protocol from the pull-down list of “Type”.
3. Make sure choosing the correct “Device ID” and “BaudRate”.
4. Select the moving speed for Pan / Tilt from the pull-down list of “Speed”.



5. To setup the preset point, follow the steps:
 - a. Select the point number from the pull-down list of "Point".
 - b. In "Point Name" field, input a name for this point.
 - c. Pan / Tilt the camera to the position, and then adjust the zoom / focus / Iris.
 - d. Click  **[Preset Setup]** button to save this preset point.



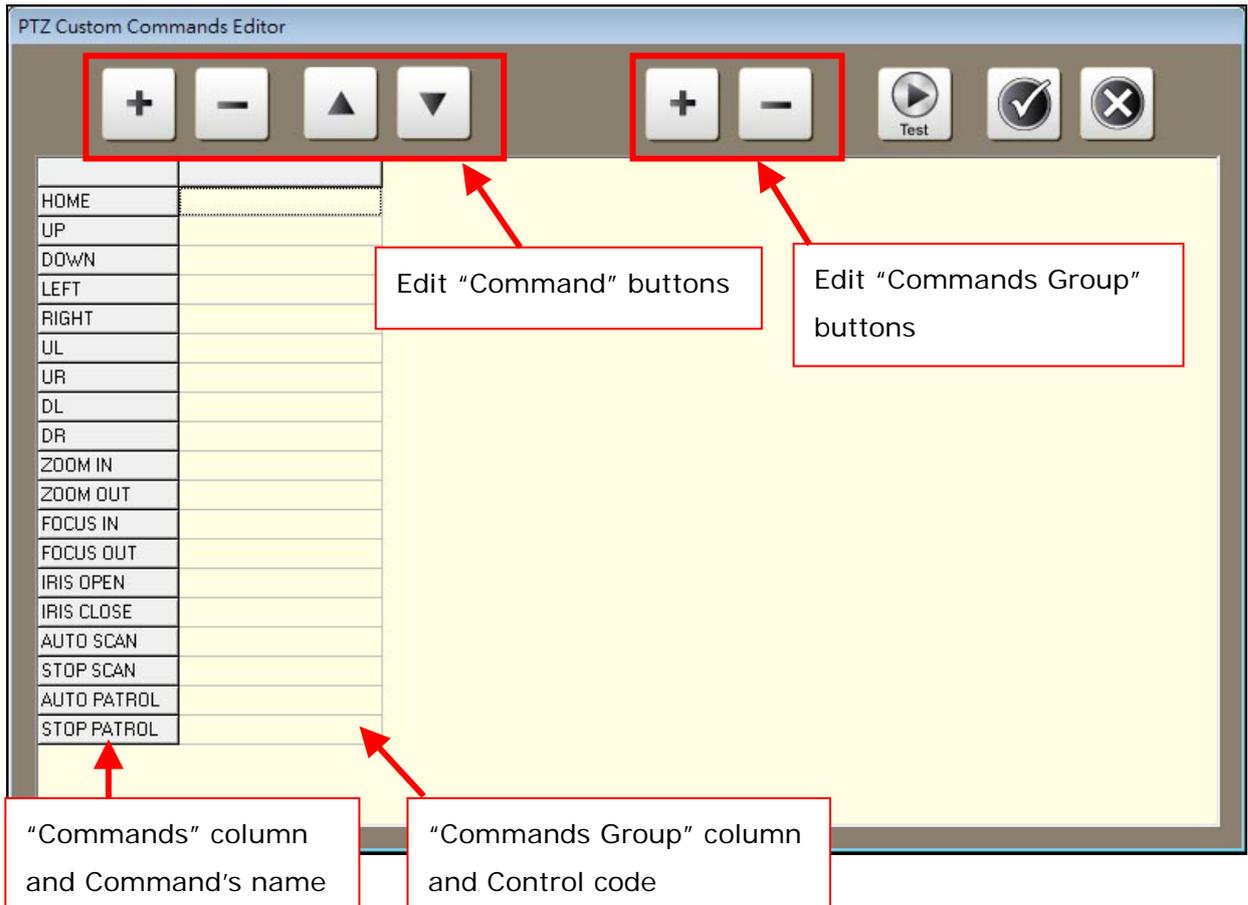
6. Click  **[Save]** to save the settings.

PTZ Custom Commands

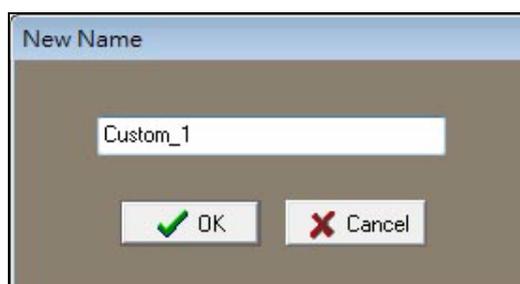
If the built-in PTZ control commands of the software don't support the connected PTZ device, you can add or create the PTZ commands. You can use the built-in and added commands with the following combinations:

- Combine the built-in and added commands to control the PTZ device.
- Only use the added commands to control the PTZ device. The built-in commands will not work with this device.
- You can modify the built-in commands, and then control the PTZ device.

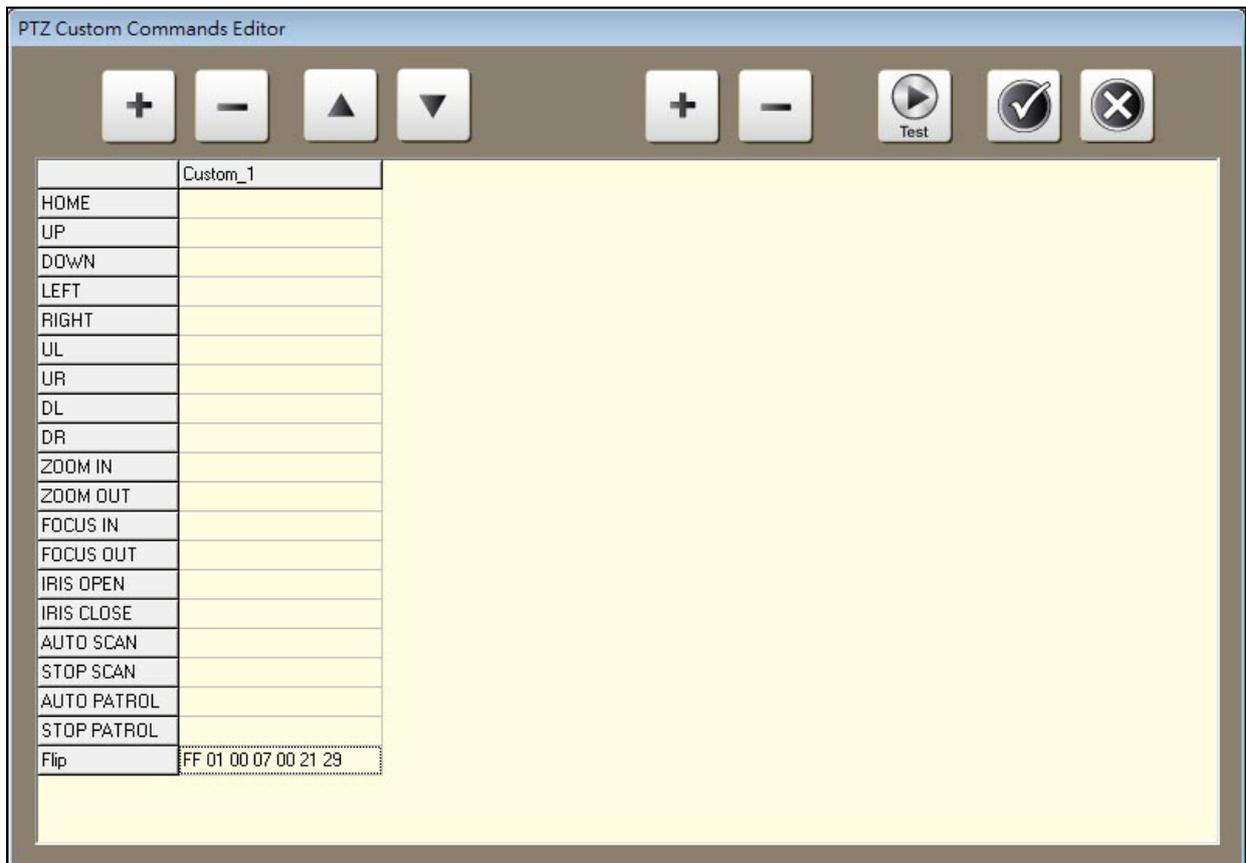
Click  **[PTZ Custom Commands]** button in "Custom Commands Group" field to open "PTZ Custom Commands Editor" sub-page.



1. You must create a "Commands Group" first and then create the commands. Click **[Add Commands Group]** button, assign a name in the pop-up window, and then click **[OK]**. A new "Commands Group" is added.



2. The built-in commands are already listed in the "Commands" column. If these commands can control the PTZ device, just leave them for empty.
3. To add a new command, click and select any empty box under the "Commands Group" column, click **[Add Command]** button, assign a name in the pop-up window, and then click **[OK]**. A new command is added.



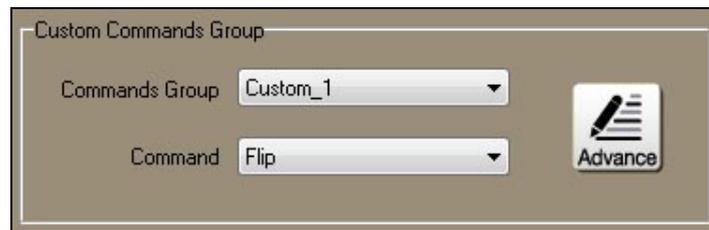
4. Under the "Commands Group" column, left-click the box three times on the right side of command, and then input the PTZ control codes. The control codes are in hexadecimal, and separate with a space.
5. When complete the configuration, click  **[OK]** to save the settings.
6. Back to "PTZ" sub-page, configure the following:
 - a. Select the PTZ protocol from the pull-down list of "Type". If you want to combine the built-in and added customized command to control the PTZ device, select a built-in protocol such as "PELCO-D", and then go ahead

to the step c.

- b. If you want to use only the customized PTZ commands, please select "PTZ Custom Commands".



- c. Select the "Commands Group" from the pull-down list of "Commands Group".



- d. Click  **[Save]** to save the settings.

7. On the Live-View screen, you can switch the pull-down list between "Preset Points" and "PTZ Custom Commands" by clicking  **[Switch List]** button. And control the PTZ device by the selected command.



11. Manage User Accounts

This software provides 3 user groups by default: Default, Admin and Guest group. In this page, you can:

- Add / delete the group and configure the authority.
- Except the Default group, add / delete users in the other groups.
- If more than 2 users in Admin group, delete users in the Admin group.
- Change the group and password of the users.

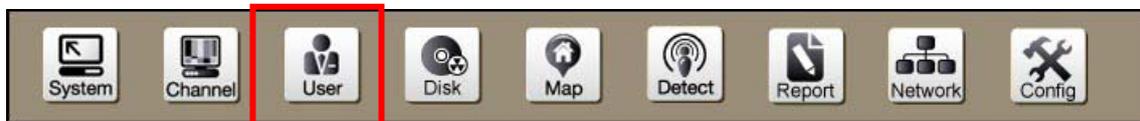
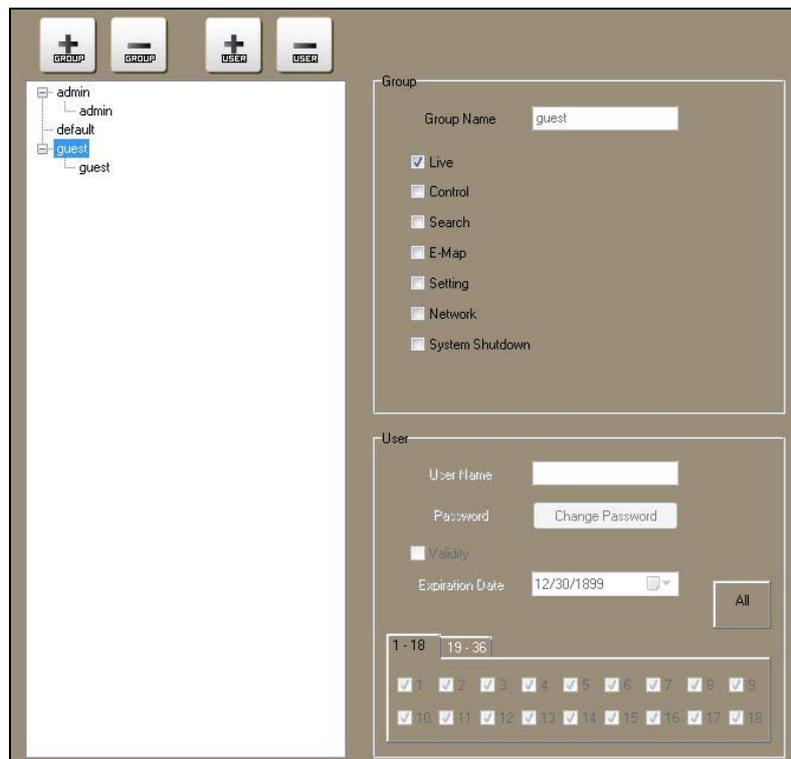


Before remove the Admin group, make sure there is another group has enabled the authorities of "Setting" and "System Shutdown", otherwise, you can't go into "Setup" page or close this software.

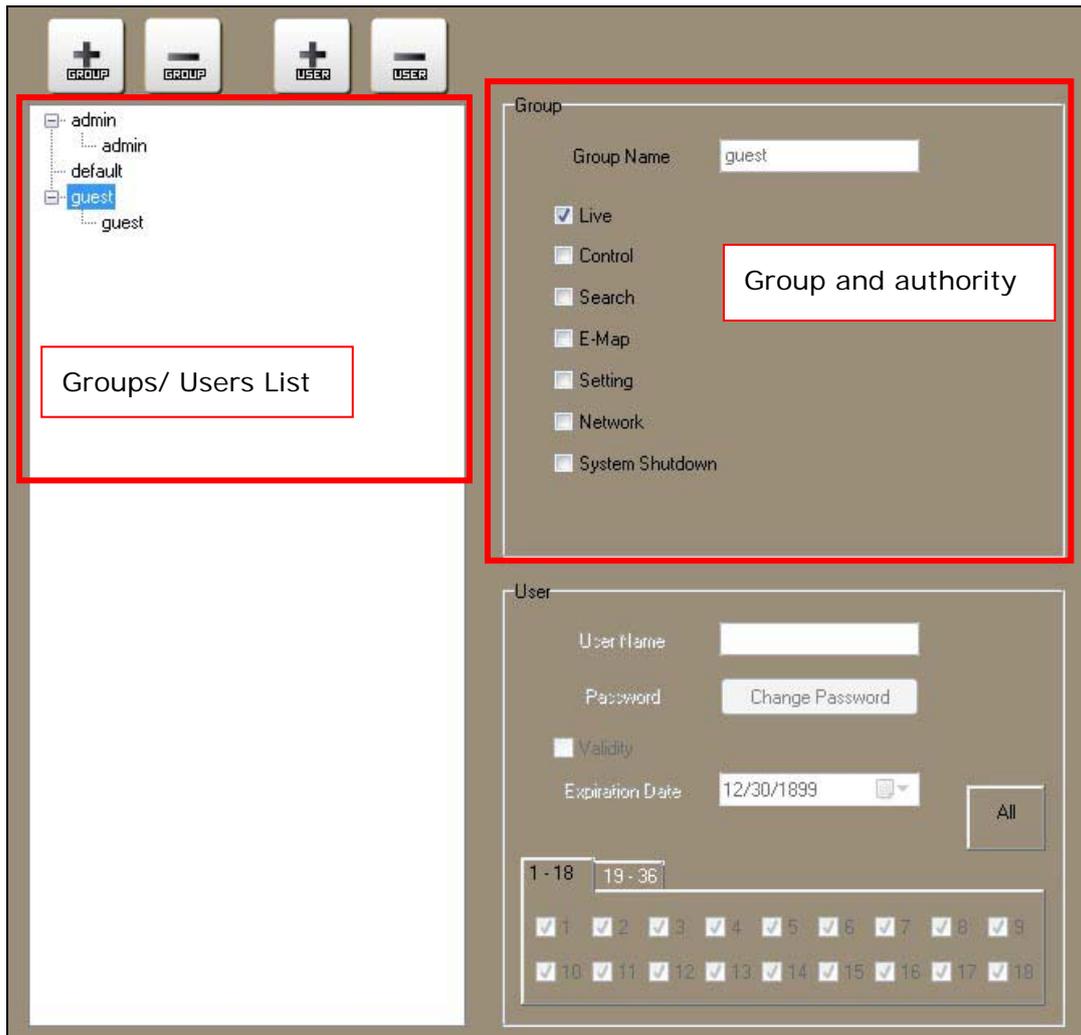


The "Default" group indicates the user who doesn't log in, it can't be removed, but you can change the authority of "Default" group.

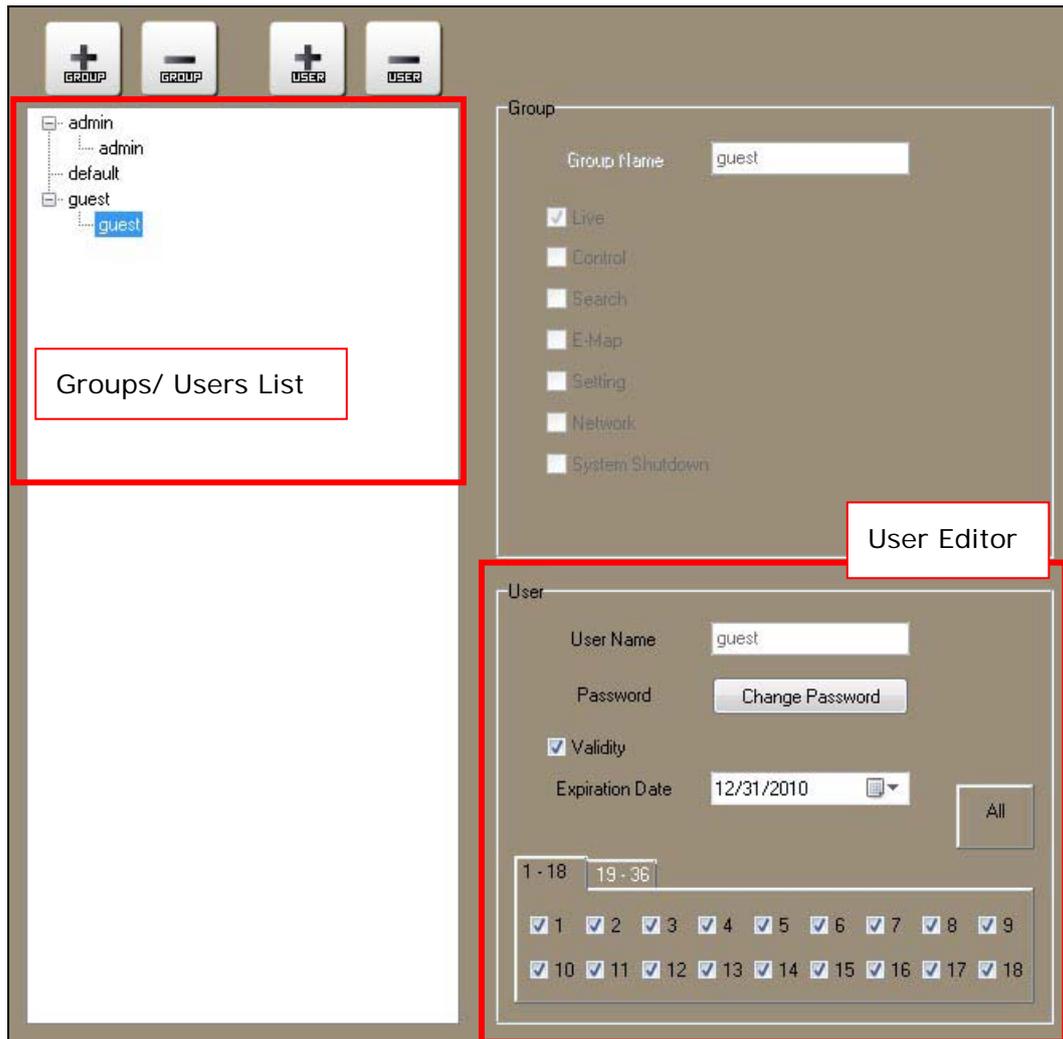
Click **[User]** on the top to enter the Password Setup page.

The screenshot shows the 'User' management interface. At the top left, there are four buttons: '+ GROUP', '- GROUP', '+ USER', and '- USER'. Below these is a tree view of groups: 'admin', 'default', and 'guest'. The 'guest' group is selected. To the right, there are two main panels. The 'Group' panel has a 'Group Name' field with 'guest' entered, and several checkboxes for permissions: 'Live' (checked), 'Control', 'Search', 'E-Map', 'Setting', 'Network', and 'System Shutdown'. The 'User' panel has a 'User Name' field, a 'Password' field with a 'Change Password' button, a 'Validity' checkbox, and an 'Expiration Date' field with a dropdown arrow. Below these is a grid of checkboxes for individual users, numbered 1 to 18. The first two columns are labeled '1-18' and '19-36'.



1. To add new group, click  **[ADD Group]**, in the pop-up window, type the name in "Group Name" field, and then click **[OK]** to add this new group.
2. To change the authority of group, click and select the group, and then check or un-check the authority type.
3. To remove a group, click and select the group from the "Groups/ Users List", click  **[DEL Group]** to remove it.
4. The name of group can't be changed. To change the name of an exist group, you have to add a new group with same authority and same password, and then delete the group you want to change.



5. To add new user into the group, click and select the group, click  **[ADD User]**, in the pop-up window, fill in the "User Name", "Password" and "Confirm Password" fields, and then click **[OK]** to add this new user.
6. To remove a user, click and select the user from the "Groups/ Users List", click  **[DEL User]** to remove it.
7. To change the password of user, click and select the user from the "Groups/ Users List", click **[Change Password]**, in the pop-up window, type the old and new password, and then click **[OK]** to change it.
8. The name of user can't be changed. To change the name of an exist user,

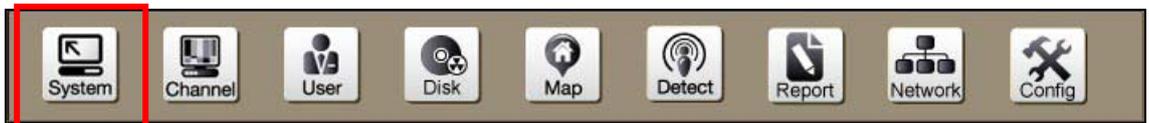
you have to add a new user in same group, and then delete the user you want to change.

9. You can define the validity of the user account. Just check "Validity" and setup the "Expiration Date".
10. You can configure which channel(s) can be viewed by different user. Just check or uncheck the channel(s) for viewing by the user.
11. To move the user to another group, just use mouse to drag the user and drop it into another group.
12. To change or remove the default Admin username and password, please add a new user into Admin group, click  **[Save]** to save the settings. Exit to the Live-View screen, log-out the default Admin user and then log-in with the new Admin user. Go into "User" page and delete the default Admin user.
13. When complete the configuration, click  **[Save]** to save the settings.

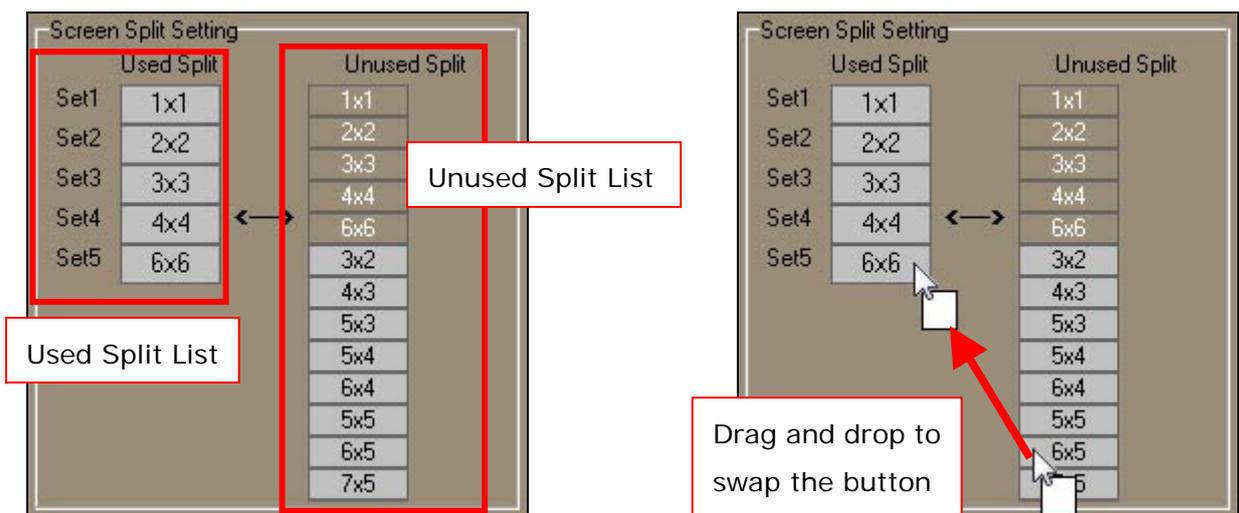
12. Configure Screen Layout

You can arrange the layout of Live-View screen previously.

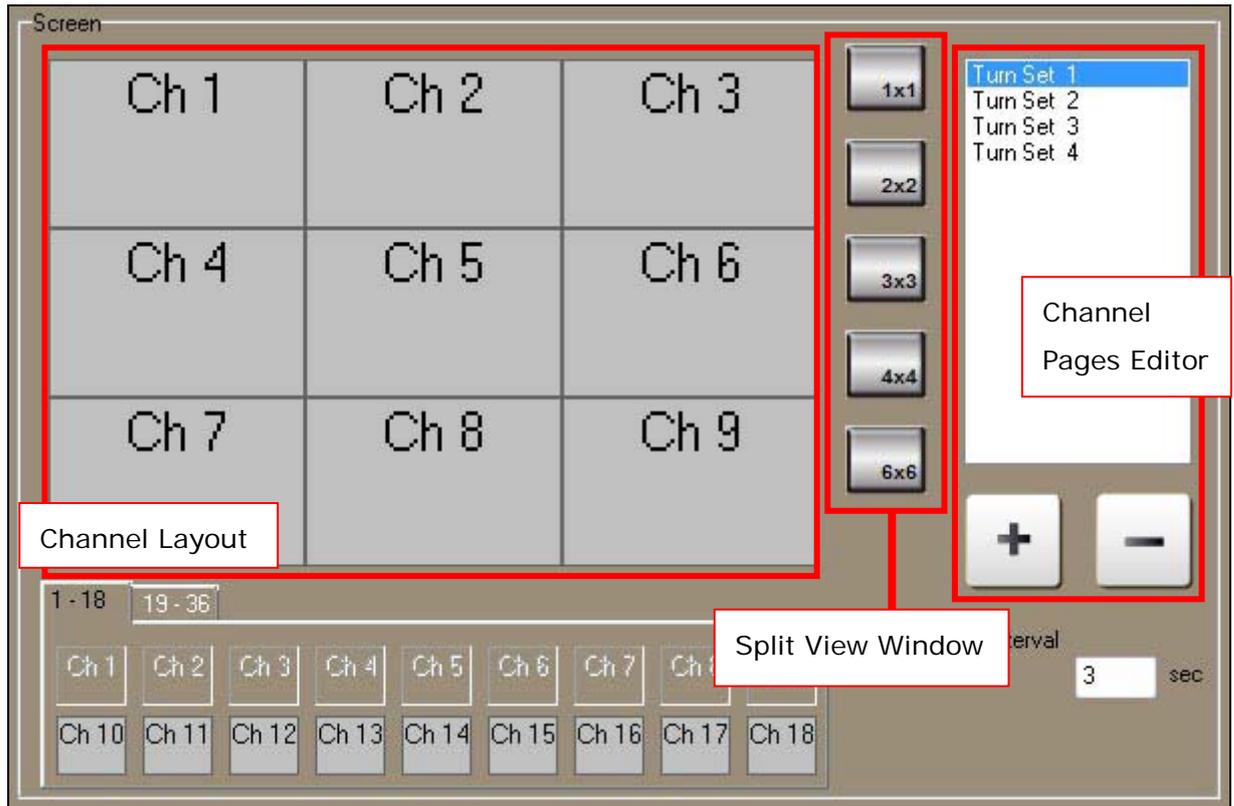
Click **[System]** on the top to enter the System Setup page.



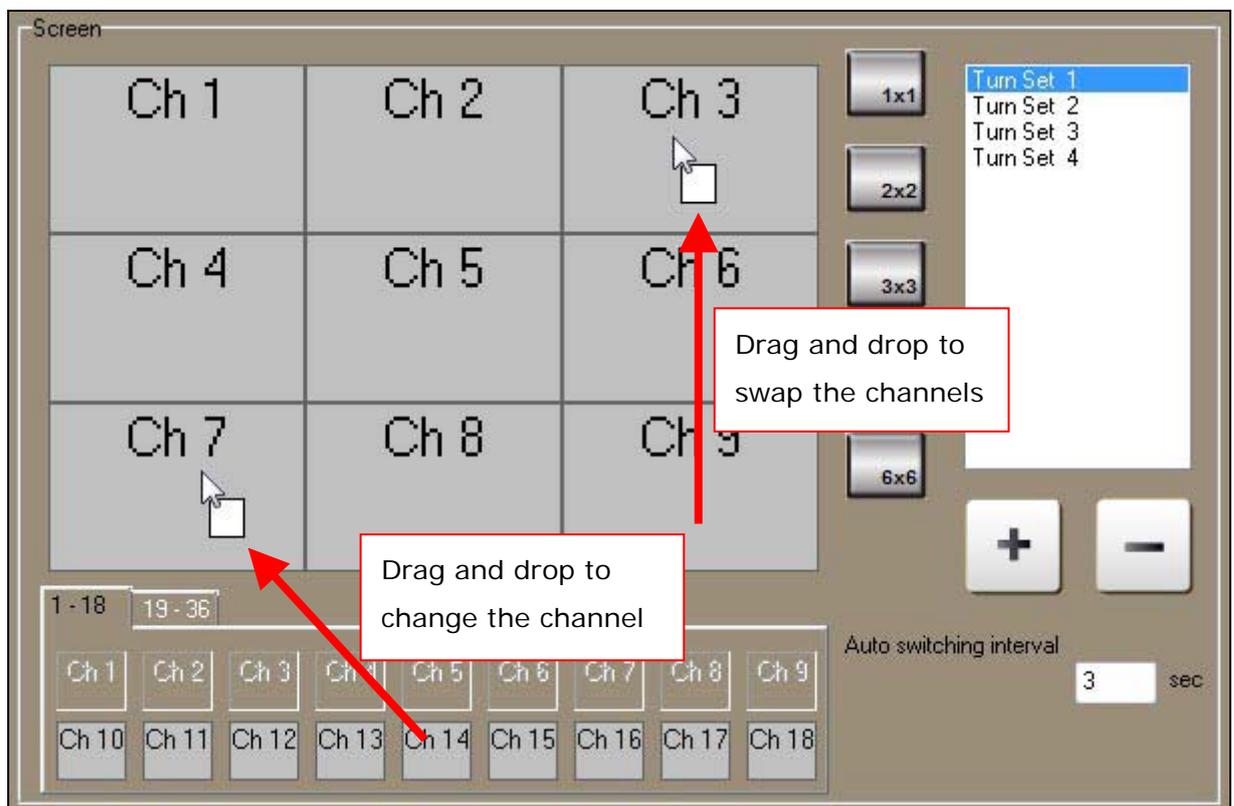
1. The recording software provides various split-view windows, you can change the split-view buttons on Live-View page. To change the split-view button, use mouse to drag a split-view button from “Unused Split List” and drop it to the button under “Used Split List”. Please refer to the figure shown on below.



2. Each split-view window has its own “Turn Set” combination. The “Turn Set” means the view page of Live-View screen. You can arrange the channels for each “Turn Set”. The “Turn Set” can be removed if it is not used, or add a new “Turn Set” for the new lay out. Each split-view window has up to 40 “Turn Set”.
3. To manage the “Turn Set” of the split-view window, click the split-view button first. To add a new “Turn Set”, click **+** **[ADD]**. To remove a “Turn Set”, click and select the “Turn Set” and then click **-** **[DELETE]**.



- To change the layout of "Turn Set", click and select the "Turn Set". Use mouse to drag the channel and drop it into the location. Please refer to the figure shown on below.



5. To change the layout of other “Turn Set” or split-view window, just repeat the above steps.
6. The “Auto Switching Interval” is the interval time for “Channel Auto Swap” function on Live-View screen. Change the time if necessary.
7. After complete the configuration, click  **[Save]** to save the settings.
8. When in Live-View screen, the channels will be shown with the layout of “Turn Set”.

13. Configure and Enable E-Mail Function

In the E-Mail Setup sub-page, you can manage the E-Mail address of multiple recipients, and enable the E-Mail message service. If you have configured the event system to notify the recipient via E-Mail, the recipients will get the notification once the event is triggered.

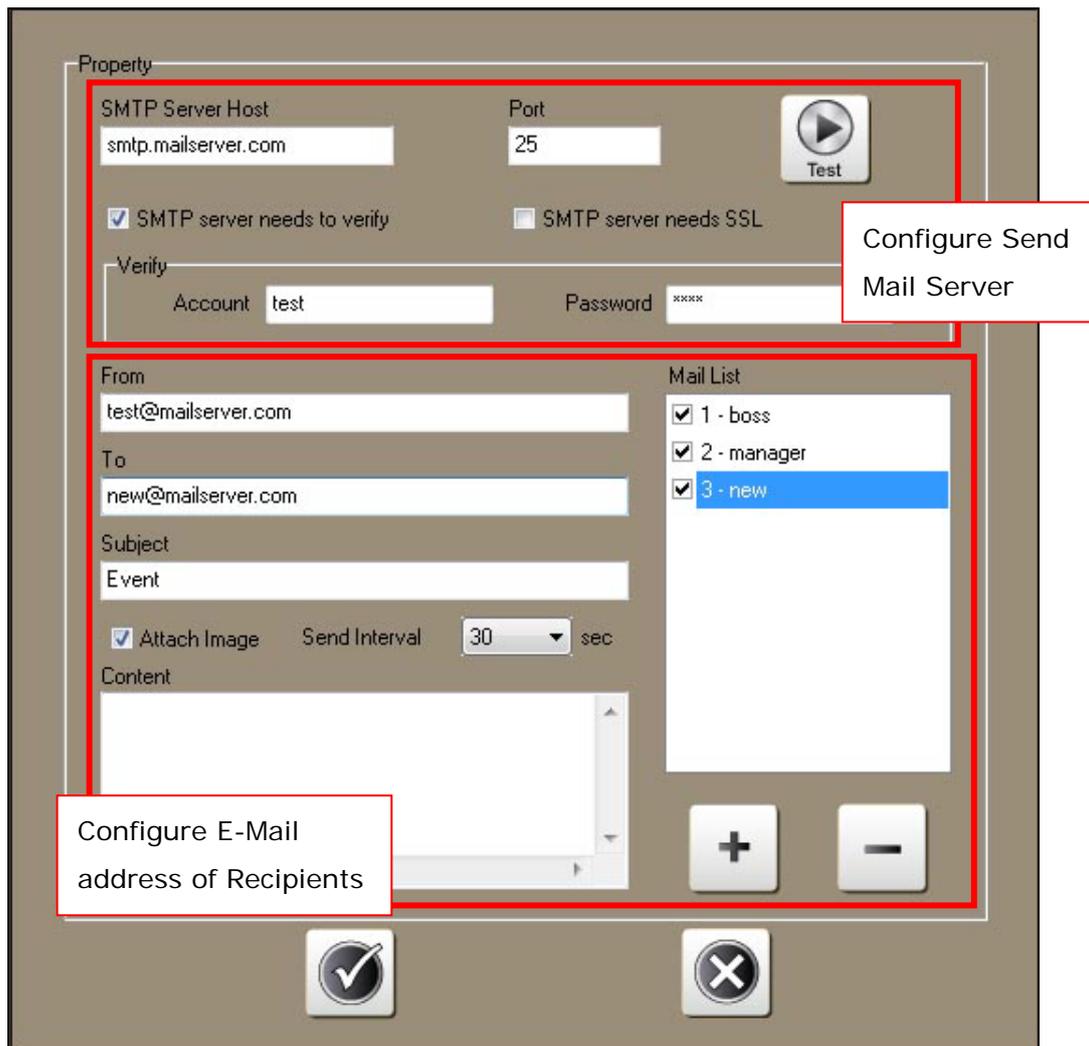
Click **[System]** on the top to enter the System Setup page.



1. On the bottom of page, check "Enable E-mail" to enable the E-Mail message service; or un-check "Enable E-mail" to disable the E-Mail message service.



2. To manage the E-Mail address of receiver, click  **[Email Setting]** to enter E-Mail Setup sub-page.



3. At the very first time, configure the Send Mail Server first.
 - **SMTP Server Host & Port:** The mail server for send out the E-Mail.
 - **SMTP server needs to verify or Needs SSL:** The verification method of the mail server.
 - **Verify:** If the mail server needs verify, input the account name and password for login the mail server.

4. To add a recipient, fill in the following fields:
 - **From:** The E-Mail address of the sender.
 - **To:** The E-Mail address of the recipient.
 - **Subject:** The subject of the E-Mail.
 - **Attach Image:** Determine whether attach a snapshot to the E-Mail.
 - **Send Interval:** The interval to send E-Mail once multiple events are

triggered.

- **Content:** Input the further message in the E-Mail if you want.

5. After fill in the information of recipient, click  **[TEST]** button to test the E-Mail service.
6. Click  **[ADD]** to add this recipient into Mail List.
7. In Mail List, if the checkbox in front of the recipient is checked, the E-Mail notification will be sent to this recipient.
8. To modify the recipient, click and highlight the recipient in Mail List, modify the information, the recipient will be modified immediately.
9. To add more recipients, click  **[ADD]** button to duplicate the added recipient, then, click and highlight the new recipient and modify the information.
10. To remove the recipient, click and highlight the recipient in Mail List, and then click  **[DELETE]** to remove it.
11. When complete the configuration, click  **[OK]** to save the settings.

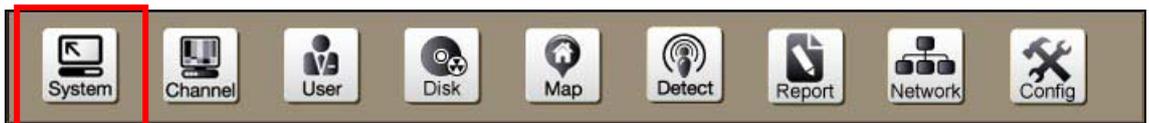


About "Attach Image" function, if the channel is under "No Record" schedule, the E-Mail notification will not contain the snapshot.

14. Other Configuration

There are further configurations in the "System Setup" page.

Click **[System]** on the top to enter the "System Setup" page.



MultiMonitor

PlayBack Form: 2 | Live Form: 1

E-Map: 2 | Multi-Live Form: 2

Log File

System log Sensor log

Motion log User log

Date Format

2010/08/20

On Program Startup

Login on program startup

Auto open on program startup Multi-Live Form

Initial screen split

3x3 FullScreen Channel Auto Swap

Multi-Live Initial screen split

3x3 FullScreen Channel Auto Swap

Screen

Ch 1	Ch 2	Ch 3
Ch 4	Ch 5	Ch 6
Ch 7	Ch 8	Ch 9

1 - 18 19 - 36

Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8	Ch 9
Ch 10	Ch 11	Ch 12	Ch 13	Ch 14	Ch 15	Ch 16	Ch 17	Ch 18

Auto switching interval: 3 sec

Auxiliary Functions

Keyboard lock(Windows key enable/disable)

Schedule auto reboot

Auto run the program on windows startup

Enable E-mail

Auto Logout: 120 sec

Overwrite When Diskfull

Minimize live independently

Screen Split Setting

	Used Split	Unused Split
Set1	1x1	1x1
Set2	2x2	2x2
Set3	3x3	3x3
Set4	4x4	4x4
Set5	6x6	6x6

About

Player

14.1. Configure Multiple Monitors

If the PC connects Multi-Monitors (it refers to exceed two monitors), the administrator can setup what is displayed on the connected monitors. This function can be worked while the PC installs display card which is supported Multi-Monitors and connects more than one monitor. Moreover, this software will detect the quantity of connecting monitors.

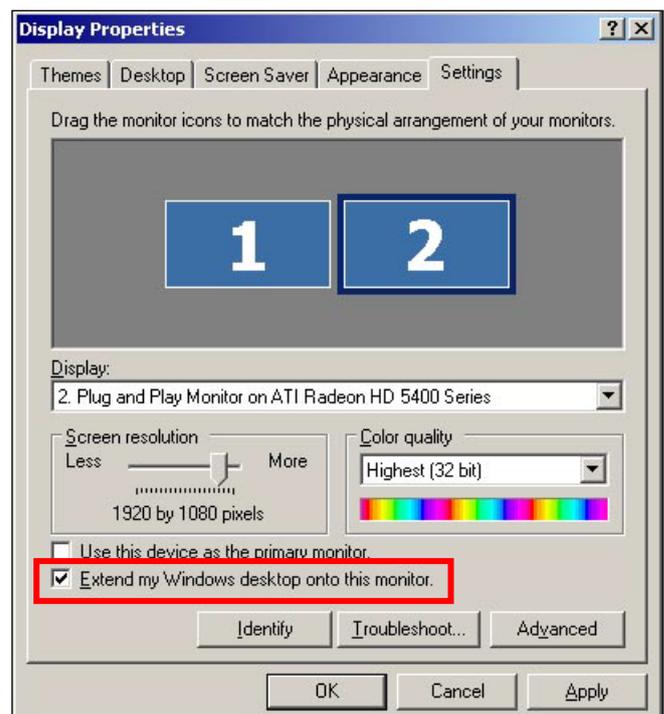


Depending on the hardware installed, there are more than 2 monitors can be displayed.

If the multiple monitors have different screen resolution, this software will be displayed with the smallest resolution.

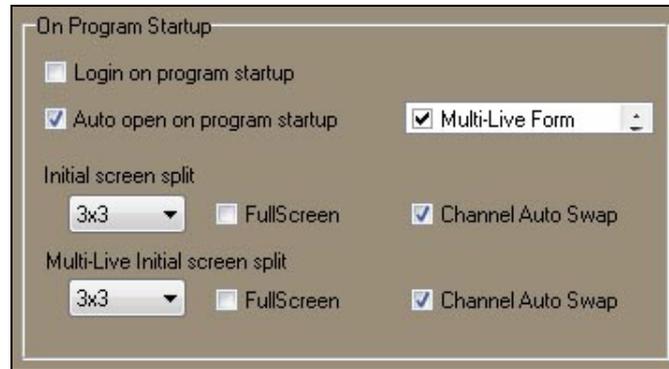
It could be performed the following setting after connected multi-monitors:

1. Click the disabled monitor number (i.e. No.2 in the figure) and select "Extend my Windows desktop onto this monitor" option.
2. Drag and drop the monitor icon to correspond the actual monitor position.
3. Reboot the PC, and the dual monitor is activated.



14.2. Configure the Startup Options

You can configure the following options to determine how to present the software when it is started up.



Login on Program Startup

By enabling this option, this software will ask for login when it is startup.

Auto Open on Program Startup

By enabling this option and select the screen, this software will display the selected view screen when it is startup.

Initial Screen Split

This section including 3 options, configure these options to determine the display method for the first Live-View screen (the first monitor).

- **Initial Screen Split:** Select the split view window to display the first Live-View screen when the software is start up.
- **Full Screen:** By enabling this option, the first Live-View screen will be displayed in full screen mode when the software is start up.
- **Channel Auto Swap:** By enabling this option, when the software is start up, the first Live-View screen will automatically show the next pages of channels with the interval time. The interval time can be configured in [Configure Screen Layout](#)

Multi-Live Initial Screen Split

If you are using multiple monitors, configure these 3 options to determine the display method for the second Live-View screen (the second monitor).

- **Multi-Live Initial Screen Split:** Select the split view window to display the second Live-View screen when the software is start up.
- **Full Screen:** By enabling this option, the second Live-View screen will be displayed in full screen mode when the software is start up.
- **Channel Auto Swap:** By enabling this option, when the software is start up, the second Live-View screen will automatically show the next pages of channels with the interval time. The interval time can be configured in [Configure Screen Layout](#)

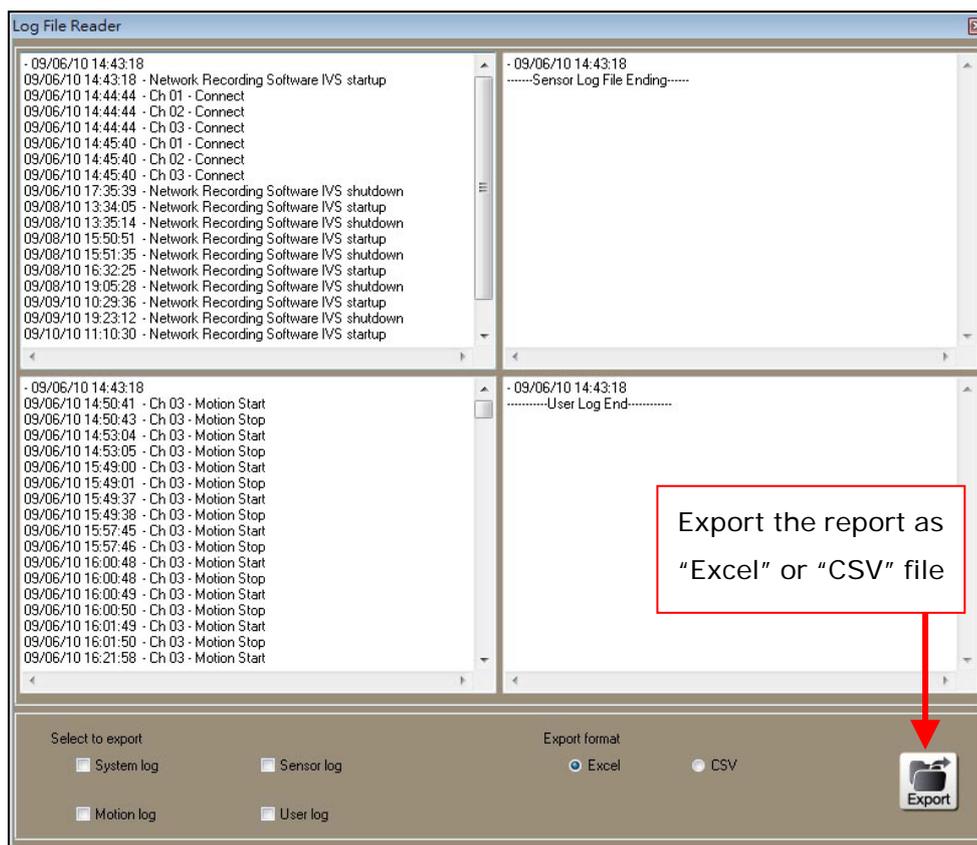
14.3. Other System Configurations

System Logs

The log files record the status of the software, check the checkbox to enable the log files.



To read the log files, click the  [Log Files Reader] button.



Date Format

There are 5 different date formats available, select the format from the pull-down list.



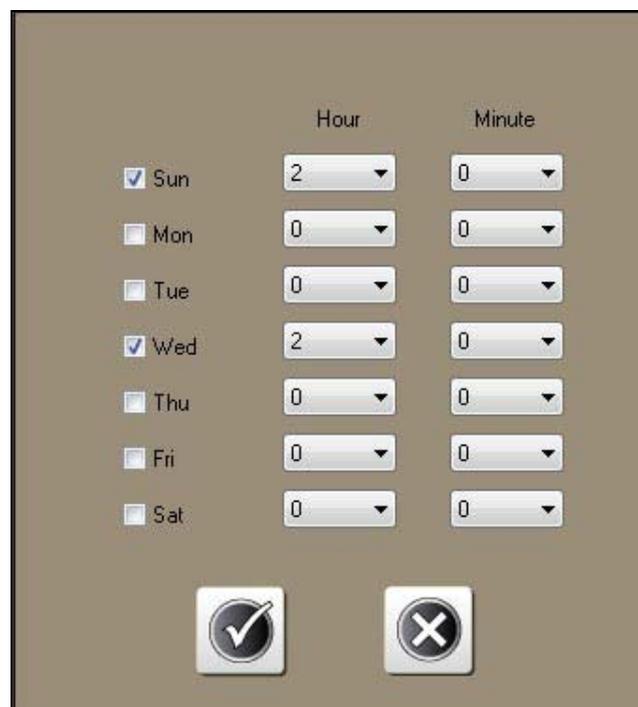
Keyboard Lock

By enabling this function, the application hotkey will be disabled (i.e. Ctrl+ESC, Alt+Tab, WIN and Alt+F4) to avoid illegal usage.

Schedule Auto Reboot

By enabling this function, the PC will be reboot at the scheduled date / time, this will keep the Windows system clean and stable.

1. Check the checkbox and then click  **[Schedule Auto Reboot]** to enter Auto Reboot Schedule sub-page.



2. Select the weekday and the time to reboot the PC, and then click  **[OK]** to complete the configuration.

3. With enable "Auto Run the Program on Windows Startup", it will start the software after PC is reboot.

Auto Run the Program on Windows Startup

By enabling this function, this software will be started after Windows is start up.



To avoid the software stay at the login window when it is startup, please also disable the "Login on Program Startup" option under the "On Program Startup" section.

Auto Logout

By enabling this function, if there is no operation after the pre-defined time, the login user will be logged out automatically.

Overwrite When Disk Full

By enabling this function, when the storage path is full, the software will overwrite the earliest data.

The default configuration of the overwrite function is enabled.

Minimize Live Independently

If you are using multiple screen, when minimize the Live-View screen, all screens of the software will be minimized with default setting. After enable this function, when minimize the Live-View screen, the other screen will be keeping displayed.

About

Click  **[About]** to show the information of the software.

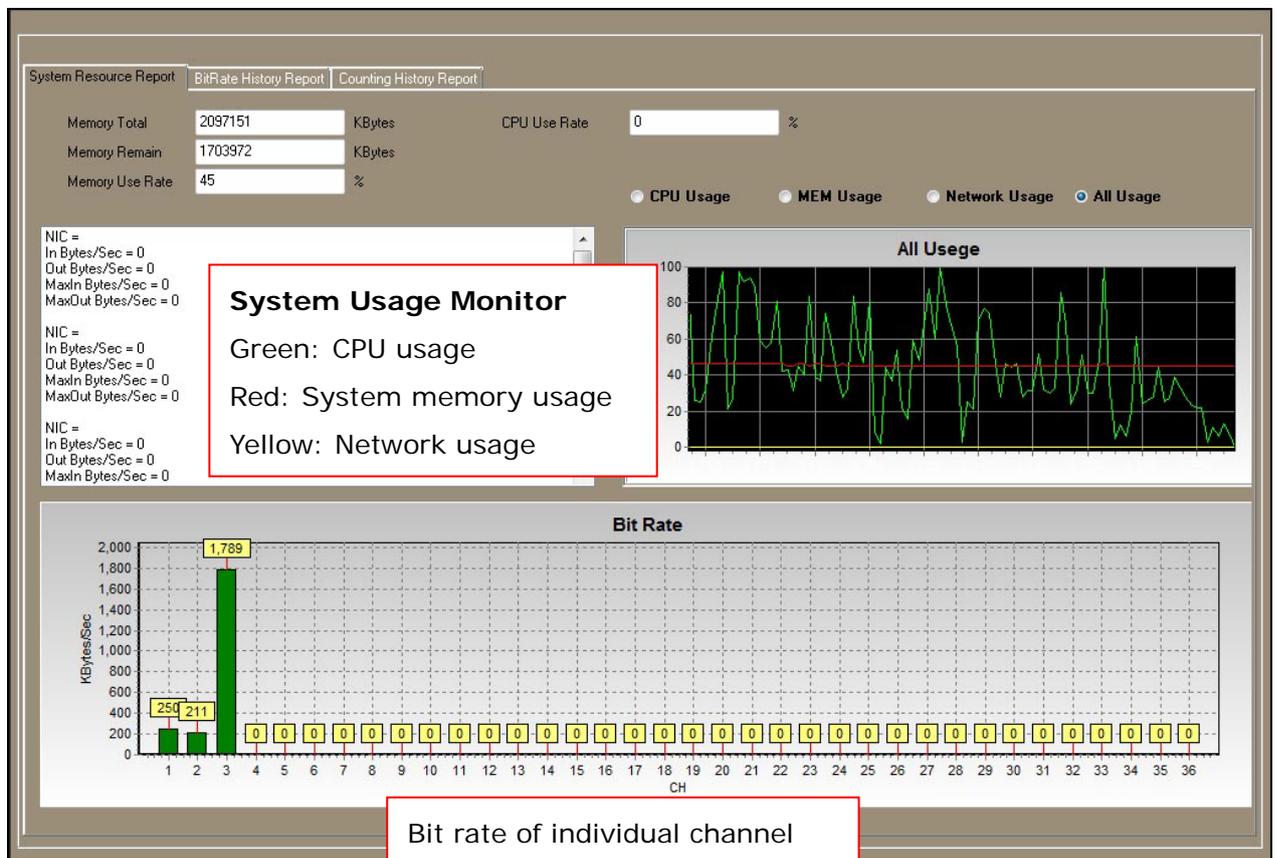
14.4. View System Status

This software provides two resource management tools, you can view and detect whether the system operation is normal or not.

System Resource Report

This page could detect whether the system operation is normal or not and maintain the system efficiency.

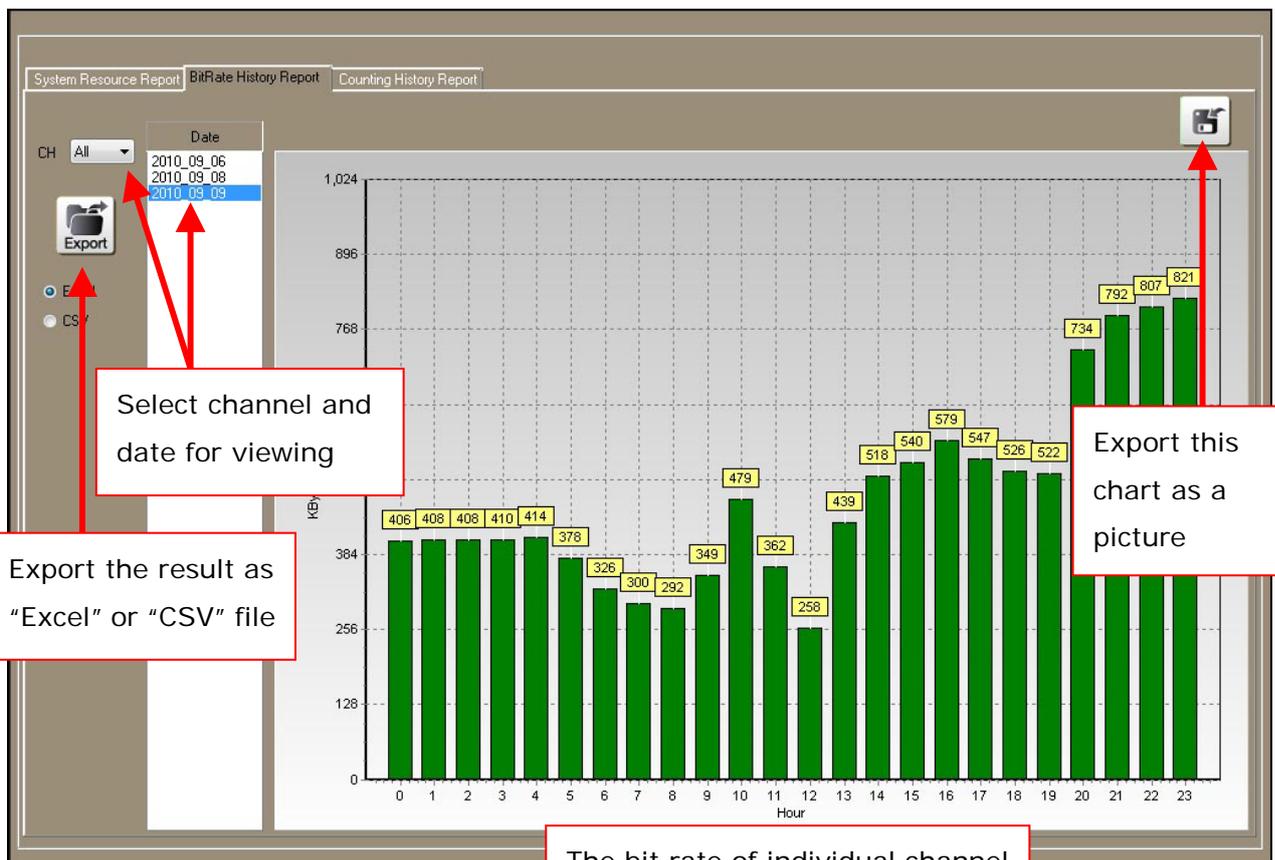
In Setup screen, click **[Report]** on the top, and then click **[System Resource Report]** tab to enter the sub-page.



BitRate History Report

This page shows the individual channel or all channels bit-rate utilization of the running computer information.

In Setup screen, click **[Report]** on the top, and then click **[BitRate History Report]** tab to enter the sub-page.



Export the result as "Excel" or "CSV" file

Select channel and date for viewing

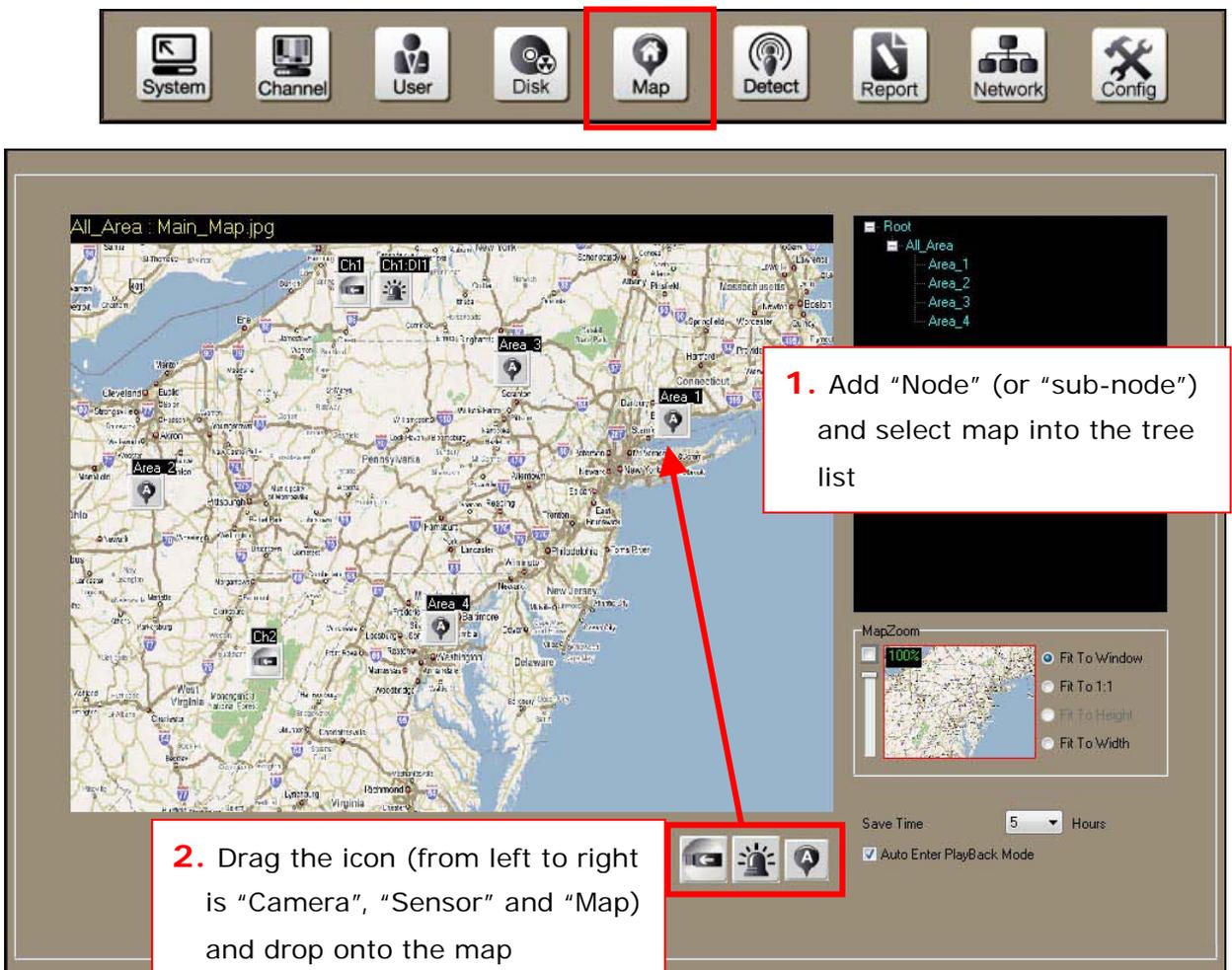
Export this chart as a picture

The bit rate of individual channel or all channels

15. E-Map

15.1. Configure E-Map

1. Click  [Camera Setup] to enter the Camera Setup screen.
2. Click [Map] on the top to enter the “E-Map Setup” page.



The screenshot shows the E-Map Setup interface. At the top, a toolbar contains icons for System, Channel, User, Disk, Map (highlighted with a red box), Detect, Report, Network, and Config. Below this is a map of the Northeast United States with four areas labeled Area 1, Area 2, Area 3, and Area 4. On the right side, there is a tree view showing a hierarchy: Root, All Area, Area 1, Area 2, Area 3, and Area 4. A red arrow points from a text box to the 'Map' icon in the bottom toolbar. Another red arrow points from a text box to the 'Map' icon in the tree view.

1. Add “Node” (or “sub-node”) and select map into the tree list

2. Drag the icon (from left to right is “Camera”, “Sensor” and “Map”) and drop onto the map

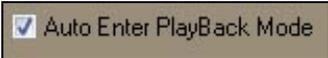
3. Use mouse right-click on “Root” on the right side and select “Add Map”, select “Create new map”, and then click [OK].
4. On “Map Image Path” field, select a picture (JPEG file) as the map. On “Map

Node Name" field, assign the name for this node (for example, assign "All_Area" as the name), and then click **[OK]** to create the node.

5. Now you can arrange the cameras and sensors onto the map. Just drag the camera or sensor icon to the location of map and drop it, and then select the channel and direction.
6. If this node contains few sub-nodes, you can drag the map icon to the location of map and drop it, and then select "Create new map" or "Link to: node name".
7. On "Map Image Path" line, select a picture (JPEG file) as the map. On "Node Name" line, assign the name for this node (for example, assign "Area_1" as the name), and then click **[OK]** to create this sub-node.
8. The E-Map is managed by a "Tree List", in the above figure on previous page, "All_Area" is the main-node, it contains few sub-nodes: "Area_1", "Area_2", "Area_3" and "Area-4". You can arrange different camera, sensor or map for each node.
9. To modify the node, right-click on the node from the tree list, and then select "Select Map", "Edit Name", "Add Map" or "Delete" from the pull-down list.
10.  Event Save Time: This value determines how long of the recorded motion or alarm event videos will be reserved for E-Map notification.



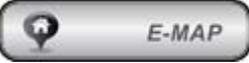
Except the time limitation, up to 5000 events can be reserved. The previous records will be over-write if exceeding 5000 records.

11.  Auto Enter Playback Mode: By enabling this function, when you are in E-Map Live-View screen, and the motion or alarm event is triggered, the event video will be played back automatically.

12. After complete the configuration, click  **[Save]** to save the settings.

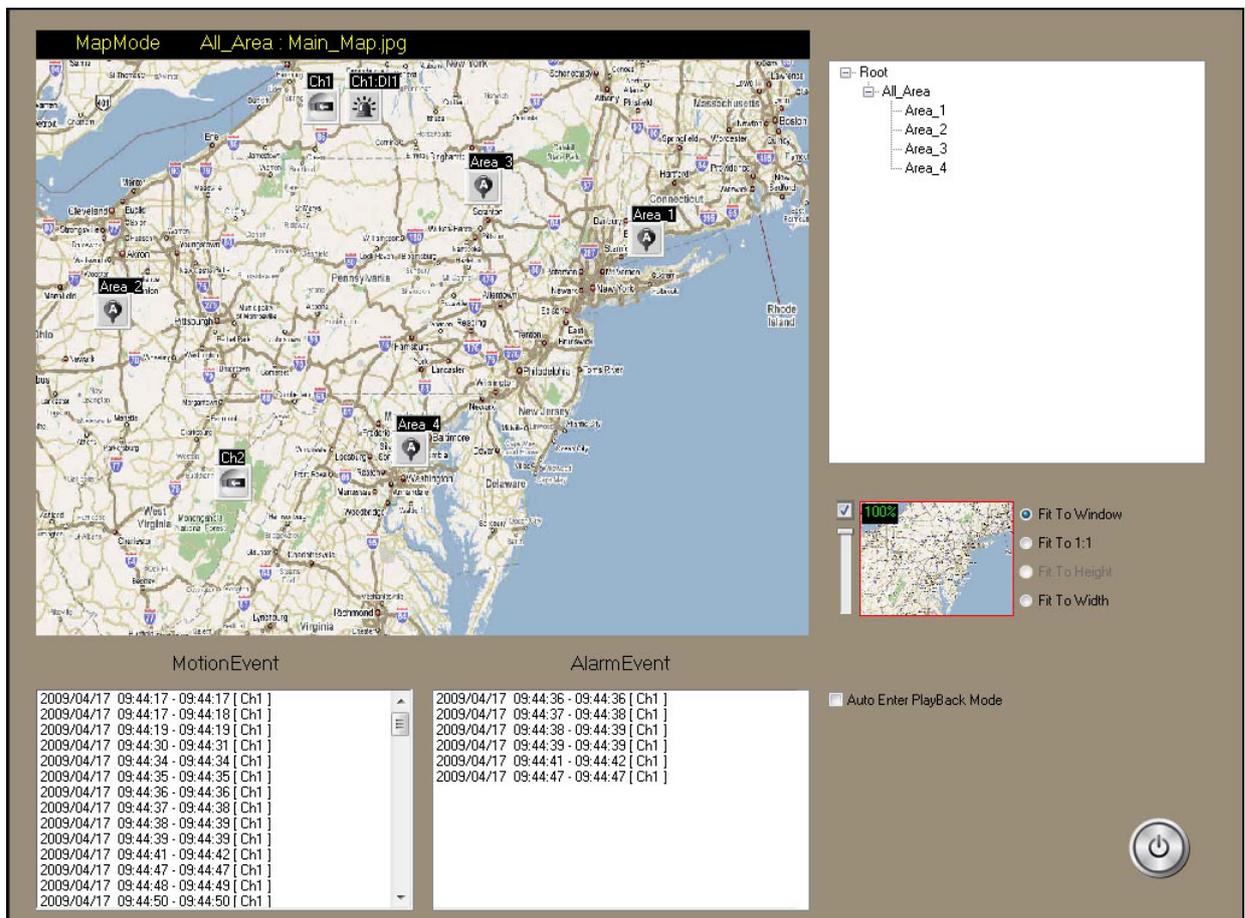
13. Click  **[Exit Setup]** go back to Live-View screen.

15.2. E-Map Live-View

Click  [E-Map] to enter the E-Map Live-View screen.

The E-Map Live-View screen provides the following functions:

- Monitor the cameras with multiple layers of nodes (maps).
- Select camera by location to see the live view video.
- Monitor the event status of cameras.
- Play back the event video automatically.



Select the Node (Map)

There are two methods to select the node (map) for monitoring:

- All nodes will be shown in a tree list on the right side. Select a node to

show the map and the cameras on it.

- If there is  (Map) icon of sub-node on the map, double-click the icon will display the map of the sub-node immediately.

See the Live View Video of Camera

Double-click the camera icon on the map, the live video will be shown in the pop-up window.

Event Notification

All events (motion & alarm) will be listed on the bottom of the E-Map Live-View screen. To play the event video clip, just select the event from the list and play it. If "Auto Enter Playback Mode" is enabled, when the event is triggered, the event video clip will be played automatically.



If the channel is under "No Record" schedule, the software will not find the event video to play, and warning "No Record Data" message.

The event video clip is for preview only, to play the whole event video, go to [Playback](#) screen and play it.

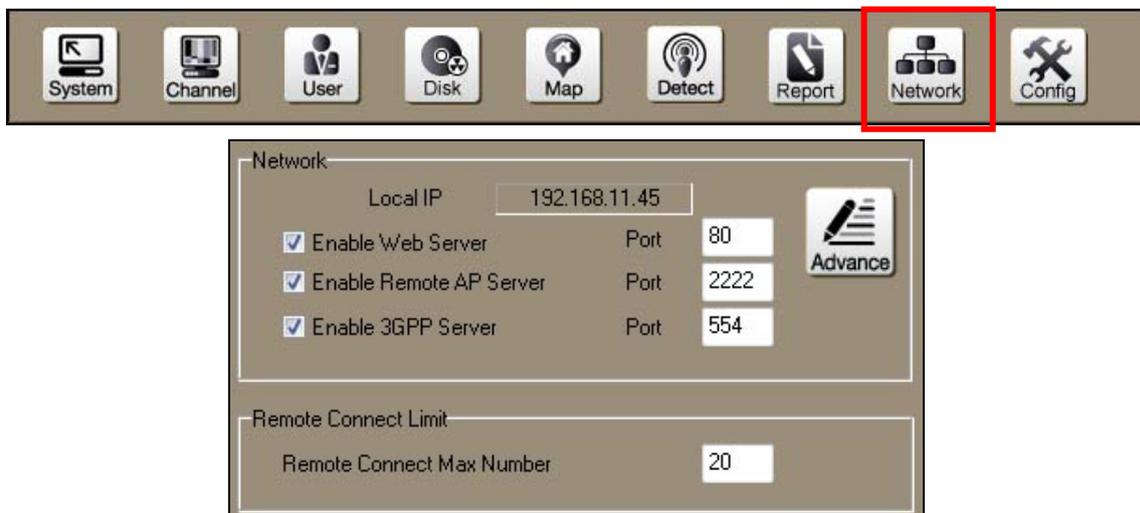
16. Remote Access

Network Recording Software provides 5 functions for remote access:

- Use “CMS (Central Management Software)” to remotely live view, operate, playback and configure the recording software.
- Remotely live view the channels of the Network Recording Software server via IE browser.
- Use “Remote Program” links to the Network Recording Software server, and then remotely live view, operate, playback and configure the recording software.
- Remotely live view the specific channels of the Network Recording Software server via “RemoteLite” software.
- Remotely live view the selected channel of the Network Recording Software server via 3G mobile phone.

16.1. Enable the Remote Access Function

Click **[Network]** on the top to enter the “Network Setup” page.



1. On the “Network” setting, check to enable the option by following:
 - **Enable “Web Server” and “Remote AP Server”:** Allow the Network Recording Software server can be remotely accessed by using CMS, IE browser, Remote Program and RemoteLite. These 2 options will be enabled

simultaneously.

- **Enable “3GPP Server”**: Allow the Network Recording Software server can be remotely accessed by using 3G mobile phone.

2. Change the “Port” if necessary.



If the remote client is through Internet, you have to configure the router or firewall and mapping the above ports to WAN side.

3. By default, this server allows 20 remote clients connecting to it simultaneously (including the clients are connecting via CMS, IE browser, Remote Program, RemoteLite and 3G mobile phone). You can change the value of “Remote Connect Max Number” under “Remote Connect Limit”.

4. Click  **[Save]** to save the settings.

On the right-side of this page is the “Network management” section, which provides:

- The status table indicates the connected clients.
- Edit “Allow List” to allow the specific IP(s) connect to this software.
- Edit “Deny List” to deny the specific IP(s) connect to this software.

Refer to the figure below to configure the “Allow List” and “Deny List”, then click



[Save] to save the settings.

Network Management

Now Connected IP

Index	IP	Account
1	192.168.11.47	admin

IP of connected clients and their authorities

1. Input an IP or a range of IP addresses

192 . 168 . 11 . 23 - 192 . 168 . 11 . 29

2. Click to add the IP in "Allow" list

3. Click to add the IP in "Deny" list

Reject

If you want to add a connected client into the "Deny" list, select the connected client, and then click this button

Index	IP	
1	192.168.11.12 - 192.168.11.22	
2	192.168.11.30	ALLOW
3	192.168.11.23 - 192.168.11.29	DENY

The list of "Allow" and "Deny" IP address

16.2. Live-View with IE Browser

Enable Web Server will allow IE browser to connect to recording software server to monitor real-time image. Please refer to instructions in the following.



The web server uses ActiveX technology to display the video, it only supports IE V7.0 or above, please do not use other browser.

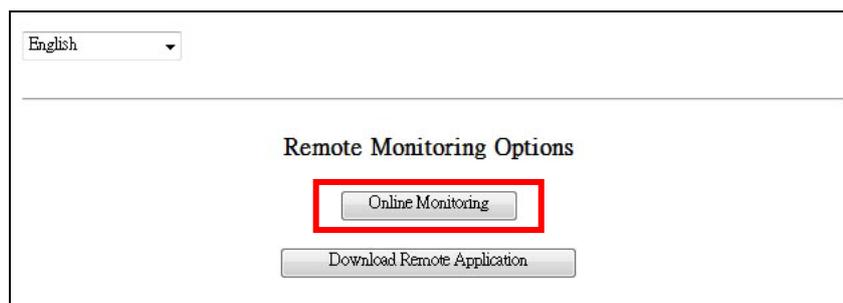
1. Within IE browser, input the address of the server, for example, `http://192.168.11.45/`



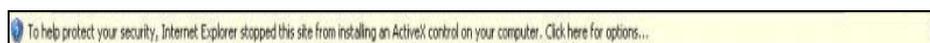
In Windows Vista / Windows 7, please right-click on the shortcut of IE browser and select "Run as administrator" to start the IE browser.



2. After successfully connected, the web page shown as the figure below. The upper-Left of the web page shows the Language options, select the language for the interface.



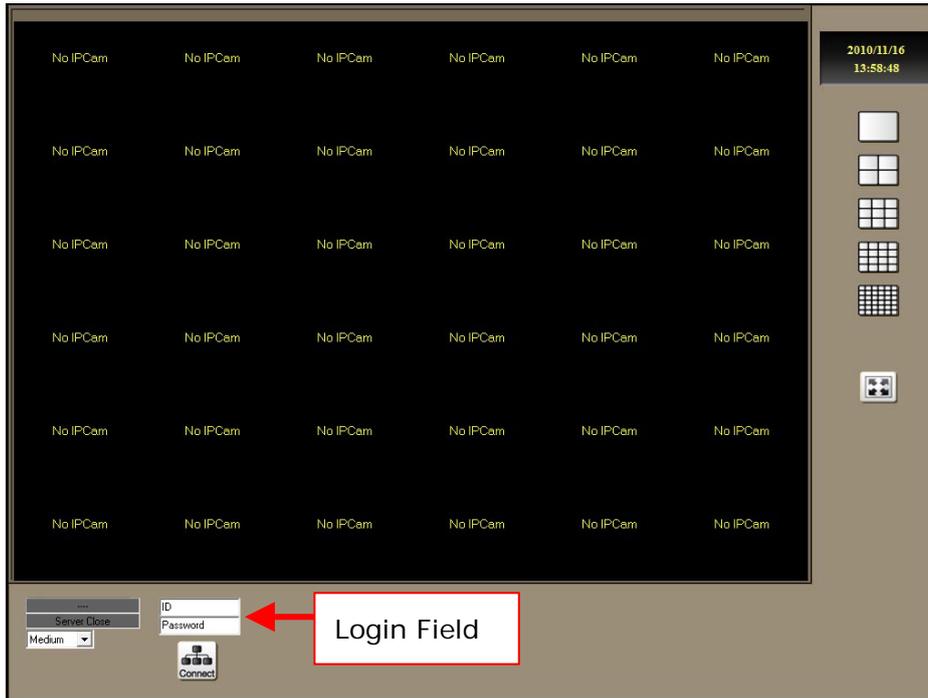
3. Click **[Online Monitoring]**, the "information bar" will pop-up at the first time entering the page.



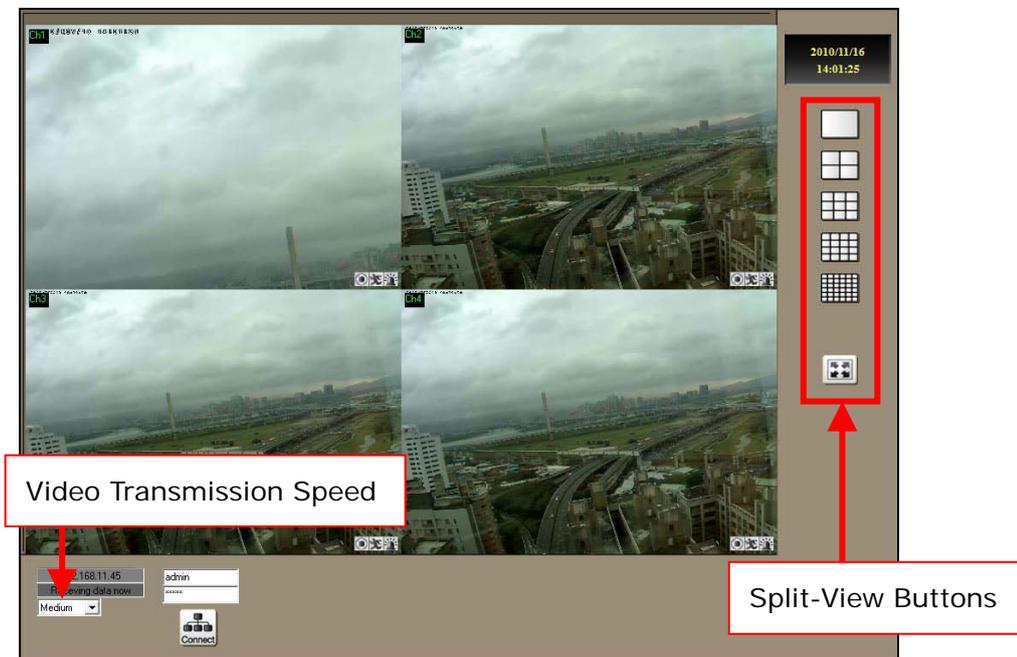
4. Within the pop-up drop down list, click "Install ActiveX Control...". And then, click "Install" to perform the installation.



5. After install the ActiveX, the online monitoring page will be shown as below:



6. Input the correct User Name and Password, and then click  to connect with the live video.



7. During the connection, the user can adjust the image transmission speed.



8. Click the Split-View Buttons to change the channels for viewing:

	<p><u>Connect to Server</u> : Fill in the user name and password, and then click this button to connect to the server.</p>
	<p><u>1x1-Window View</u> : Shows a video channel at once. Click this button again will show the next channel.</p>
	<p><u>2x2-Window View</u> : Shows 4 video channels on the 2x2 split-window. Click this button again will show the next 4 video channels.</p>
	<p><u>3x3-Window View</u> : Shows 9 video channels on the 3x3 split-window. Click this button again will show the next 9 video channels.</p>
	<p><u>4x4-Window View</u> : Shows 16 video channels on the 4x4 split-window. Click this button again will show the next 16 video channels.</p>
	<p><u>6x6-Window View</u> : Shows 36 video channels on the 6x6 split-window. Click this button again will show the next 36 video channels.</p>
<p>Double Click</p>	<p><u>Enlarge Channel</u> : Double-click the channel can enlarge it. Double-click it again to resume the split-view.</p>
	<p><u>Full Screen</u> : Full screen mode. To exit the full screen mode, right-click the mouse on the video.</p>

16.3. Live-View with “RemoteLite”

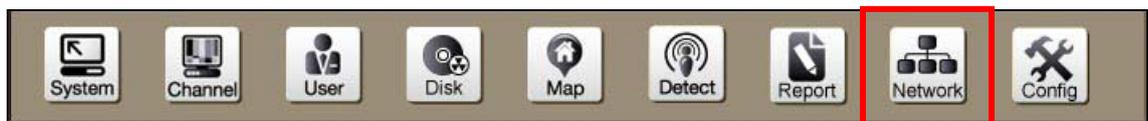
RemoteLite is remote software which is different from Network Recording Software. RemoteLite is designed for live-viewing only. It does not allow user to playback or to change any setting.

The RemoteLite software is not installed within the Network Recording Software; instead, it is exported from the Network Recording Software.

The Network Recording Software server can select specific channels for viewing by the remote client. The administrator of the Network Recording Software server can configure and publish different RemoteLite software to match different remote client's demand.

Configure and Publish RemoteLite Software

Click [**Network**] on the top to enter the “Network Setup” page.



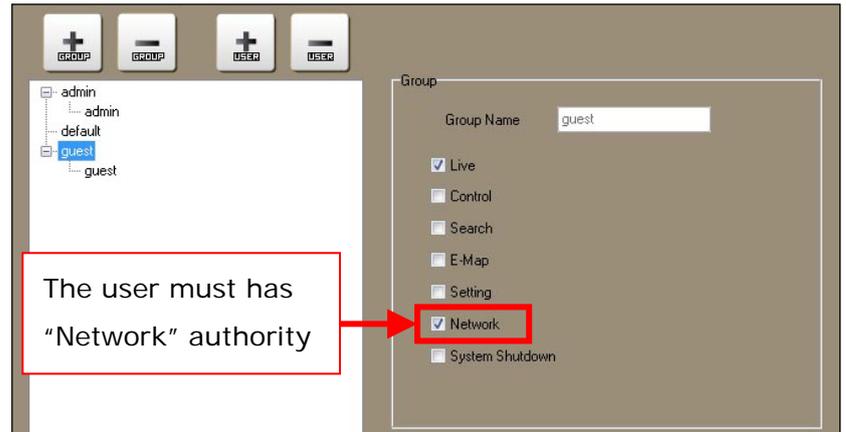
1. Click [**Export RemoteLite**] to open RemoteLite setup page.



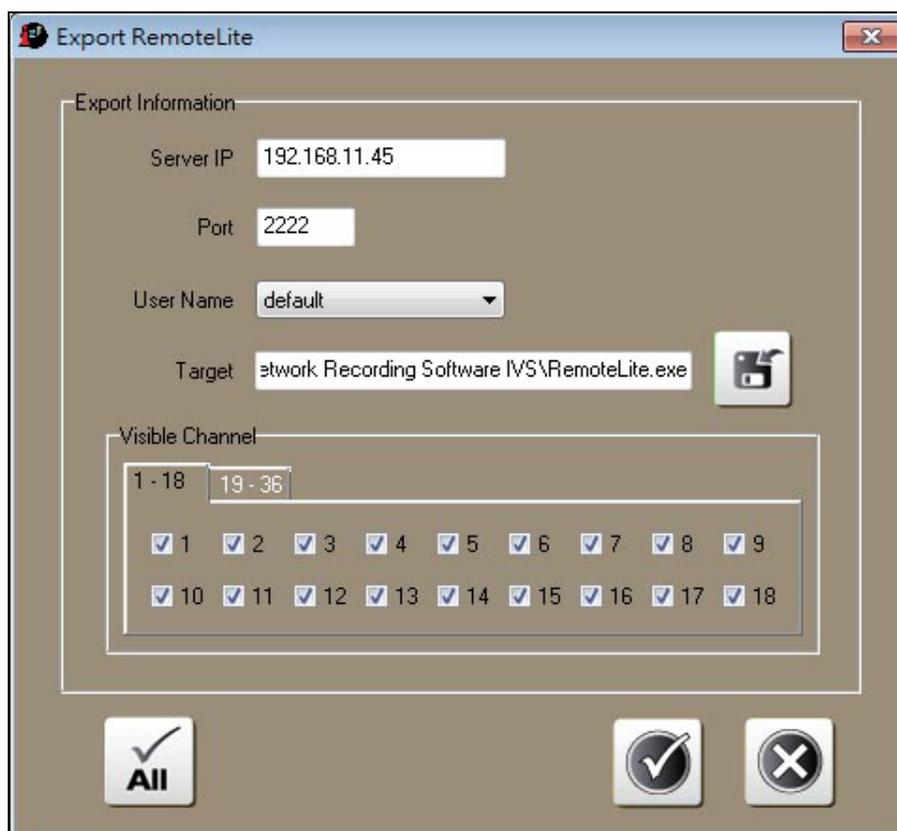
2. On Export RemoteLite page, configure the following:

- **Sever IP:** The IP address of the Network Recording Software server.
- **Port:** The access port of the Network Recording Software server.

- **User Name:** The available names are pre-defined in the Password Setup page. User should have the authority to get the access of Network.



- **Visible Channel:** You can select which channel is allowed for viewing with RemoteLite software (up to 4 channels). For instance, if you only select channel 1 and channel 2 for viewing, the other channels will be hidden and displayed as "Private Channel" on the RemoteLite view screen.



3. After complete above setting, click [Open File] and select the folder to save the RemoteLite software, and then click [Export] to export

the RemoteLite software.

4. Send the exported RemoteLite software to the remote client for use.

Live-View with RemoteLite Software

After the remote client receives the RemoteLite software, the client can use this software to see the live video from the Network Recording Software server.

1. Double-click on "RemoteLite.exe" to launch the software.



In Windows Vista / Windows 7, please right-click on the icon of the software and select "Run as administrator" to launch the software.

2. Click , the software will connect to the server and display the live video.



3. During the connection, the user can adjust the image transmission speed.



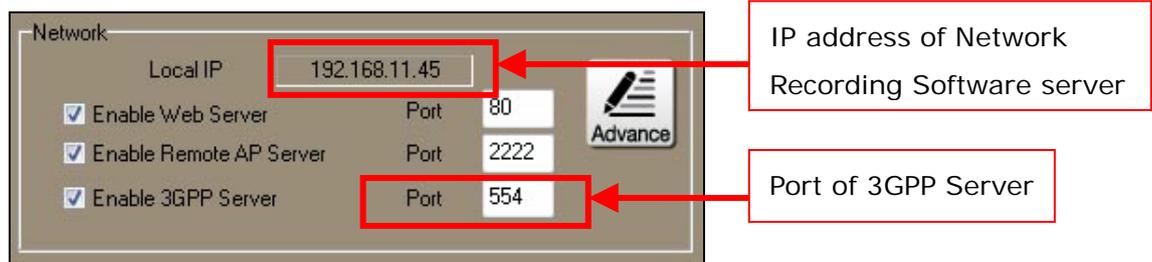
4. Click the Split-View Buttons to change the channels for viewing:

	<p><u>Connect to Server</u> : Click this button to connect to the server.</p>
	<p><u>1x1-Window View</u> : Shows a video channel at once. Click this button again will show the next channel.</p>
	<p><u>2x2-Window View</u> : Shows 4 video channels on the 2x2 split-window. Click this button again will show the next 4 video channels.</p>
	<p><u>3x3-Window View</u> : Shows 9 video channels on the 3x3 split-window. Click this button again will show the next 9 video channels.</p>
	<p><u>4x4-Window View</u> : Shows 16 video channels on the 4x4 split-window. Click this button again will show the next 16 video channels.</p>
	<p><u>6x6-Window View</u> : Shows 36 video channels on the 6x6 split-window. Click this button again will show the next 36 video channels.</p>
<p>Double Click</p>	<p><u>Enlarge Channel</u> : Double-click the channel can enlarge it. Double-click it again to resume the split-view.</p>
	<p><u>Full Screen</u> : Full screen mode. To exit the full screen mode, right-click the mouse on the video.</p>
	<p><u>Exit</u> : Close and exit the software.</p>

16.4. Live-View with 3G Mobile Phone

The remote client can live view the video of selected channel of Network Recording Software server by using 3G mobile phone.

1. Make sure the 3G mobile phone is already connect to Internet or Intranet, and then start the "Streaming Media Player" which has been built-in the mobile phone.
2. Input the address "rtsp://[IP of Network Recording Software server]: [Port of 3GPP server]/CH[Channel Number]", such as :
"rtsp://192.168.11.45:554/CH01" will link to the server and view the channel 1. The IP address in the below figure is for Intranet connection. For Internet connection, please use the public IP address.



3. After click "Connect", the live video of the channel will be displayed on the 3G mobile phone.



If the remote client is through Internet, you have to configure the router or firewall and mapping the port of 3GPP Server to WAN side.

16.5. Accessed with “Remote” Program

The remote client can use “Remote Program” connects to Network Recording Software server, according to authority of the login user, the remote client can do the following:

- Remotely live view the channels of **one** Network Recording Software server.
- Remotely operate the channels of **one** Network Recording Software server.
- Remotely play back the recorded data of **one** Network Recording Software server.
- Remotely configure the settings of **one** Network Recording Software server.



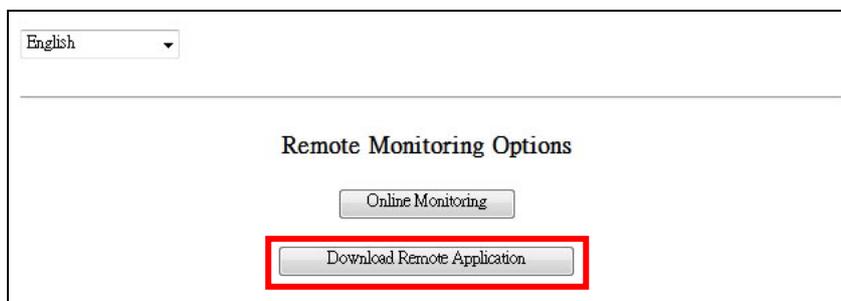
The version of “Remote Program” and “Network Recording Software” must be same, different version of “Remote Program” will not work properly.

Remote Program has been installed when install Network Recording Software IVS. The remote client may also download the installation program from the webpage server for the individual installation.

Software Installation

If the client PC has not installed the Network Recording Software IVS, you can download the installation program from the webpage server for the individual installation.

1. Follow the instruction in [Remote Live View → Live View with IE Browser](#), link to the webpage of Network Recording Software server, click **[Download Remote Application]** and then save it on your PC:



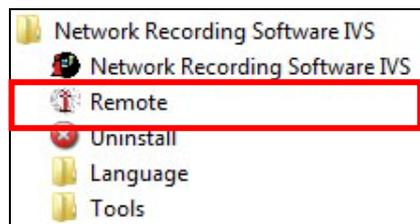
2. Double-click the downloaded file to install the Remote Program.

Running Remote Program

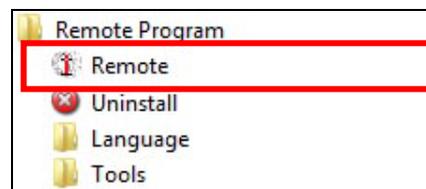


In Windows Vista / Windows 7, please right-click on the desktop icon or the short-cut in Start Menu, then select "Run as administrator" to start the program.

If the client PC has installed the Network Recording Software IVS, click "Start" → "All Programs" → "Network Recording Software IVS" → "Remote" to run the program.



If the client PC has installed the Remote Program individually, double-click the desktop icon - "Remote Program". Or, click "Start" → "All Programs" → "Remote Program" → "Remote" to run the program.



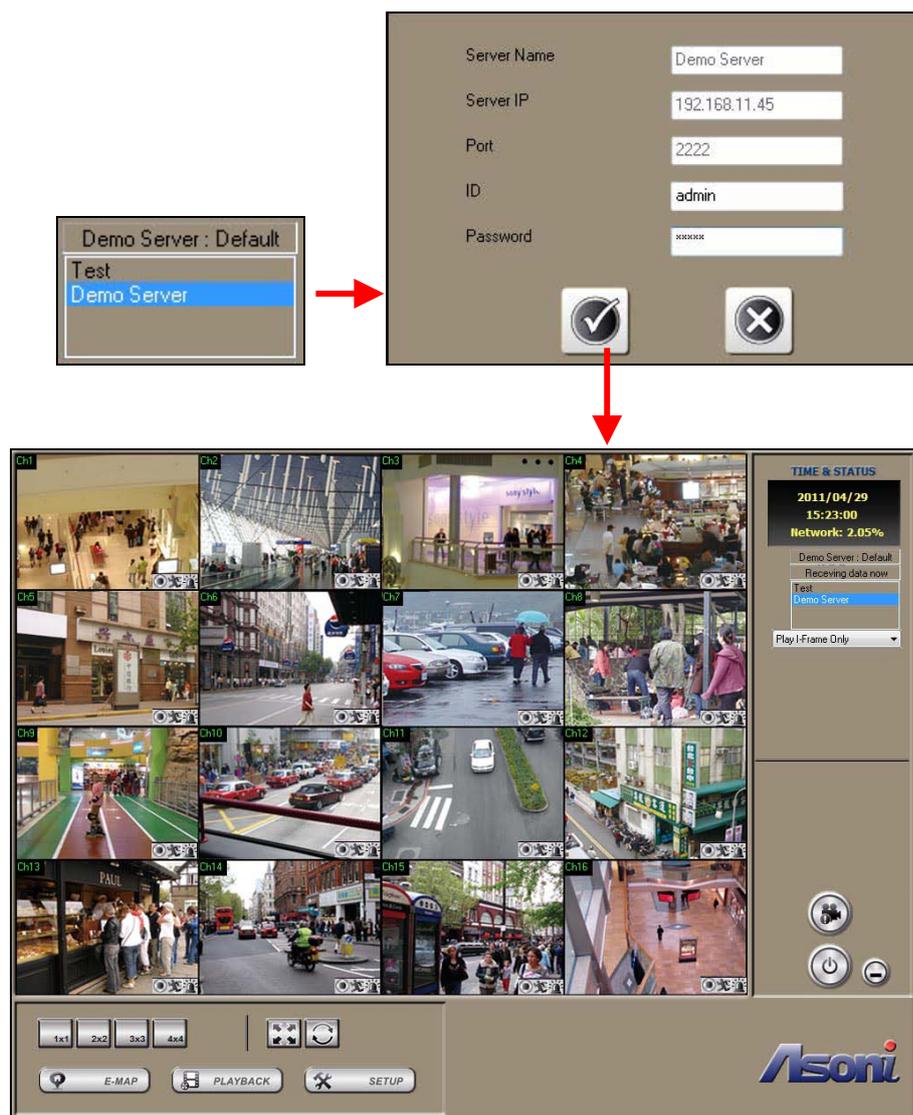
The software shows the screen as below figure:



4. You can add multiple servers into the list. When user intends to delete a server, please select the server first then click  **[Delete Server]** to delete.
5. Click  **[Save]** to save the settings.

Remote Operate the Network Recording Software Server

1. On the top-right corner of live screen, double-click a server form the list, type the correct user ID and password in the login window, and then click  to start the connection.



2. Select the speed from the pull-down list to display the video. Because Remote Program does not connect to IP Camera / Video Server directly, it connects to recording software server instated. Therefore, user can adjust the display speed depending on the network condition.



3. Remote program receives the image from the remote server, thus there are different real-time monitoring mode depending on different series of recording software.

4. You can click  **[Camera Setup]** to enter the Camera Setup screen. In this page, you will see the configuration of the Network Recording Software server, change the settings will also change the configuration of the Network Recording Software server. The operation is same as the Network Recording Software, please refer to the previous chapters for the operation.



After changing the setting in Remote program, the Network Recording Software server will be changed as well.

17. Configure System Environment

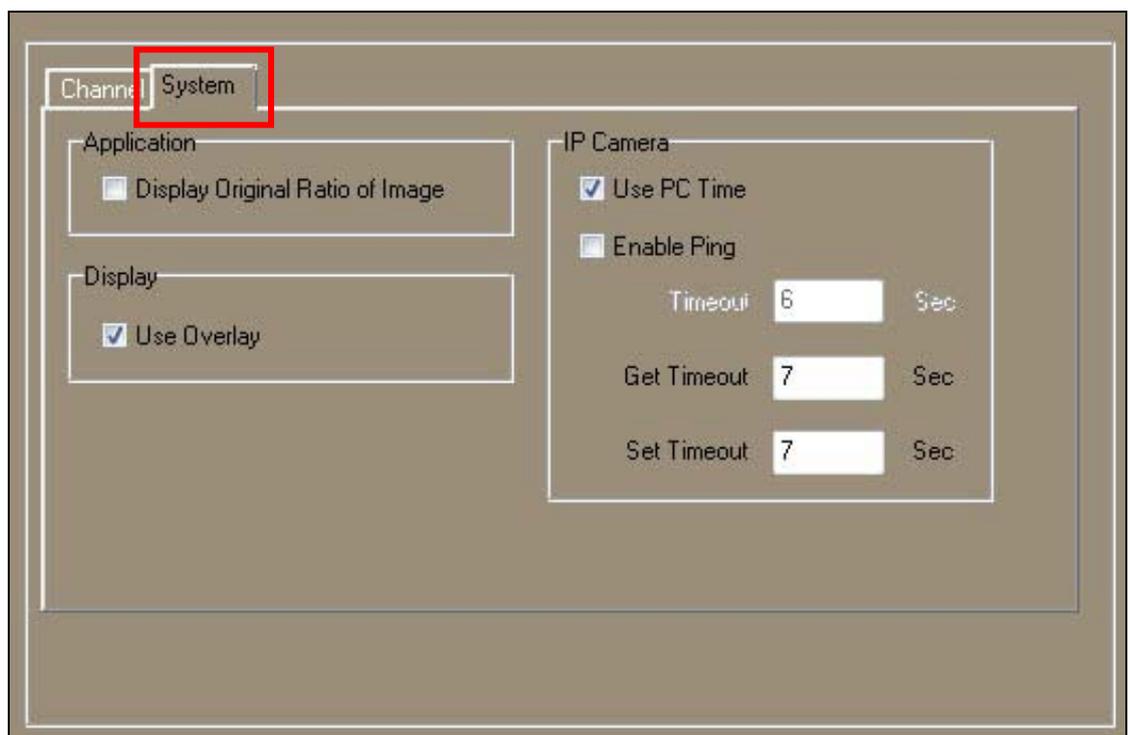
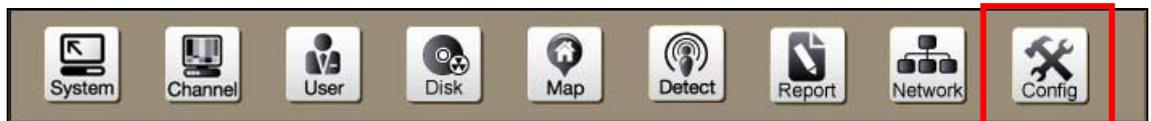
There are two methods to configure the system environment, one is the “Config” page in Network Recording Software, and another is independent software called “Config Tool”. These two methods provide the following functions:

- An easy way to search, add and manage multiple cameras and video servers.
- Configure system parameters depending on the Windows environment.

The “Config Tool” software provides the following extra functions:

- Configure more system parameters depending on the Windows environment.
- Backup and restore the settings of the recording software.

To use “Config” page, enter the Setup screen, click **[Config]** on the top, and then click **[System]** tab to enter the sub-page.



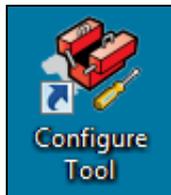
To run the "Configure Tool", close and exit the Network Recording Software first, then double-click the desktop icon - "Configure Tool". Or, click "Start" → "All Programs" → "Network Recording Software IVS" → "Tools" → "Configure tool".



In Windows Vista, please right-click on the desktop icon or the short-cut in Start Menu, then select "Run as administrator" to start the program.

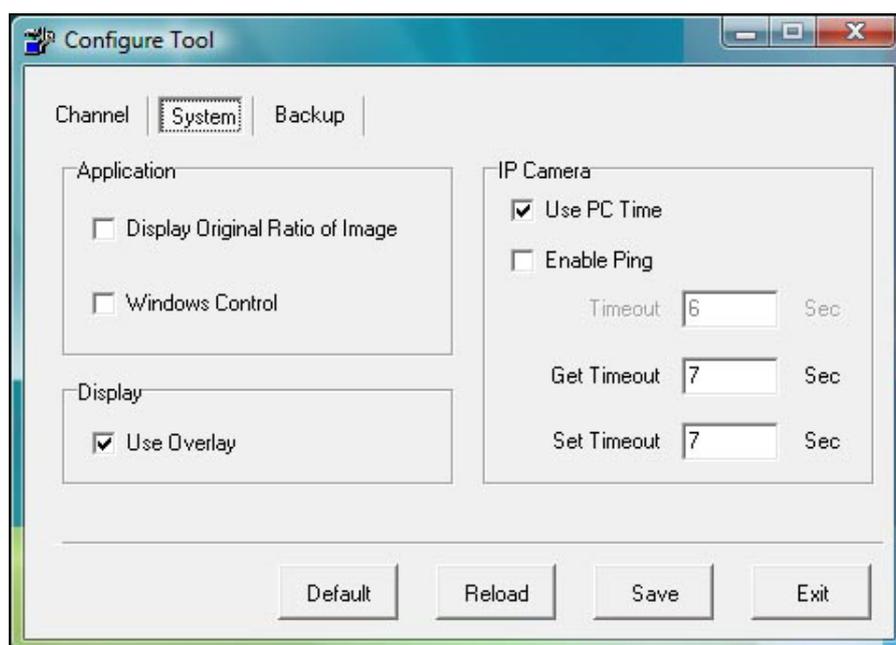


"Configure Tool" and Network Recording Software cannot run simultaneously. Please close and exit Network Recording Software before launch "Configure Tool".



After configure the settings, remember to click **Save** button on the bottom of the page, otherwise the configuration will be ignored.

Click **System** tab on the top of the software to enter the "System Configuration" page.



Display Original Ratio of Image

By enabling this function, the video of all channels will be displayed with the original ratio.

Windows Control (Only in “Config Tool”)

When this function is enabled, the recording software will be executed in a 1024x768 window. If the desktop resolution larger than 1024x768, you can drag this window to proper position.

Use Overlay

By enabling this function, the recording software will use the hardware accelerator of display card. This will reduce the CPU loading and enhance the performance.



Some display cards have incompatible issue with Overlay function. If the video on Live-View screen is abnormal, please disable this function.

Use PC Time

By enabling this function, system will record the video transferring time based on the PC.



If this function is disabled, the recording time of the cameras may different from the PC time.

Enable Ping

Some network device will disable the “Ping” function. To connect network cameras or video servers which are protected by the firewall, please disable this function to make sure it can connect correctly.

17.1. Backup and Restore Configurations

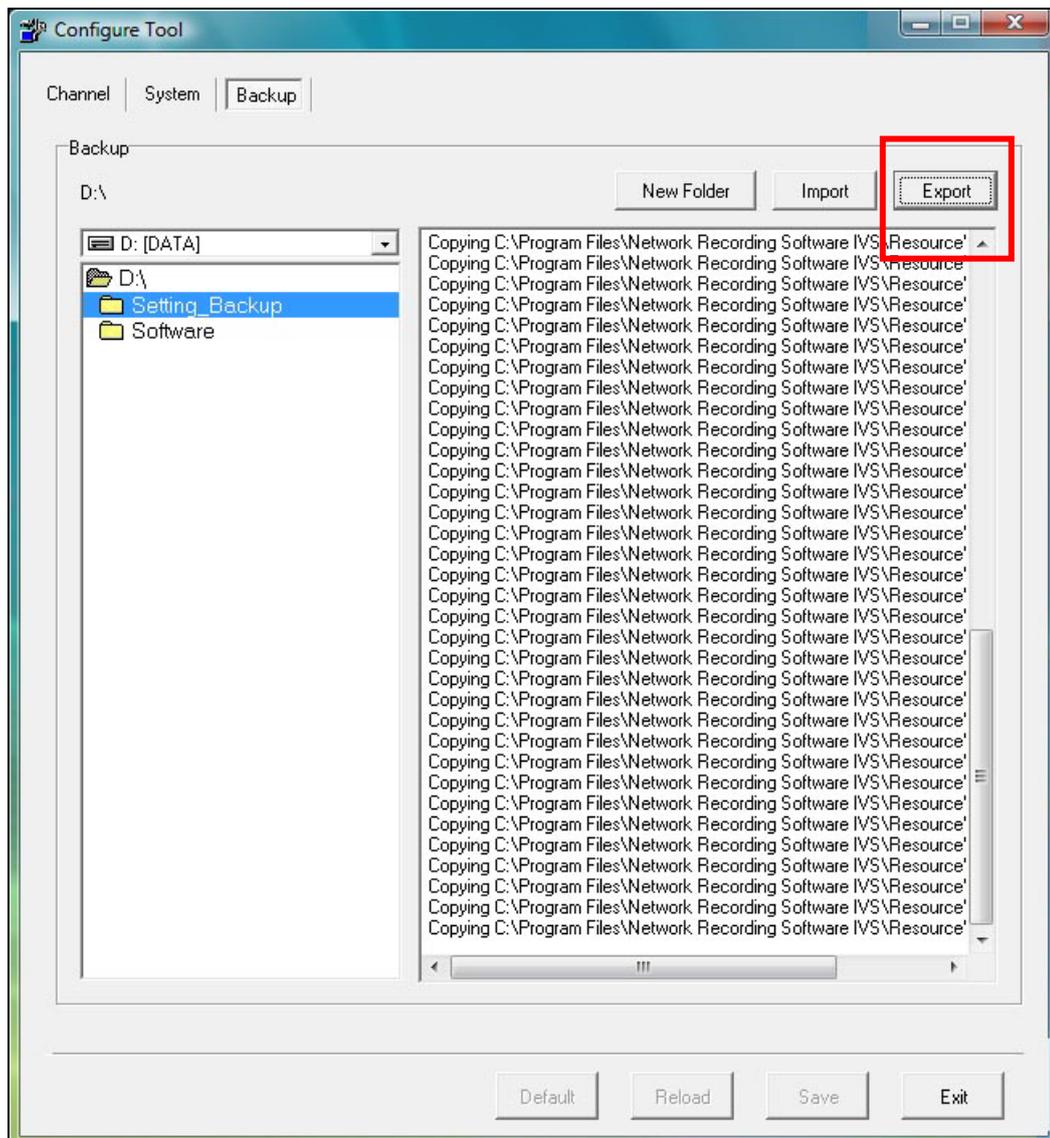
Click **Backup** tab on the top of “Config Tool” to enter the “Backup Configuration” page.

This page provides the following functions:

- Export to backup the settings of the recording software.
- Import to restore the settings of the recording software.

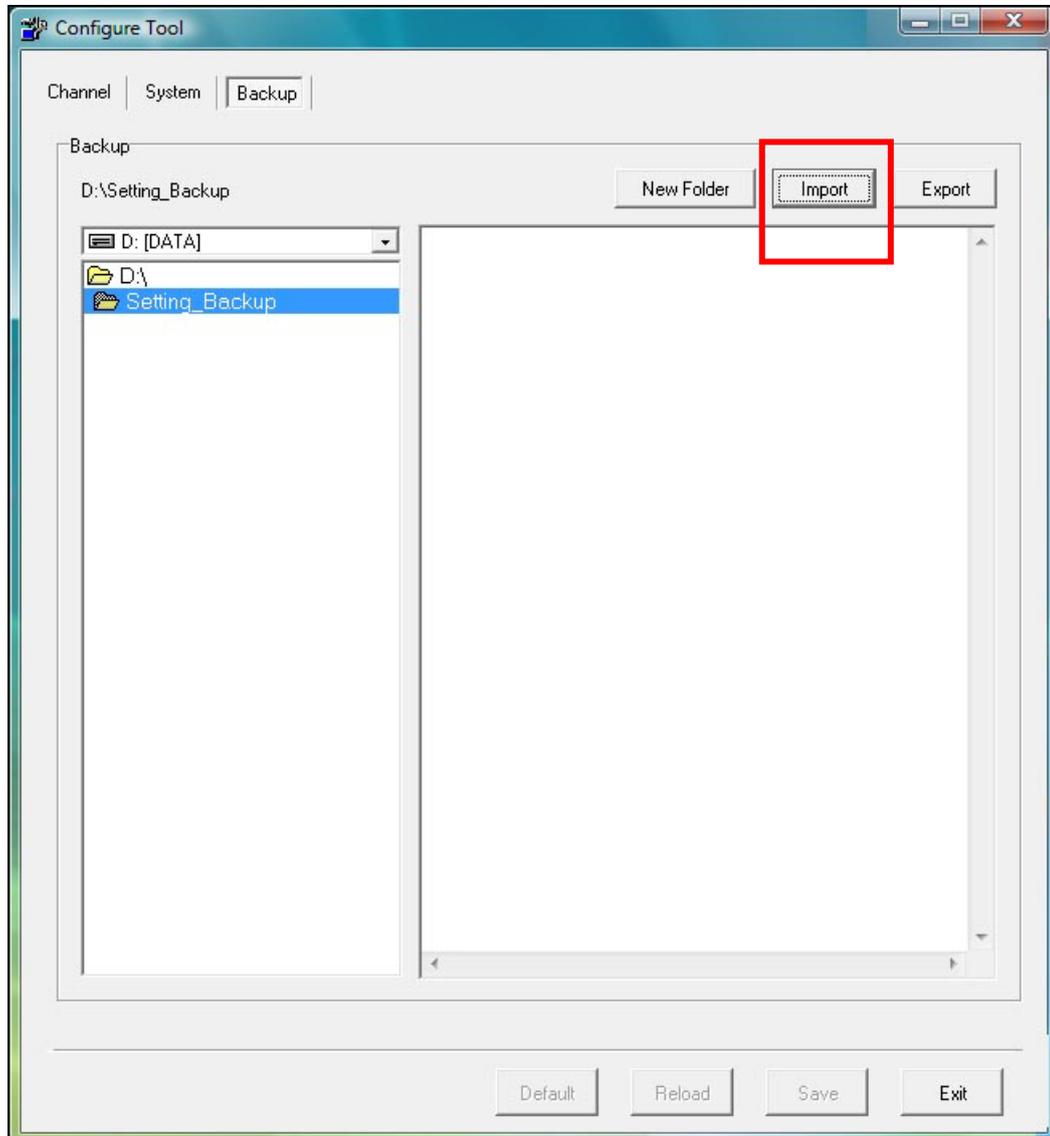
Export to Backup the Settings

Select the folder to store the settings, and then click **Export**.



Import to Restore the Settings

Select the folder which contains the backup settings, and then click **Import**. Then, click **Save** button.



18. Product Specifications

Live View	
Channel	SOL6040-Pro: Up to 4CH SOL6090-Pro: Up to 9CH SOL6160-Pro: Up to 16CH SOL6360-Pro: Up to 36CH SOL6720-Pro: Up to 72CH
Monitoring Split Window	SOL6040-Pro: 1x1, 2x2 View Window SOL6090-Pro: 1x1, 2x2, 3x2, 3x3 View Window SOL6160-Pro: 1x1, 2x2, 3x2, 3x3, 4x3, 5x3, 4x4, 8CH, 13CH View Window SOL6360-Pro: 1x1, 2x2, 3x2, 3x3, 4x3, 5x3, 4x4, 5x4, 6x4, 5x5, 6x5, 7x5, 6x6 View Window SOL6720-Pro: 1x1, 2x2, 3x2, 3x3, 4x3, 5x3, 4x4, 5x4, 6x4, 6x5, 7x5, 6x6, 8x5, 7x6, 8x6, 9x6, 8x7, 10x6, 9x7, 10x7, 9x8 View Window
Software UI Resolution	Apply for all desktop resolution, supports from 1024x768 up to 1920x1200
Multiple Monitor	Yes, Live View, Second Live View, Playback, E-MAP
Channel Rotation	Auto and Manual
Full Screen	Yes
Two-way Audio	Yes, Chatting with single channel and Broadcast to all
PTZ Control	Yes, via PTZ control panel. Provides Pan, Tilt, Zoom, Focus, Iris, Pan/Tilt speed, Go preset point, Auto patrol,

	Send "Custom PTZ Commands".
Digital I/O Control	Yes, can activate alarm devices (connected to the camera) such as siren or alarm, It supports ON and OFF switch mode and Delay switch mode, up to 4 I/O Control.
Digital Zoom	Yes, via digital zoom control panel
Channel Status	Yes
E-Map View	Multiple-layer of maps, Live-view and Event notification
3 rd -Party Camera Support	Axis, Canon, Panasonic, Sanyo, Sony, Toshiba, and other brands
Recording	
Recording Mode	Schedule (Weekly and Specific Time), Motion Trigger, Digital Input / IVS Trigger, Motion or Digital Input / IVS Trigger, Manually
Recording Schedule	Yes, configurable by each channel
Recording Audio	Yes
Storage	Supports multiple storage, Overwrite once storage is full
Channel Setup	
Channel Management	Add / manage cameras and video server
View and Record Resolutions	Depends on the camera output resolution, up to 1920 x 1080
Video Quality	Best, High, Standard, Medium, Low
Auto Search Camera	Yes
Hardware Motion Detection Configuration	Yes, configurable by each channel
Digital I/O Configuration	Yes, configurable by each channel

PTZ Configuration	Yes, configurable by each channel. Provide: Select PTZ protocol, Set preset point, User defined "Custom PTZ Commands"
Channel Type	Normal channel, Attached channel, RTSP Stream or MJPEG Stream
Advanced Setup	Yes, configure Tag, Time/Date and Status location of shown channel and the font
Video Playback	
Video Search	Yes, Search by time or Event list
Video Export	H.264 or MPEG-4 video clip (AVI format), Snapshot (JPG format)
Video Simultaneous Playback	Yes, up to 16 channels
Video Forward / Backward	1x, 2x, 4x, 8x, 16x, 32x (depending on hardware or channel)
Digital Zoom	Yes, via digital zoom control panel
Event System	
Event Trigger from Camera	Hardware Motion Detection (detected by camera), Digital Input (connected to camera)
Event Trigger from "Network Recording Software IVS"	IVS detections including: Software Motion Detection, Missing Object Detection, Foreign Object Detection, Loss Focus Detection, Occlusion Detection, Redirection Detection, Boundary Detection, Video Loss Detection and Counting
E-Mail Warning	Send E-mail with event attachment
On Screen Warning Method	Status Indicator, Warning message, Enlarge screen for viewing single channel, Play audio
System Setup	
Multi-Screen Configuration	Assign Live View, Second Live View, Playback, E-MAP for different monitor

Log Management	System log, Motion trigger, Digital Input trigger, User log
Date Format	Yes, 5 Date format selectable
Channel Layout Configuration	Yes, arrange channel layout by administrator
Auto Reboot Schedule	Yes
Auto Startup the Software	Yes
E-Mail Configuration	Yes, supports multiple E-Mail receivers
Lock up Widows System Keys	Yes
Security	
Account Authority	Yes, User account, password and Group management
Remote Access Control	Yes, "White List" for allowing the specific IP range "Black List" for deny the specific IP range
Remote Access and Control	
CMS (Central Management Software)	Remote live-view / operate / playback / configuration
Web Server	Remote view via IE browser
Remote View Server	Remote view via RemoteLite software
3GPP Server	Remote view via 3G mobile phone
Remote Program Server	Remote live-view / operate / playback / configuration
Configure Tool	
Channel Management	Add / manage multiple cameras and video server
Auto Search Camera	Yes
ON/OFF Time Synchronization	Yes, system will record the video transferring time based on the PC
ON/OFF Overlay	Enable/ disable hardware accelerator of display card
Backup Import / Export	Yes, Import / Export the settings of software

