iVMS-4000(V2.03.03)

User Manual

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Chapter 1 Welcome to iVMS-4000 (V2.03)

1.1 Overview

The iVMS-4000(V2.03) is the client application specially developed for the embedded DVR/DVS. It is applicable to DVR, hybrid DVR, NVR, DVS, IP Camera, IP Dome and decode card, as well as the decoder if the "Client Software (Decoder)" is selected during the installation of client software. The iVMS-4000(V2.03) also can be accessed by iVMS2000 client software.

Note: There may be technical inaccuracies, or typographical errors in the manual. The contents including description of products and program will be updated without prior notice.

1.2 Computer Disposition Request

Operating System: Microsoft Windows 2000, XP, 2003, Vista, Windows7

CPU: Intel Pentium IV 3.0 GHz or models above

RAM: 1G or above

Display: 1024×768 resolution or above

1.3 Convention

Conventions as follows in this manual:

- DVR, hybrid DVR, NVR, DVS, IP Camera and IP Dome are all referred to as *device*
- *Click* refers to left click mouse
- *Double click* refers to double left click the mouse

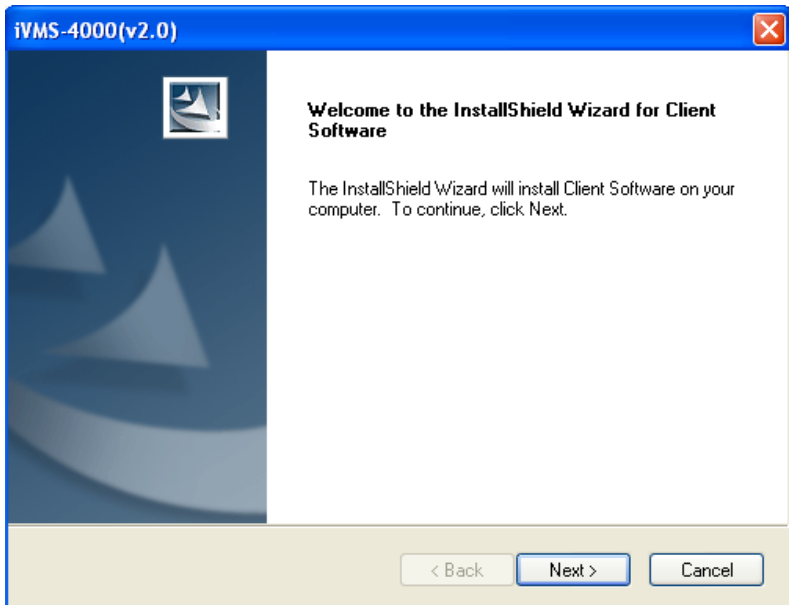
Note: As the "Client Software" and the "Client Software (Decoder)" are similar in operation, the following chapters will mainly introduce the instructions for the "Client Software" as the example.

Chapter 2 Install & Uninstall

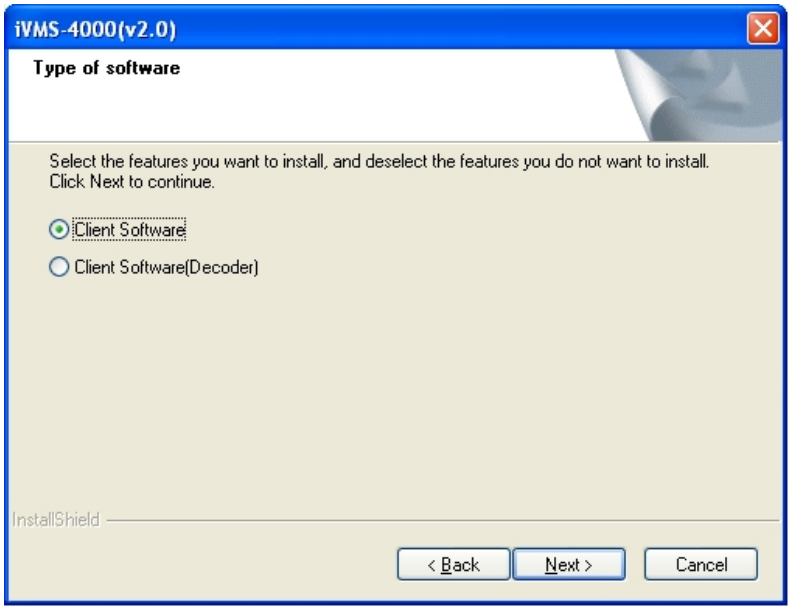
2.1 Install the Software

Double click the program file 

to enter the following InstallShield Wizard as shown below:



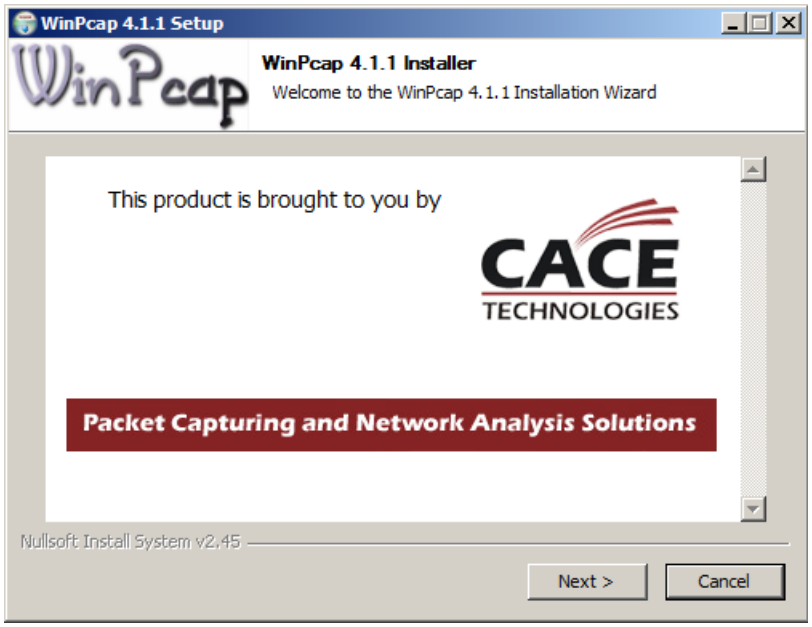
Click “Next” to enter the following dialog box:



If the decoder is used, please select the “Client Software (Decoder)” option, otherwise, select “Client Software” option and then click “Next” again.

Input the user information and software installation location according to the hints.

After that, a SADP installation wizard will pop up; click “Next” to start to install WinPcap. If it has already been installed, this step can be cancelled.



Note: SADP is used for searching the online devices within the LAN; this function is unavailable if the WinPcap is not installed.

2.2 Uninstall Software

Enter start menu, select “All programs”→”iVMS-4000(v2.0)”→”Uninstall iVMS”, and the InstallShield Wizard shown as below will pop up:



Click “Yes” and start to uninstall the software, the un-installation will finish after the computer has restarted.

Chapter 3 Basic Operations

Click “Start”→”All Programs”→”iVMS-4000(v2.0)”→” iVMS-4000(v2.0)” to start the software.

3.1. User Registration

User needs to register an administrator if the iVMS software is used for the first time.

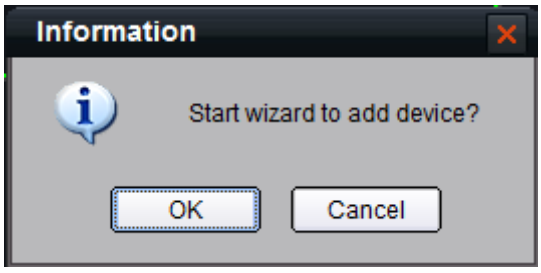


Input the user name and password in the dialog box and click “OK”. Then, user can log in as the administrator.

Note: Enter, Space, and TAB buttons are invalid for the user name and password. The password cannot be null, and should not contain the following characters, including “**%**” and “**’**”. Password should not be less than six characters and does not support the copy and paste operation.

Add Device Wizard

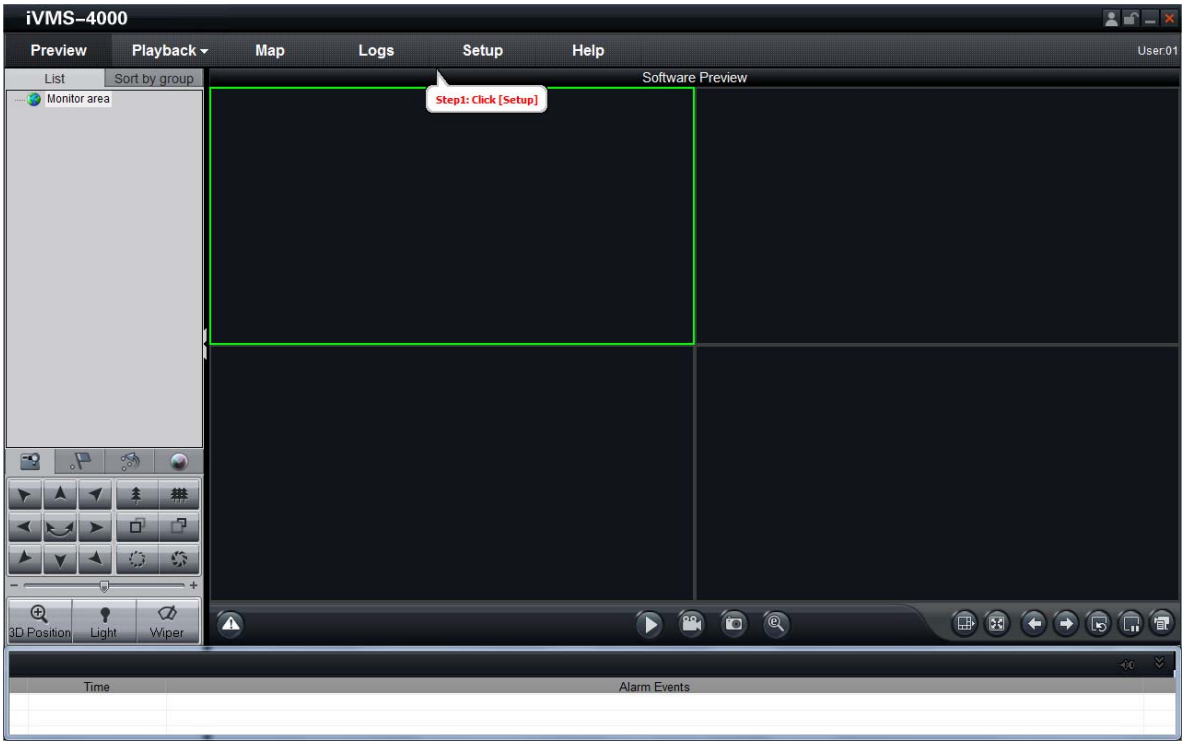
After registration and login, the following information will pop up:



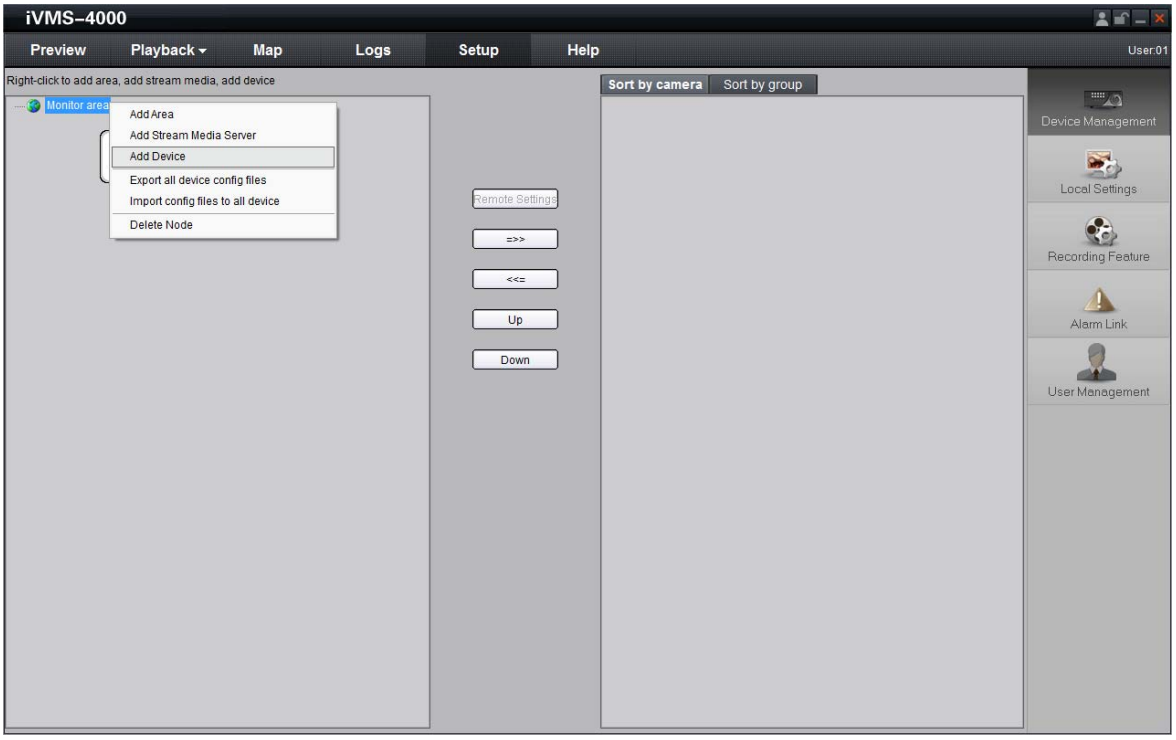
Click “OK” to start the wizard and add the device, or click “Cancel” to exit the wizard.

Step1: According to the hint, click 

to enter the device adding interface.

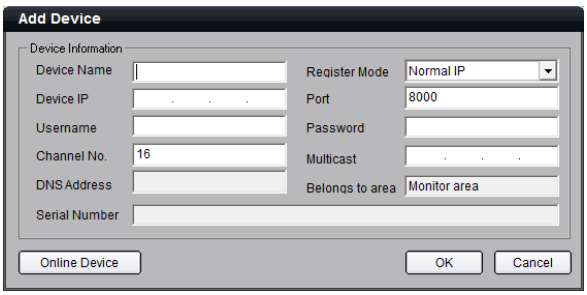


Step2: According to the hint, right click on the default area node and then select Add Device option from the right-click menu to add a device.



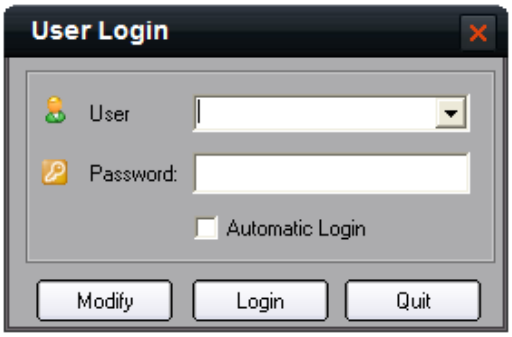
Enter the device information in the text box of Add Device interface.

Please refer to *Section 4.2 Add Device* for more details.



3.2 User Login

When user opens the iVMS software after registration, the login dialog box will pop up, shown as below:



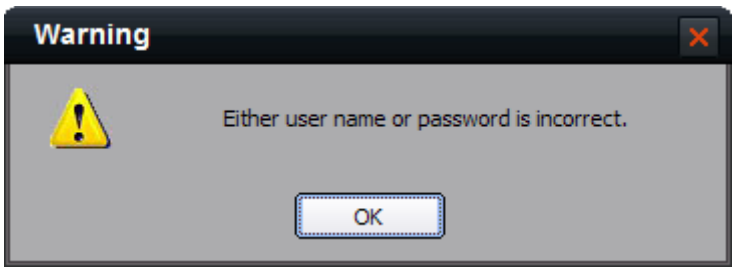
Input user name and password, and then click “Login” to start using the iVMS software.

Click 

to automatically save the user name and password, then user does not need to input them again for future login.

If user wants to change password, please select a user name and click “Modify”.

If the user name or password is incorrect, the following warning information will pop up:



If user wants to cancel login, please click “Quit”.

Note: Please stop all the operations (e.g. preview, recording, playback and etc.) before switching the users.

3.3 GUI Introduction

The main interface of the client software is described as below:



System Panel:

Area	Description		Area	Description
❶	Toolbar		❷	Menu Bar
❸	Device Area		❹	Preview Area
❺	PTZ Control Area		❻	Alarm Info Area

Toolbar:

Button	Description
	Lock button. When user clicks it, the icon will change to ; re-click it to activate login window and input the correct password to unlock the interface.
	Minimize button
	Exit button
	Software user switch button

Minimize the iVMS software and right click the icon "" on the taskbar, then you'll see the popup menu including software/hardware preview, setup, remote VOD, local playback, map, log and exit options.

Menu Bar:

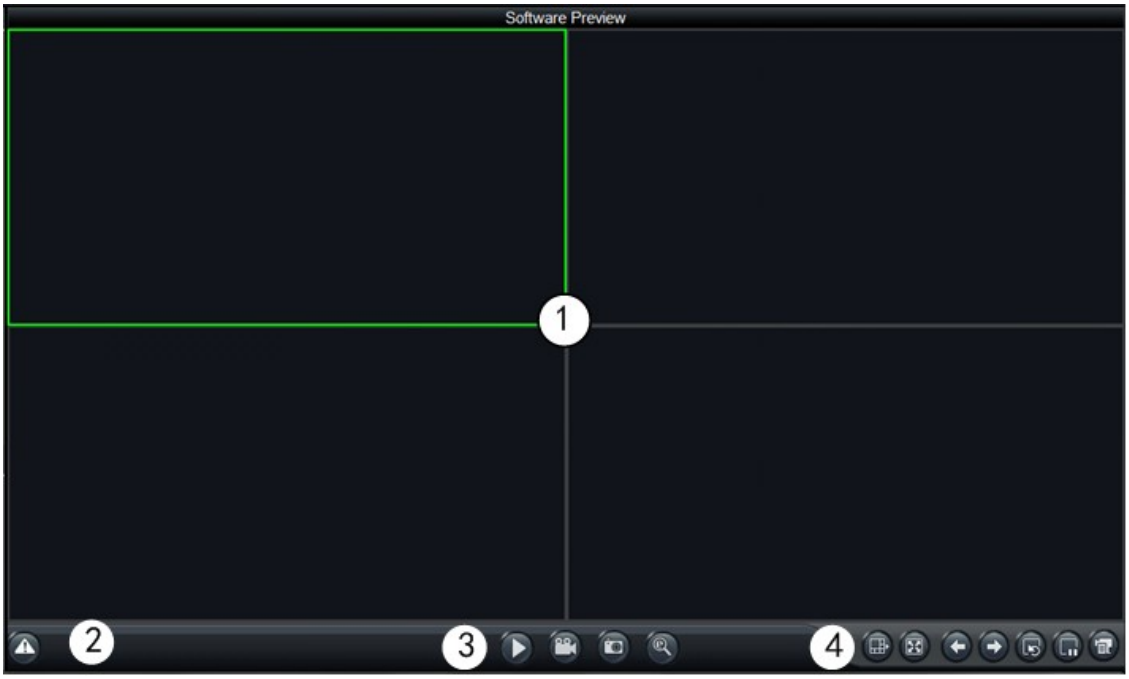
Area	Description
Preview	Enter preview interface for live view, PTZ control, video parameters adjust, etc. (If the decoding card is installed in PC and the "Client Software" option is selected during installation, it is allowed to enter the software or hardware decoding interface)
Playback	Enter playback interface, including remote VOD and local playback
Map	Enter e-map interface
Log	Enter log query interface
Setup	Enter setup interface
Help	Enter Help (user manual) and About (software info) menu

Note: If the "Client Software (Decoder)" is selected, the TV Wall will be displayed on the menu bar of the main interface for access to TV wall.

Device Area:

Mode	Description
List	Display by list
Sort by group	Display by group

Preview Area:



Area	Description		Area	Description
1	Display windows		2	Alarm indicator
3	Basic functional buttons:		4	Advanced functional buttons: window

	play, record, capture and digital zoom			division, full screen, page up, page down, resume cycle, pause cycle and show channel state.

PTZ Control Area:

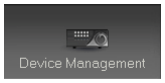
Icon	Options	Description
	PTZ	Control PTZ
	Presets	Configure and call the preset
	Sequence	Configure and call the sequence
	Video	Brightness, contrast, saturation, hue and volume adjustment

Alarm Information Area:

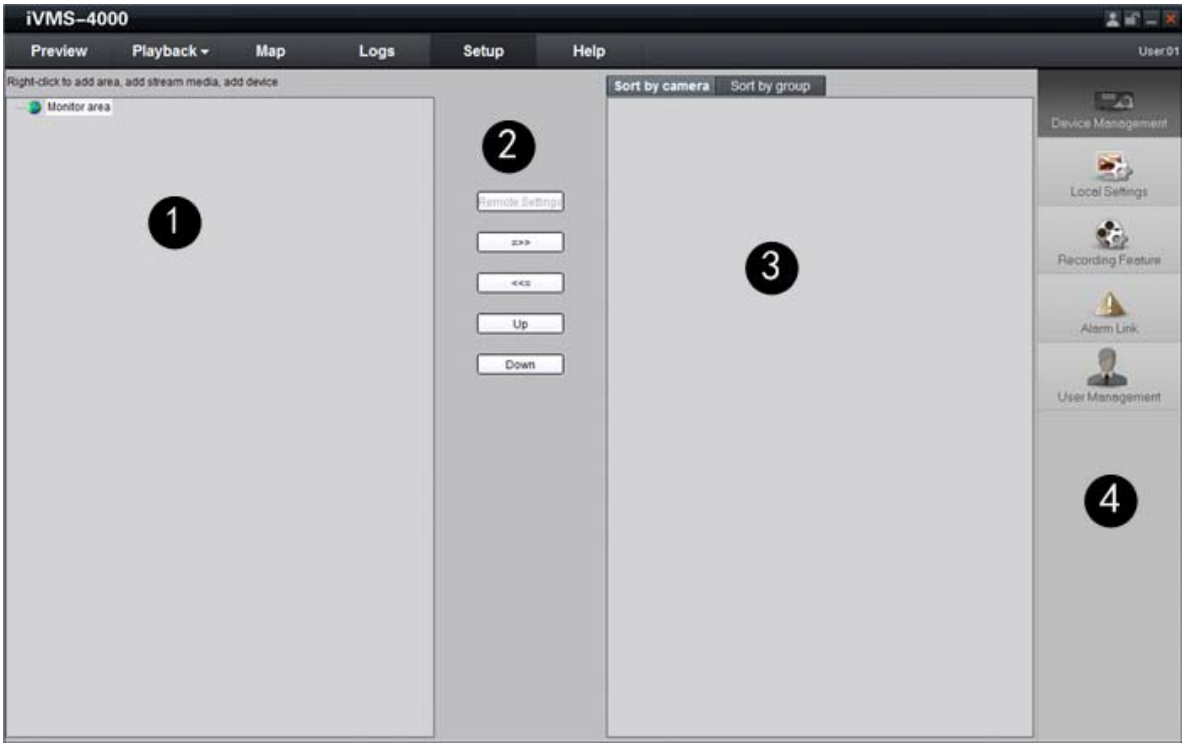
Display alarm time, information and alarm sign. The area size can be enlarged by dragging the upside of the area. You can fix the area size by clicking icon "" , which will then turn to""; and when it returns to "", the area size will resume to original size. Clickto hide the alarm information area, or clickto resume the display.

Chapter 4 Device Management

Before any operations, user needs to add device and configure it. Click 

to enter the configure mode, and then click 

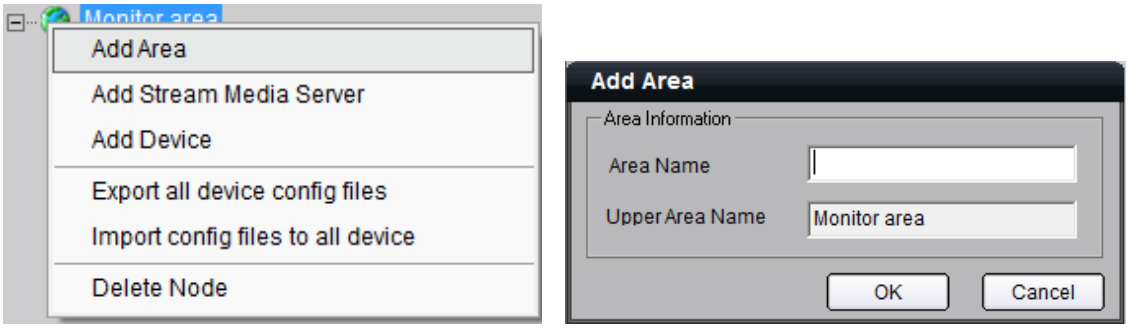
to manage the device.



Area	Description		Area	Description
❶	List area		❷	Configuration buttons
❸	Group/Shortcut key area		❹	Navigation bar

4.1 Sub-area Configuration

By default, the system has the root area named as “Monitor Area”. User can right click it to add the sub-area. Select “Add Area” from the menu to enter the Add Area dialog box, as shown in the following figure:



Enter the area name and then click “OK” to save the settings. The new sub-area will be displayed under the site tree.

Note: Enter, Space, TAB is invalid in the area name. It cannot be null and should not contain the following characters, including “**%**” and “**’**”.

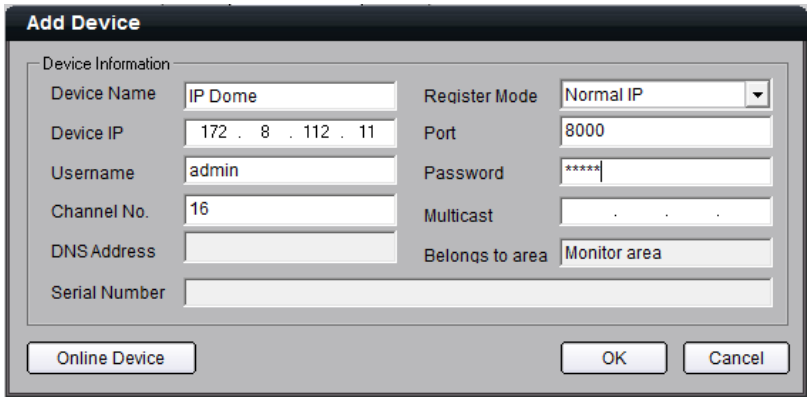
Note: When you select “Delete Node”, the sub areas, stream media servers, and devices under the root of this area will be deleted as well. Before doing that, you need to stop current preview or recording, otherwise there will be warning information popping up.

4.2 Add Device

Right click the area and select “Add Device” to enter the Add Device dialog box. Enter the information of device to be added.

Normal IP mode

The default register mode is the “Normal IP”. After input the device name, IP address, username, password, port and channel No. Click the “OK” button to finish adding device.



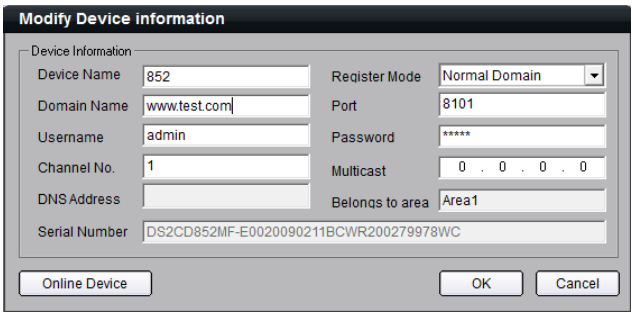
The Illustration about the adding interface:

Options	Description
Device Name	User-defined
Register Mode	Normal IP, Private Domain, Normal Domain
Device IP	IP address of the device
Port	Device port (default: 8000)
User Name	User name of the device (default: admin)

Password	Password of the device (default: 12345)
Channel No.	The channel number of the device
Multicast	Used when visiting the device by the way of multicast, or else leave it blank
DNS Address	Used as IP address of IP server when adopting private domain, or else it can't be filled.
Belong to area	Display the area to which the current device belongs
Device serial	Used when adopting private domain, or else leave it blank

Normal domain mode

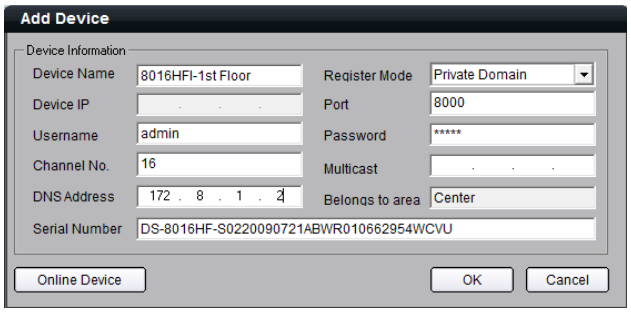
If you select normal domain, please enter the domain name with the registered domain name in the text box.



Private domain: If you configure the device with the address of IP Server that runs normally, then the connected device can be resolved by IP Server; and iVMS software can get the dynamic IP address from IP Server by server name or by serial number.

Private domain mode

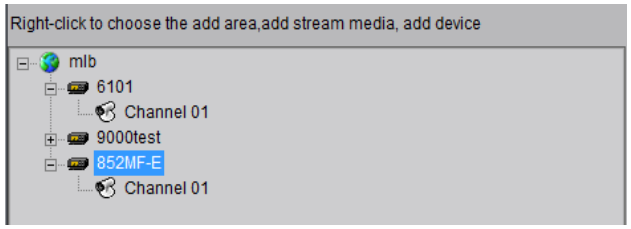
If you select private domain, please input the correct device serial number and IP address of IP server in the text box of DNS Address.



Note: In private domain mode, if you input device serial number, the iVMS software will go to obtain the IP address from IP server; If no device serial number is entered, the IP address can be obtained by using device name to resolve IP server, yet the device name you enter here must be the same with the name in the device.

Click "OK" to finish adding device.

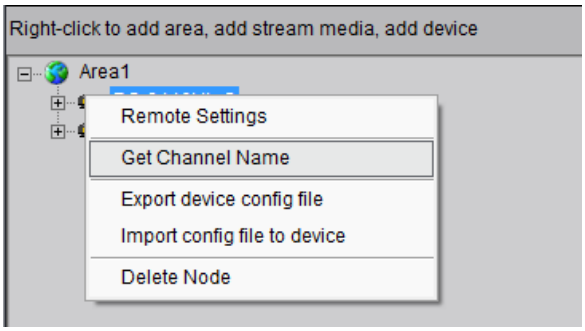
Right-click menu is available, double click the node can modify the device parameters. If the device is not online or not connectable, some options are not invalid.



Note: Up to 50 devices can be added.

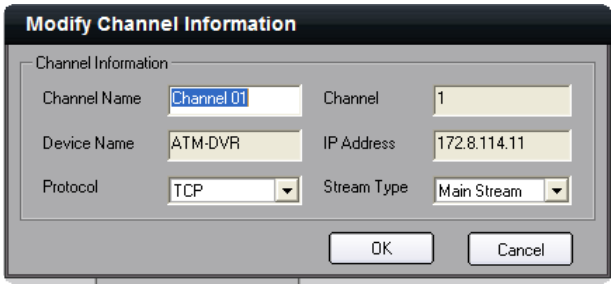
4.3 Channel Configuration

Click “Get Channel Name” to get the names of all channels.



Tips: The main stream is usually used for device encoding, which sub stream is for network transmission.

Double click the channel name and then the “Modify Channel Information” dialog box will pop up.



Channel Name	Current channel name, editable
Channel	Channel number of the device, unchangeable
Device Name	Device name, unchangeable
IP Address	Device IP address that unchangeable
Protocol	Select connection protocol: TCP, UTP, MCAST and RTP.
Stream Type	Choose main or sub stream for the channel

Note: If the option “Get channel name” is selected, the channel name will be replaced with the name saved in the device.

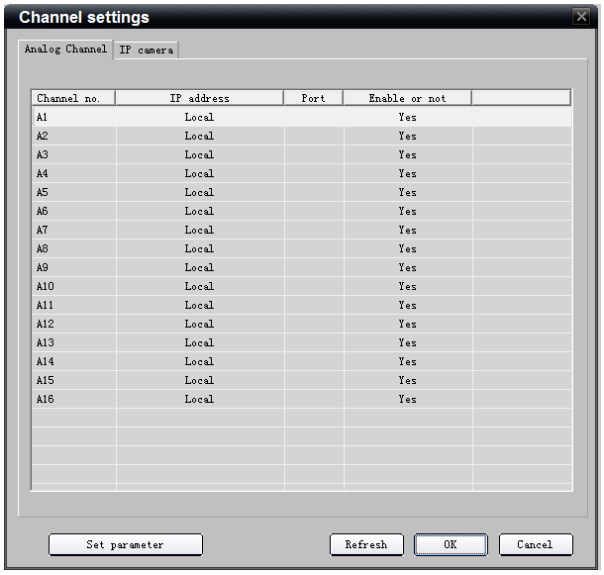
4.4 Channel Configuration of DS-9000 Series DVR

DS-9000 Series DVR supports the preview and recording of IP camera, IP dome and DVS. When the DS-9000 Series DVR is added to iVMS software, then it is accessible to add and manage the IP channels as well as to enable or disable the analog channels.

Right click the device name and select “Remote Configuration”, then the “Channel Configure” menu will pop up. The “Analog Camera” will show by default.

Double click the selected analog channel to enable or disable it.

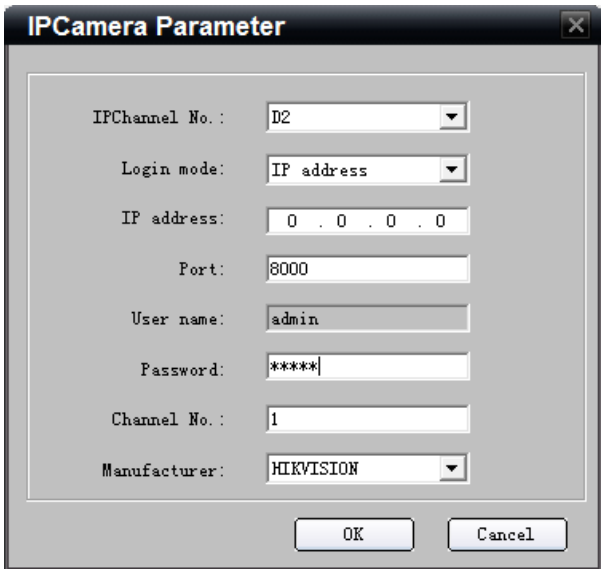
Note: DS-9000 series DVR can not preview and record this channel when it is disabled, unless it is enabled again.



Click “IP camera” to enter the interface of IP channel management.

Click “Add” to add IP channel.

Input the IP address, user name, password and port, and then click “OK”.

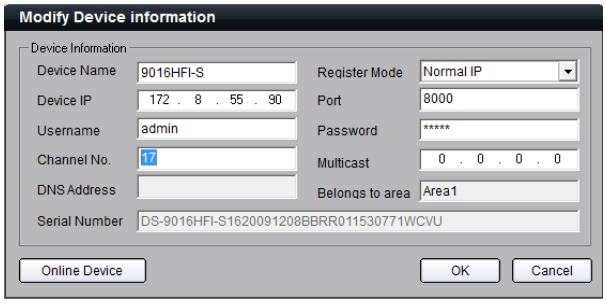


Double click the selected channel to modify the parameters.

Click “Delete” to delete the selected channel.



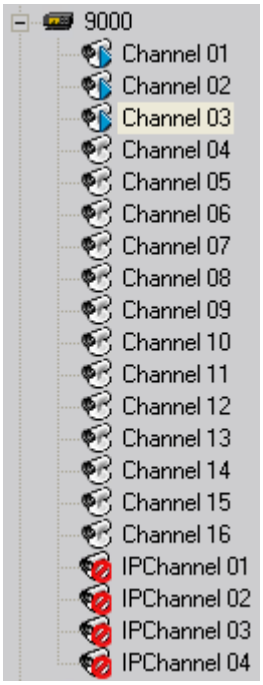
After that, you can change the channel number according to the added channels. Double click the device name to modify the device information.



Note: DS- 9016HFI-S DVR supports up to 16 analog channels and 8-ch IP cameras to be added. Please refer to the user manual of DS-9016HFI-S for more details.

After that, the added IP channel will be seen in the channel list of the device.

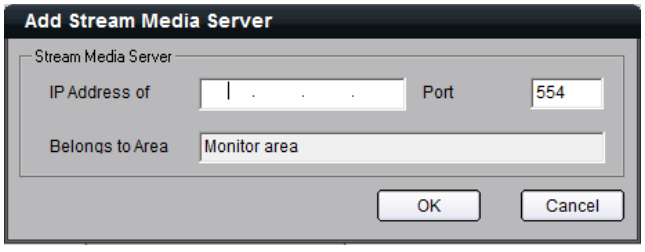
If IP channel cannot be connected, the icon under the preview interface will be shown as 



4.5 Stream Media Server Configuration

When the connections is up to the limit of the device or the bandwidth is not enough, user can add the stream media server to forward real-time video stream, then it can reduce the pressure of the device network.

Right click the Area node, select the "Add Stream Media Server" option, input the IP address and the Port (554 as default, need to be the same as stream media server setting), then click OK to finish.

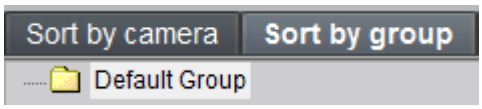


4.6 Group Configuration

Click the Sort by group button to enter group area management window.

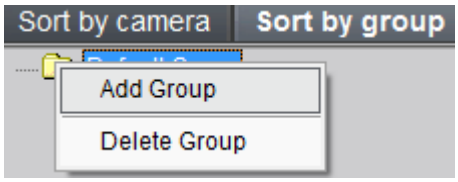
4.6.1 Sort by group

There is the default group. You can add new channels or delete the existed channels.

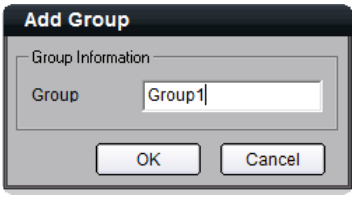


Right click in the empty area and you will see sub menu as shown on the right.

Select “Add Group”.

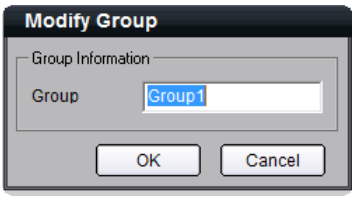


Input the group name and click “OK”.



Double click the group name to change the group name.

Right click the group name and select “Delete Group” to delete the selected group.



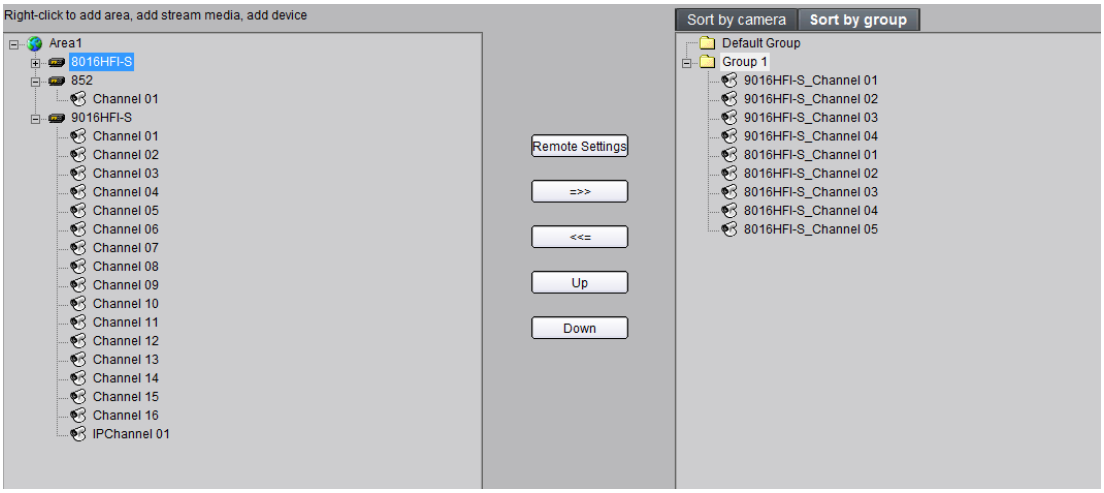
Note: Enter, Space, TAB is invalid in the group name, which cannot be null, and should not contain the following characters, including “**%**” and “”.

4.6.2 Channel

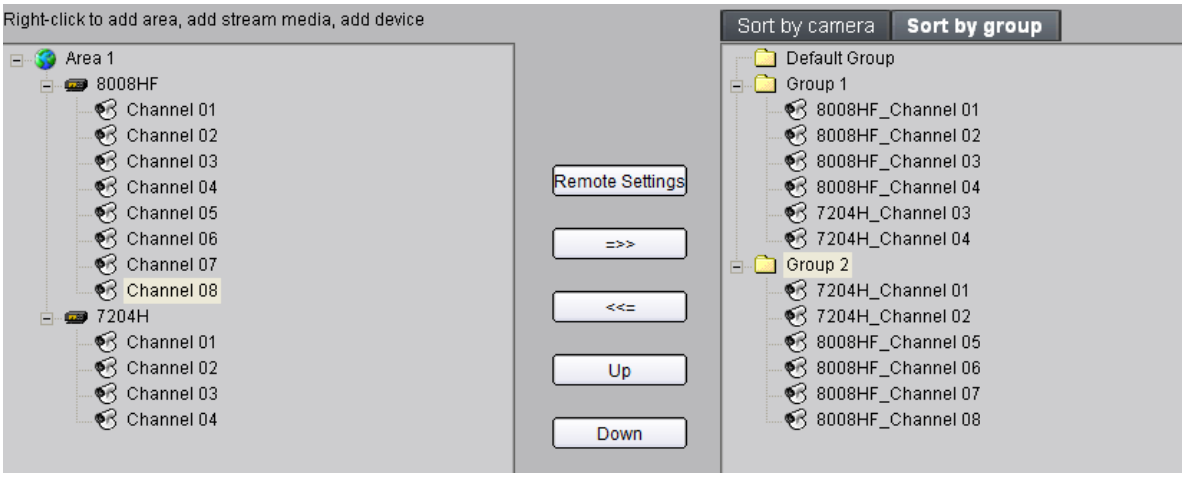
After adding the group, the channels in the site tree can be moved to the selected group.

Add Channel

Select the channel from the site tree, and click => key to move it to the selected group.



Select the device in the list area and click =>> key and all the channels of the device can be moved to the selected group.



Use Up and Down keys to adjust the channel sequence in the group list.

Delete Channel

Use <<= key to delete the channel or group in the group area.

Note: One channel can be added to different groups, yet one group cannot add the same channel repeatedly. Max. 50 different channels can be added to one group.

4.7 Sort by Camera Configuration

Click Sort by camera button to enter shortcut key management window. Only the channels can be added to the “Sort by camera” area.

Select the channel from the list area, and click =>> key and move it to the “Sort by camera” area.

Select the device from the list area, and click  key to add all the channels of the device to the sort by camera area.

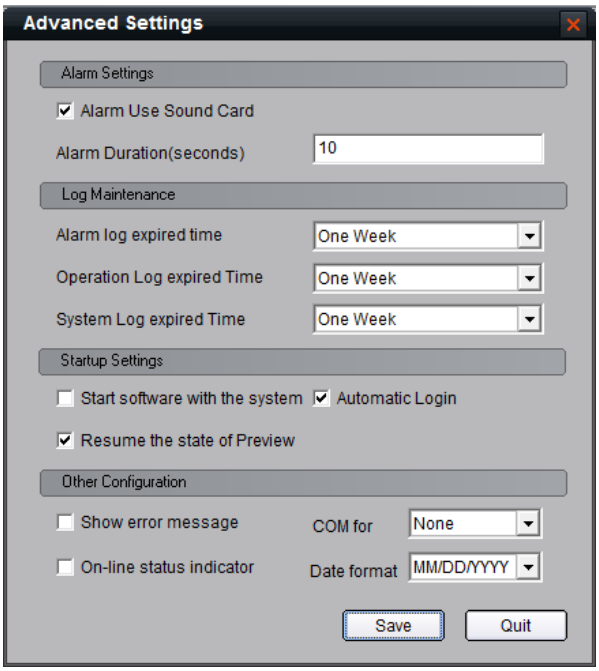
Use  key to delete the channel in the sort by camera area.

Note: Up to 256 channels can be added to “Sort by camera” area.

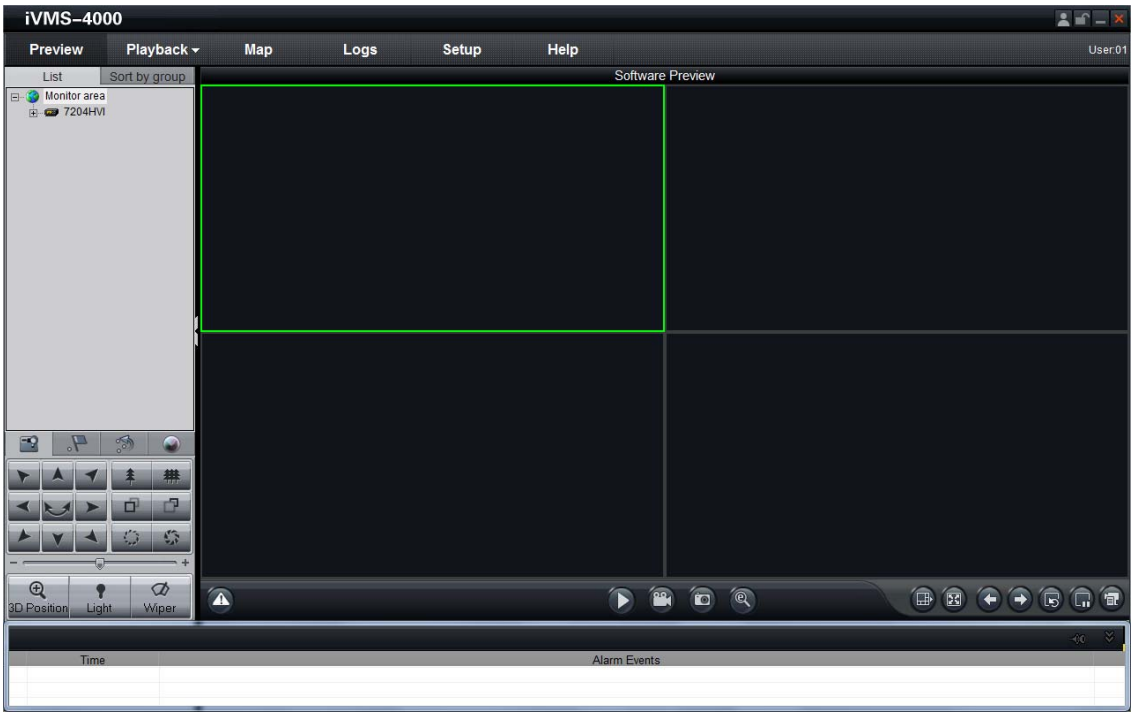
Chapter 5 Preview

After configuring the device, click the Preview key to return to the preview interface. Click the "List" and "Group" keys to switch between two modes.

Click Setup key and then Local Settings key and Advanced Settings button to enter "Advanced Settings" in which user can enable the Resume the state of Preview option to save current preview state including window division and preview channel for next login.



The play windows are divided into 2×2 mode as default, and up to 64 window divisions can be configured. User can click the button to change window division mode.



Preview Panel Buttons:

Area	Description		Area	Description
	Play			Record
	Capture			Digital zoom
	Window division			Full screen
	Page up, page down			Resume cycling all the device
	Stop cycling all the device			Show channel state

Note: The window division mode and channel sequence can be remembered by the Client Software as, and will play automatically when log in next time.

5.1 Non-cycle Preview

5.1.1 Play by Node

Double click the device name or drag it to the play window to preview (cycle preview disabled).

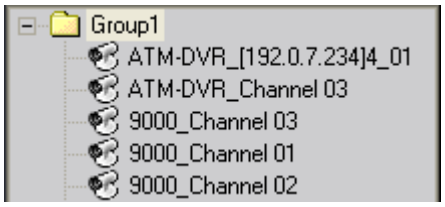
Double click the channel name to preview the corresponding cameras.



Double click the device name to preview the corresponding cameras of the device in the current window divisions.



Double click the group name to preview the corresponding cameras of the group in the current window divisions.



You can also preview them by dragging them to the play windows.



5.1.2 Sort by Camera Preview

Sort by camera mode

If it has configured “Sort by camera” in the device list, then press “” button of the preview interface to view all the corresponding channels in the “Sort by camera” area in the current window divisions. If the channel number is more than the window division number, user can click and to change the page to preview. Please refer to the *Section 4.7 Sort by camera Configuration* for more details.

Sort by group mode

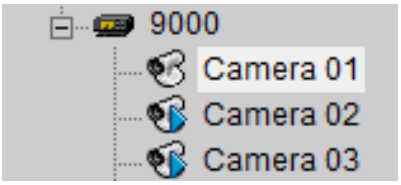
Click the “Sort by group” to enter this mode. If the “Sort by group” has been configured, then press “” button of the preview interface to view all the corresponding channels in the Sort by group area in the current window divisions. If the channel number is more than the window division number, user can click and to change the page to preview. Please refer to the *Section 4.6.1 Sort by Group Configuration* for more details.

5.1.3 Stop Playing

There are 3 ways to stop live preview.

Double click the channel to stop playing.

The play icon is, double click it to stop previewing this channel and the icon will change to.



Right click video to stop playing

Right click in the play window and the menu will pop up. Click “Stop Play” and the live view will stop. Meanwhile, the play icon will change to .



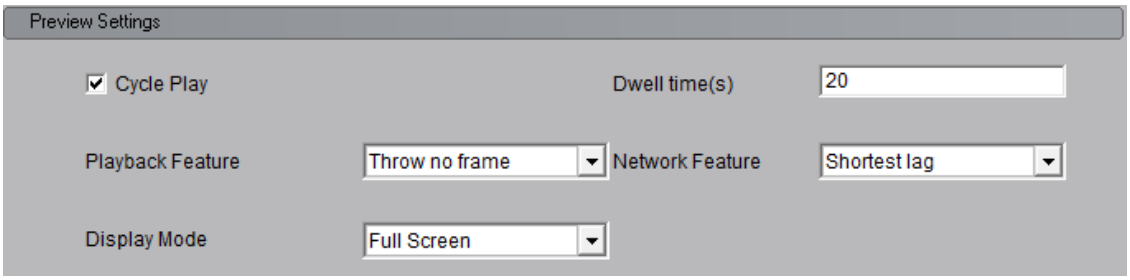
Stop all playing

Click the key in the preview panel to stop all the live view channels.

5.2 Cycle Play

5.2.1 Cycle Configuration

Click Setup key to enter the configuration interface. Then enter the local settings interface by click “Local Settings” button.



Enable Cycle:

Click Cycle Play to enable Cycle Play, and input the cycle time. Click “Save” and return to the preview interface.

Note: The cycle time should be set between 20 and 300s.

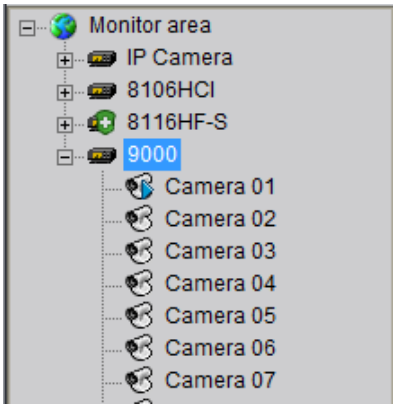
Disable Cycle:

Click Cycle Play to disable Cycle Play and save the settings.

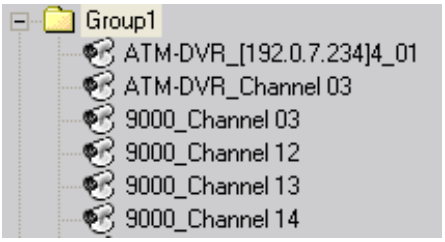
5.2.2 Cycle Play of Device/Group

Start cycle

Double click the device name and all the channels of the device begin to cycle in the selected window division from the 1st channel.



Double click the group name and all the channels of the group begin to cycle in the selected window division from the 1st channel.



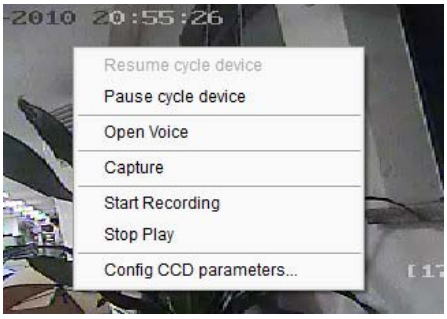
Drag the node of the device to the window, and then all the channels of this device begin to cycle.

Drag the node of the group to the window, and then all the channels of this group begin to cycle.



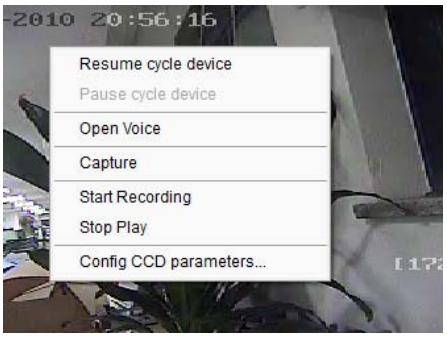
Pause/Resume Cycle

If the current window is in the device/group cycle mode, right click the cycling window, click “Pause cycle device” or “Stop cycle group” to pause cycling and remain the current image.



Click “Pause cycle” key  to pause all the cycling window divisions.

If the current window is in the device/group cycle mode, right click the paused window, click “Resume cycle device” to restart cycling.



Click “Resume cycle devices” key to restart all the paused channels.

5.2.3 Mixed Cycle

Mixed cycle mode enables iVMS software cycle previews channels of the group or sort by camera, the default window division is 2×2.

Cycle Play of Sort by camera Channels

Click “List” key to display channel list.

Click key to start mixed cycle play. Take 2×2 window division for example, if there are 8 channels in the short key area, then start cycle playing, the first 4 channels will be displayed in the window, after one cycle period, the last 4 channels will be displayed in the window.

Click button in the preview panel to stop the channel mixed cycle of short key.

Click key to display the first 4 channels, click key to display the last 4 channels.

Note: Click button or to pause the channel sequence cycle of sort by camera. This function needs sort by camera configuration first.

Cycle Play of Group Channels

Click “Sort by group” key to display group channel list. (Please stop playing before switching to group channels.)

Click key to start mixed cycle play. Take 2×2 window division for example, if there are 2 groups in sort by group area, each of them has 4 channels, then start cycle playing, 4 channels of the first group will be displayed in the window, after one cycle period, 4 channels of the second group will be displayed in the window.

Click key to display the first 4 channels, click key to display the last 4 channels.

Note: Click button or to pause the channel sequence cycle of sort by group. This function needs sort by group configuration first.

5.3 Preview Control

Full Screen:

In preview mode, user can click  key to preview in full screen.

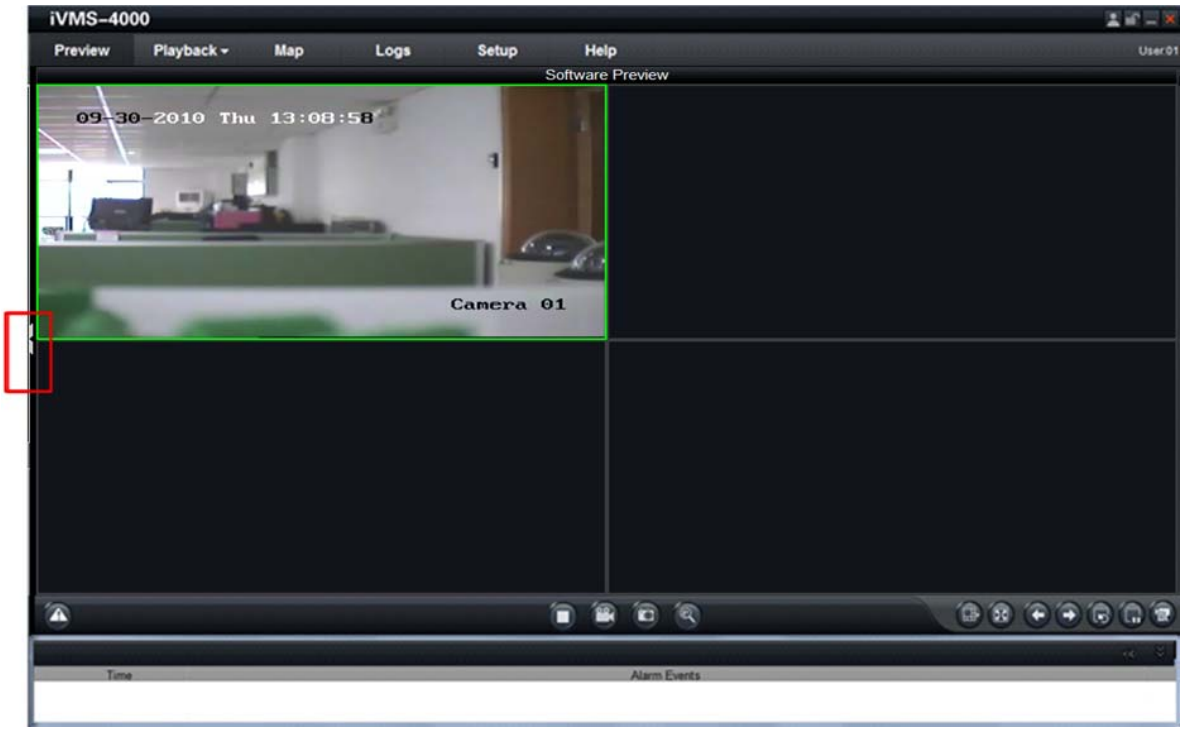
Enlarge:

When in the multi-screen preview mode, double click the selected image to enlarge it, and double click again to resume.

If user is previewing the zero-channel, double click it first time, it will enlarge the zero-channel, double click on window division in the zero-channel video, it will enlarge that channel to fill the zero-channel video. Double click it the third time, it will only change the zero-channel form single to multi display.

Hide/Show Site Tree:

In the preview interface, user can click the hide/show button to hide or show the site tree and PTZ control panel area.

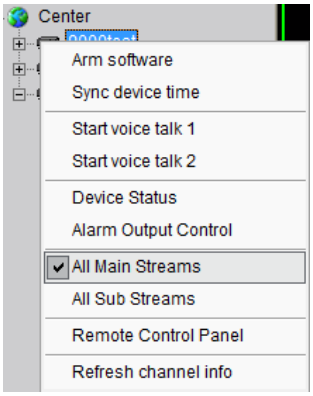


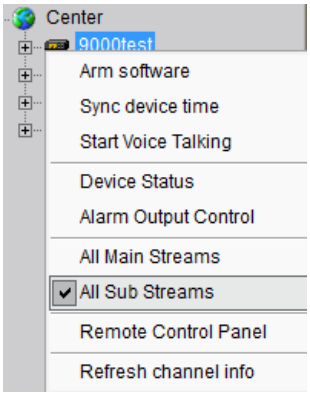
Main/Sub Stream:

Main stream is for recording, sub stream is for network transmission when bandwidth is low. The stream will take effect after re-preview the device or channels.

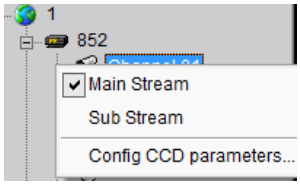
Software use the main stream by default, if needed, user can switch to sub stream to preview.

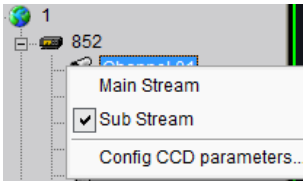
Right click device name and select “All Main Streams” or “All Sub Streams” to change the device





Right click channel name and select “Main Streams” or “Sub Streams” to change the channel stream type.

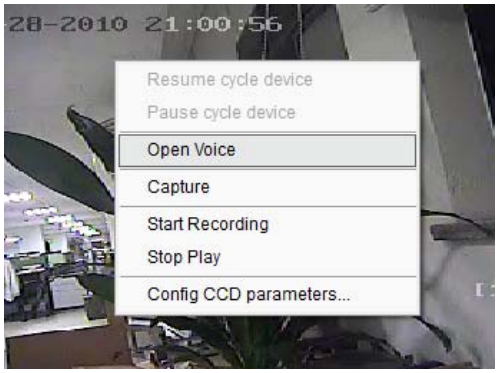




Note: the sub stream preview needs the device to support, or else the sub stream preview will be failed.

Voice Control

Right click the selected window, select “Open Voice” to enable audio preview, right click again and select “Close Voice” to disable audio preview.



Note: The software only can open voice of one window at the same time. If the voice of the next window is opened then the voice of the previous will be closed automatically.

Digital Zoom

Software support digital zoom function



Select a window, click , hold on the left button of the mouse, drag the mouse to the right and down direction.



Release the mouse, it will display the zoom area.

Hold on the left button and drag to the left, it will return to the full of the video sense.

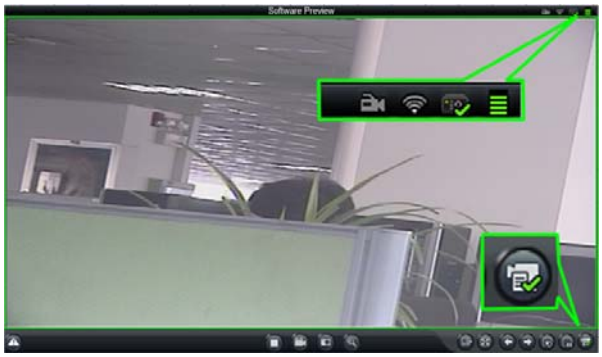


Channel State

In preview mode, click the  button to enable the display of the current channel state. And then the icon will change to , which can be selected to hide the channel state.

The icons shown on the title bar are described as below:

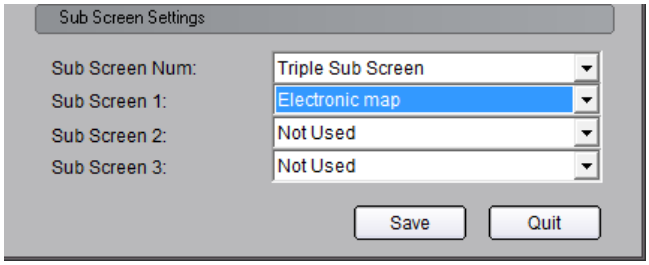
	No local recording/local recording
	Normal signal/signal loss
	Normal hardware/abnormal hardware
	Current bitrate level (1~5)



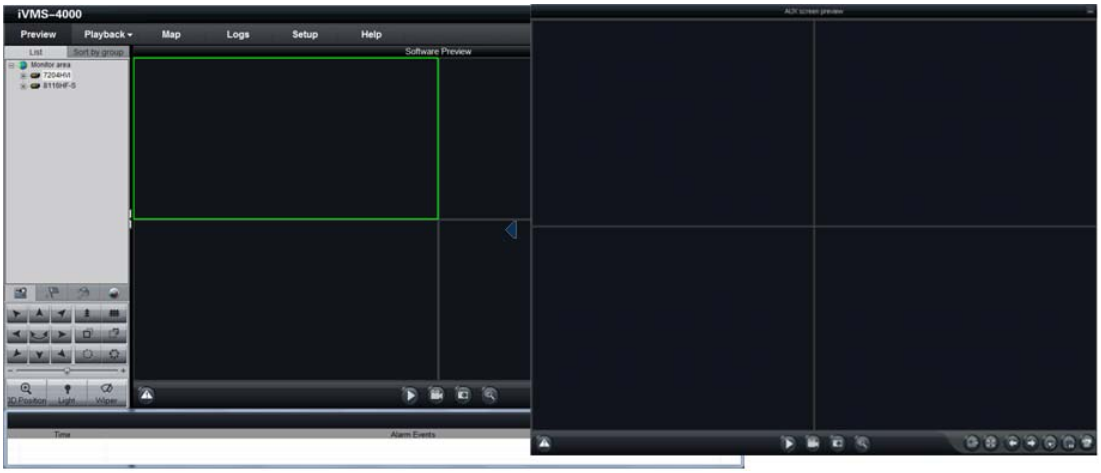
5.4 Sub-screen Preview

Up to three sub screens can be used for simultaneous display through the client software if multiple monitors have been connected, and each sub screen can be set for the use of “electronic map”, “remote playback” and “secondary screen preview”.

Click Setup → Local Settings → Email/Sub Screen Settings to enter the Sub Screen Settings interface, which allows user to select the sub screen number and the display information of each sub screen.



E.g., when user selects the "Single Sub Screen" option and used as the "Secondary screen preview', then the following display mode will be shown in preview:



Note: when the main screen is in the 64-division display mode, the sub screen can't be opened. And when the sub screen is opened, then both of the main screen and aux screen can support up to 32 window divisions.

5.5 Recording & Capture

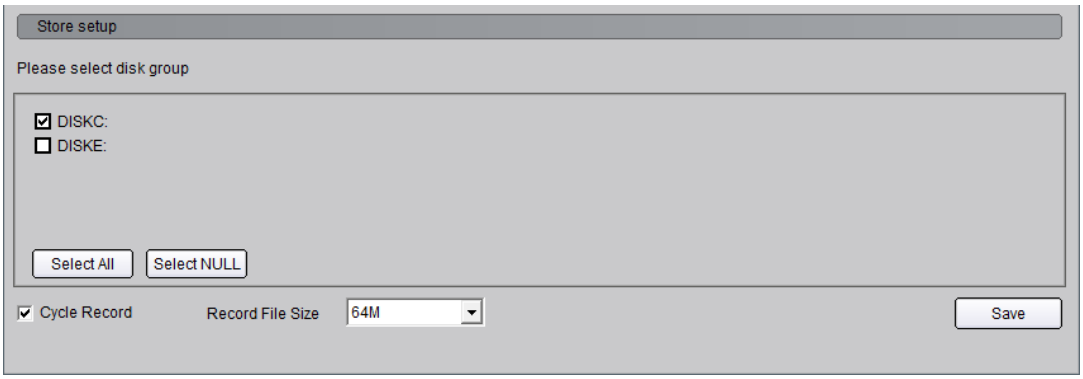
Recording and capture is only available in the live view mode.

Note: If the channel is in the recording mode, click "Stop" button to stop recording, and the preview, cycle play are stopped as well.

5.5.1 Recording

Record Disk Configuration

Click Setup → Recording Feature → Local Recording Settings to enter the Local Recording Settings interface:

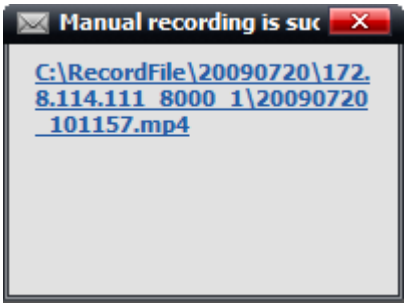


Select the saving hard disk of recorded files in “Store setup”.

Instant Recording

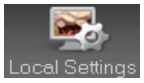
When previewing, click the button to start recording, and the icon changes to , and the channel icon changes to . Click the button to stop recording.

After recording, the hint window with index of recorded files will pop up; click the hint to open the target folder.



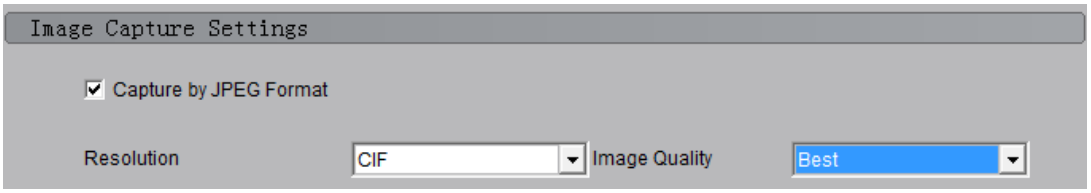
5.5.2 Capture

Click 

→ 

to enter the Local Settings interface.

Image format configuration



Format	Selection	Instruction
JPEG	☑	Resolution and image quality can be changed. If capture the IP camera with higher resolution, please uncheck it.
BMP	☐	Resolution and image quality can’t be changed, capture depending on current channel parameter

Path configuration

The default saving path is *C:\Program Data\Client\Picture*. User may click the button Browse to change the saving path.



Capture

In preview mode, click the button to start capture.

After picture captured, the hint window with capture index will pop up; click the hint to open the target folder.

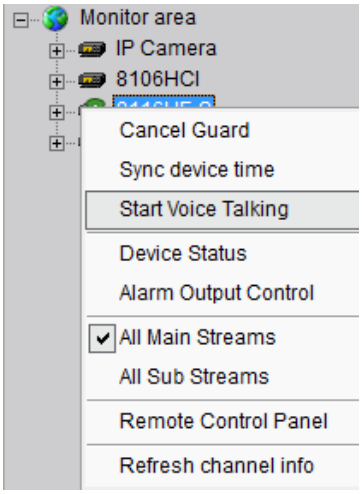


5.6 Others

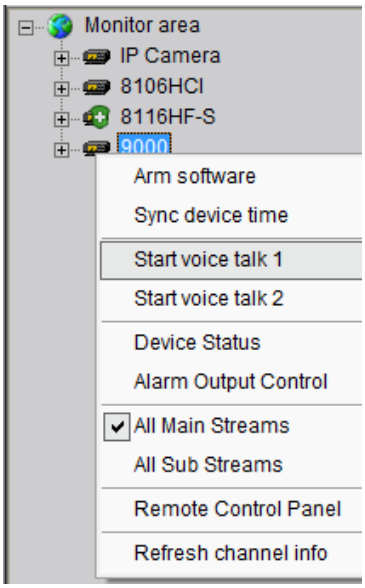
5.6.1 Voice Talk & Broadcast

In preview interface, right click the device name and the sub menu will pop up.

Click “Start Voice Talking” to talk with the selected device.



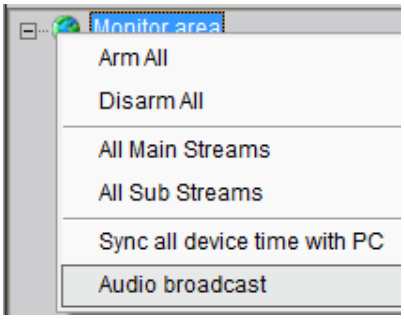
If the device is DS-9000 DVR, then there will be two voice talk channels for choice.



Note: Only 1 channel of voice talk is supported by the client software at the same time.

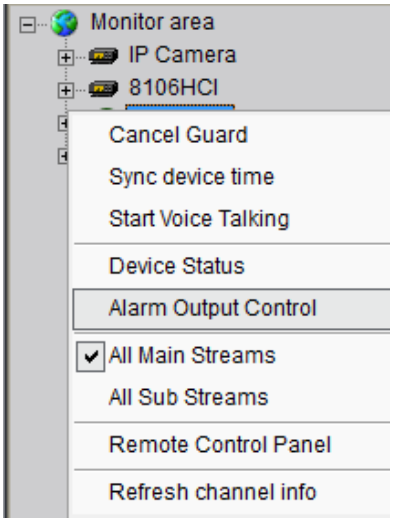
5.6.2 Audio Broadcast

Right click area name and select “Audio Broadcast” to talk to the area.

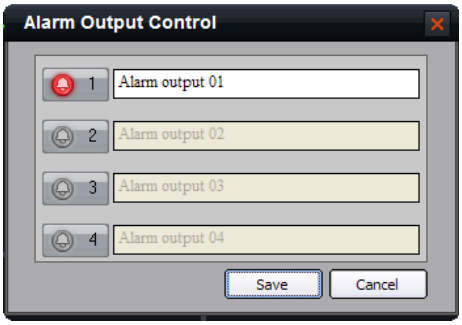


5.6.3 Alarm Output Control

Right click the device name and the sub menu will pop up. Select “Alarm Output Control” to turn on or off the alarm output, and define alarm output name.

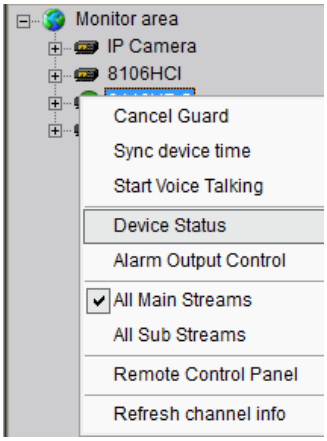


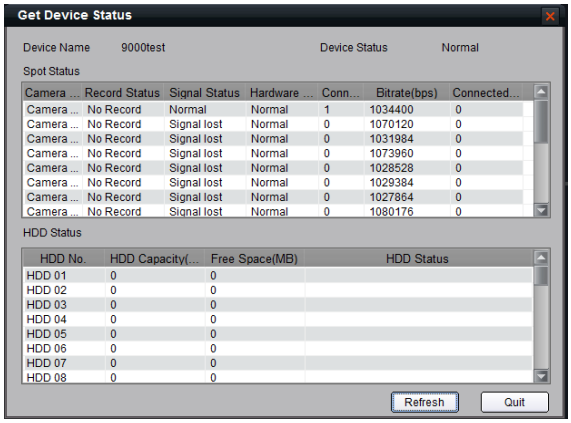
Click  and it will become  key, which then allows user to enable the alarm output and activate the name modified function. Re-click  key to turn off the alarm output.



5.6.4 Device Status

Right click the device name and the sub menu will pop up. Click “Device Status” to get device working information, including channel and hard disk status.





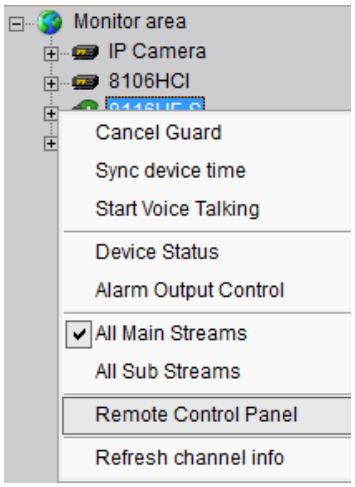
Note: Some options will turn gray and become unavailable if the device doesn't support the functions.

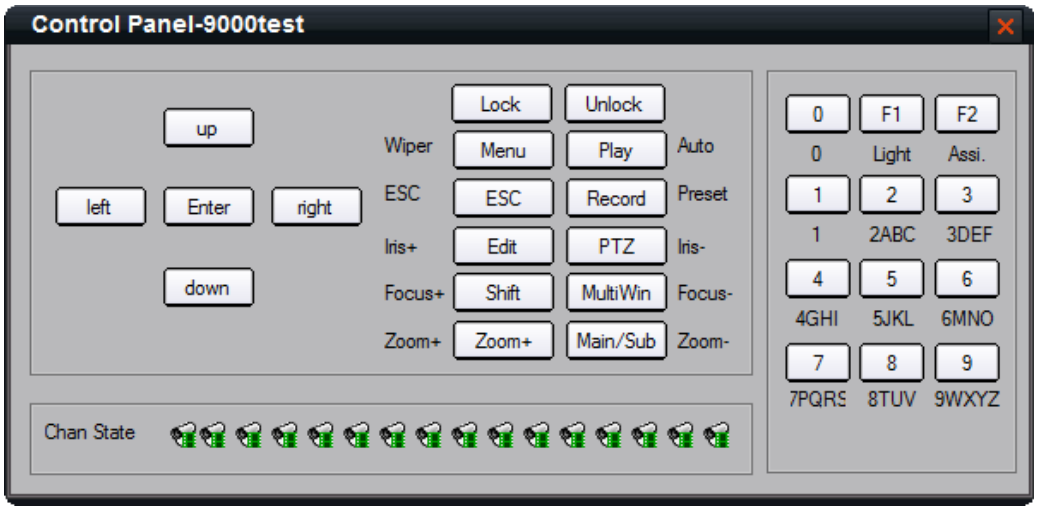
5.6.5 Remote Control Panel

Right click the device name and the sub menu will pop up.

Select "Remote Control Panel" and the control panel will pop up shown as figure below.

You can click the buttons on the panel and control device like using front panel.





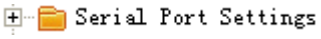
Chapter 6 PTZ Control

6.1 RS-485 Parameters Configuration

Before PTZ operations, please make sure that RS-485 parameters has been correctly configured by iVMS software.

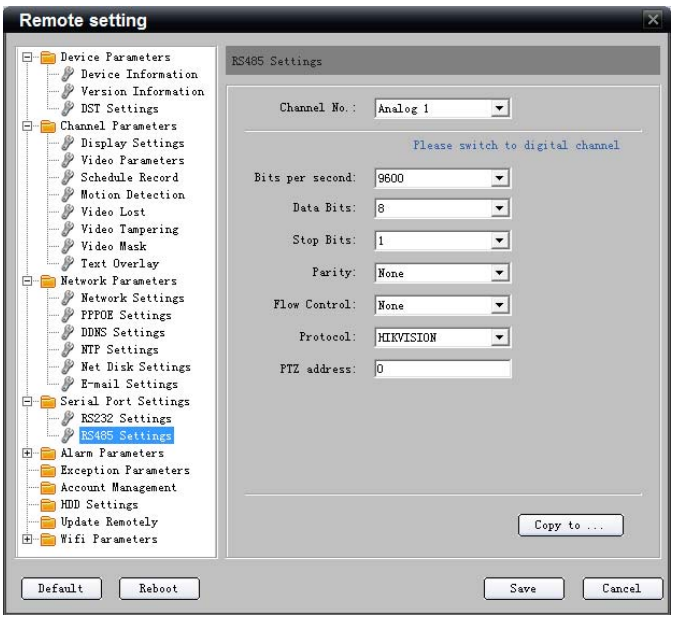
Click “Setup” and enter the corresponding interface.

Right click the device name and select “Remote Configuration” from the sub menu.

Click  to unfold the options, shown as figure on the right.

Set right parameters of the each channel.

Note: RS-485 configuration must be the same with PTZ configuration.



6.2 PTZ Control

Return to preview interface and user can control PTZ.

There are 8 keys to control PTZ directions, and the slide bar is used to change PTZ speed, which is adjustable from level 1 to 7, with the default speed of 4.

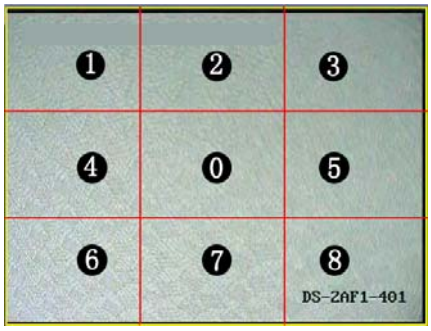
Click  key to start auto scan.

Click the function keys on the right to adjust focus, iris and zoom.



Other PTZ Control Mode – Screen PTZ Control: user can control PTZ by dragging and click in the play window.

Drag Control: There are 3×3 nine areas, when the mouse moves to area 1-8, the mouse icon will become as: ❶ ; ❷ ; ❸ ; ❹ ; ❺ ; ❻ ; ❼ ; ❽ , and continued to move the mouse along the direction shown by arrows, PTZ will move to the same directions.



Note: This function is only available for software decode.

6.3 Partial Zoom

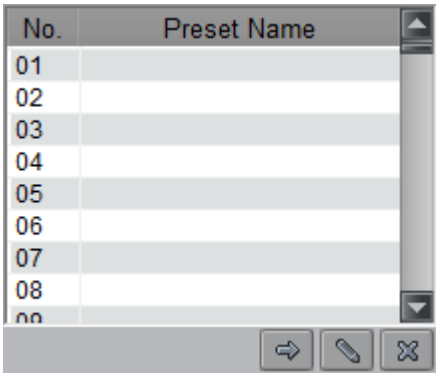
Click “Partial Zoom” to zoom in or out, the mouse icon will become as , press the left key of the mouse and drag an area you want to zoom.

Drag from up left to down right to zoom in; drag from down right to up left to zoom out.

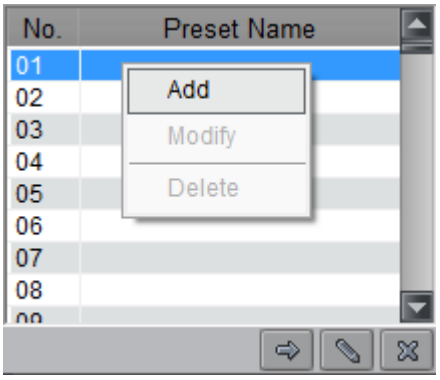
Note: This function is only available as private protocol is selected for PTZ.

6.4 Preset

Select one channel and click the key on the PTZ control panel and enter preset edit window.



Select one play window, and right click the preset list or click to add, modify and delete preset.



Move the PTZ to the position you want, and click “Add” to input preset name, then click OK to finish.



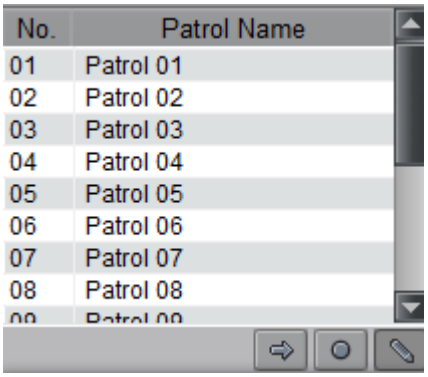
Then double click preset in list or click  to call it.

Right click preset to modify or delete this preset, click  to delete preset as well.

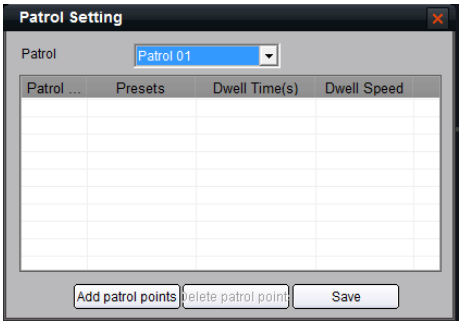
6.5 Patrol

After adding two or more presets for one channel, you can set a patrol with presets for PTZ.

Step1: select one channel and click  key to show patrol list.

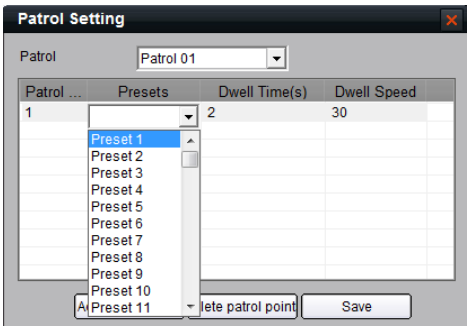


Step2: Click  or right click patrol name then select the preset you would like to enter patrol configure menu.

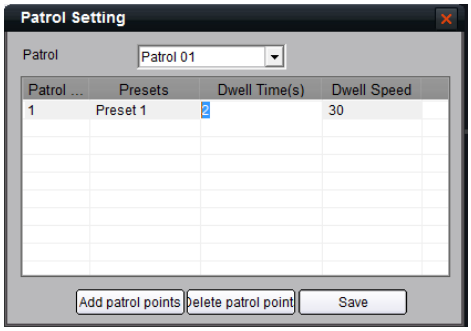


Step3: Click 

add the preset to the patrol, you can also click preset area to select presets from the list.

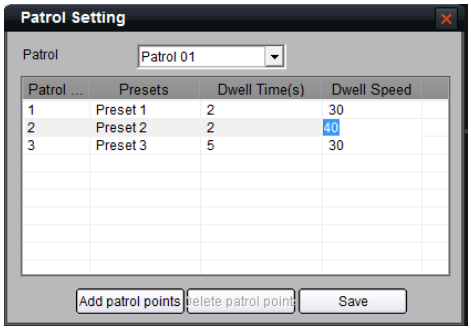


Step4: Set the time and speed for the preset.



Note: The dwell time can be set between 1 and 128s; and the dwell speed is between 1 and 40.

Step5: Repeat the 2nd and 3rd step to add the presets to the patrol. Then click Save key to save the settings.



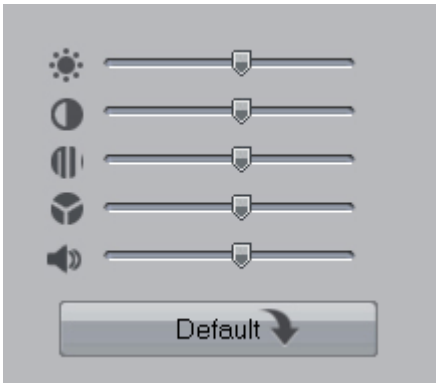
After configuration, you can choose the patrol from the list 

, and call/stop them by clicking  and  keys.

6.6 Video Parameters Configuration

Click the  key to show the video parameters configuration menu.

Move  to adjust the video parameters. (Range: 1-10, default value: 6).



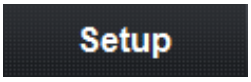
Icon	Description	Icon	Description
	Brightness		Contrast
	Saturation		Hue
	Volume		Restore

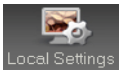
6.7 Keyboard and Joystick Control

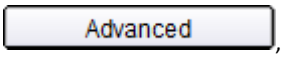
The iVMS client supports keyboard (DS-1002KI, DS-1003KI) and joystick control PTZ and preview window layout.

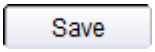
Connect Ta, Tb of DS-1002KI, DS-1003KI keyboard to Rx+, Rx- of RS-485⇨RS-232 converter, then connect converter to COM interface of computer.

Keyboard connect configuration

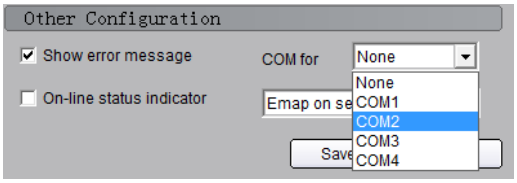
Click 

→ 

→ 

, and select keyboard serial ports (None by default) in “Other Configuration”. Click 

to save parameters



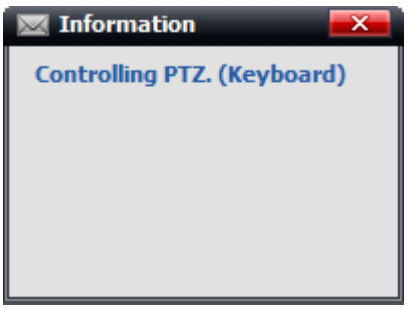
Keyboard control

Press “EXIT” button on the keyboard to switch control state. A message “Controlling window layout” will pop up afterwards, and then you can move the green active box by using keyboard joystick.



Press “EXIT” button on the keyboard to switch control state. A message “Controlling PTZ” will pop up afterwards, and then you control PTZ by using joystick.

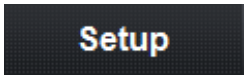
Press “PTZ control” button on the keyboard to control iris, focus, zoom, wiper, light, and preset calling by using joystick or function buttons.

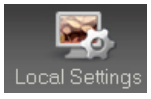


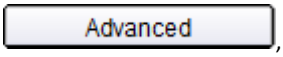
Under the TV Wall Interface, press the buttons of the DS-1003KI keyboard in turn to select the output window division, ”Monitor”->”Number of the decoder sub window ” ->”OK”

Press the buttons of the 1003KI keyboard in turn to select the decode channel, “Channel”->”Channel ID”->”OK”

Note: the “Shift” button is the key to switch PTZ control and window shift when it connect to DVR. When using DS-1002KI, DS-1003KI keyboard connected to PC, the software define “ESC” button of the keyboard to be switch function.

Click 

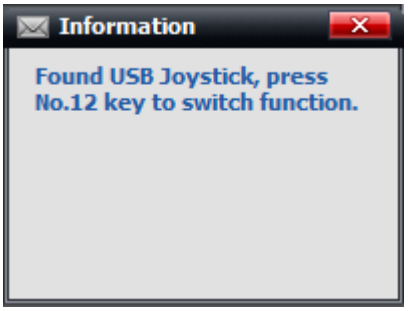
→ 

→ 

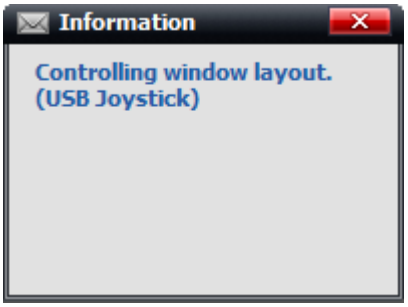
, and select keyboard serial ports as NULL by default to release the serial ports.

6.8 PTZ Control by Joystick

Connect with a USB joystick, and a message will pop up shown as figure on the right, and define “switch button” afterwards.

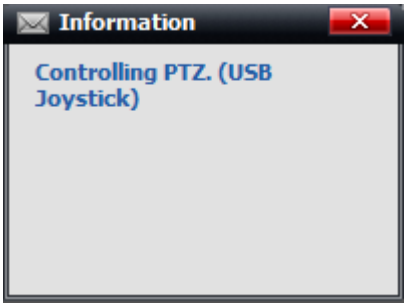


Press “switch button”, and a message “Controlling window layout” will pop up afterwards, and then you can move the green active box by using USB joystick.



Press “switch button”, and a message “Controlling PTZ” will pop up afterwards, and then you can control PTZ by using USB joystick.

Press “PTZ control” button on the keyboard to control zoom and preset calling by using USB joystick.



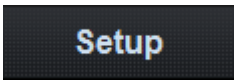
Note: “Switch button” is different according to different models of USB joystick. By default, iVMS software usually defines the last logic button as “Switch button” (e.g. if there are 12 buttons in total, then define the 12nd button as “Switch button”).

Different models of USB joystick have different buttons, which decide the number of callable presets.

Chapter 7 Recording

7.1 Local Recording

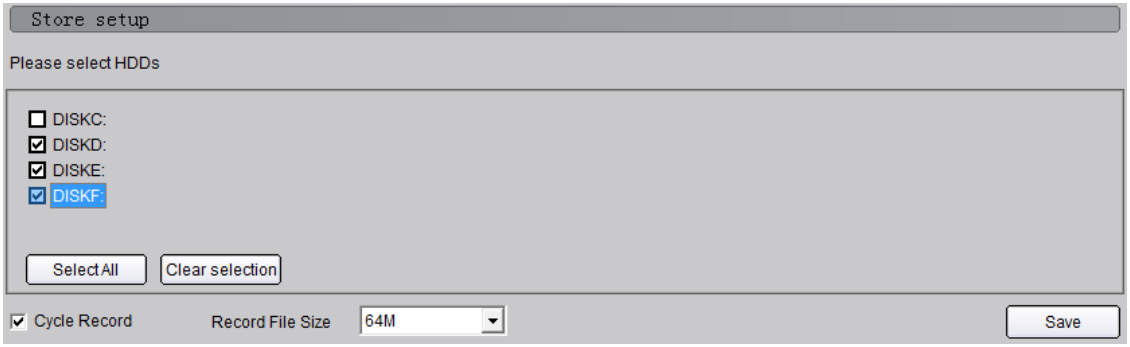
7.1.1 Store Setup

Click 

and then 

to enter record setting interface

It can set the record file store partition and the max record file size in the store setup.



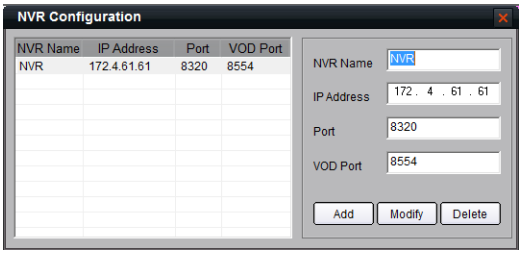
HDDs selection	☑ Choose saving hard disk of the recorded files
Cycle record	☑ Each disk space is less than 2G, the earliest recorded files will be overwritten to continue recoding.
	☐ When the disk is full, the "Disk Clean" will pop up, after cleaning disk and if the disk space is larger than 2G, the schedule recording will restart.
Record file size	Each record file max size, 32M/64M/128M/256M can be selected

7.2 NVR Storage Server Recording Configuration

User can remote configure the recording schedule and playback the recorded files of the NVR storage server through client software. Click "NVR Recording Setup" to enter the NVR configuration interface.

7.2.1 Add NVR Server

Click NVR Configuration key to enter NVR configuration interface.



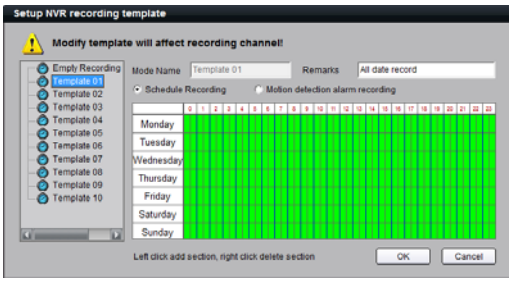
Input the NVR server name, IP address and port, and click Add key to finish.

Note: Up to 16 NVR servers can be added to the iVMS software. The default server port and VOD port are 8320 and 8554.

7.2.2 NVR Recording Mode Configuration

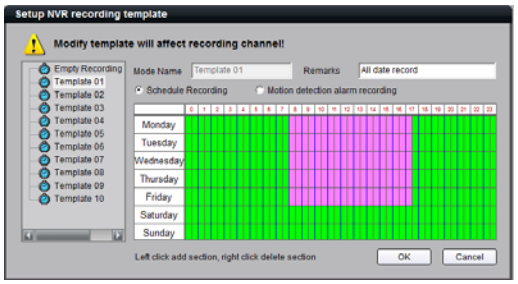
After having finished the adding of NVR server, user can define the recording template for the schedule recording settings.

Step1: Select the added NVR servers from Please select N list, and click Modify Template to enter modifying recording schedule.



Step2: Select the record template, and set the recording period for the mode.

Click the mouse to add recording schedule; right click to cancel recording schedule.



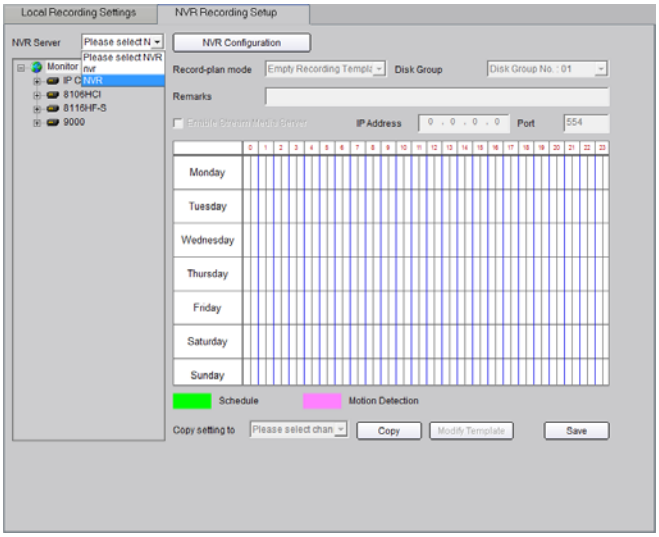
Recording type includes “Schedule Recording” & “Motion Detection Recording”. Then use left click to add section, right click to delete section in the date area.

Note: The unit of recording mode is half an hour, green means schedule recording, pink means motion detection recording, and white means no recording.

7.2.3 NVR Recording Schedule Configuration

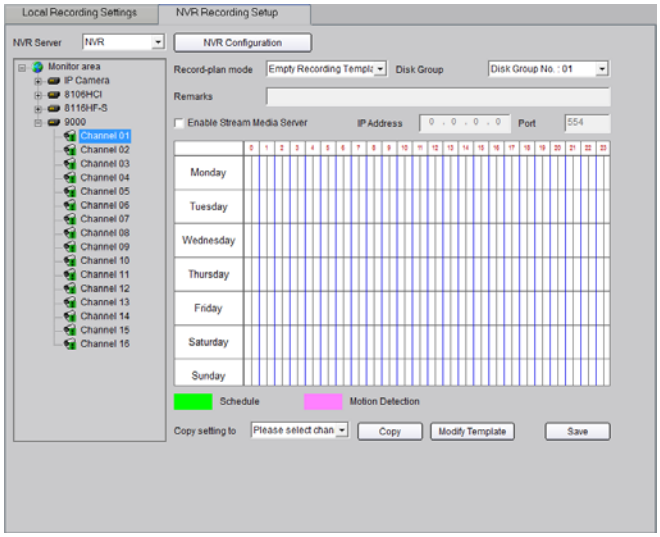
User should configure the schedule recording through client software so as to enable the NVR to realize the integral storage of record files over network. Operate the following steps:

Step1: Select the NVR server from the NVR drop-down menu



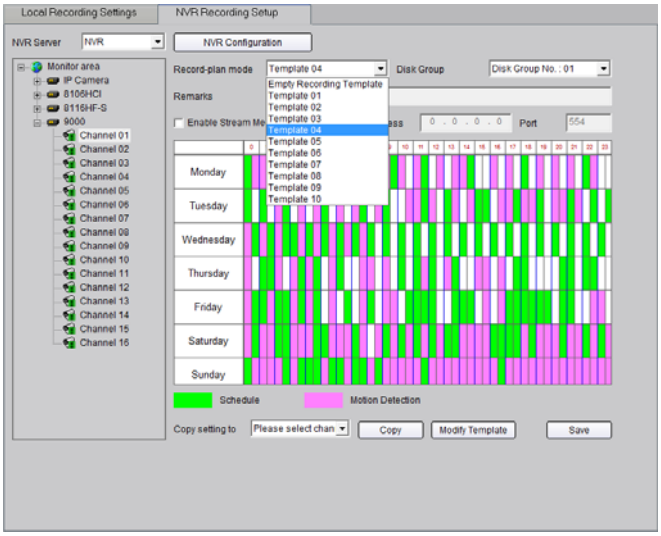
Step2: Select the device or channel for recording

If the device selected, it will be effective to all the channels of the device.

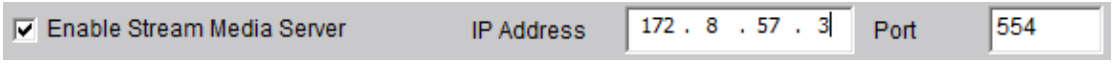


Step3: Configure the recording schedule.

Select the mode from “Recording plan mode” and select the disk group to save the recorded files.



If required, user can also enable the stream media server and input its IP address and port in the text boxes.



Click 

to finish the NVR server schedule recording configuration.

Chapter 8 Playback

Three playback modes are provided by the client software and can be selected by clicking Playback key.

Remote VOD: Searching the recorded files from hard disk of DVR or storage server.

Local Playback: Searching the recorded files from hard disk of PC.

Event Playback: Searching the recorded files of motion detection or alarm in signal triggered from hard disk of DVR.

Dynamic Analysis: Analyzing the existed record files in DVR and then find out the periods during which there is video variation, e.g., moving persons or objects, etc.

8.1 Remote VOD

Click Playback from the menu bar and then select “Remote VOD” from the drop-down menu to enter the remote VOD interface.

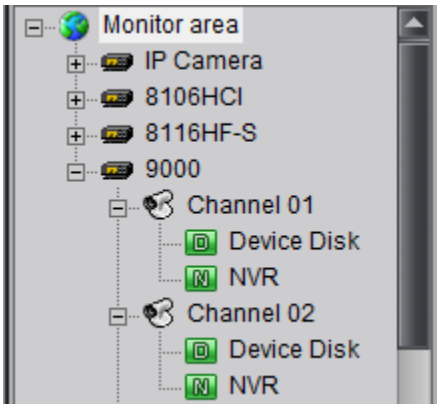


Area	Description		Area	Description
❶	System Area		❷	Device Area
❸	Playback Windows		❹	Query Area
❺	Play Control Buttons		❻	Time Bar Area

8.1.1 Remote VOD Query

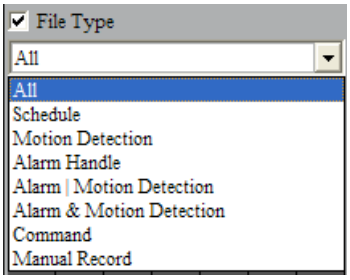
Step1: Select the window for playback and the channel from the site tree.

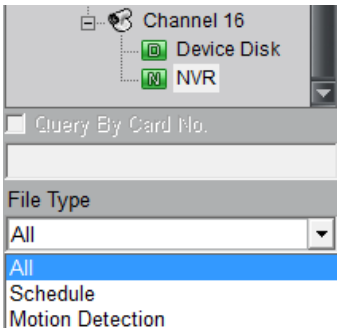
For the channel which has been configured with NVR recording, there will be available with two options under the channel name in the site tree: Device Disk and NVR.

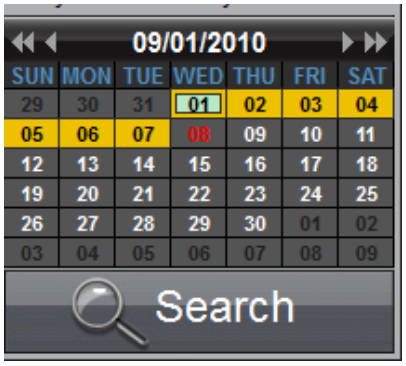


Step2: Select recorded file type and query time. Use can hold and drag the left key of mouse to select multiple dates for search.

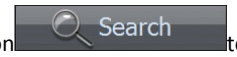
If user has selected NVR from the channel, then only the Schedule and Motion Detection record file types are available.



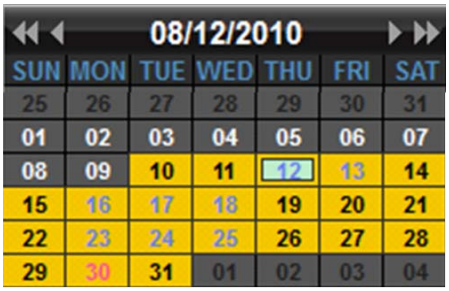




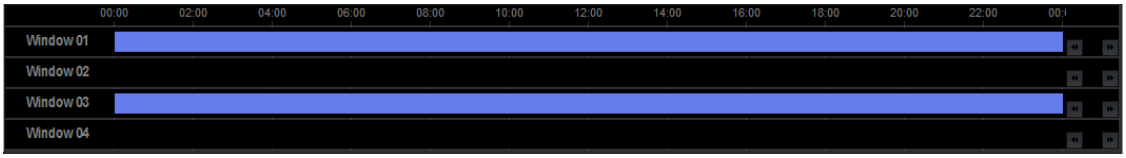
Step3: Add information of card number. For ATM DVR, user can enable “Query by Card No.” and input the overlaid card number to search. Other device can skip this step.

Step4: Click the button 

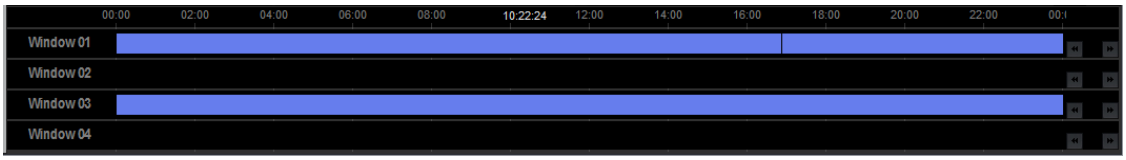
to search the matched recorded files. If there are record files existed in the current day being searched, the front will be shown in pink, or else, it is shown in red; while for other dates being searched, the font will be shown in blue when there are record files existed, or in black when there is no file found.



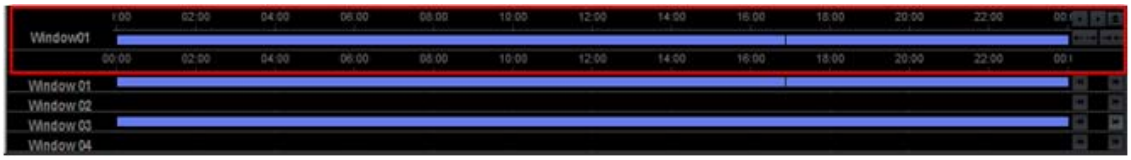
The time bar area is used to show the time segment for the record files. User can click the  or  to select the previous or next day of the record files.



Step5: Click the button to start playback. You can select the time by dragging mouse to the desired position on the time bar.



User may click the window from the list to enlarge the current time bar. The and buttons on the right side are used to scale up/down the display of the time bar, and the and buttons are used to move the time bar, and the is to hide the enlarged time bar for the selected window.



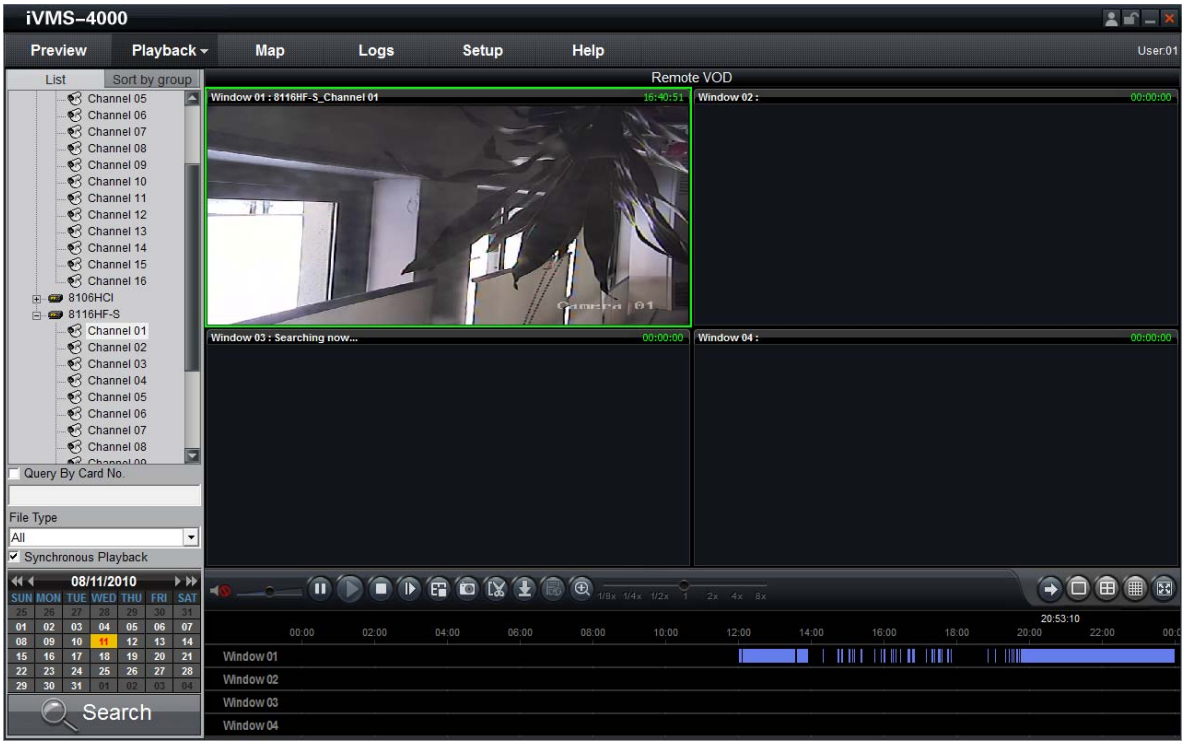
Select one channel then drag into playback window. If there is recorded file existed during the selected time, it will play back from the very beginning of this day.

Note:

1. Up to 4 channels can be selected for synchronous playback each time.
2. When user has clicked the checkbox of Synchronous Playback to , the 4 windows will play back synchronously. If the 4 windows have different playback time, then the playback time of other windows will be synchronized with the time of the current selected window.

8.1.2 Playback Control

The playback window will be shown as below:



Descriptions on playback buttons:

Button	Description		Button	Description
	Open/Close sound			Video clip
	Voice control			Download
	Pause			Remote backup
	Play			Digital zoom
	Stop			Play Speed adjust bar
	Play by single frame			Page down(for time bar area)
	Stop all			1/4/16 division
	Capture			Full Screen

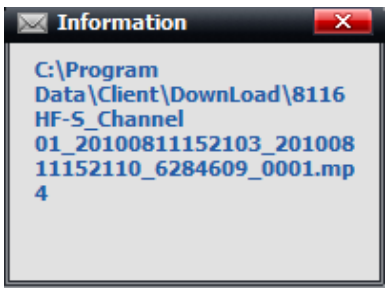
Note: The remote backup function is special for DS-9500 series NVR.

In the single frame playback mode, every time you click button, the recorded files will play forward by one frame.

Only one window audio can be opened at the same time when in VOD mode. If the audio of next window opens, then the audio of previous window will be closed.

Record File Clip

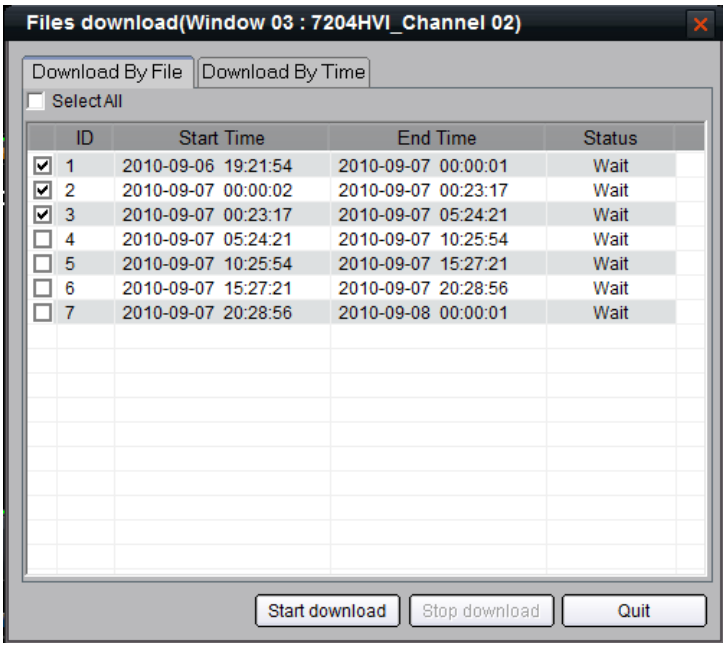
During playback, click once to set the start time of video clip, and click it again to set the end time of video clip. After saving the video clip, a message will be raised, click it to open video segment.



Record File Download

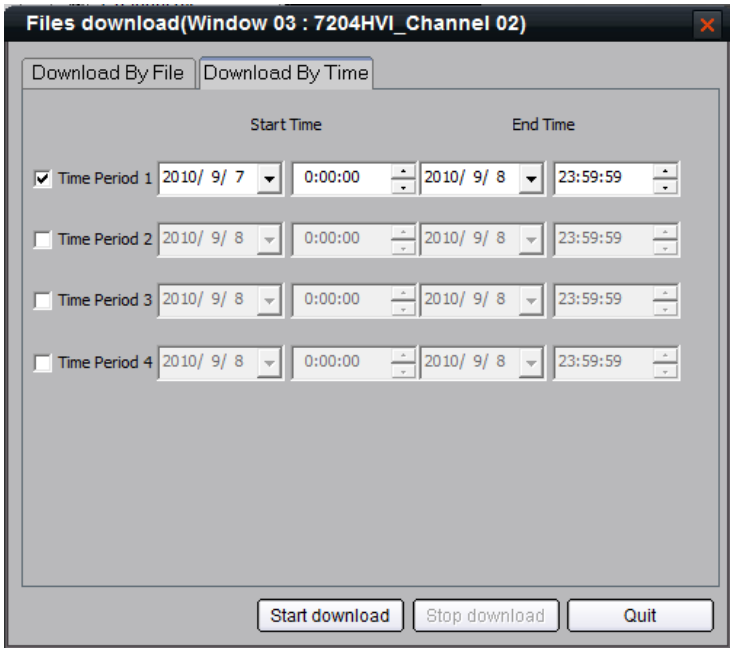
Download by File

After searching out the recorded file, you can click  to download file to local PC. You may click on message to open the download saving directory.



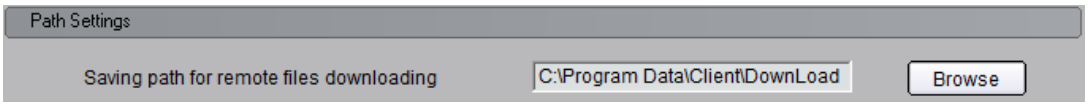
Download by Time

In the Files Download interface, select Time Download option to enter the Time Download interface. Set the period with the start time and end time and then click the “Start download” button to download the record files and save them to your local computer.



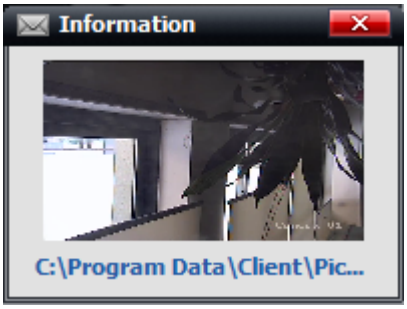
After completion of download, the system will pop up the information box indicating the record files saving path.

The default saving path for the record clips and download is *C: \Program Data \Client\DownLoad*. User may go to "Configure" → "Local Settings" → "Path Settings" to change the saving path.



Playback Picture Capture

User can also get the remote capture by clicking  button, and you will see the pop up message. Click the picture to open the capture and click the path to open the capture folder.



Digital Zoom

Click  can realize the digital zoom function.

In the digital zoom mode, the playback window will display the video as PIP, main window display the zoom in part.

Move the tape on the right, click  and  to change the zoom ratio. Drag the red frame, the zoom area will move with it. By rolling the mouse, user can change the zoom ratio as the same.



Click the  button again to close the digital zoom.

Save Remote File

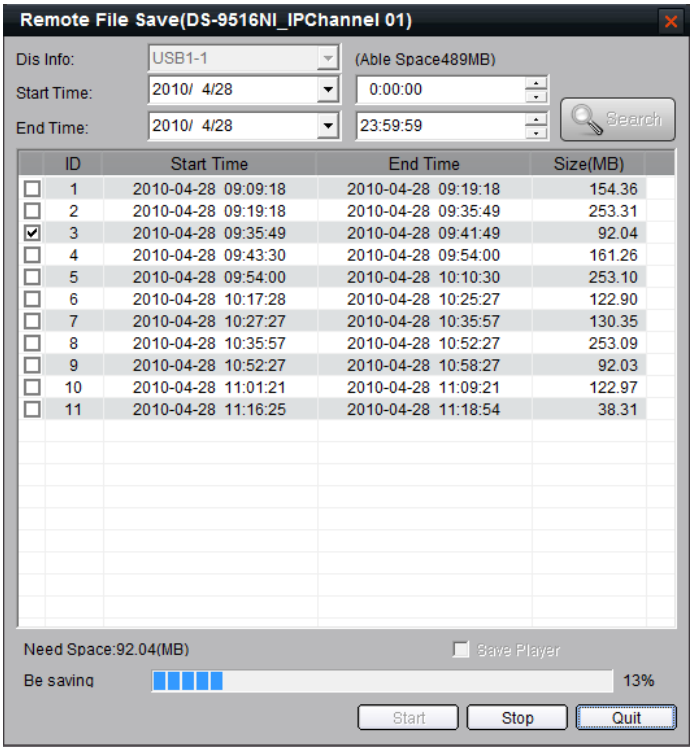
DS-9500 series NVR supports the remote file save, user can save the record file to the external storage device connecting to the NVR.

Connect the compatible external storage device to the appointed port of the NVR, click the  button, to open the remote file save window.

Select the storage device, set the time period and search, then the corresponding record file will be in the list.

Select the file you want, click “Start” button to backup the record file. You can see the saving rate at the bottom.

You can also select the “Save Player” option, then the player will be copy to your external device at the same time.



Note: Up to 20 files could be selected for saving.

8.2 Local Playback

Click  from the menu bar and then select “Local Playback” from the drop-down menu to enter the local playback interface.

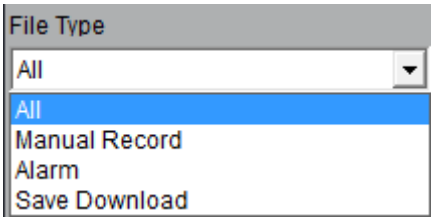


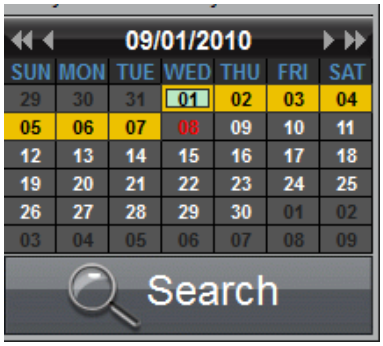
Area	Description		Area	Description
❶	System area		❷	Device area
❸	Playback windows		❹	Query area
❺	Play control buttons		❻	Time bar area

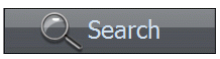
8.2.1 Local Playback Query

Step1: Select the playback channel and window.

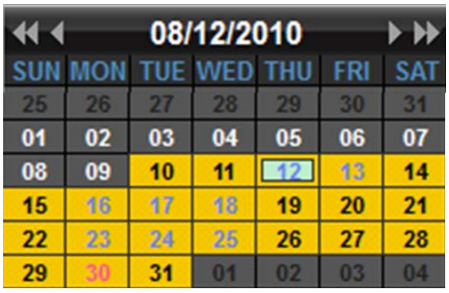
Step2: Select recorded files type and query time. Use can hold and drag the left key of mouse to select multiple dates for search.



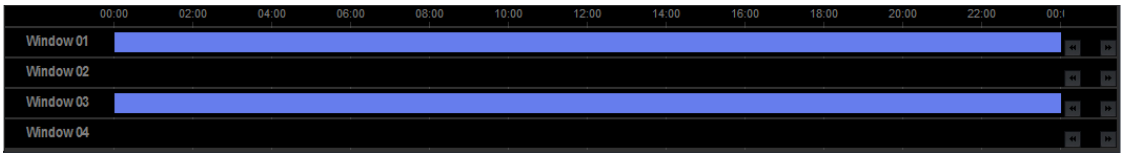


Step3: Click 

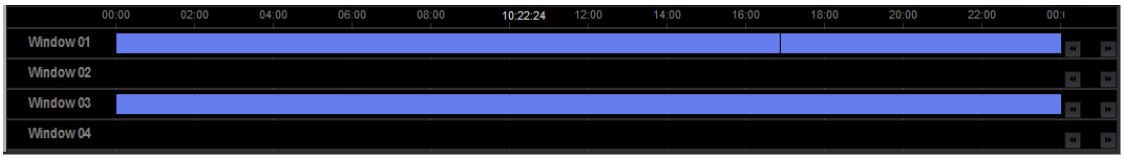
key to search the matched recorded files. If there are record files existed in the current day being searched, the front will be shown in pink, or else, it is shown in red; while for other dates being searched, the font will be shown in blue when there are record files existed, or in black when there is no file found.



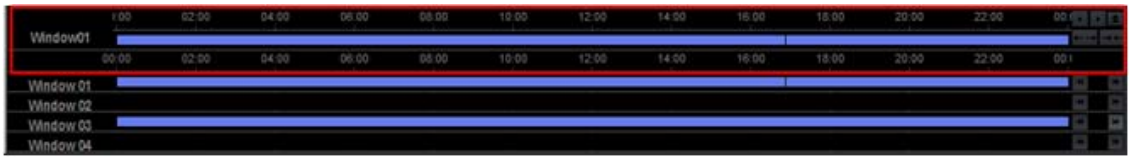
The time bar area is used to show the time segment for the record files. User can click the or to select the previous or next day of the record files.



Step4: Click the button to start playback. You can select the time by dragging mouse to the desired position on the time bar.



User may click the window from the list to enlarge the current time bar. The and buttons on the right side are used to scale up/down the display of the time bar, and the and buttons are used to move the time bar, and the is to hide the enlarged time bar for the selected window.

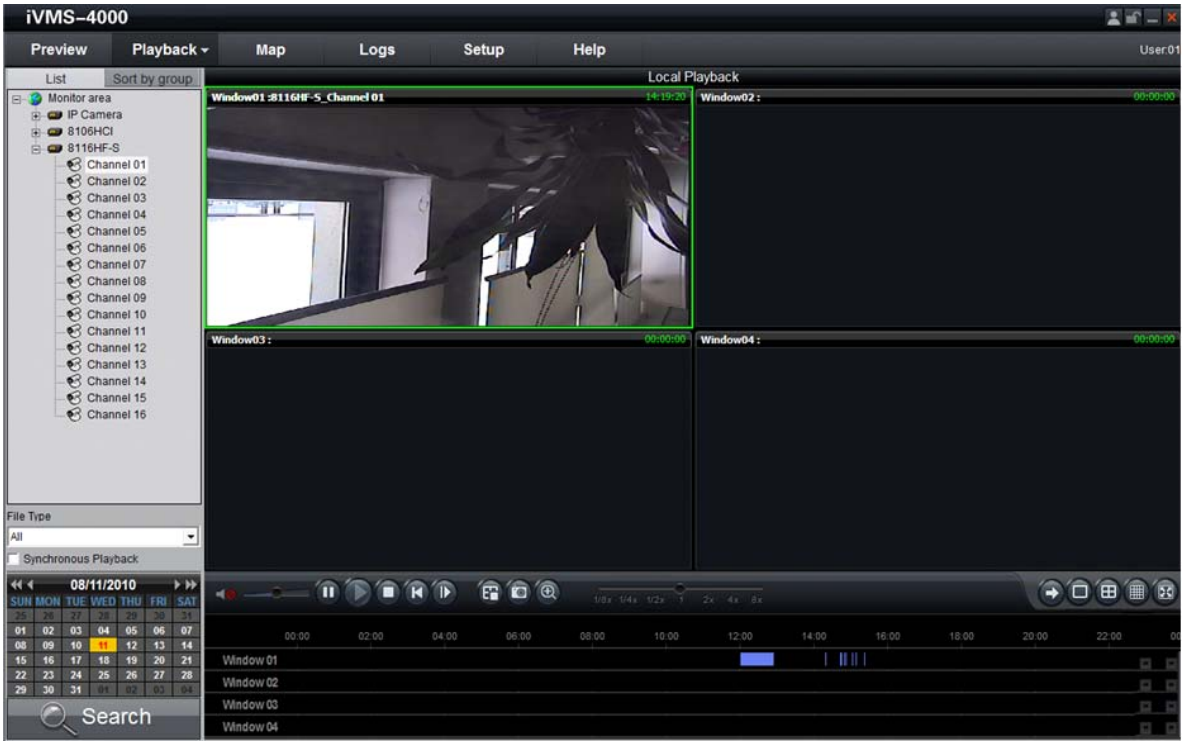


Select one channel and then drag it into playback window. If there is recorded file in this day, software will play back it from the very beginning of this day.

Note: When user has clicked the checkbox of Synchronous Playback to , the 4 windows will play back synchronously. If the 4 windows have different playback time, then the playback time of other windows will be synchronized with the time of the current selected window.

8.2.2 Playback Control

When playback has succeeded, the play window will be shown as below:



Descriptions of playback buttons:

Button	Description		Button	Description
	Open/Close sound			Capture
	Voice control			Digital zoom
	Pause			Play Speed adjust bar
	Play			Page down(for time bar area)
	Stop			Single-division
	Play from the beginning of file			4-division
	Play by single frame			16-division
	Stop all			Full Screen

Note:

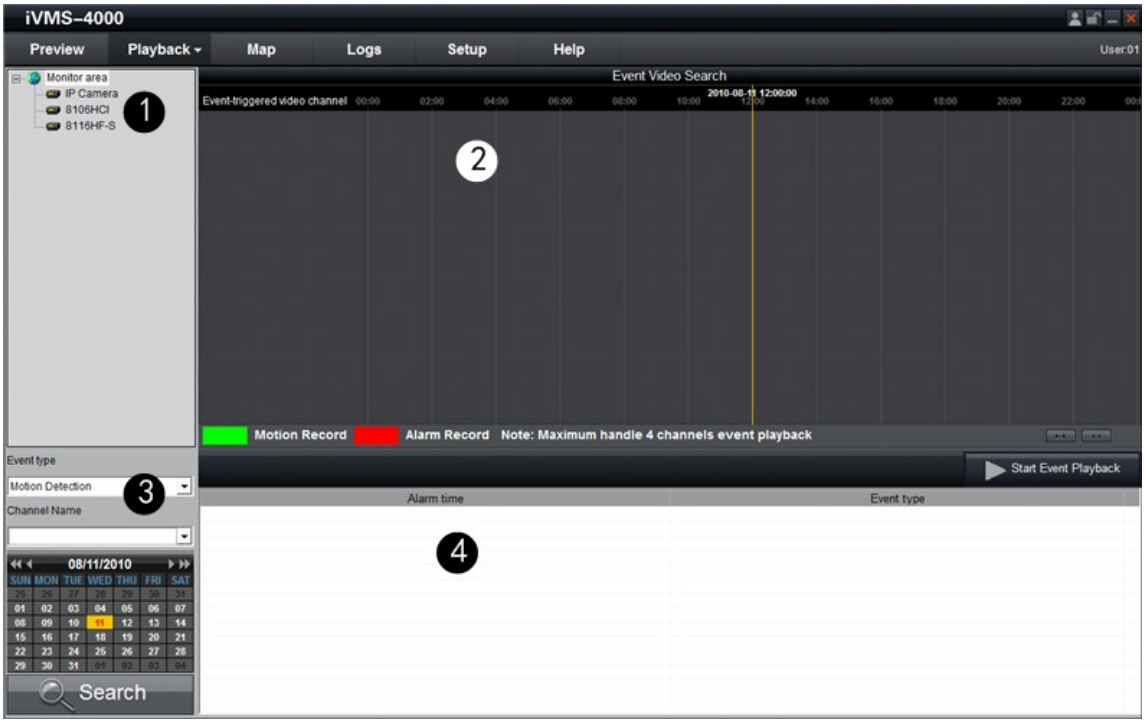
In the single frame playback mode, every time you click button, the recorded files will play forward by one frame.

Only one window audio can be opened at the same time when in VOD mode. If the audio of next window opens then the audio of previous window will be closed.

8.3 Event Playback

Click Playback from the menu bar and then select “Event Playback” from the drop-down menu to enter the event playback interface.

With event playback function, user can search record of motion detection or sensor alarm. If the matched record existed, it will be displayed on the interface, and user can select and play back the record files.



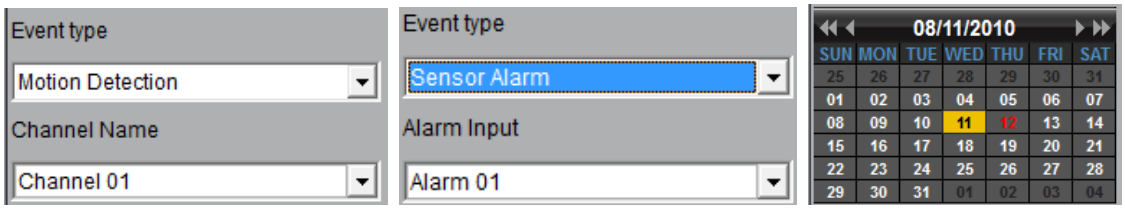
Area	Description		Area	Description
❶	Device list		❷	Time line
❸	Search options		❹	Log info

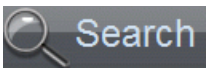
Note: Event playback function is supported by DS-9000/9100 series DVR, with firmware version 1.1 or higher.

8.3.1 Record Search

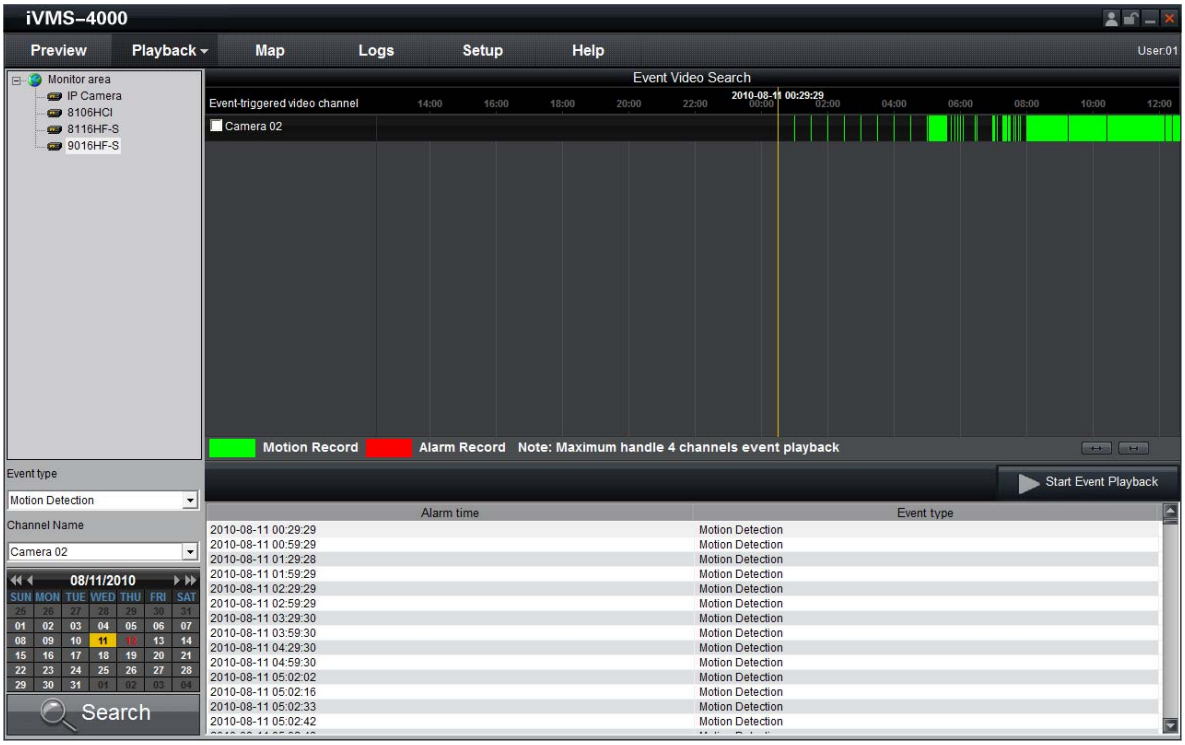
Step1: select a device.

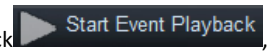
Step2: select the event type to motion detection or sensor alarm, and then select the channel/alarm input number, as well as the event date.



Step3: click 

to search record file, if there are record file match the options, they will be display on the time line.



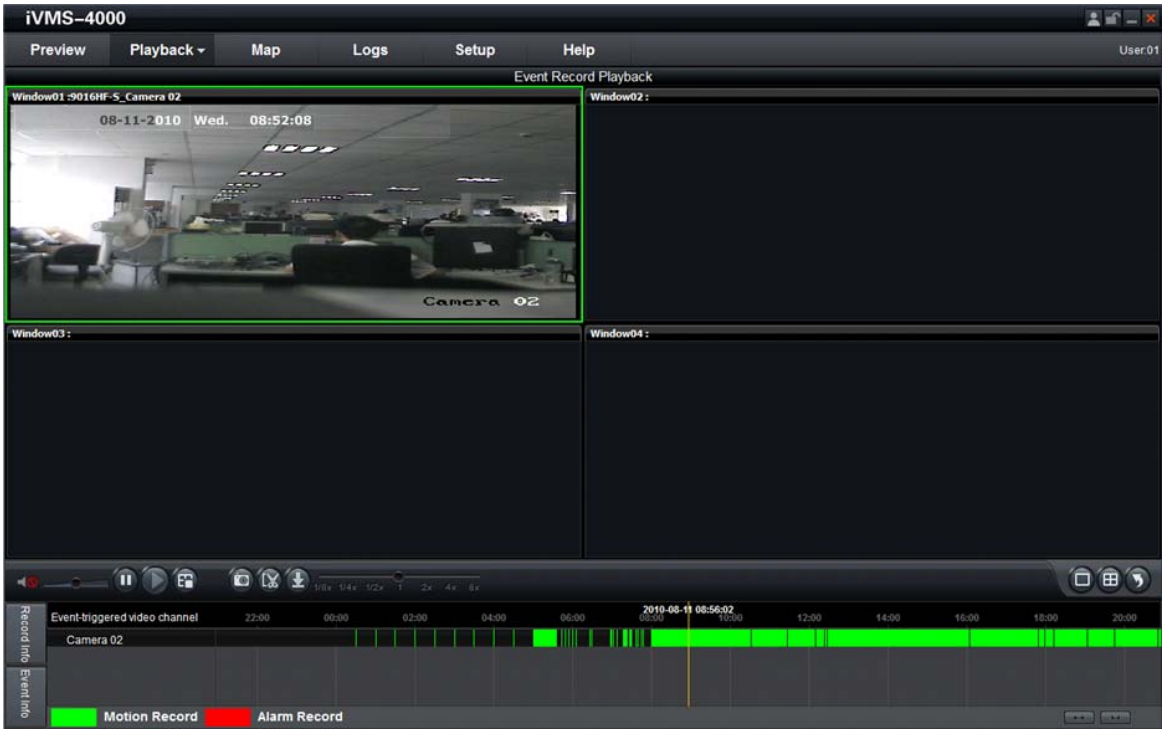
Step4: select the channels needed to be playback, move the mouse and select a time point, then click 

, selected channels will playback record synchronously.

Note: Up to 4 channels can be handled for synchronous event playback.

8.3.2 Playback Control

The event playback window will be shown as below:



Button	Description		Button	Description
	Open/close sound			Video clip
	Pause			Download record
	Play			Single-division
	Stop all			4-division
	Capture			Return to search
				Play Speed Adjust Bar

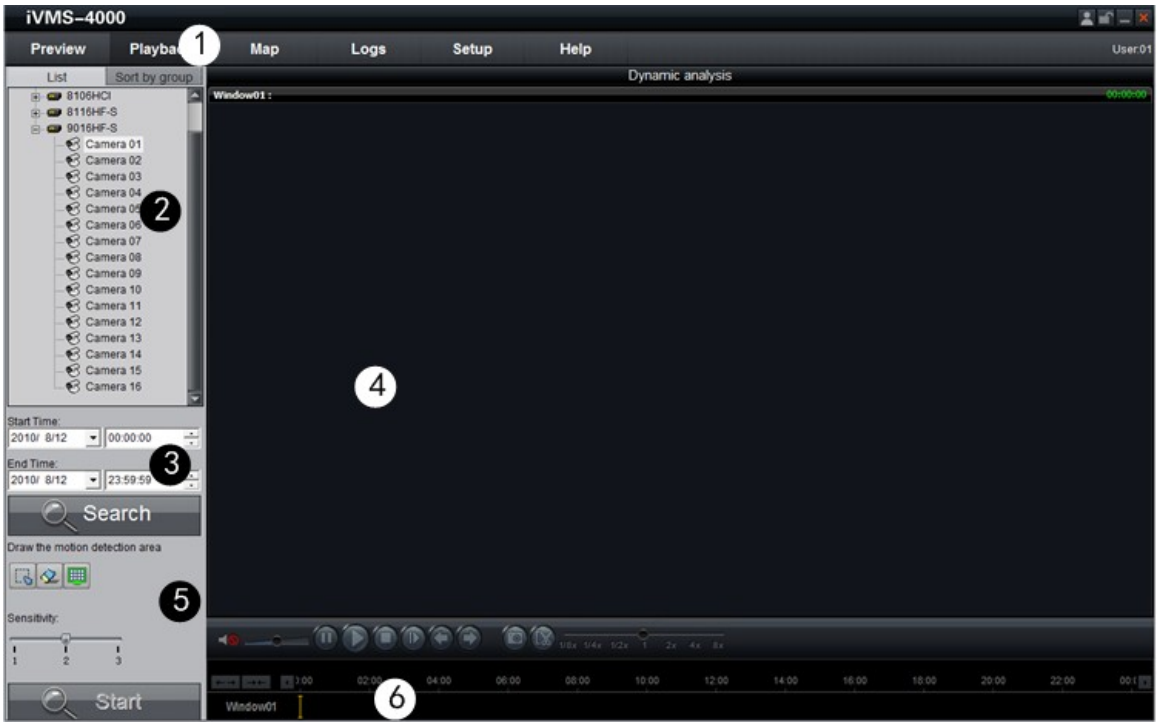
The software only can open voice of one window at the same time. If the voice of the next window is opened then the voice of the previous will be closed automatically.

8.4 Dynamic Analysis

Click Playback from the menu bar and then select “Dynamic analysis” from the drop-down menu to enter the dynamic analysis interface.

The dynamic analysis function analyze the existed record files in DVR and then find out the periods during which there is video variation, e.g., moving persons or objects, etc. User can set the start time, end time, analysis area in the video and the sensitivity.

Note: Only the DS-9000/9100 DVR supports this function, and the version should be V1.2 or higher.



Area	Description		Area	Description
❶	System Area		❷	Device Area
❸	Time period Area		❹	Playback Area
❺	Dynamic analyze Area		❻	Time line Area

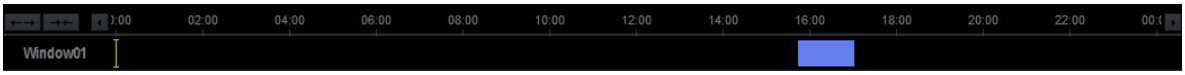
8.4.1 Record Search

Step1: select the channel you want to playback and analyze.

Step2: set the start time and the end time, the maximum length of period could be two days.

Step3: click 

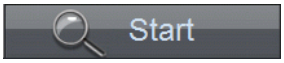
button to search the record file, if there is record file, it will display the record time axis and playback the record from the beginning.



User could choose time by dragging mouse to the time you want on the time axis.

Step4: click , press the mouse and drag a window in the dynamic analysis area. Click  to clear the area window. Click  to set the whole video screen to the analyze area.



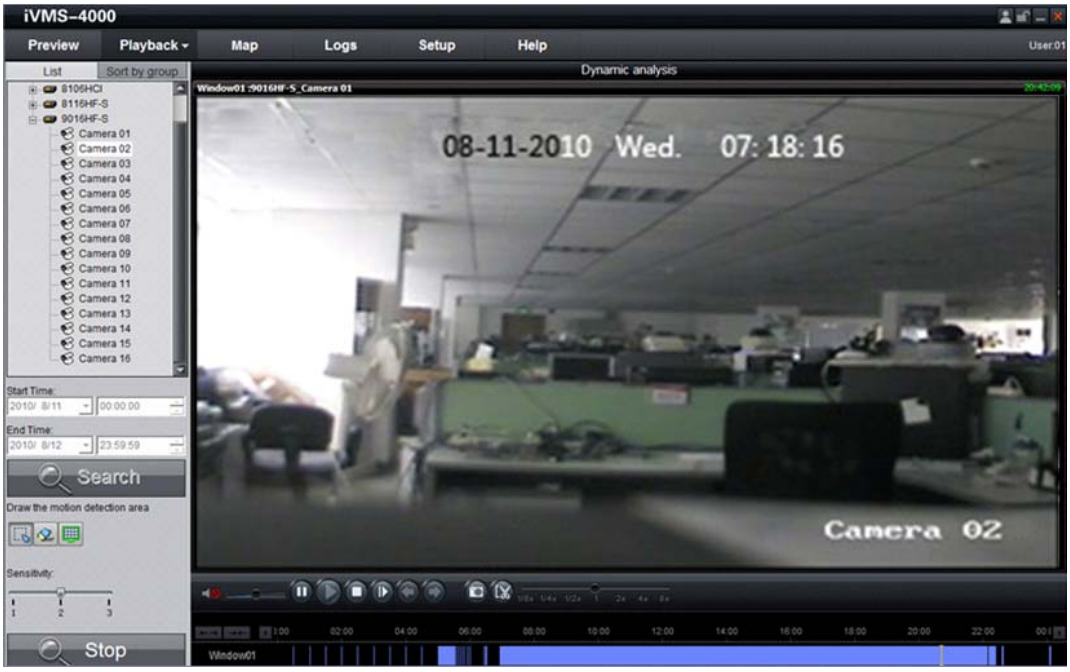
After having set the sensitivity, click 

to start drawing.

Note: only after click the draw button, user could draw the analysis area. User could draw multi areas, without size and number limitation. To the same area, the higher sensitivity the more dynamic information could be detected.



8.4.2 Playback Control



Button	Description		Button	Description
	Open/close sound			Go to next event
	Pause			Capture
	Play			Video Clip
	Stop			Time axis zoom in/out
	Play by single frame			Move the time axis
	Back to last event			Play Speed Adjust Bar

Note, under the single frame play model, it play one frame when you click  button one time.

Playback capture

User can also get the capture by clicking  button, and you will see the pop up message. Click the picture to open the capture and click the path to open the capture folder.

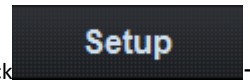
Previous/Next Event

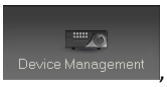
With the dynamic analyze function, if multi record clips are deleted, user can click  or  to select the previous or next clip.

Chapter 9 Remote Configuration

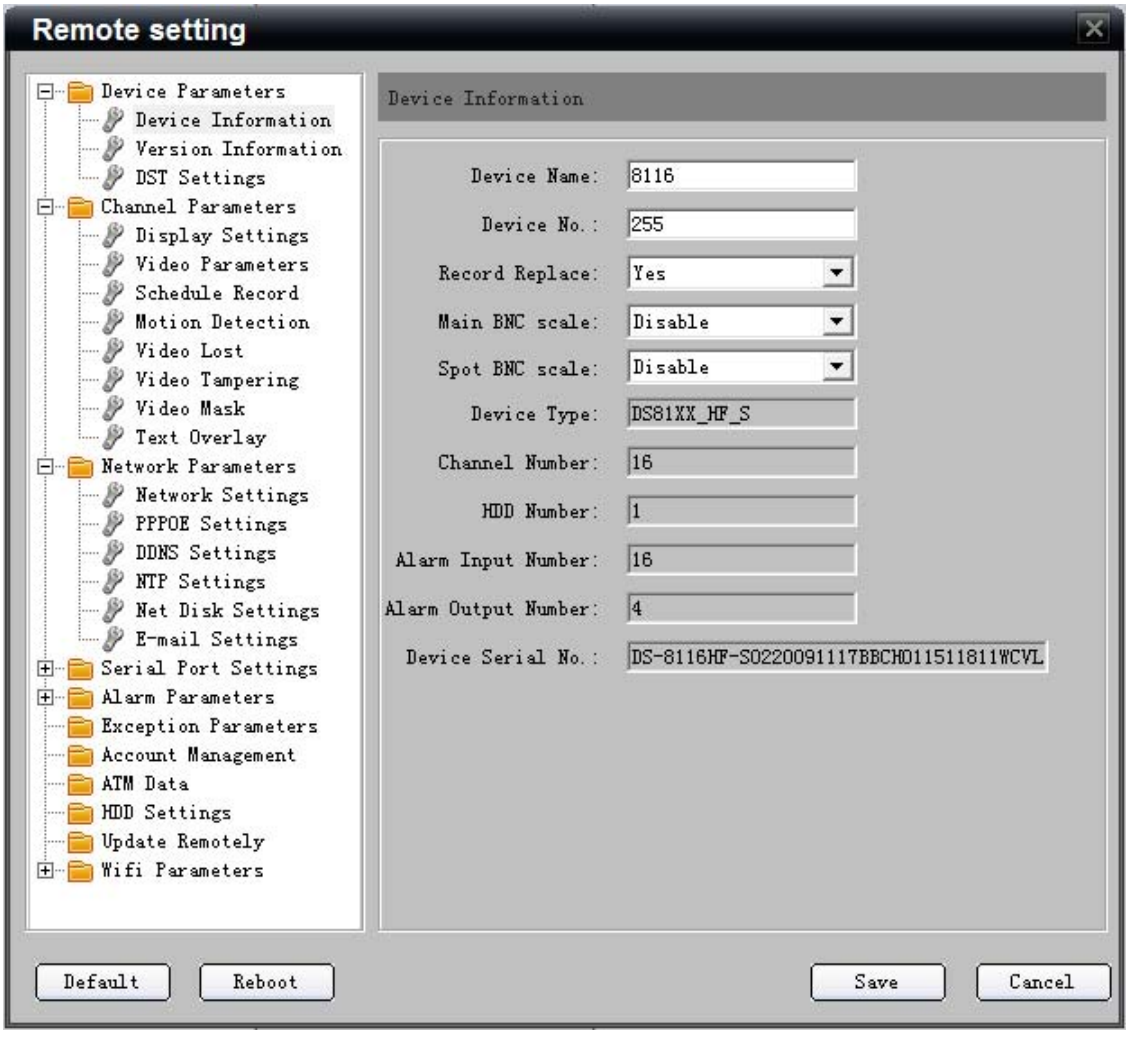
9.1 Remote Device Configuration

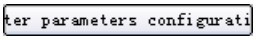
You can remotely configure the parameters of the device, including recording schedule, alarm schedule and etc.

Click 

→ 

, and then click the device and select the “Remote Settings” to enter the following interface:



If the device is DS-9000 series DVR, after clicking the “Remote Settings”, you need to click 

key in the pop-up menu to enter the configuration interface.

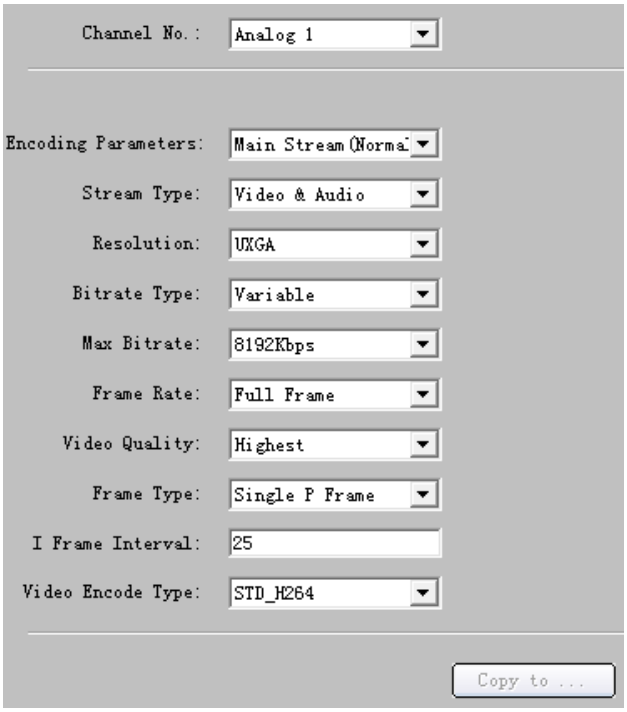
Note: Remote configuration of PC DVR via iVMS software is not available currently.

9.1.1 Remote Recording Configuration

9.1.1.1 Encoding Parameters Configuration

Select Channel Parameters → Video Parameters to enter encoding parameters configuration interface.

Note: If the device is DS-9000 series, click "Switch to IP Channel" and select IP channel to configure the parameters of IP camera.

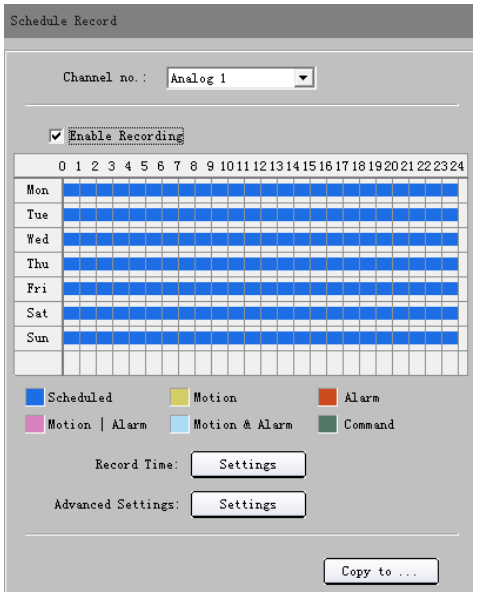


Parameters	Description
Encoding Parameters	Main/Sub stream and Event Parameters
Stream Type	Video & Audio or Video stream
Resolution	Recording Resolution
Video Quality	Highest, higher, high, average, lower, lowest
Bitrate Type	Variable & Constant
Max Bitrate	Maximum bit rate of the compressed stream
Frame Rate	Record frame rate, from 1/16 to full frame
Frame Type	BBP,BP & Single P frame
I frame interval	The interval between 2 I frames
Video Encode Type	User could select different encode type of standard H.264, MPEG4 or HIK.264. (need special version of IP camera support)

9.1.1.2 Schedule Recording

Select Channel Parameters → Schedule Recording to enter configuration interface.

Enable recording by clicking the tick.



Click “Settings” of the “Record Time” to enter recording schedule configuration interface.

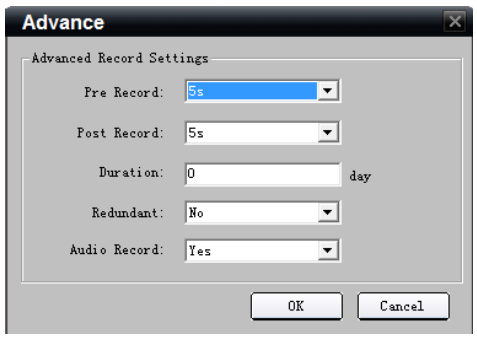
Select “Weekday” as some day of the week or the whole week for recording time.

Click Schedule Recording for the recording type. The “All Day Recording” or 8 “Segments” can be selected as well.



Note: The time of each segment can’t be overlapped.

Click “Settings” of the “Advanced settings” to enter advanced settings. User can set pre/post record time.



Note: “Recording Expired” “Redundant” and “Audio Record” are only available for DS-9000 series DVR.

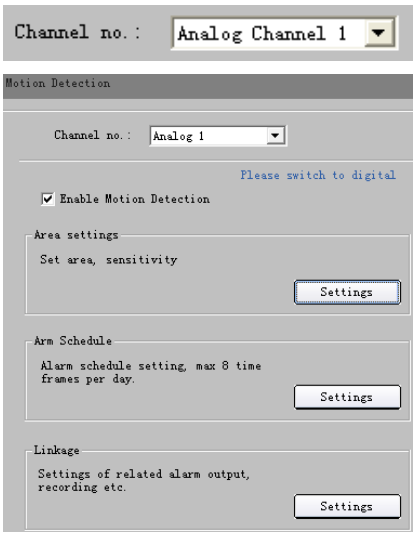
Parameters	Description
Duration	Storage life of recorded files in redundant disk, expired data will be deleted
Redundant	Redundant for this channel or not (When redundant disk is available)
Audio Record	Recorded files include audio or not

9.1.1.3 Motion Detection Recording

Click Motion Detection to enter motion detection recording interface.

Note: If the device is DS-9000 series, click “Switch to IP Channel” and select IP channel to configure the parameters of IP camera.

Step1: Select channel number for motion detection.

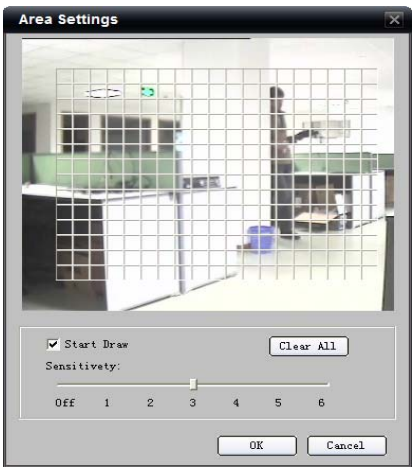


Step2: Enable motion detection to activate “Setting Area”, “Arm Schedule” and “Linkage” settings.

Step3: Set the motion detection area and sensitivity.

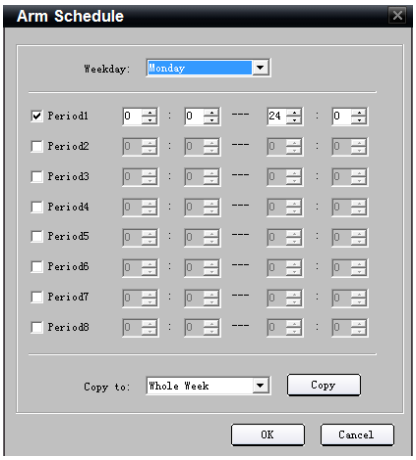
The sensitivity 1 and 6 are the lowest and the highest level.

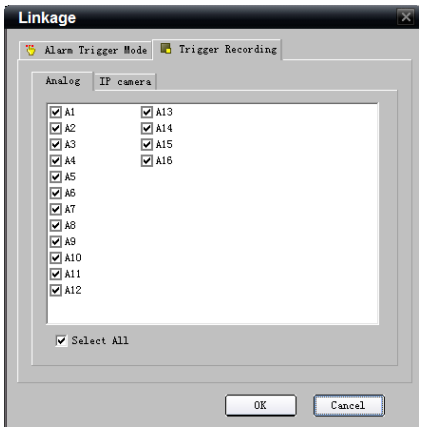
Enable “Start Draw”, and select the detection area by using mouse.



Step4: Set the detection time.

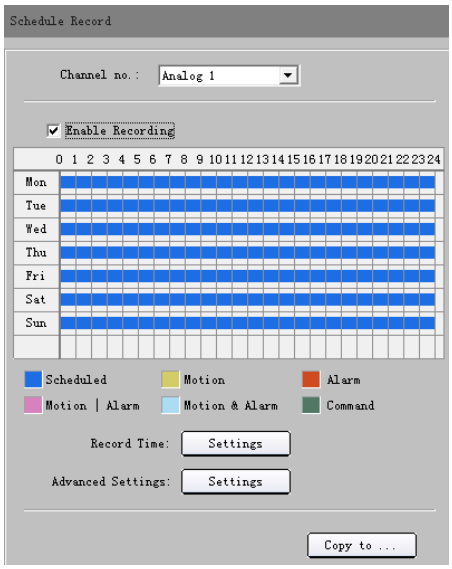
“Arm Schedule” can be one day or the whole week, and 8 segments for one day.





Step5: Set the “Trigger Recording” for linkage.

Click “Setting” in the linkage area and select “Trigger Recording” tab.

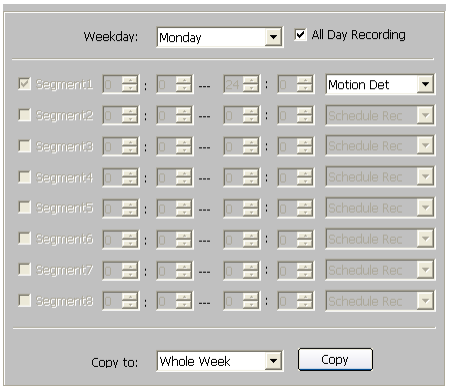


Step6: Select Channel Parameters → Schedule Recording, enable recording by clicking the tick.

Step7: Set the detection recording time.

Click “Settings” of “Record Time”.

Select “Weekday” as some day of the week or the whole week for recording time.



Click Schedule Recording for the recording type and change it to Motion Detection. The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment can’t be overlapped.

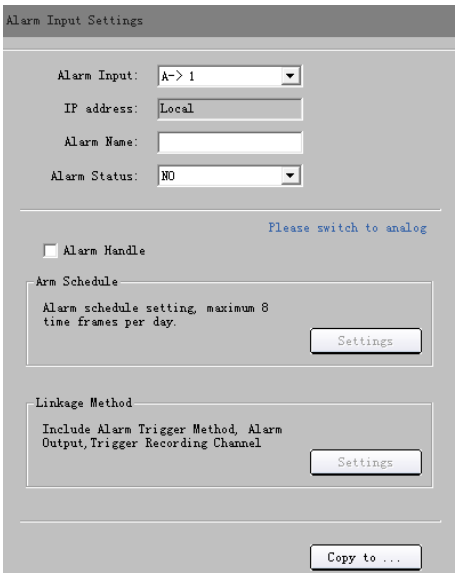
The valid time is the intersection of the motion detection time and motion detection recording time.

9.1.1.4 Alarm Recording

Select Alarm Parameters → Alarm Input Settings

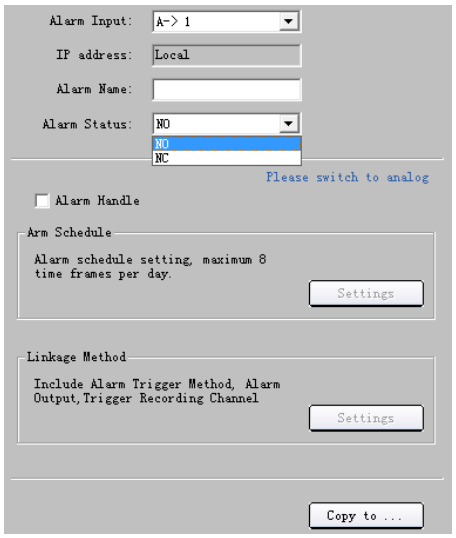
Step1: Select alarm input.

Note: If the device is DS-9000 series DVR, you can click “Switch to IP channel” to configure the alarm input of IP channel.

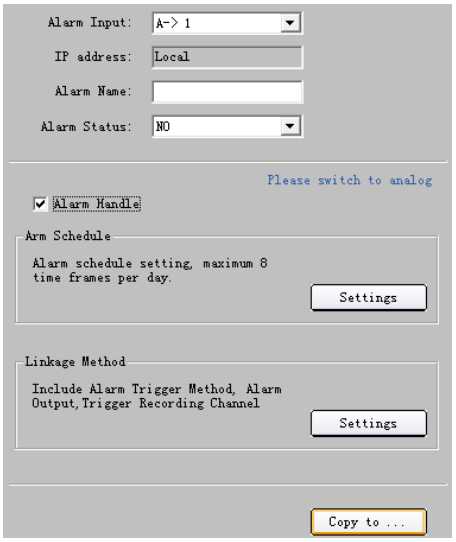


Step2: Select the type of alarm input, “NO” or “NC”.

Note: The settings will become effective after rebooting.



Step3: Enable “Alarm Handle” to activate “Arm Schedule” & “Linkage Method”.



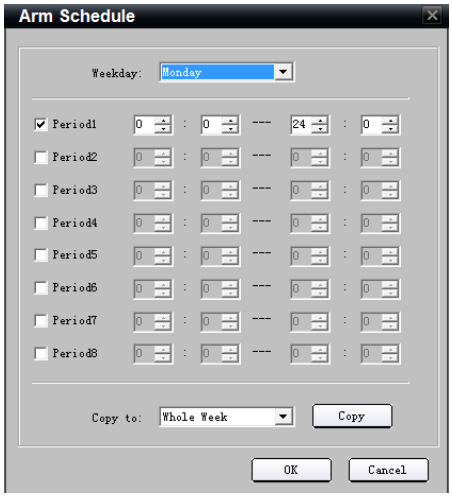
Step4: Set the arm schedule for alarm input.

Click “Settings” in “Arm Schedule” menu.

Select “Weekday” as some day of the week or the whole week for recording time.

The “All Day Record” or 8 “Segments” can be selected as well.

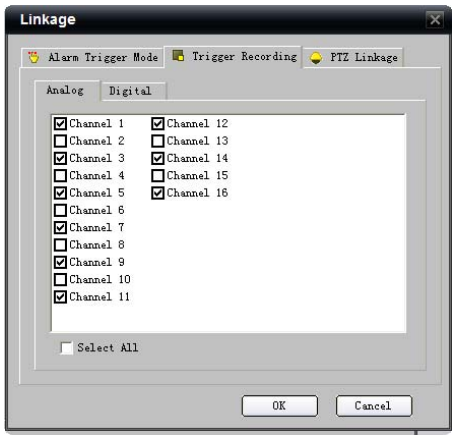
Note: The time of each segment can not be overlapped.



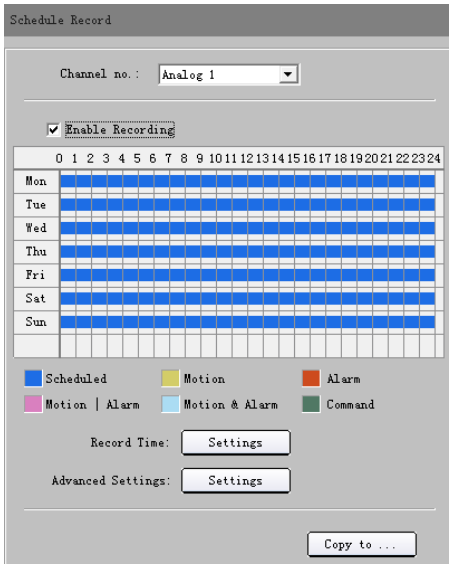
Step5: Set recording channel triggered by alarm.

Click “Settings” in “Linkage” menu and select “Trigger Recording” tab.

Enable the recording channels you want.



Step6: Enter schedule recording interface. Click Enable Recording to enable Recording.



Step7: Set the recording time for alarm input.

Click “Settings” of “Record Time”.

Select “Weekday” as some day of the week or the whole week for recording time.

Set the record type to be Alarm Recording.

The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment can not be overlapped.



9.1.1.5 Other Recording Modes

Other Recording Modes are including “Motion detection & Alarm”, “Motion detection | Alarm”.

“&” means recording is triggered when two situations happened together;

“|” means recording is triggered when one of the situations happened.

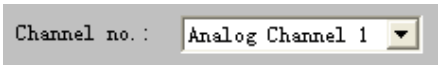
The configurations are the same with “Motion detection recording” or “Alarm recording”.

9.1.2 Alarm

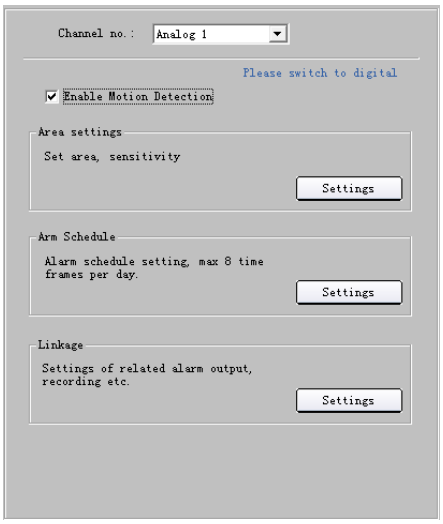
You can configure motion detection alarm, signal level alarm, video loss alarm and other alarm and linkage through client software.

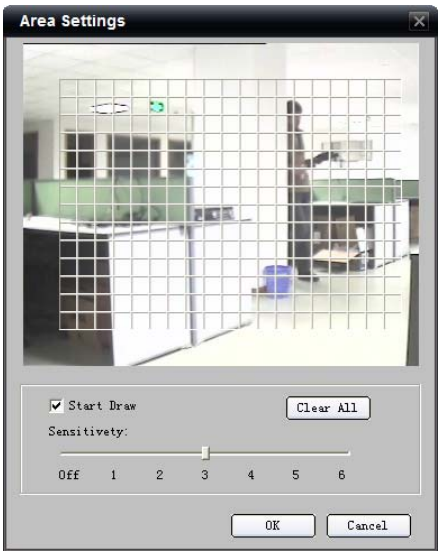
9.1.2.1 Motion Detection Alarm

Step1: Select channel number for motion detection.



Step2: Enable motion detection to activate “Setting Area”, “Arm Schedule” and “Linkage” settings.

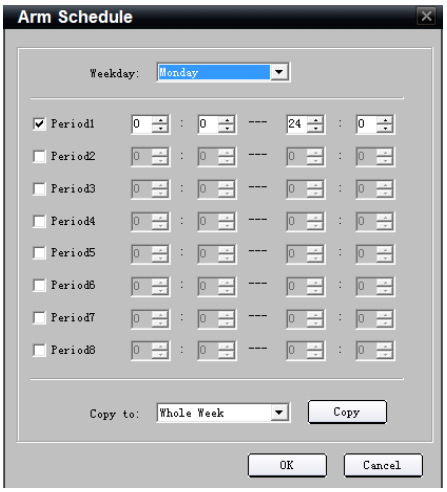




Step3: Set the motion detection area and sensitivity.

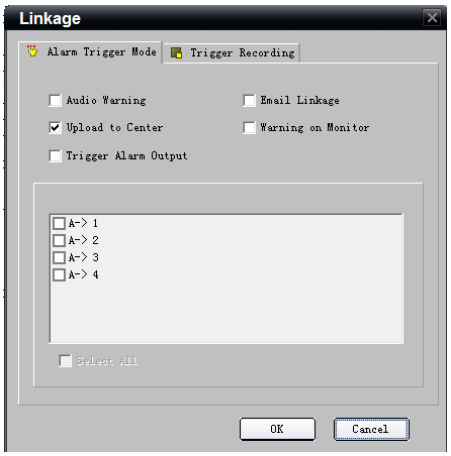
The sensitivity 1 and 6 are the lowest and the highest level.

Enable “Start Draw”, and select the detection area by using mouse.



Step4: Set the detection time.

“Arm Schedule” can be one day or the whole week, and 8 segments for one day.



Step5: Set the alarm linkage for motion detection and select alarm output channel.

Alarm Linkages Description:

Linkage	Description
Warning on Monitor	When the alarm signal is detected, the image of corresponding channel will pop out as single screen.
Audio Warning	Alarm triggers buzzer

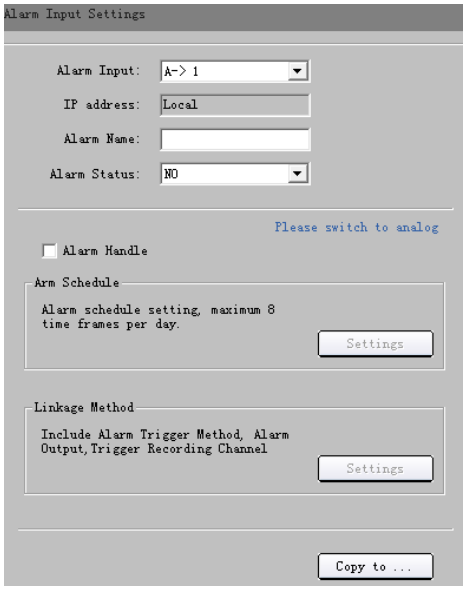
Upload to Center	Upload the alarm signal to the center, such as client software
E-mail Linkage	When the alarm signal is detected, the client software will send the email to the designated mailbox.
Trigger Alarm Output	Trigger alarm output of the device; if the device is DS-9000 series, triggering alarm output of IP channel can be selected as well.

9.1.2.2 Signal Level Alarm

Select Alarm Parameters → Alarm Input Settings

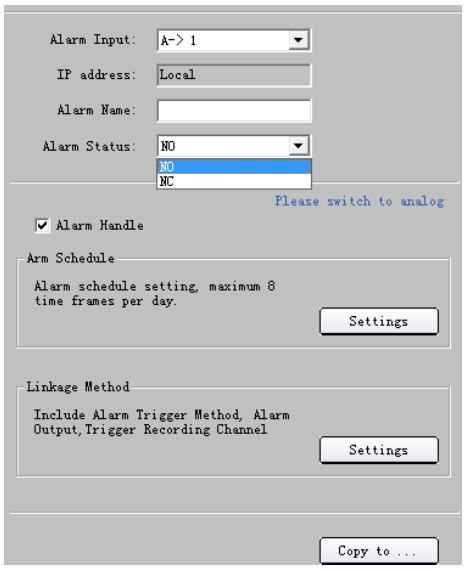
Step1: Select alarm input.

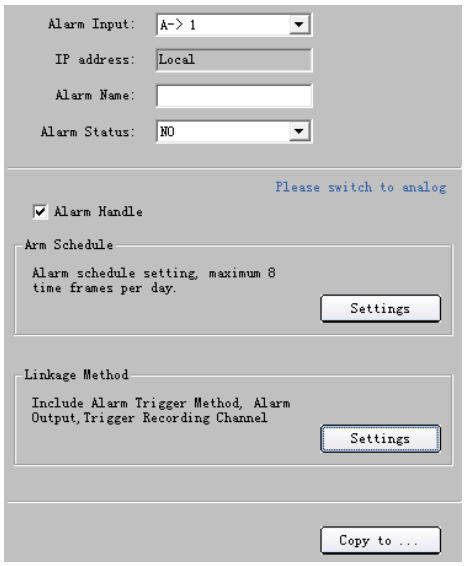
Note: If the device is DS-9000 series DVR, you can click “Switch to IP channel” to configure the alarm input of IP channel.



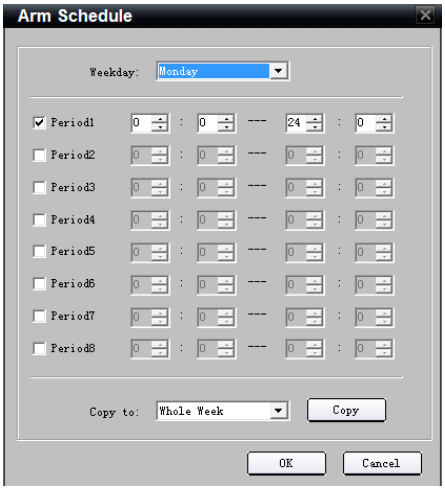
Step2: Select the type of alarm input, “NO” or “NC”.

Note: The settings will become effective after rebooting.





Step3: Enable “Alarm Handle” to activate “Arm Schedule” & “Linkage Method”.



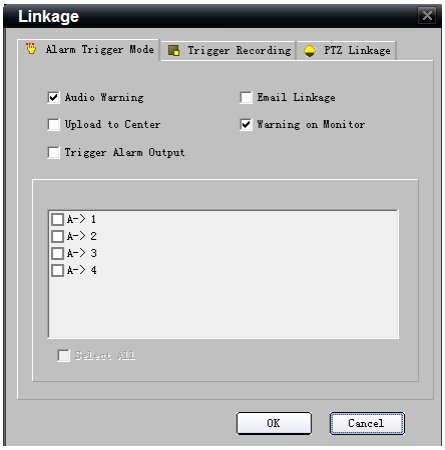
Step4: Set the arm schedule time for alarm input.

Click “Settings” in “Arm Schedule” menu.

Select “Weekday” as some day of the week or the whole week for recording time.

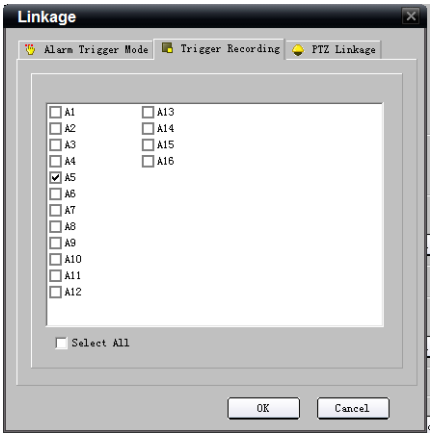
The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment cannot be overlapped.



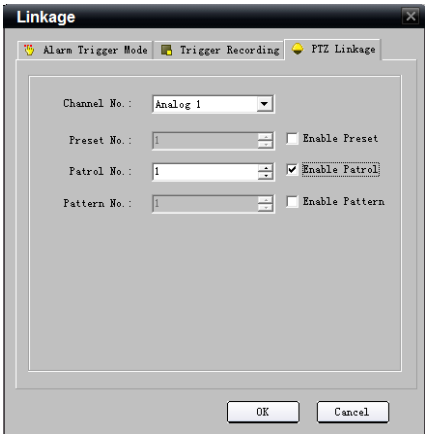
Step5: Set the alarm linkage for signal level and select alarm output channel.

Step6: Set Trigger Recording for signal level alarm.



Step7: Set PTZ linkage for signal level alarm.

Note: Alarm input can link PTZ of several channels, but one channel can only link one option of preset, sequence and pattern.



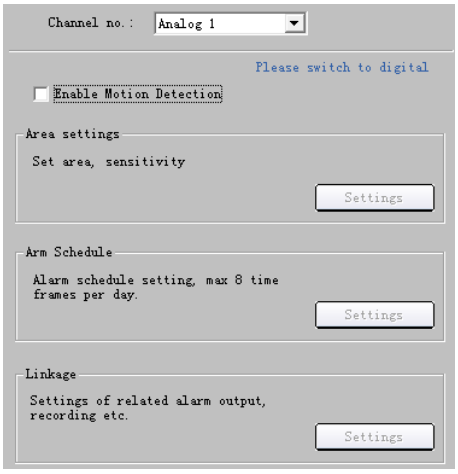
9.1.2.3 Video Loss

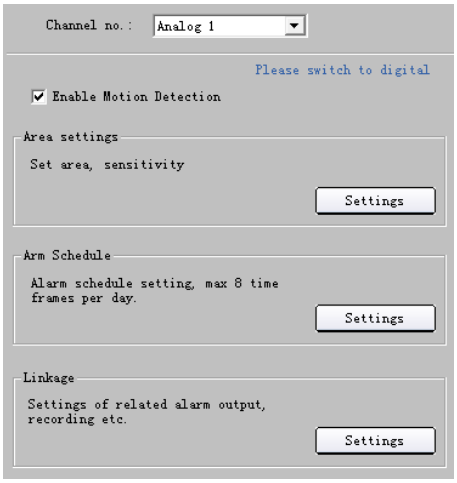
If the video input signal loss, user can set relevant linkage operation.

Step1: Select the channel number for video loss.

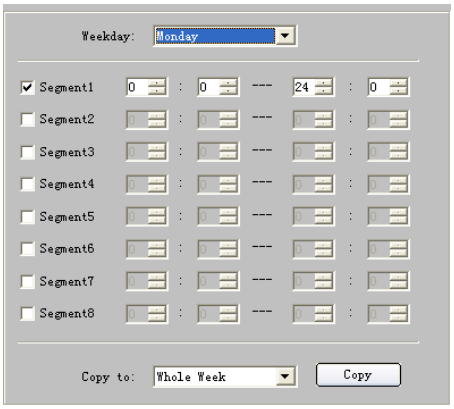
Select Channel Parameters → Video Lost

Note: If the device is DS-9000 series DVR, you can click “Switch to digital channel” to configure the video loss of IP channel.





Step2: Enable “Video Loss” to activate settings of “Arm Schedule” and “Linkage”



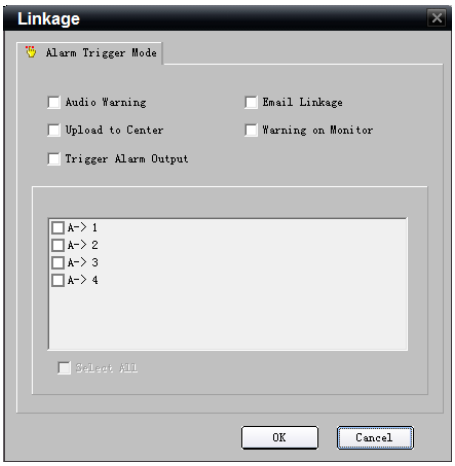
Step3: Set the arm schedule for video loss.

Click “Settings” in “Arm Schedule” menu.

Select “Weekday” as some day of the week or the whole week for the arm schedule.

The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment can not be overlapped.



Step4: Set linkage for video loss.

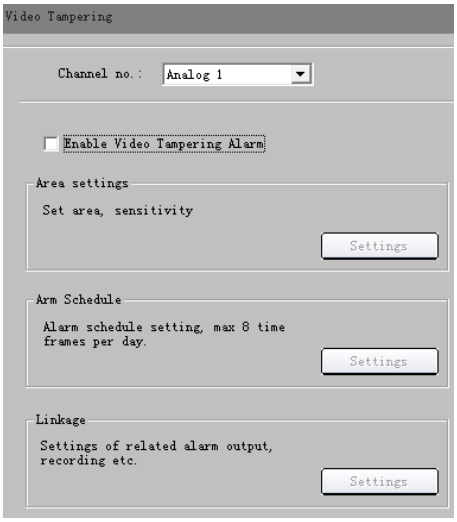
Click “Settings” in the “Linkage” menu.

9.1.2.4 Video Tampering

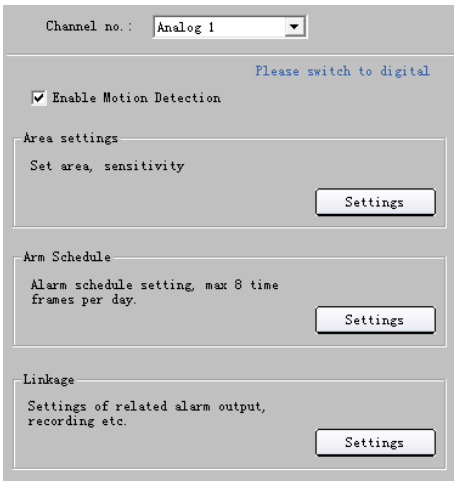
Step1: Select the channel number for video tampering.

Select Channel Parameters → Video Tampering

Note: If the device is DS-9000 series DVR, you can click “Switch to digital channel” to configure the video tampering of IP channel.



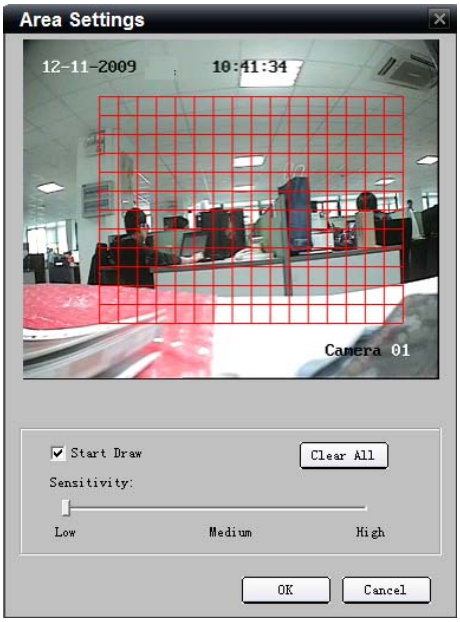
Step2: Enable “Video Tampering Alarm” to activate settings of “Setting Areas”, “Arm schedule” and “Linkage”



Step3: Set the video tampering area and sensitivity.

The sensitivity can be divided into three levels: Low, Medium, and High.

Enable “Start Draw”, and select the detection area by using mouse.



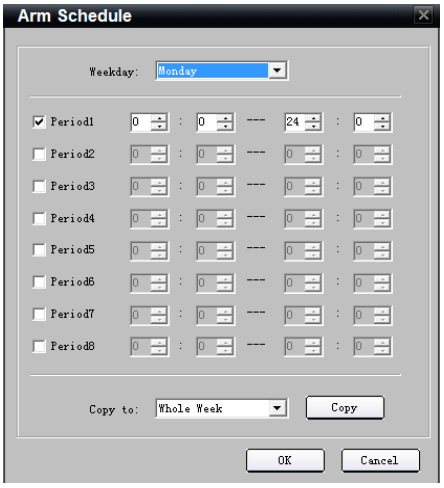
4th step: Set the arm schedule for video tampering.

Click “Settings” in “Arm schedule” menu.

Select “Weekday” as some day of the week or the whole week for the arm schedule.

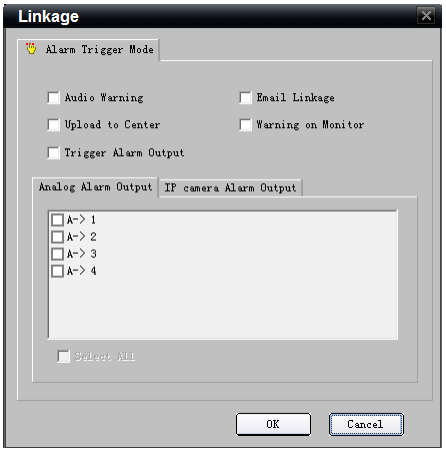
The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time of each segment cannot be overlapped.



5th step: Set linkage for video tampering.

Click “Settings” in the “Linkage” menu.

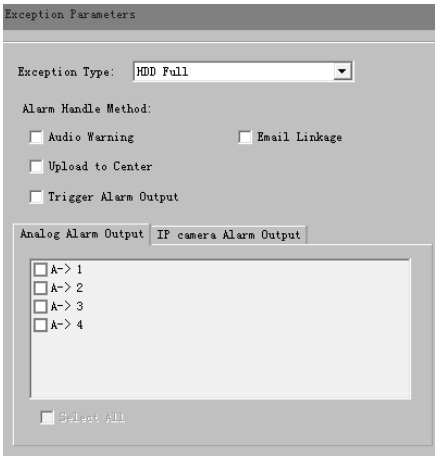


9.1.2.5 Exceptions

Exception parameters are for the alarm handle of abnormal event, which is including “HDD Full”, “HDD Fault” (HDD errors or HDD not initialization), “Network Broken”, “IP Address Conflict”, “Illegal Access” (user name or password wrong), “Video Output Standard Mismatch” and “Video Signal Exception” (video signal unstable).

Select the exception type and handle method.

Select Exception Parameters to enter configuration interface.

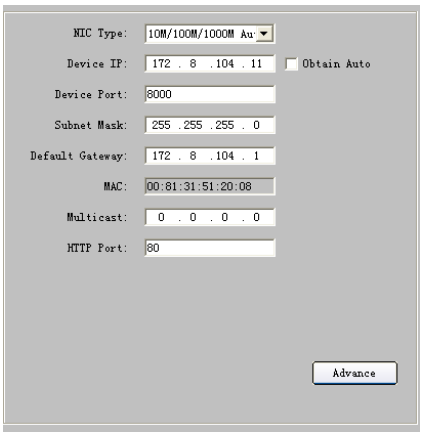


9.1.3 Network Configuration

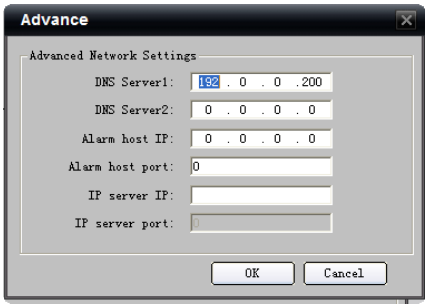
9.1.3.1 Basic Configuration

Select Network Parameters → Network Settings

Configure the network according to the actual situation. If there is DHCP server in the network, enable “Obtain Auto” and reboot the device to get the IP address under this network segment automatically.



Select “Advance” to enter advanced configuration. You can configure preferred DNS server1 and spare DNS server2, IP address of alarm host and IP server.



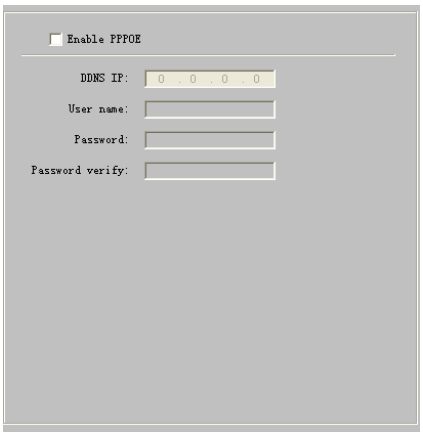
Parameters	Description
DNS1 DNS2	Preferred and spare DNS server
Alarm host	Alarm signal can be uploaded to the IP address automatically
IP sever	IP address of IP server

9.1.3.2 PPPoE

Select Network Parameters → PPPOE Settings

Enable PPPoE by ticking, input the user name and password, then save the changes and reboot the device to make the parameters become effective.

If succeed to dial, the current IP address will be displayed in the blank “DDNS IP”.



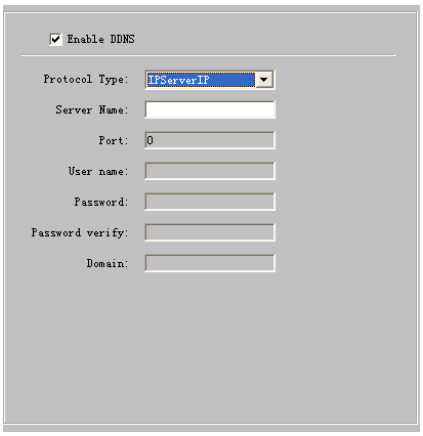
9.1.3.3 DDNS

Adopting DDNS function can solve the problems caused by dynamic IP.

Click Network Parameters → DDNS Settings

Enable DDNS.

If the “IPServerIP” is selected as protocol, then input the address where the IP server is running.

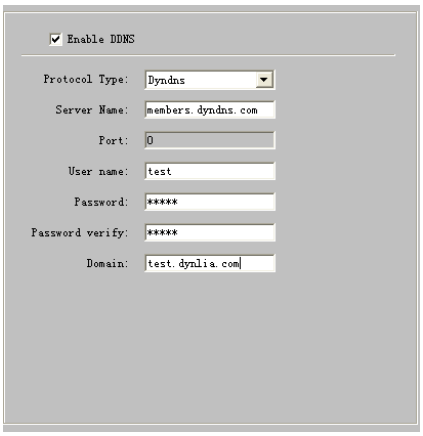


If the “Dyndns” is selected as protocol:

Server Name: Input the IP address of the server, such as members.dyndns.org;

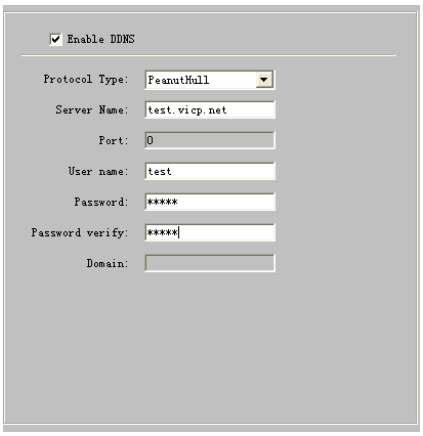
Domain: the domain name that user applied for the device, such as test.dynlia.com;

User name, password and verify: the account information that user registered on the Dyndns website.



If the “Peanut Hull” is selected as protocol:

Input the user name and password applied on the Peanut Hull website to visit the device by the applied domain name.



9.1.3.4 NTP

Adopting NTP function can enable iVMS software to synchronize the time and data of the device regularly.

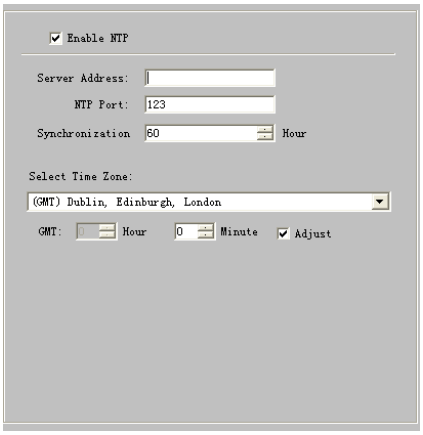
Select Network Parameters → NTP Settings

Tick ☑ to enable NTP function.

Note: Time Synchronization Interval: 0~10080 min (default 60min).

If the device connected to the public network, the IP address of NTP server provided by carrier can be input in the blank “Server Address”;

If the device connected to private network, the IP address of NTP server built by NTP software can be input the blank “Server Address”.



9.1.3.5 Net Disk

By Net Disk Settings, recorded data can be saved to the network storage disk provided by NAS server.

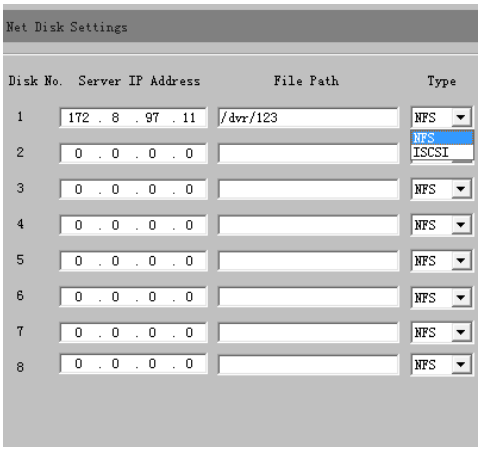
Select Network Parameters → Net Disk Settings

Input the IP address of NAS server in the blank “Server IP address”; input the saving path allocated by NAS server in the blank “File Path”.

Note:

1, Make sure that the device supports NFS function and NAS server allocated the storage space correctly.

2, If select the ISCSI, the device should be 90 / 91 series DVR with version 1.2 or higher, and the 95 / 96 series NVR.



9.1.3.6 E-Mail

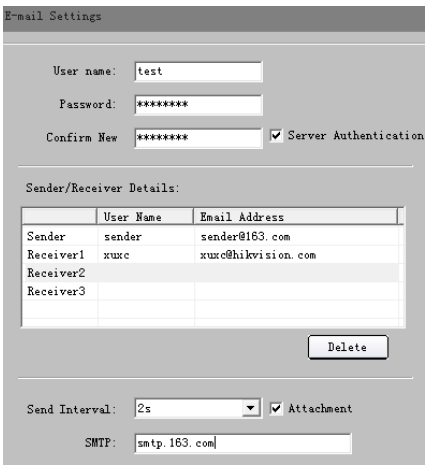
Through E-mail configuration, the e-mail can be sent to the designated mailbox when there is an alarm.

Select Network Parameters → E-mail Settings

If server authentication is needed, enable it (i.e.☑) and input user name and password.

Input the sender and recipient information, if need to send picture, you can enable “Attachment” (i.e.☑).

Note: Make sure that the device supports email function and NAS server allocated the storage space correctly. DS-9000 device does support email function.

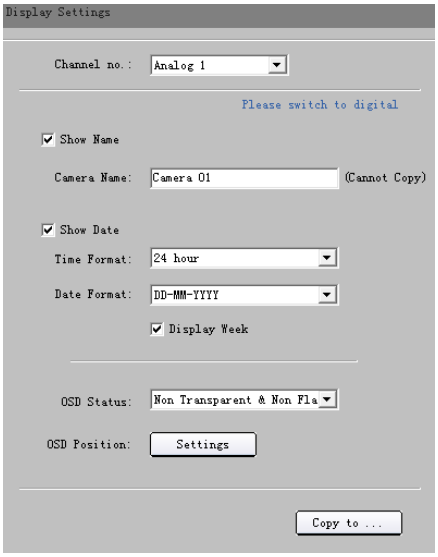


9.1.4 Channel Configuration

9.1.4.1 Channel Display Settings

Select Channel Parameters → Display Settings

You can configure channel name, OSD and related parameters here.

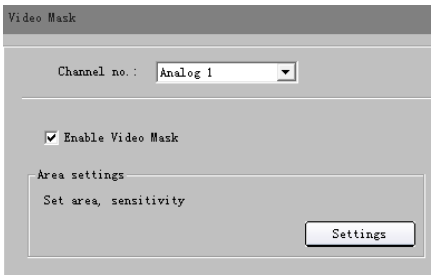


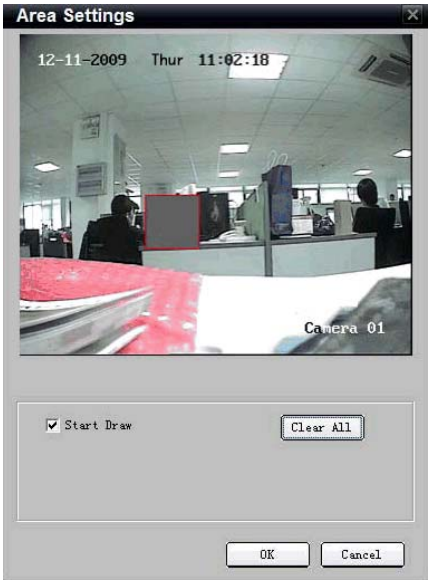
9.1.4.2 Video Mask

Step1: Select channel number, and enable video mask (i.e.☑).

Select Channel Parameters → Video Mask

Note: If the device is 9000 series, click “Switch to digital” to choose IP channel and configure the parameters.





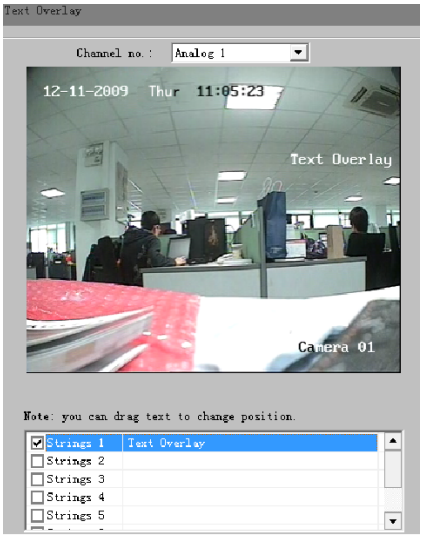
Step2: Set the mask area.

Click “Settings” to enter area set menu.

Enable “Start Draw” (i.e.), select the mask area by clicking and dragging the mouse.

9.1.4.3 Text Overlay

You can add characters on the screen of the channel.



Select Channel Parameters → Text Overlay

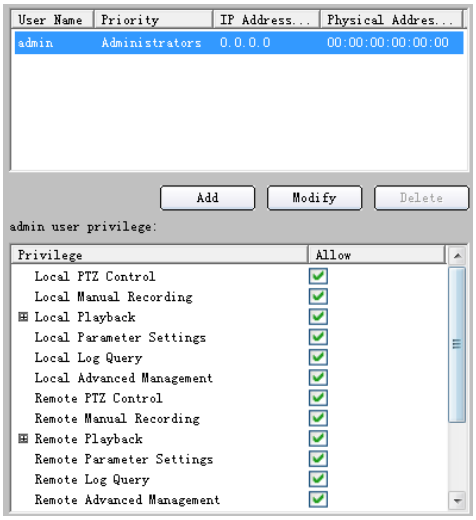
Tick “Strings 1” (i.e.) to enable text overlay, double click the strings area to input the characters you want to overlay on the screen.

Note: If the device is DS-9000, then only analog channel support text overlay.

9.1.5 Account Management

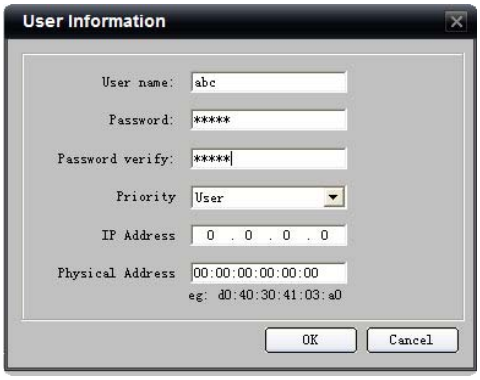
The default user name and password of device administrator are “admin” and “12345”. Administrator can remote add, delete users or distribute authority for users. The new added users are divided into two levels: user and operator. (For “Remote Configuration” privilege, operator has “Voice Talk” right, user does not; for “Channel Configuration” privilege, operator has all the rights, user has local playback, remote playback rights.)

Select Account Management



Click “Add” to add user.

Note: If you set the IP address or physical address, and then only the PC with the same IP address or physical address can visit the device through network.



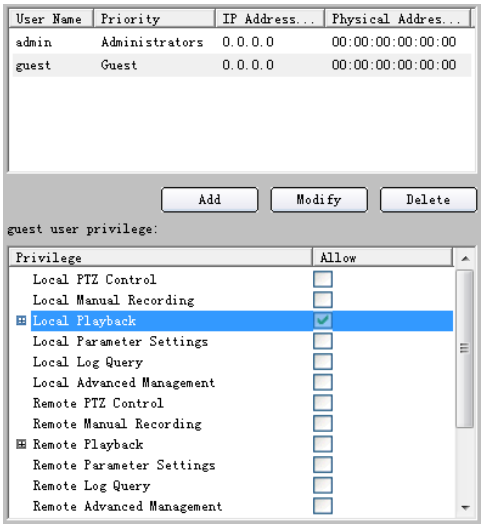
Click “Modify” to change the user name and password; click “Delete” to delete the user.

Status means privilege granted, status means privilege not granted.

If the privileges are related to channels, then status means granting the privileges of all channels; status means granting no privileges of all channels.

Click to unfold the channels, and set the privilege for each channel. If only part of channels have operating privileges, the status will be.

Note: Please refer to the user manual of the device for the detailed descriptions on privileges.

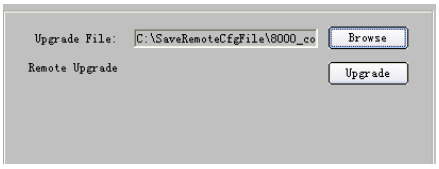


9.1.6 Others

9.1.6.1 Remote update

Click Update Remotely

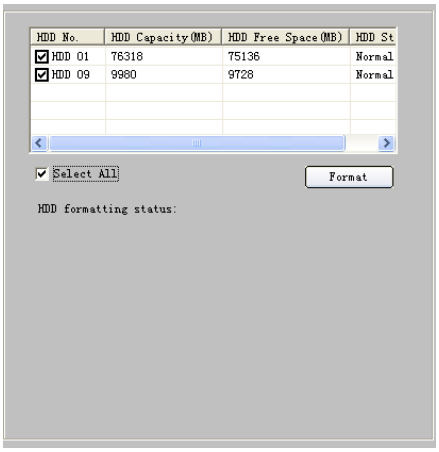
Click “Browse” to search the local upgrade file, click “Upgrade” to start upgrade remotely.



9.1.6.2 HDD Format

Click HDD Format

Note: Please backup the data before formatting hard disk.



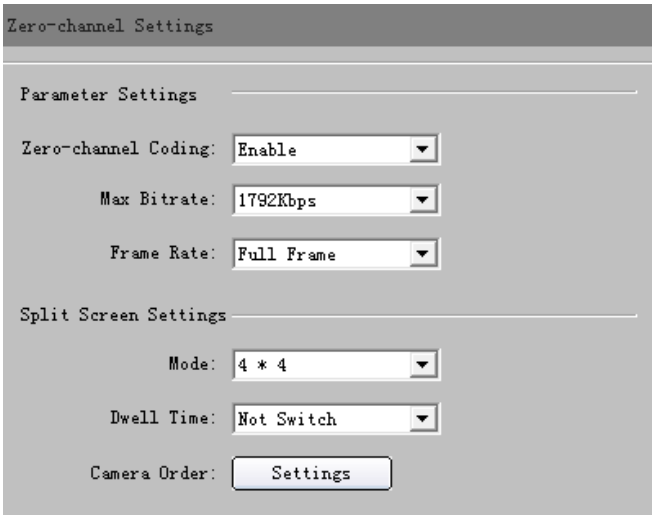
9.1.6.3 Zero-channel Settings

Zero-channel is specially used for encoding the spot output port. User could set the spot output (zero-channel) encoding parameters, window divisions and the cycle mode. By this function, user could preview the video of the spot output, it could save the bandwidth for user.

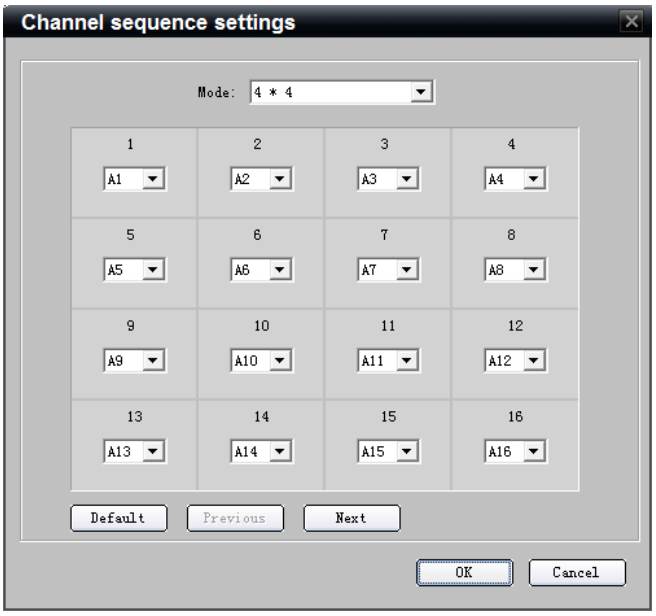
Note, this function is supported by the 9000 / 9100 series DVR with the version 1.2 or higher and 9600 series NVR.

If the device supports zero-channel, and the channel number is set to be more than the analog channel number, the last channel of the device will be zero-channel. The priority of the zero-channel is higher than IP camera channel, if you want to use the IP channel of the DVR, you need to set the channel number to be one more than the summation of the analog and IP channel number, zero-channel need this one channel to display.

Click Zero-channel Settings, into the setting interface. User could enable it and then set the Bitrate, Frame rate, Split mode and the dwell time.



Click Camera Order: Settings, into the channel sequence settings interface, user could set the mode and the channel display sequence.

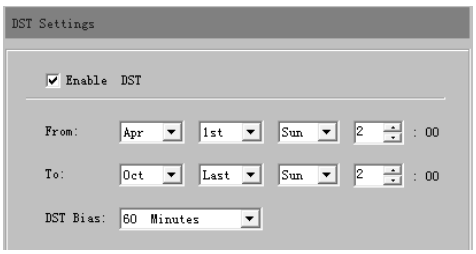


9.1.6.4 DST Settings

Click the DST Settings to enter the DST setting interface.

Click the check box of “Enable DST”, and then set the start time and the end time of DST, and the DST bias time.

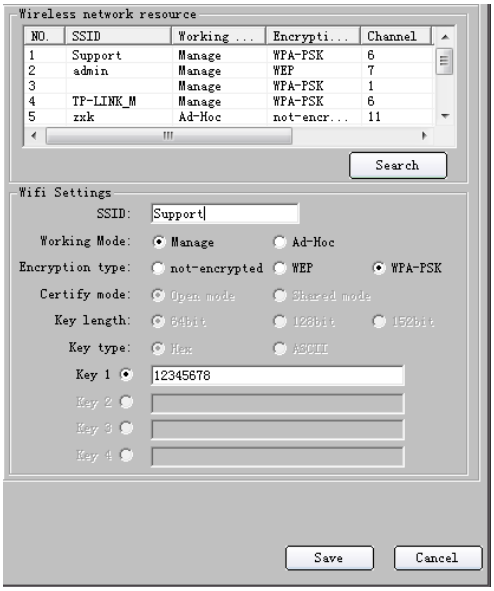
Note: the DST settings are valif for the device which supports the DST function only.



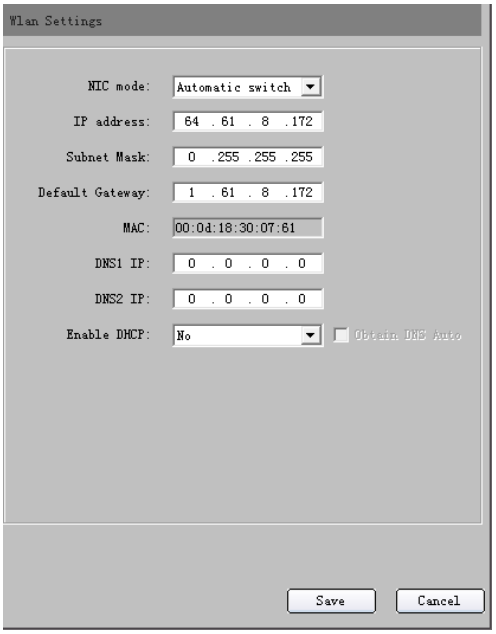
9.1.6.5 Wifi Settings

Click the Wifi Settings to enter the Wifi Settings interface.

User can either click the Search button to obtain the open wireless network to automatically set the Wifi parameters, or manually fill in the Wifi parameters.



Click the Wlan Settings to enter the Wlan Settings interface to set the NTC mode and other wireless parameters.



9.2 iVMS-2000 Remote Configuration

User can remotely configure some parameters of the iVMS-2000 through the client software.

Click Setup → Device Management to enter the device management interface. Right click the *iVMS-2000* node and select “Remote Configuration” to enter the remote configuration interface.

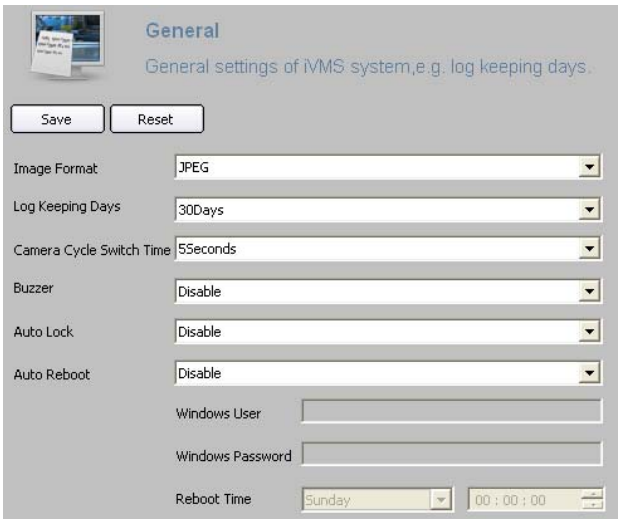
Note: Please refer to the user manual of iVMS-2000 for more detailed instructions about the iVMS-2000 remote configuration.

9.2.1 General Settings

Software could remotely set the general parameters of iVMS-2000.

Click 

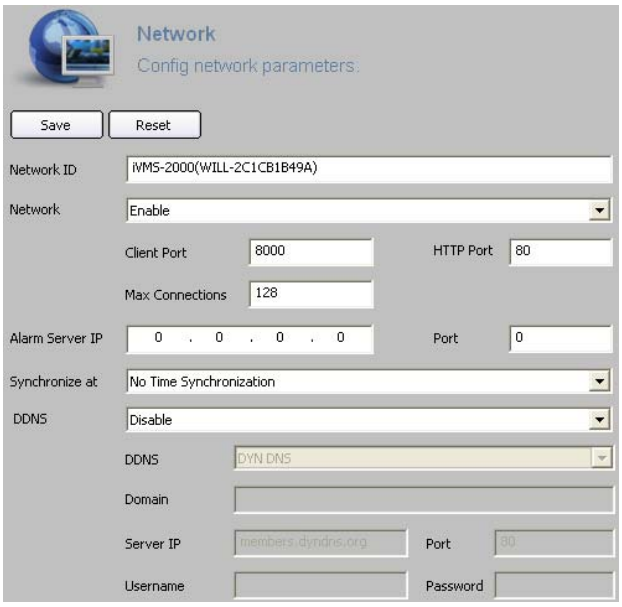
to set the general parameters. Click “Save” button after finish configuration.



9.2.2 Network Settings

Click 

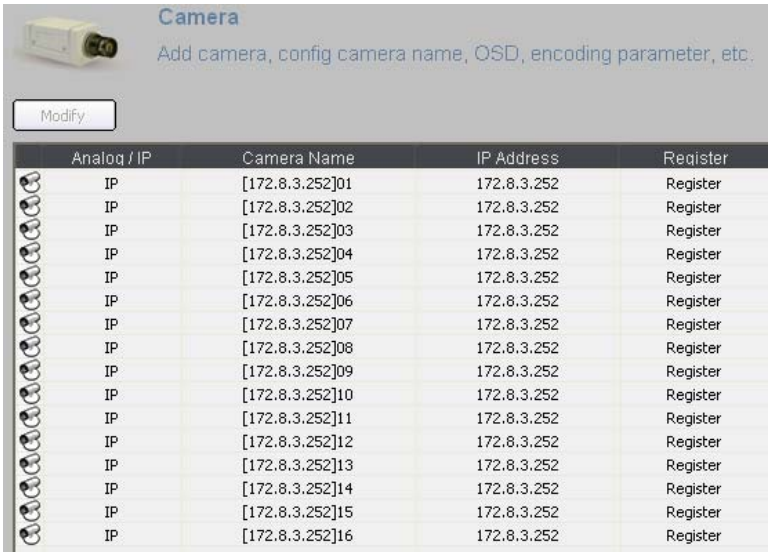
to set the network parameters. Click “Save” button after finish configuration.



9.2.3 Camera Settings

Click 

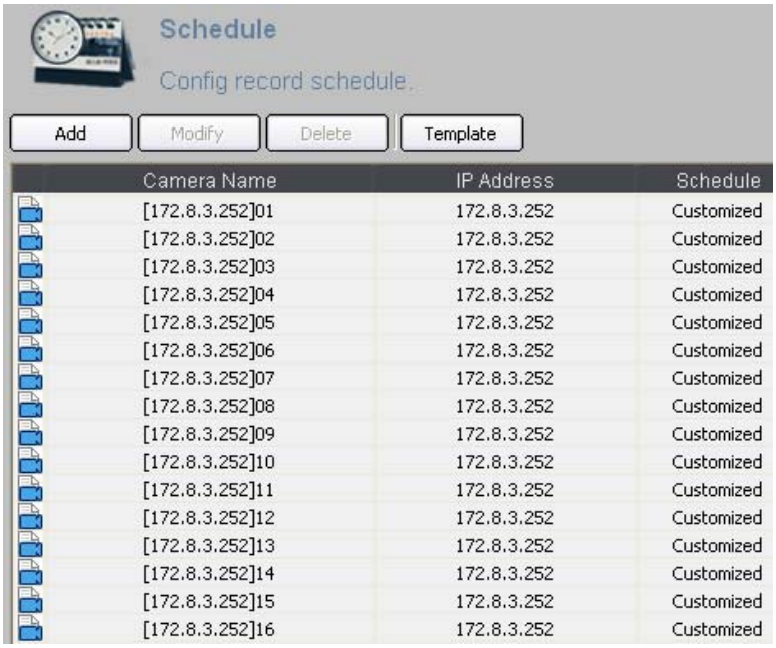
to set the camera parameters. Click “Save” button after finish configuration.



9.2.4 Schedule Settings

Click 

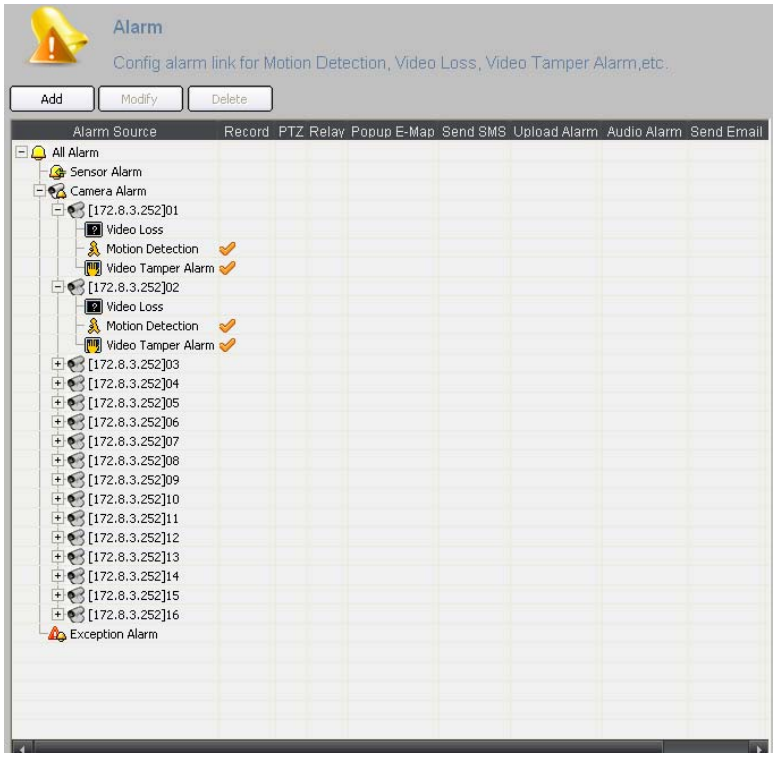
to set record schedule.



9.2.5 Alarm Settings

Click 

to set Alarm link.



9.2.6 User Settings

Click 

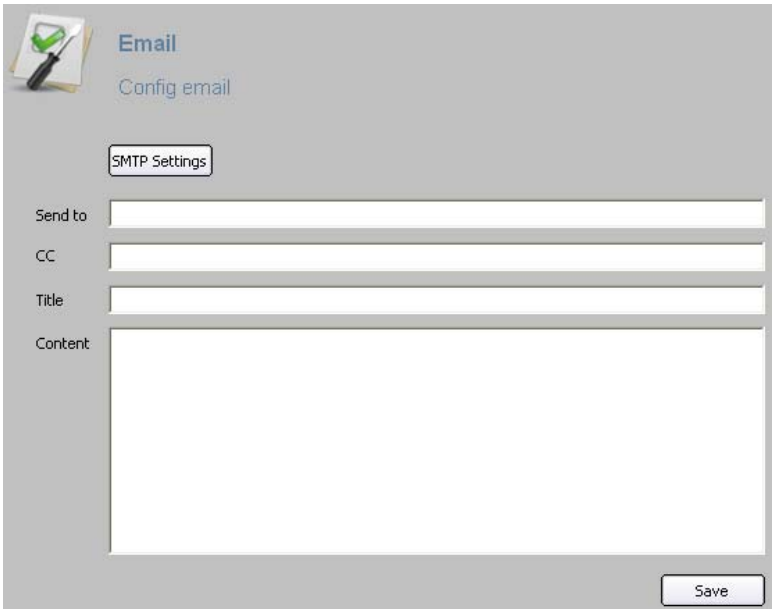
to set account information.



9.2.7 E-mail Settings

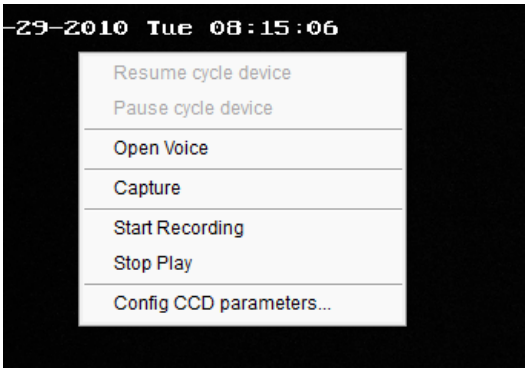
Click 

to set e-mail information.



9.3 Remote Config CCD Parameters

Right click the mouse on the previewing video screen, select the "Config CCD parameters" option, open the camera CCD setting menu.



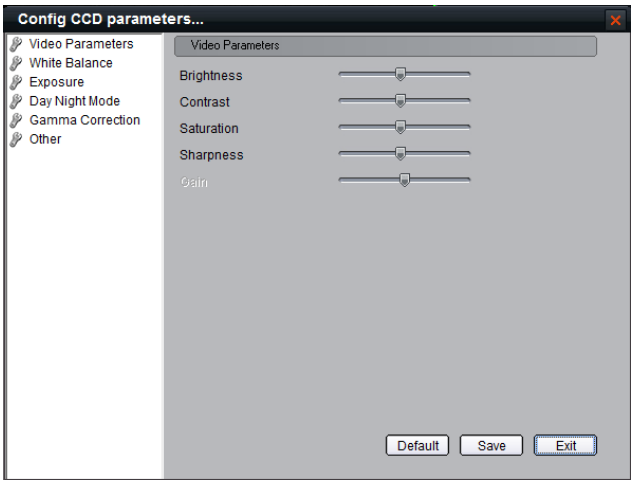
note:

1, this funciton need the camera supporting.

2, different model of camera could have different parameters config interface, please refer to the actual interface.

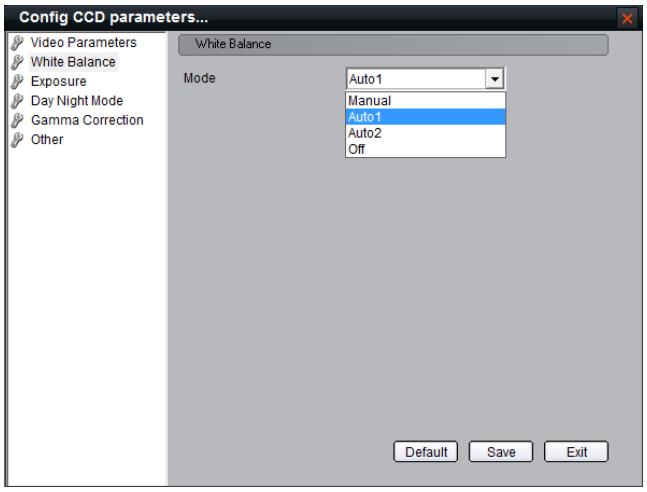
Video Parameters Configuration

Adjust the brightness, contrast, saturation, sharpness, gain and other parameters, which can be set from 1 to 100.



White Balance Configuration

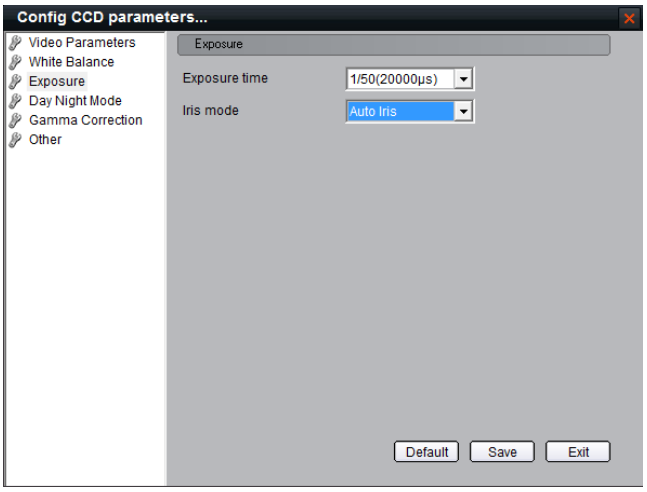
Set the white balance mode. “Manual”, “Auto 1”, “Auto 2” and “Off” for your need



Exposure

Set the exposure time and the iris mode of the lens for your need.

The exposure time need to be adjust according to the actual scene.

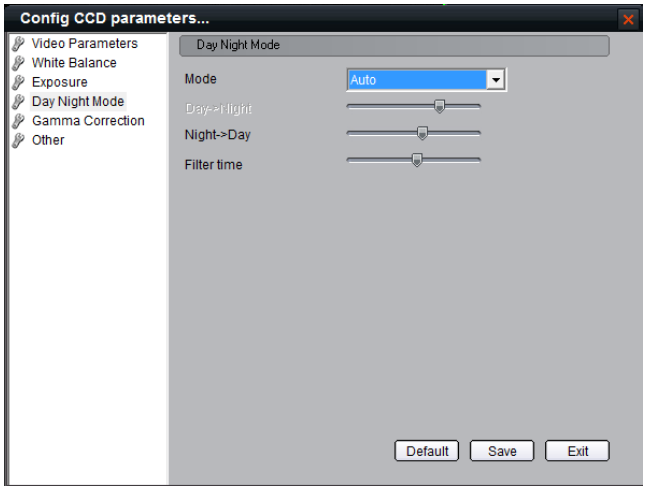


Day/Night Mode

There is “Auto”, “Day” and “Night” mode could be selected.

The day-> night and night->day both have 0-7 levels to be adjusted. Number 0-7 is the threshold to fit for dark to bright scene.

Filter time is the effect time after the scene reached the threshold, with 0-120s optional.

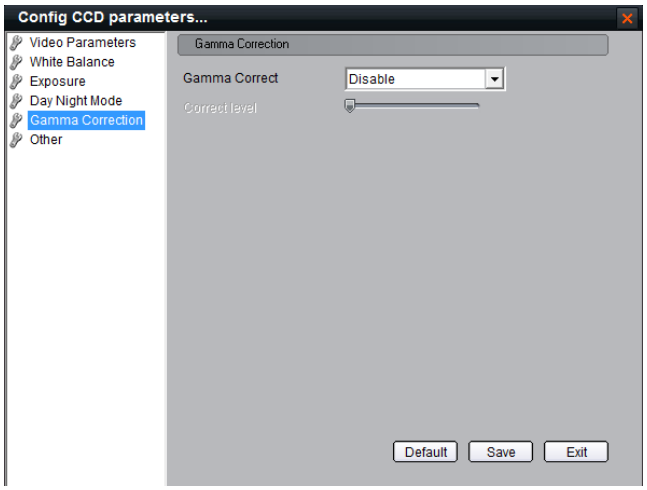


Gamma Correction

User could enable or disable the gamma correction function.

If enable it, there are 0-10 levels could be adjusted.

Note: this function is supported by 886, 876 IP camera only.

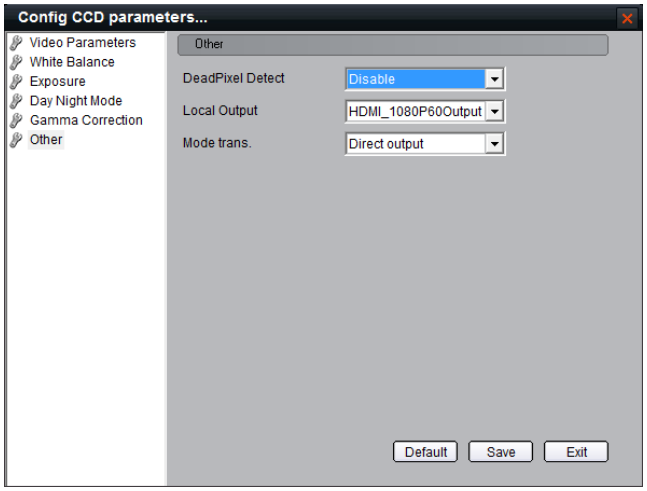


Other

For different model of IP cameras, the setting is different.

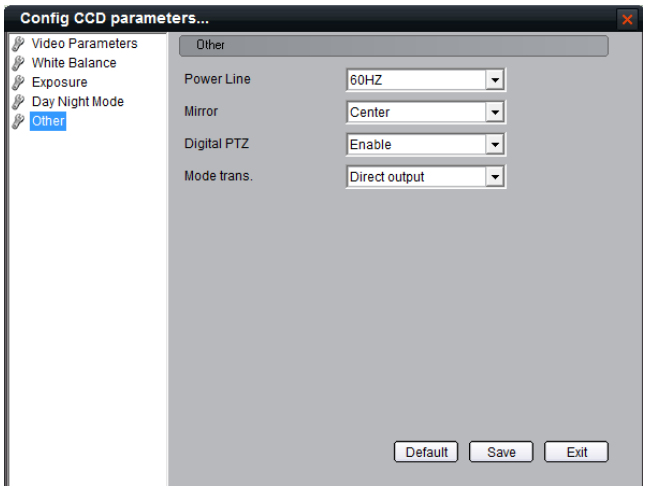
On the right is for model of 886, 876.

User could set the “Dead Pixel Detect”, camera HDMI local output mode, Mode trans, and other function according to different model of camera support.



On the right is for model of 753, 853, 763, 863, 7153/7133 and 8153/8133.

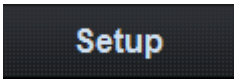
User could set the “Power Line” 50/60HZ, Mirror settings, Digital PTZ switch and Mode trans.



Chapter 10 Alarm Linkage

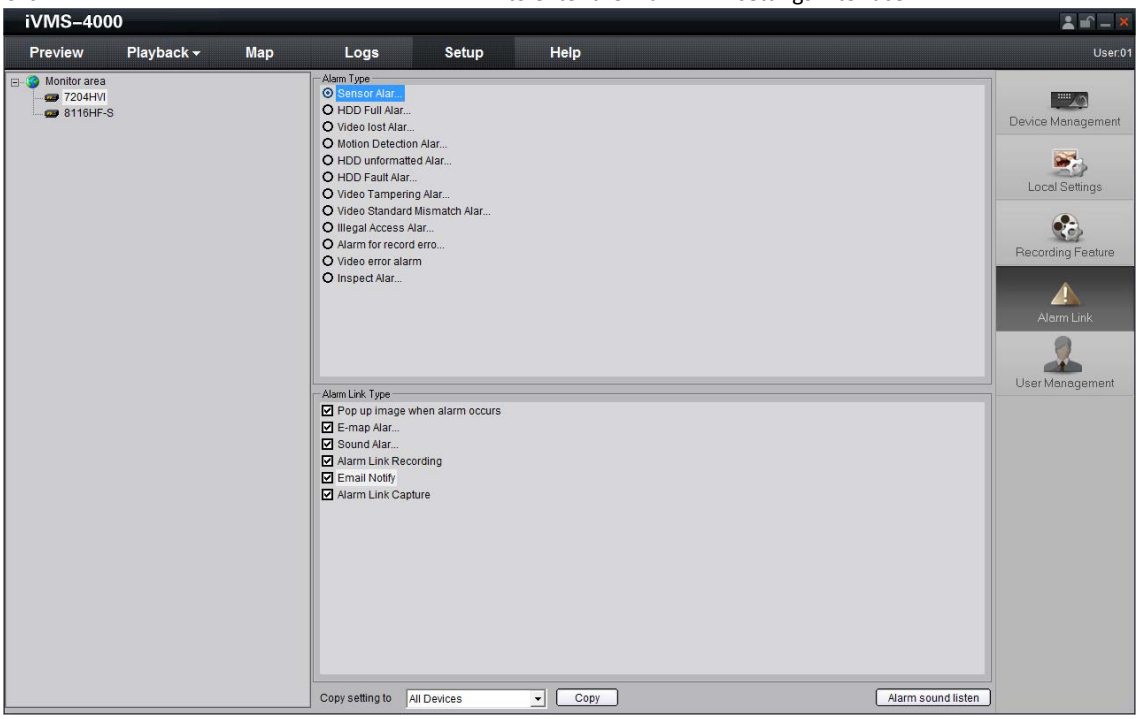
According to the various alarm signals uploaded from the device, iVMS software can configure the different linkages for them.

10.1 Alarm Link Configuration

Click 

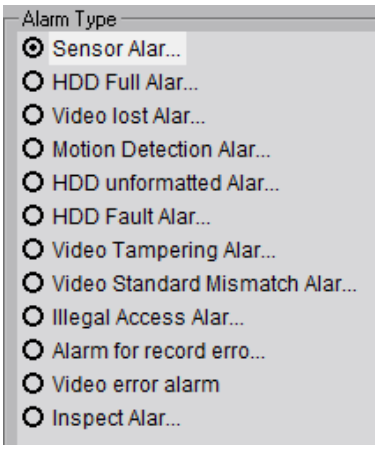
→ 

to enter the Alarm Link settings interface:

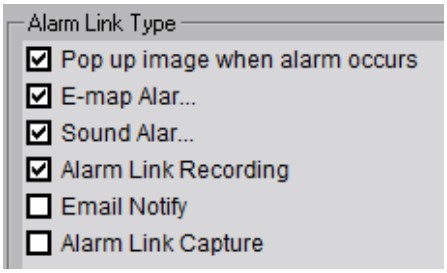


Step1: select the device from the device area on the left, activate the alarm type and alarm linkage type options.

Step2: select the alarm type, after selected, the alarm type status will become .



3rd step: select the alarm linkage type for the alarm type, and status ☑ means selected.

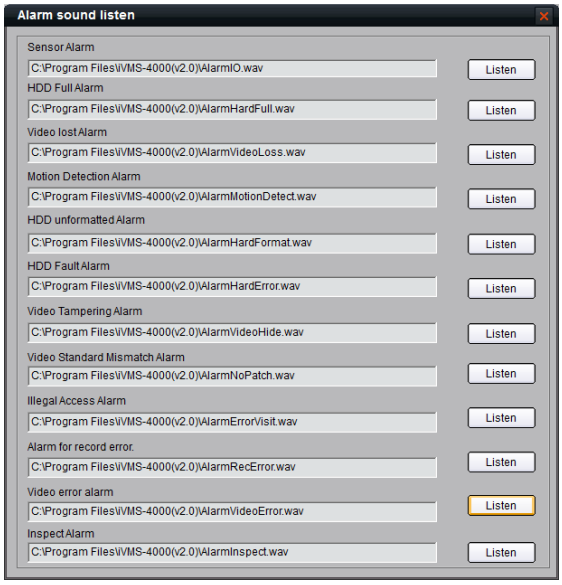


Descriptions on Alarm Linkage Type

Linkage Types	Descriptions
Pop up image when alarm occurs	Pop up single screen image when alarm occurs. If there is alarm type of decode window, it will pop up the image through this decode this channel
E-map Alarm	When alarm occurs, the related hotspot in the e-map twinkles
Sound Alarm	Alarm triggers local alarm sound
Alarm Link Recording	Alarm triggers local recording of alarm channel
Email Notify	Send the alarm information to the designated receiver by Email.(User should configure the Email settings in the Local Settings→Email/Sub Screen Settings menu)
Alarm Link Capture	The client software will automatically capture the alarm picture and save it to the designated folder when there is alarm occurring. User is allowed to view the alarm information and corresponding pictures from the alarm logs.

Note: Before alarm linkage configuration, the alarm schedule and handle method of the device are required to set correctly.

By clicking the Alarm sound listen at the bottom of the Alarm Link Settings interface, user is allowed to enter the following interface:

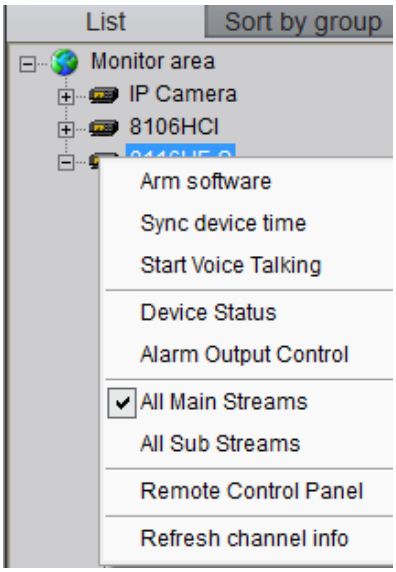


Click the Listen button to listen the alarm sound of the alarm type as required. And it also allows user to access the installation path of the client software and replace the default alarm sound file with the *wav* file of the same name.

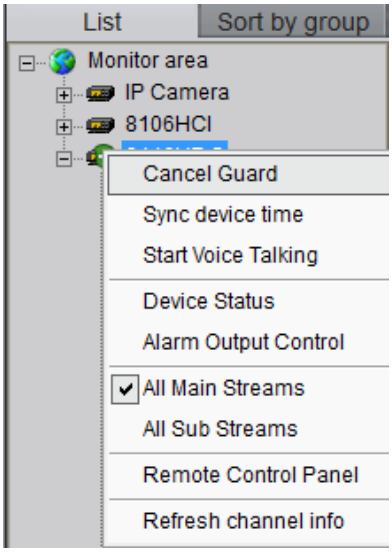
10.2 Alarm Arming & Disarming

You can choose “Arm software” and “Cancel Guard” to decide whether to handle alarm signal or not.

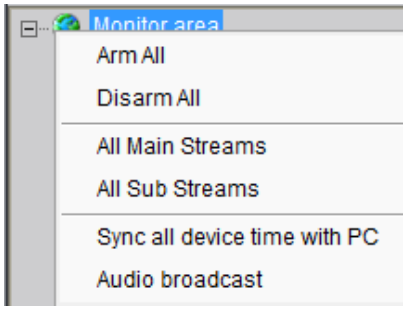
Right click the device name in the preview mode, and select “Arm software” to enable to monitor the alarm of the device; and the icon of the device will become as .



If the device is on guard, right click the device name, you can select the “Cancel Guard” to cancel monitoring the alarm of the device.



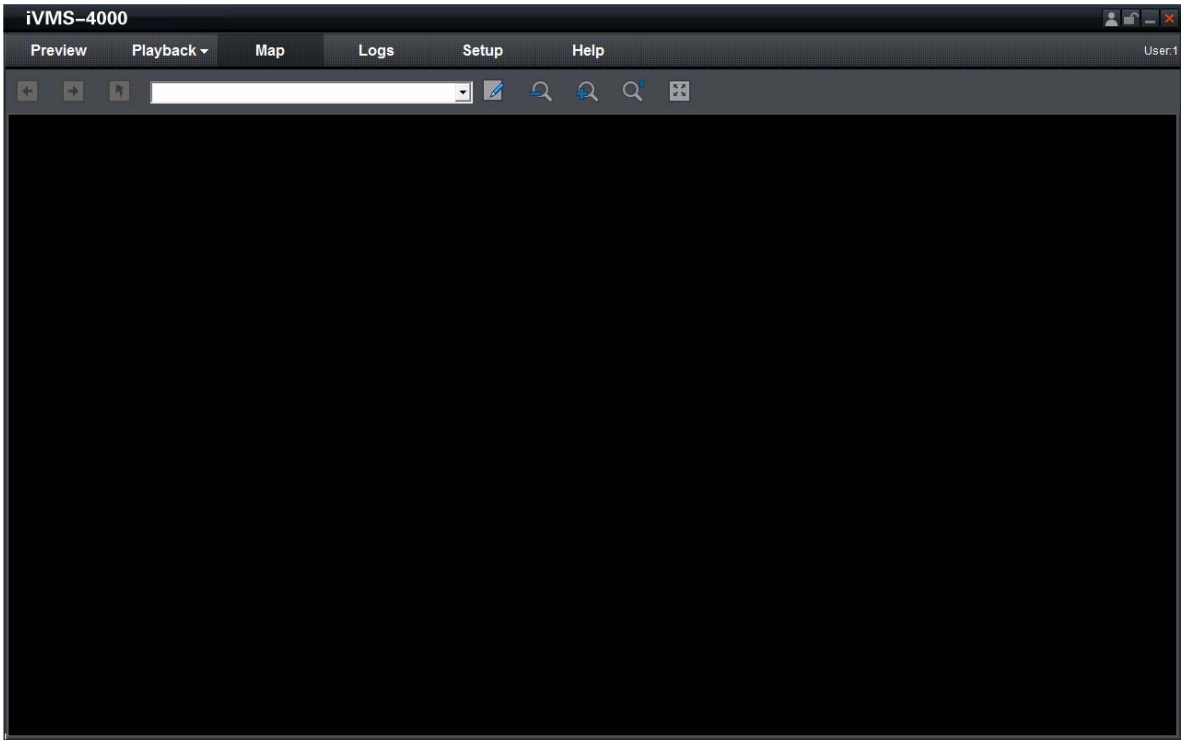
Right click the area name, select “Arm All” or “Disarm All” for the whole devices of the device.



After the device or the area fortified, the alarm linkage will become effective when there is an alarm of the device.

Chapter 11 E-Map

Click Map key to show the e-map window.



Toolbar Buttons Descriptions:

Buttons	Descriptions		Buttons	Descriptions
	Enable/Disable Map Edit			Enter/Exit Full Screen
	Zoom Out			Previous Page
	Zoom In			Next Page
	Zoom Adjustment			Upper Level

11.1 Add Map

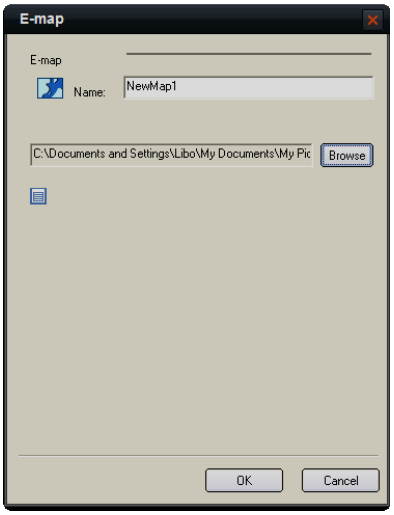
Step1: Click button to enter map edit mode, the cursor will become as

Step2: Right click the black area and select “Add Map” (or click button to display Map Info Area and right click the area and select “Add Map”), then the Add Map window will pop up.

Step3: Add the map.

Click “Browse” to search the image file on the local PC.

Click “OK” after renaming the file to finish.



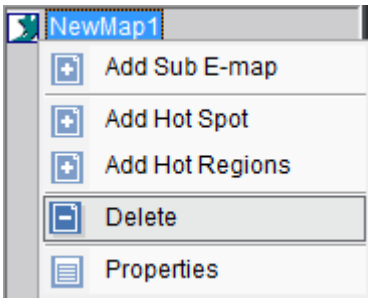
Note: Supported file formats are BMP & JPEG.

Step4: Add sub map, right click the image name in the map info area or the image itself, and the sub menu will pop up.

Select “Add Sub E-map” to add sub map.

Select “Properties” to change the map name and image file.

Select “Delete” to delete the selected map.



11.2 Map Configuration

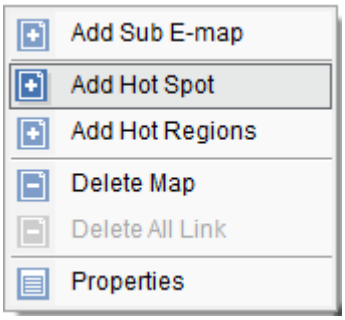
Map configurations need to be done under the map edit mode.

11.2.1 Hot Spot

Through hot spot configuration, user can mark out the location and live view of the monitoring points on the e-map.

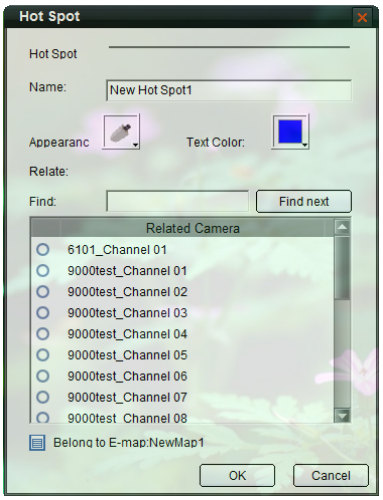
Add Hot Spot

Step1: Right click the image name in the map info area or the image itself, and select “Add Hot Spot”.



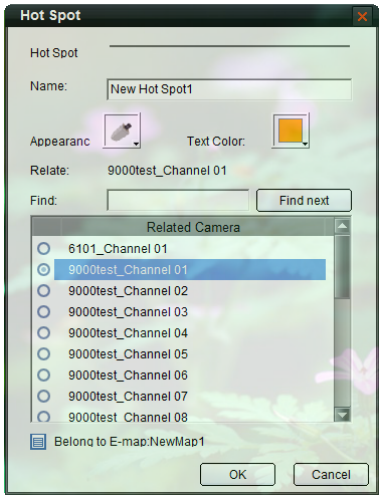
Step2: Input the name of hot spot, click  and select the icon for hot spot.

You can also click  to change the color of characters.

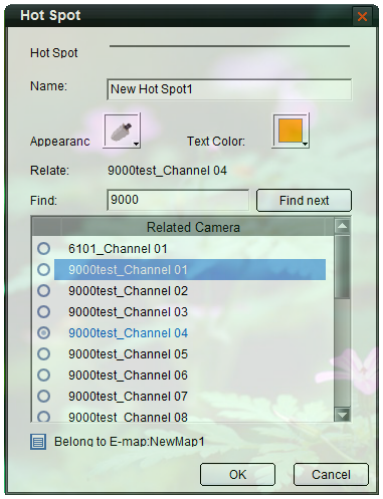


Step3: Select the channel you want to relate to in the list "Related Camera", and press "OK" to finish.

After succeed to add hot spot, move the mouse to the icon of hot spot, it will become as , and you can move the hot spot by pressing left button and dragging.



Input the key words in the "Find" blank, click Find next to find the channel whose name embraces the key words.



If the alarm links to e-map is set as alarm handling method, in the non-edit mode the hot spot will twinkle when there is an alarm of related channel triggered. Double click the hot spot; the live image of the related channel will pop out.

Edit Hot Spot



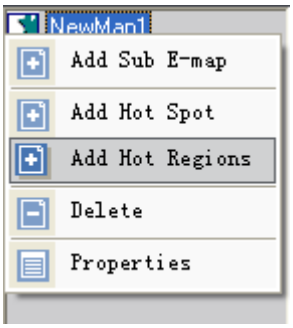
In the edit mode right click the icon of the hot spot, the edit menu will pop up.

Select “Delete” to delete the hot spot; select “Properties” to change the name, appearance and related monitoring point of the hot spot.

11.2.2 Hot Region

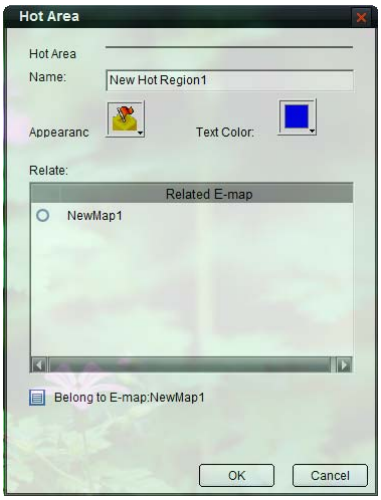
Hot region configuration can be used for displaying the sub map in the main map.

Add Hot Region



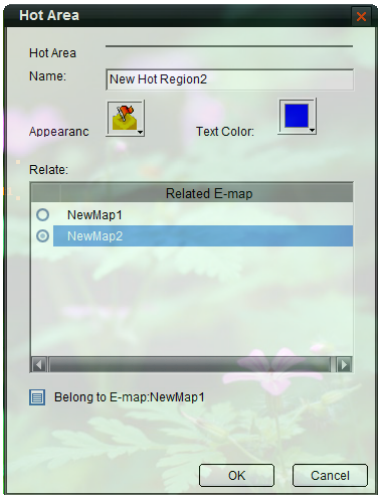
Step1: Enter hot region adding interface.

Right click the image name in the map info area or the image itself, and select “Add Hot Regions”.



Step2: Input the name of the hot region, click  button to select icon for hot region.

You can also click  to change the color of characters.



Step3: Select the map from the “Related E-map” list, and press “OK” to finish.

After succeed to add hot region, move the mouse to the icon of hot region, it will become as , and you can move the hot region by pressing left button and dragging.

After hot region related to the map, double click the hot region icon in the non-edit mode will show the related map.

Note: You cannot edit map unless in the edit mode.

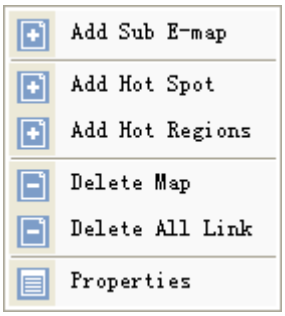
Edit Hot Region

In the edit mode right click the icon of the hot region, the edit menu will pop up.



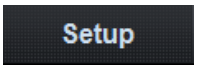
Select “Delete” to delete the hot region; select “Properties” to change the name, appearance and related map of the hot region.

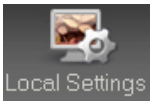
Right click the map in the edit mode, select “Delete All Link” to delete the all hot spot and region of the map.



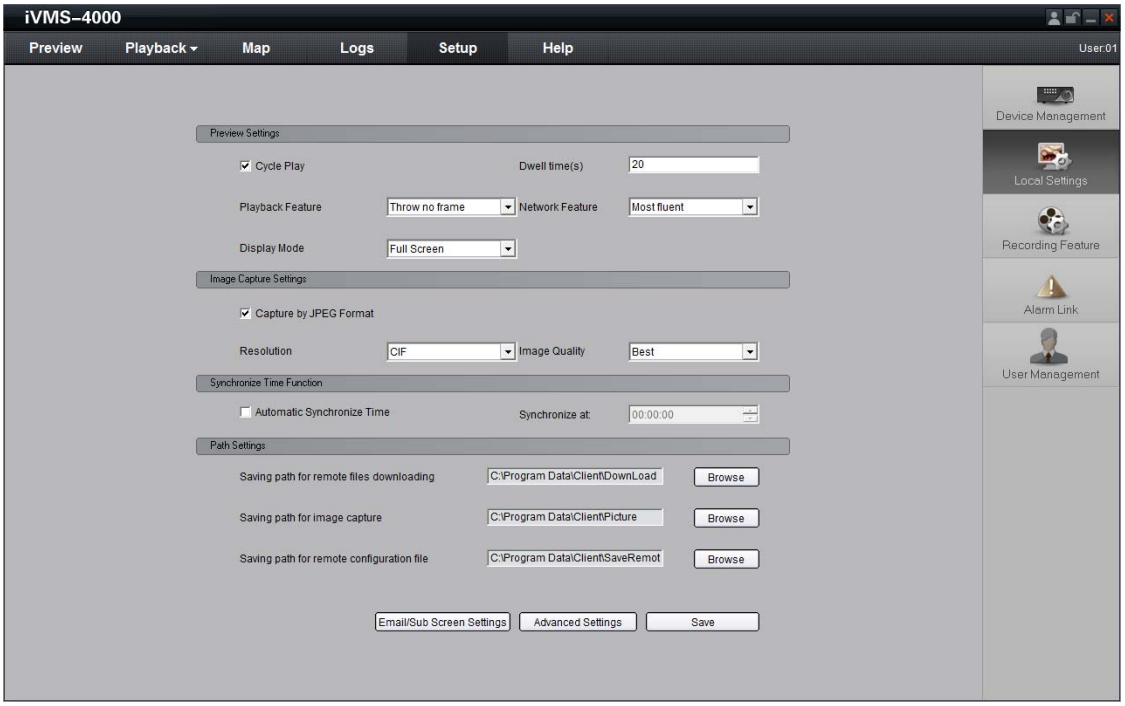
Chapter 12 Utilities

12.1 Software Configuration

Click 

→ 

to enter the following interface:



Descriptions on Software Configuration:

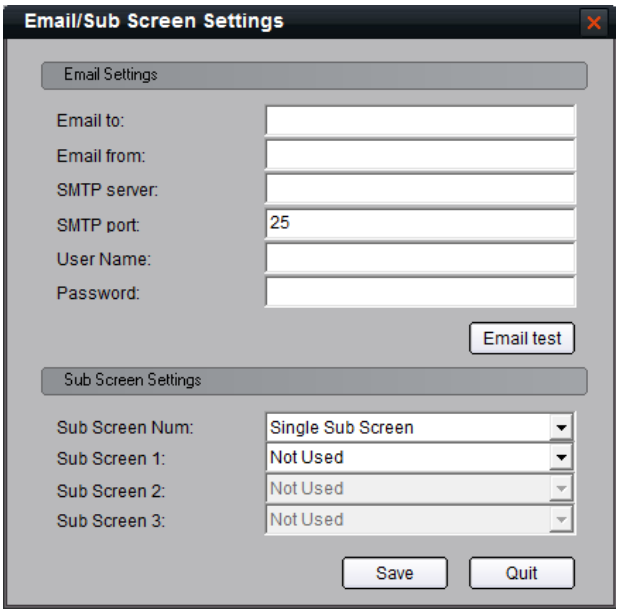
Software Configuration	Descriptions	Descriptions
Preview Settings	Cycle Play	☑ means enable it
	Dwell Time	Set the time of cycle play
	Playback Feature	Configure the playback performance, whether to drop B frame
	Network Feature	Set the instantaneity and fluency for preview
	Display Mode	Set the display ratio of preview window
	TV Wall Dwell Time	Set the dwell time of cycle play on TV wall
Image Capture Settings	Capture Image by JPEG Format	☑ means JPEG format
		☐ means BMP format Image resolution and quality can be configured
Synchronization Function	Auto Synchronize	☑ means enable it, and user can set the time for synchronization

Path Configuration	Remote Download Path	Set the path for remote downloading recorded files
	Capture Saving Path	The saving path of captures from preview or playback
	Configuration File Saving Path	The saving path for exporting the configuration file

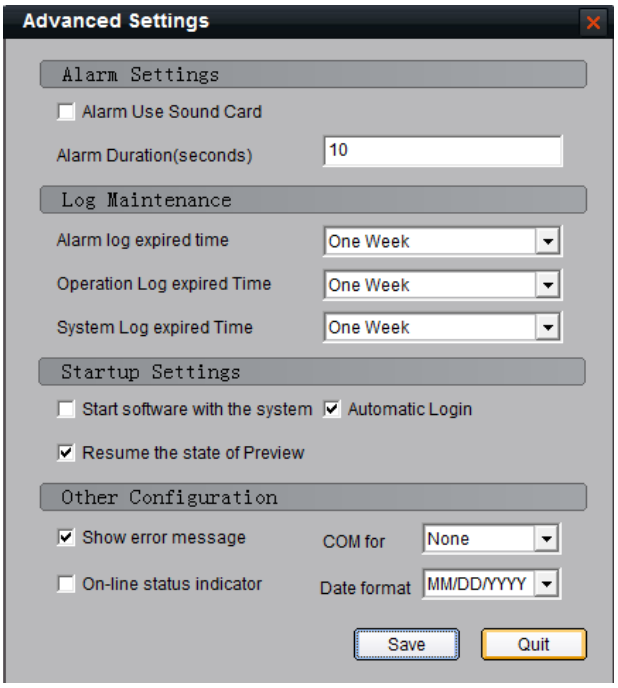
Click Email/Sub Screen Settings to enter the E-mail/Sub Screen Setting interface.

With the alarm link function, user can configure the Email settings for sending the alarm information to the designated receiver when there is alarm occurring.

Refer to the section *5.4 Sub-screen Preview* for the sub screen settings.



Click “Advanced Settings” to enter alarm settings, log maintenance startup settings and other configuration.



Descriptions on Advanced Configuration:

Advanced Configuration	Descriptions	Descriptions
Alarm Settings	Alarm Use Sound Card	☑ means audible alarm outputs from sound card
	Alarm Duration	Set the time length of the alarm delay
Log Maintenance	Alarm Log expired Time	The retention period of the alarm log in the database
	Operation Log expired Time	The retention period of the operation log in the database
	System Log expired Time	The retention period of the system log in the database
Other Configuration	Show error message	Pop up the warning dialog box when error occurs
	Playback on second monitor	Select two screen display for e-map or remote playback
	On-line status Inspection	☑ means start to inspect the status of the current devices. It will send e-mail to the appointed e-mail address when the devices are offline, go online and offline. (email set correctly)
	Auto Login	☑ means enable it
	COM for	Serial port number

After enable inspection, if the device is offline, then the alarm light will twinkle, and the detailed information will be listed; if the device is on line, the alarm light stop twinkling and the on line information will be listed as well.

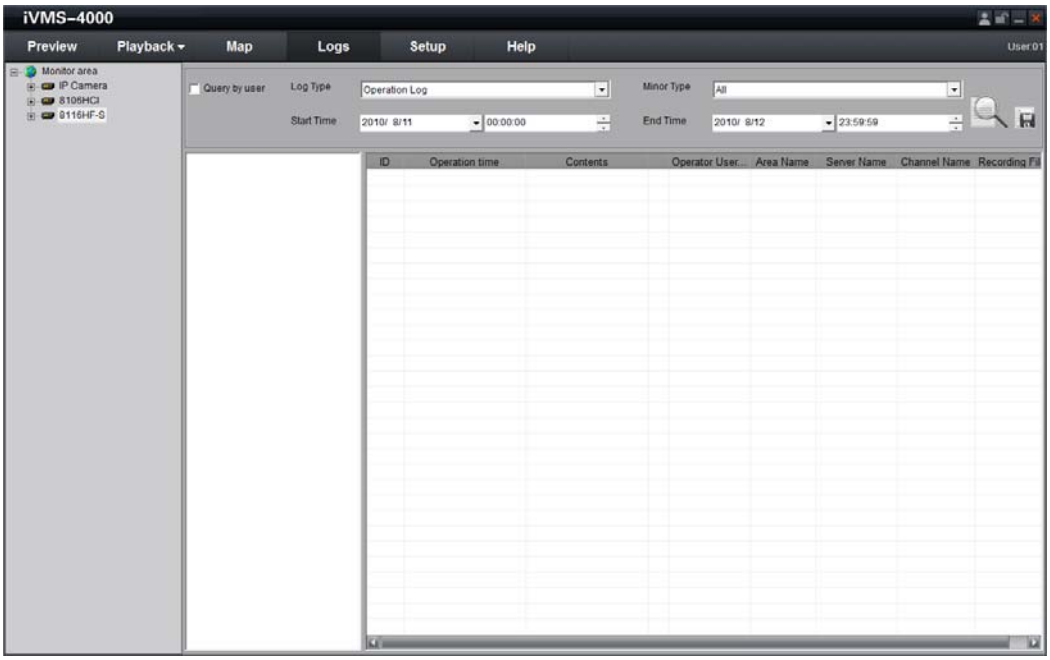


12.2 Log Management

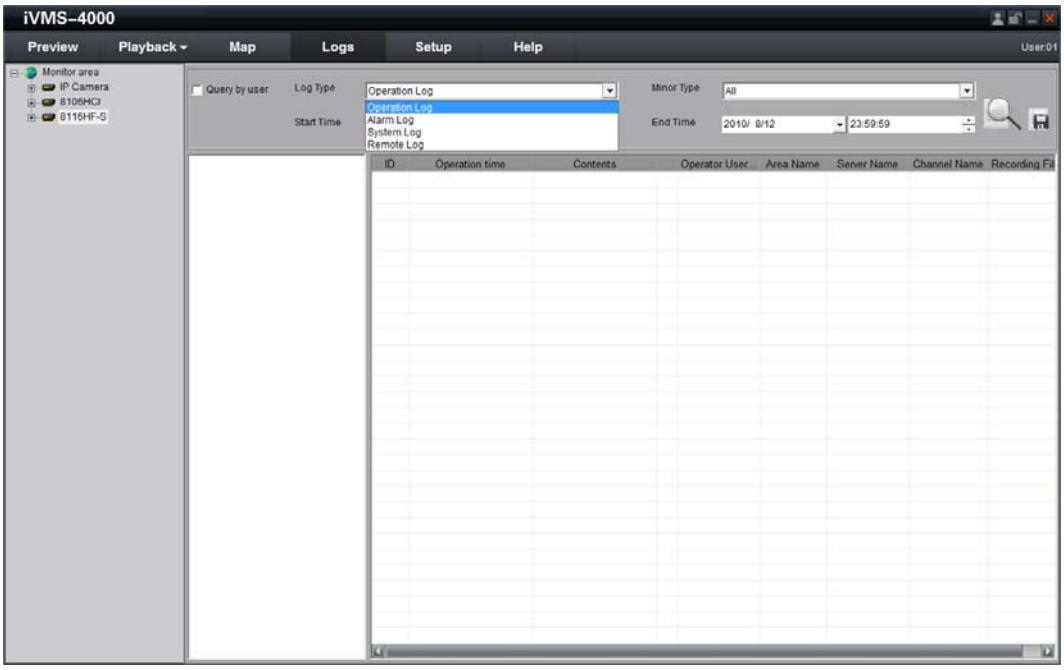
Click  to enter the manage interface

12.2.1 Log Query

Step1: select the area, device or channel you want to search from.



Step2: select type and subtype for the log you want to search for.



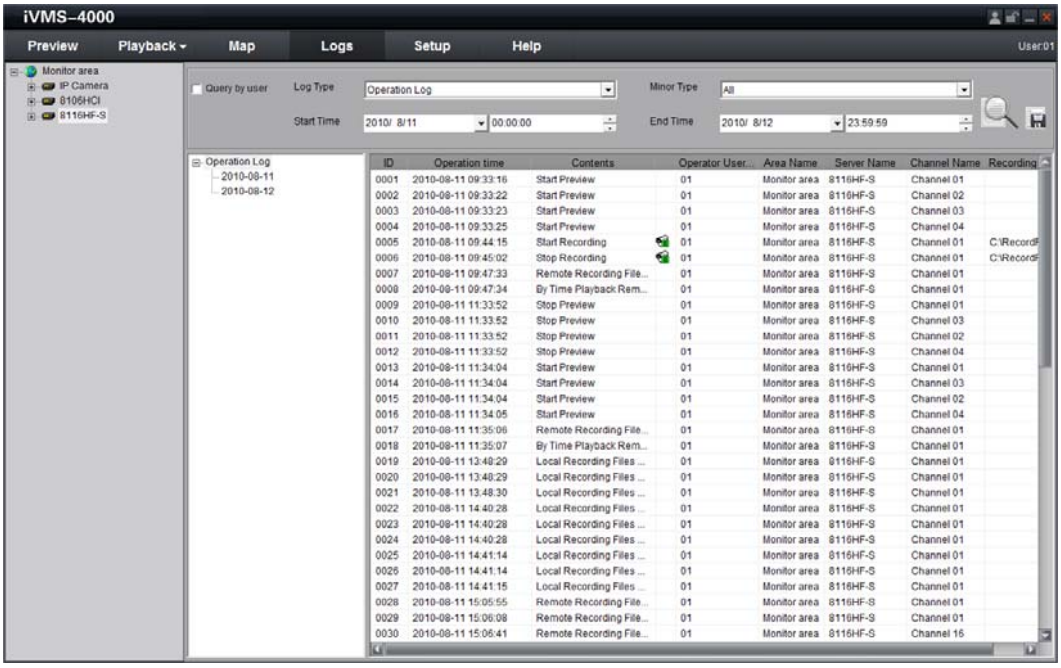
System Log: Record information on login, logout and software configuration.

Operation Log: Record information on the software operation.

Alarm Log: Record information on the alarm and it needs to be linked as alarm link type.

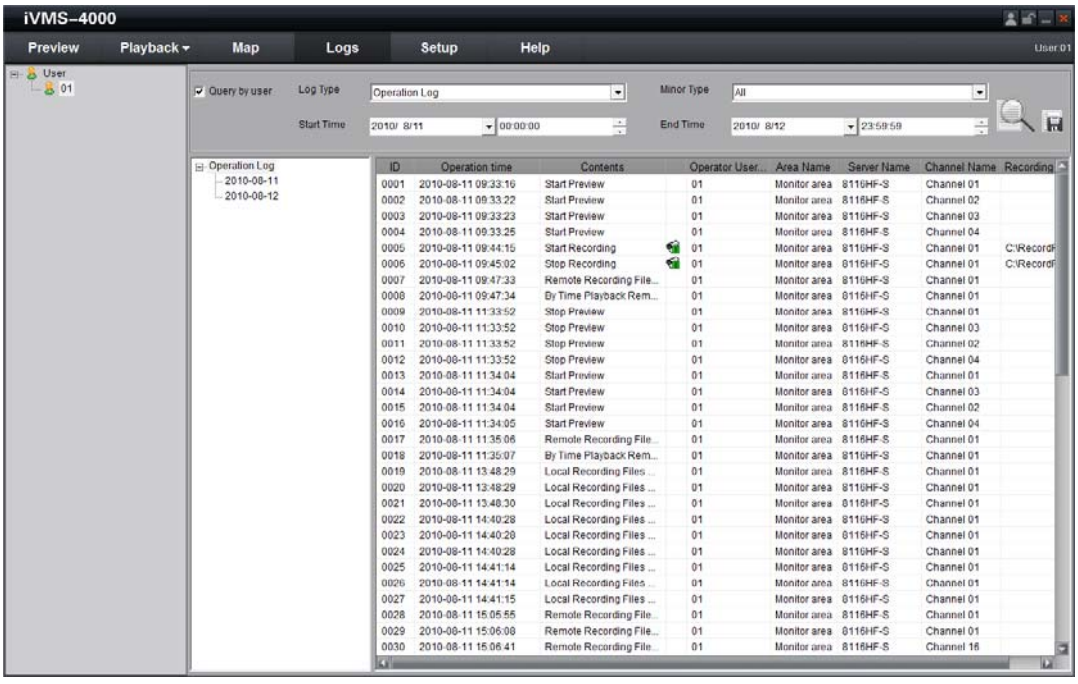
Remote Log: Record information on operations of the remote device.

Step3: select the start time and end time for the log query, click  button and the logs match condition will show in the list.



Double click the date in the list on the left, the logs of that day will show in the information list.

Enable “Query by user” (i.e. ☑), and you can search log by users.



Note:

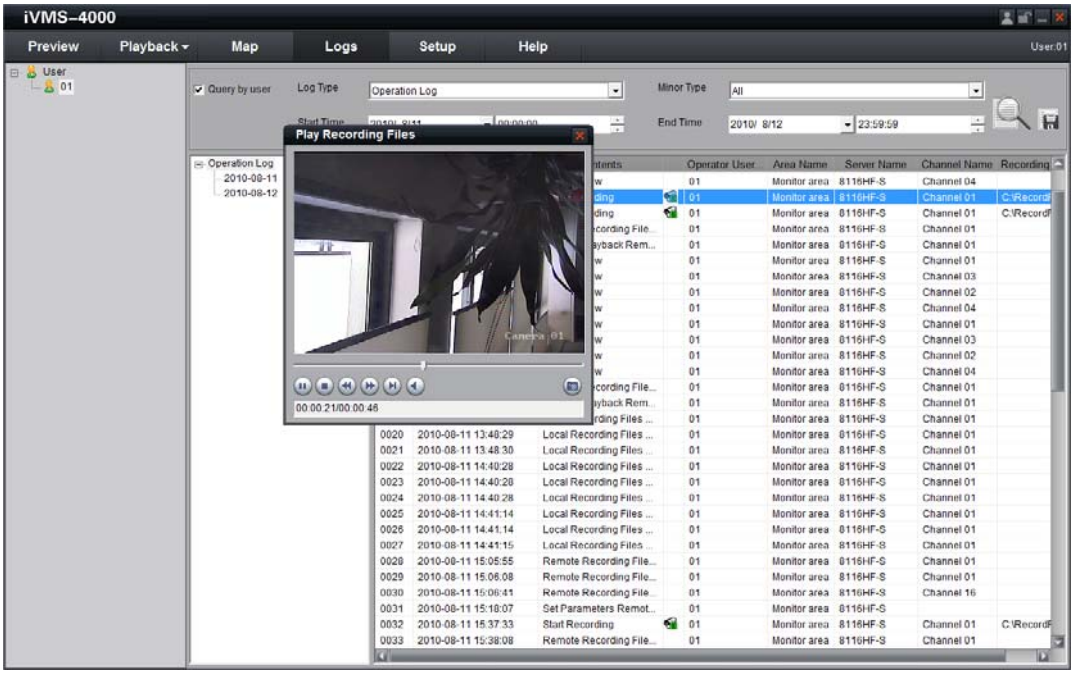
1. The “Description” option must be supported by DS-9000/9100 series DVR with the version of 1.1.0 or higher.
2. Up to 36000 local logs or2000 remote logs can be searched and displayed. If it is failed to search the related log results, user can shorten the searching time or select the specific log type.

12.2.2 Play Back Linked Recording

If the logs contain linked recordings, then you can play them back.

ID	Operation time	Contents	Operator User...	Area Name	Server Name	Channel Name	Recording
0004	2010-08-11 09:33:25	Start Preview	01	Monitor area	8116HF-S	Channel 04	
0005	2010-08-11 09:44:15	Start Recording	01	Monitor area	8116HF-S	Channel 01	C:\RecordF
0006	2010-08-11 09:45:02	Stop Recording	01	Monitor area	8116HF-S	Channel 01	C:\RecordF
0007	2010-08-11 09:47:33	Remote Recording File...	01	Monitor area	8116HF-S	Channel 01	
0008	2010-08-11 09:47:34	By Time Playback Rem...	01	Monitor area	8116HF-S	Channel 01	
0009	2010-08-11 11:33:52	Stop Preview	01	Monitor area	8116HF-S	Channel 01	
0010	2010-08-11 11:33:52	Stop Preview	01	Monitor area	8116HF-S	Channel 03	
0011	2010-08-11 11:33:52	Stop Preview	01	Monitor area	8116HF-S	Channel 02	
0012	2010-08-11 11:33:52	Stop Preview	01	Monitor area	8116HF-S	Channel 04	
0013	2010-08-11 11:34:04	Start Preview	01	Monitor area	8116HF-S	Channel 01	
0014	2010-08-11 11:34:04	Start Preview	01	Monitor area	8116HF-S	Channel 03	
0015	2010-08-11 11:34:04	Start Preview	01	Monitor area	8116HF-S	Channel 02	
0016	2010-08-11 11:34:05	Start Preview	01	Monitor area	8116HF-S	Channel 04	
0017	2010-08-11 11:35:06	Remote Recording File...	01	Monitor area	8116HF-S	Channel 01	
0018	2010-08-11 11:35:07	By Time Playback Rem...	01	Monitor area	8116HF-S	Channel 01	
0019	2010-08-11 13:48:29	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0020	2010-08-11 13:48:29	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0021	2010-08-11 13:48:30	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0022	2010-08-11 14:40:28	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0023	2010-08-11 14:40:28	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0024	2010-08-11 14:40:28	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0025	2010-08-11 14:41:14	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0026	2010-08-11 14:41:14	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0027	2010-08-11 14:41:15	Local Recording Files ...	01	Monitor area	8116HF-S	Channel 01	
0028	2010-08-11 15:05:55	Remote Recording File...	01	Monitor area	8116HF-S	Channel 01	
0029	2010-08-11 15:06:08	Remote Recording File...	01	Monitor area	8116HF-S	Channel 01	
0030	2010-08-11 15:06:41	Remote Recording File...	01	Monitor area	8116HF-S	Channel 16	
0031	2010-08-11 15:18:07	Set Parameters Remot...	01	Monitor area	8116HF-S		
0032	2010-08-11 15:37:33	Start Recording	01	Monitor area	8116HF-S	Channel 01	C:\RecordF
0033	2010-08-11 15:38:08	Remote Recording File...	01	Monitor area	8116HF-S	Channel 01	

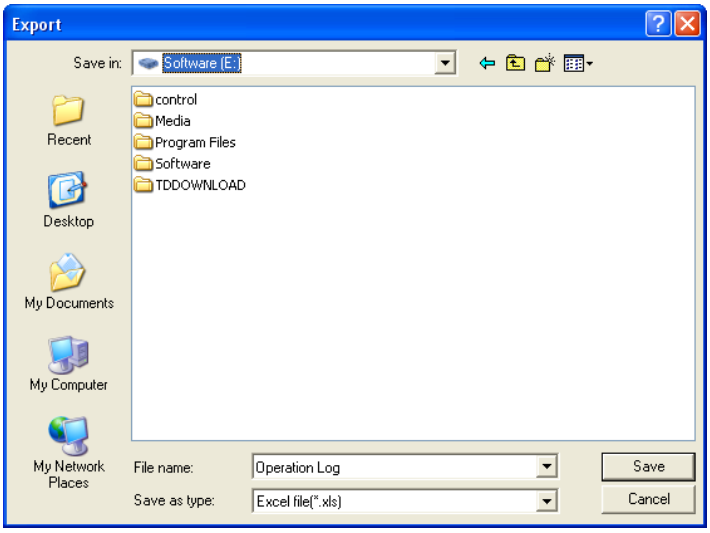
Click the log with the icon  in the list to play back the linked recordings.



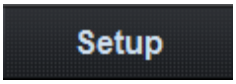
Similarly, if the logs contain captured alarm linked pictures, then you can click the icon  in the list to play back the corresponding alarm pictures.

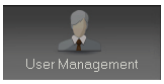
12.2.3 Export Log

Click  button to export current logs as Excel or Txt format.

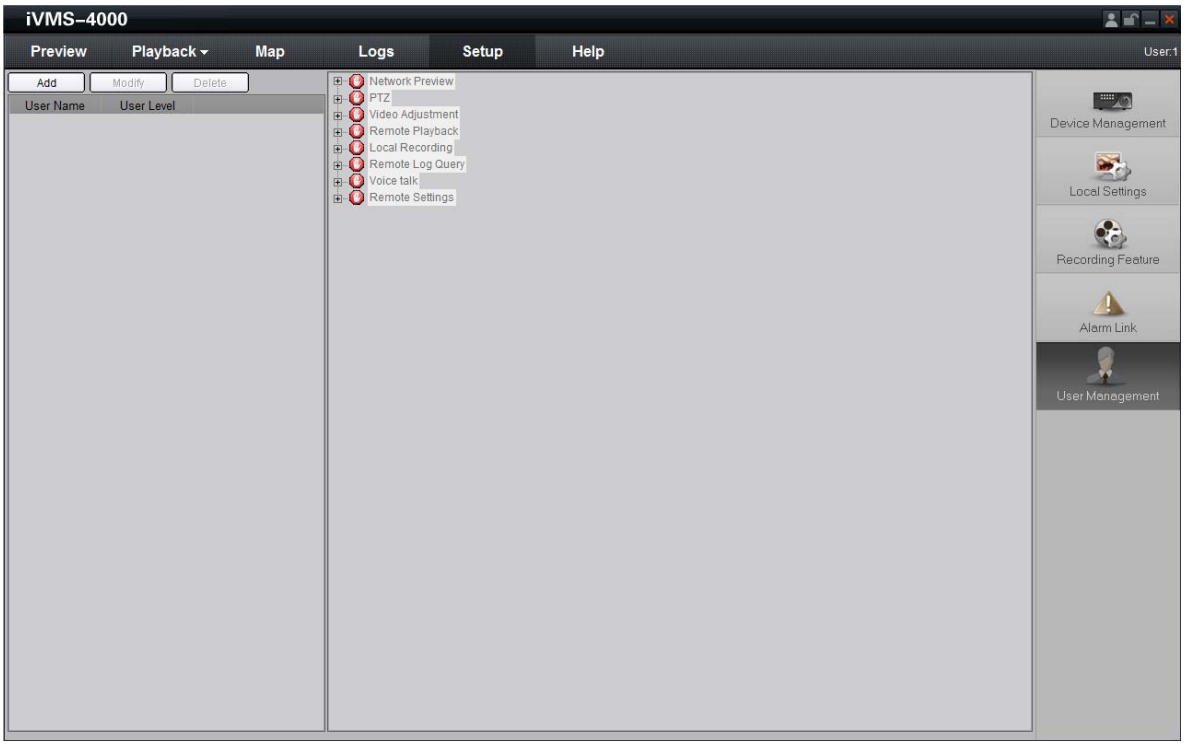


12.3 User Management

Click 

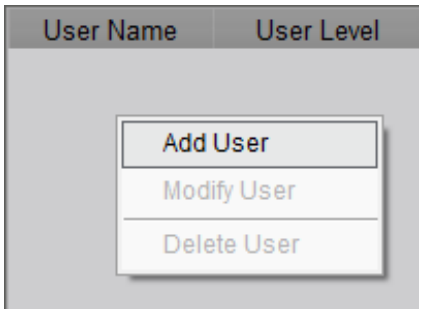
→ 

to enter the User Management interface:



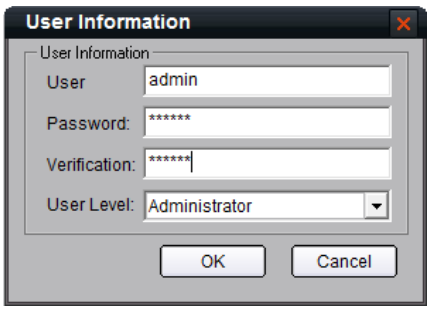
12.3.1 Add & Delete User

Right click the user list on the left, and select “Add User”.



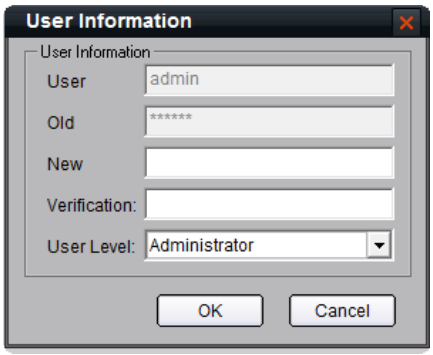
Input the user name, password and select the level for user, then click “OK” to finish.

There are two options for user level: Administrator and Guest. Administrator has all the rights by default; as for Guest, you need to set the rights for it.



Double click the user name or right click it and select “Modify User” to change the password and user level.

Note: The administrator registered when the software ran for the first can change password and user level; administrator can change user password, guest has no rights on user management.



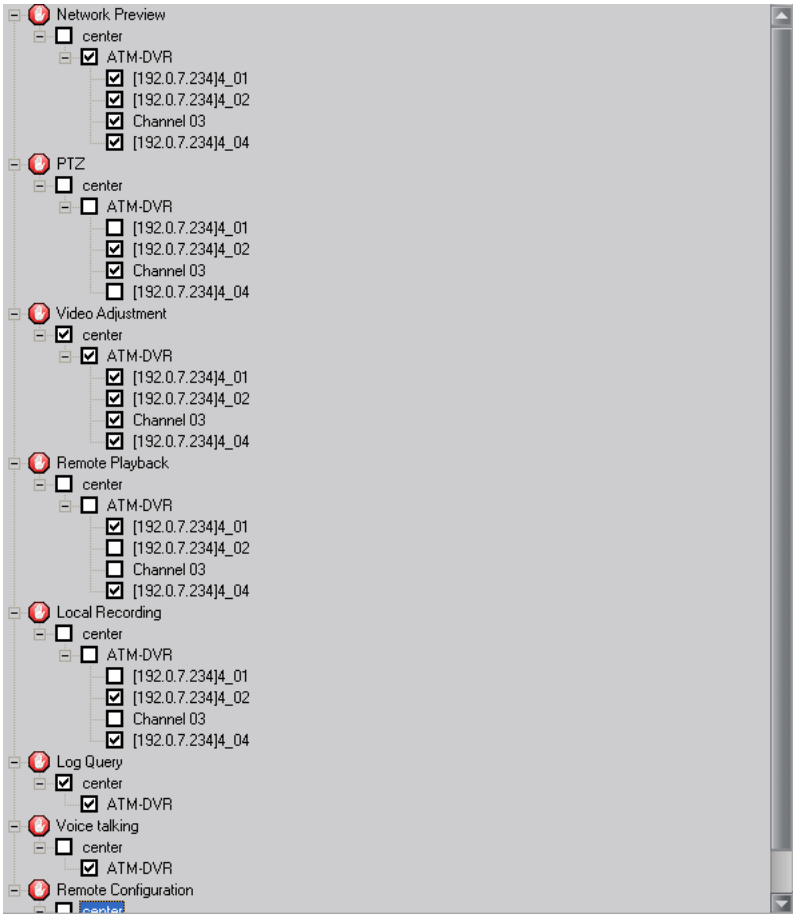
User Privileges Descriptions:

User Type	Privilege	Descriptions
Registered User	Add user	Add administrator and normal user
	Modify user	Modify the levels of all users and privileges of normal users
	Operation Privilege	With all privileges by default, cannot be changed.
Administrator	Add user	Add normal user
	Modify user	Modify the privileges of normal users
	Operation Privilege	With all privileges by default, cannot be changed.
Others	Add user	No privileges
	Modify user	No privileges
	Operation Privilege	No local configuration privileges, needs to set the privileges first.

Note: The administrator can be modified in the login dialog box instead of the user management. The password cannot be null and should be more than 6 characters.

12.3.2 User Rights Distribution

Select a guest, and click the rights tree on the right to distribute the rights for user.



Note: The operations are available for the guest only when the corresponding rights are distributed.

12.4 Export/Import Config Data

This client software supports to export and import the configure data, select the “Data export” option, software will save the configure data to local file, and select the “Data import” option, software will apply the configure file to the current software account.



Note:

1. Software will cover the former configuration.
2. After data import, it will take effect after reboot the software.

Chapter 13 Hardware Decode Control

If the “Client Software” option is selected during the installation of the client software and there is video/audio decoding card installed in the computer, then user can double click the “Hardware Decode Preview” option to enter the decode preview interface and realize the output of network video signal from the dome/camera and display it on TV wall through the decoding card.

13.1 Hardware Decode Configuration

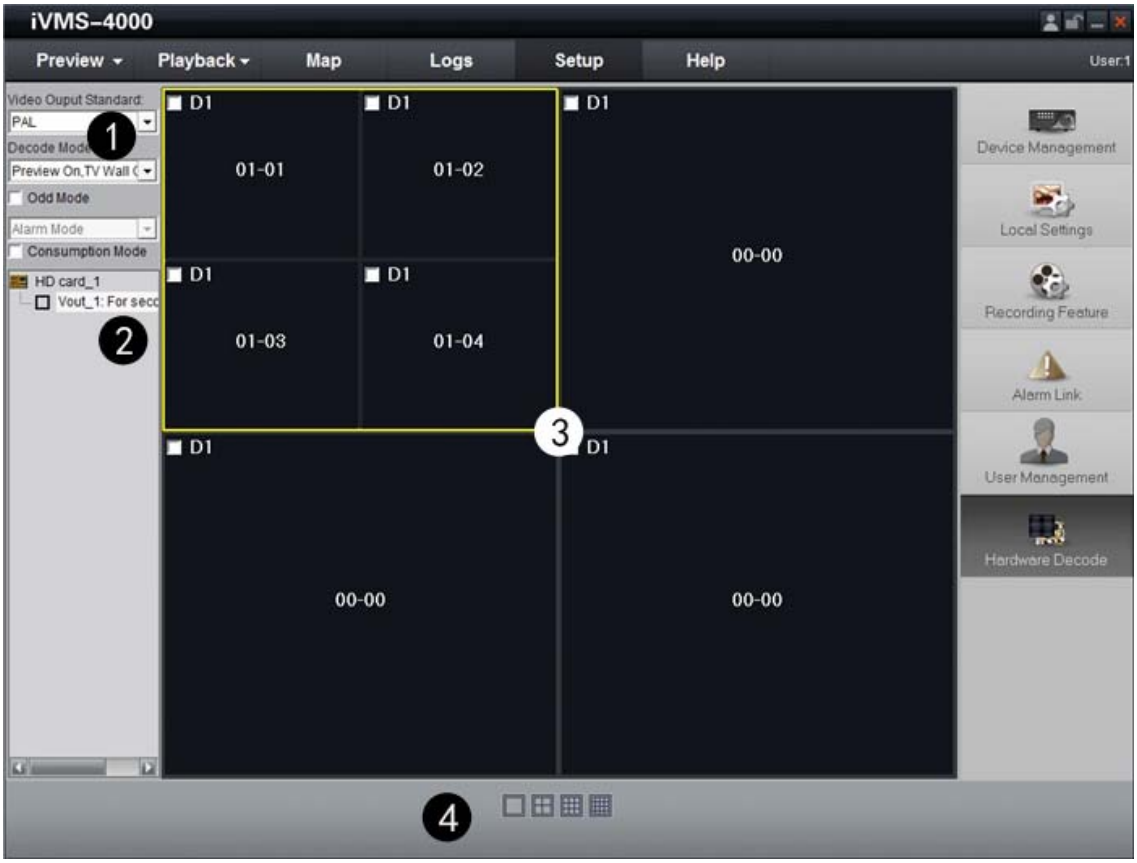
Before hardware decode on TV Wall, user needs to configure the card output and window division mode, or else it will use the default decode mode.

Click 

key and then 

on the right to enter the configuration interface.

The decoding card installed in the PC can be recognized and initialized automatically as iVMS software starts up, and the information will be displayed in the decoding card info area. The icon  means which video output of the decoding card will be used to duplicating by the icon.



The area descriptions are as follows:

Area	Instruction
❶	Configuration Area: Configure the Video Output Standard, Decode Mode and Consumption Mode.
❷	Decoding Card Info Area: Show the information of the decoding cards and channels.
❸	Output Window Area: Configure the output mode of decoding channels.
❹	Window-division Mode Selection Area: Select window-division mode.

13.2 Hardware Decode Mode Configuration

Before preview, user should configure the hardware decode parameters in the Configuration Area:

Configuration	Description
Video Output Standard	Select the video output standard to PAL or NTSC.
Decode Mode	Select the decode mode to “Factory default”, “Preview On, TV Wall On” or “Preview Off, TV Wall On”.
Odd Mode	When the Odd Mode is enabled by clicking the checkbox to☑, the alarm pictures can be outputted by decode card to TV wall after configuration in Alarm Link interface. (Enter “Setup”→ ”Alarm link” to set the alarm link type to “Pop up image when alarm occurs”, which will allow the iVMS software to output the video through decode card on TV wall when there is alarm.)
Consumption Mode	User can enable the Consumption Mode to decode the stream from DS-9000 and DS-8100 series DVR.

Note:

1. The selected video output standard must be the same with that of DVR and TV wall, or else the video image displayed on TV wall will become abnormal.
2. When the Odd Mode is enabled, the first channel of the first decode card will be used for outputting the alarm pictures and cannot be configured or modified any more.
3. When the Consumption Mode is enabled, it is allowed to decode stream from DS-9000 and DS-8100 series DVR. If the resolution is selected to 4CIF, the number of decoding channels will be halved.

Decode Mode	Description
Factory Default	Each DS-4101HDI card is capable of decoding 1 channel, each DS-4002MDI card decoding 2 channels, and each DS-4004MDI card decoding 4 channels and so forth.
TV wall on & Preview on	Both of the video images from the play window and TV wall of iVMS software are decoded by decode card. The decode channel must be configured in the hardware decode configuration interface.
TV wall on & Preview off	The video images from the TV wall are decoded by decode card, while the video images from the play window are decoded by CPU.

For MDI card:

When the resolution of all video images is set to CIF resolution, the maximum number of decoding channels is: 4

channels by each DS-4002MDI card, and 8 channels by DS-4004MDI card.

When the resolution of all video images is set to 4CIF resolution and the Consumption Mode is disabled, the maximum number of decoding channels is: 2 channels by each DS-4002MDI card, and 4 channels by DS-4004MDI card.

When the resolution of all video images is set to 4CIF resolution and the Consumption Mode is enabled, the maximum number of decoding channels is: 1 channel by each DS-4002MDI card, and 2 channels by DS-4004MDI card.

For HDI card:

Each DS-4101HDI card is capable of decoding 1 channel at 1080P/1080I/UXGA/XVGA resolution; 2 channels at 720P resolution; 3 channels at SVGA resolution; or 4 channels at 4CIF/VGA or lower resolution.

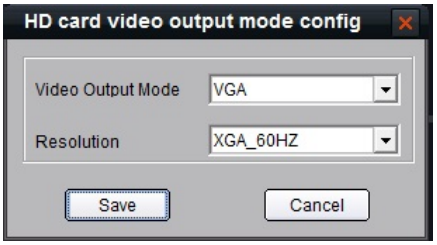
Note: Do not output more than 4 channels at CIF or 2 channels at 4CIF resolution from the DS-4002MDI card; and do not output more than 8 channels at CIF or 4 channels at 4CIF resolution from the DS-4004MDI card.

13.3 Decode Output Mode Configuration

If the MDI card is used, the video output mode is selected to CVBS mode by default, and no configuration is required.

If the HDI card is used, user can enter the “HD card video output mode configuration” interface and select the video output mode to CVBS, DVI, HDMI, VGA or YPbPr from the drop-down menu.

Select the resolution and then click Save to complete settings.



13.4 Hardware Decode Output Window Configuration

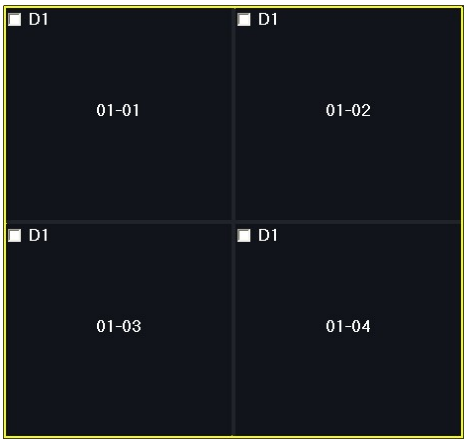
The “output window panel” has a multi-window division according to the total MDI card BNC number. One window is related to one BNC.

Take one DS-4004MDI card for example, there are 4 BNC outputs and the “output window panel” will show you 4 windows division. The play window is named as 01-01, 02-01, 03-01 and 04-01.

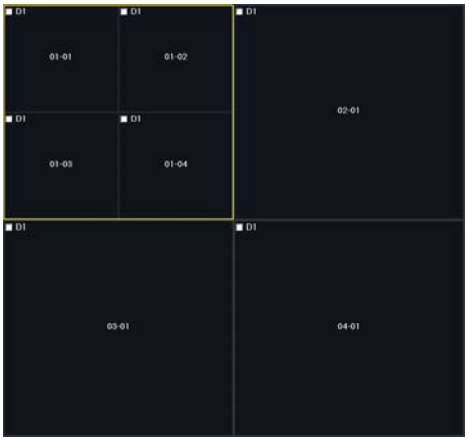


Select one window on “output window panel” and click the window division button to select a window division on this BNC output.

For example, if we select the first window 01-01 and then divide it into 4 windows, then the 4 windows will be named as 01-01, 01-02, 01-03, and 01-04.



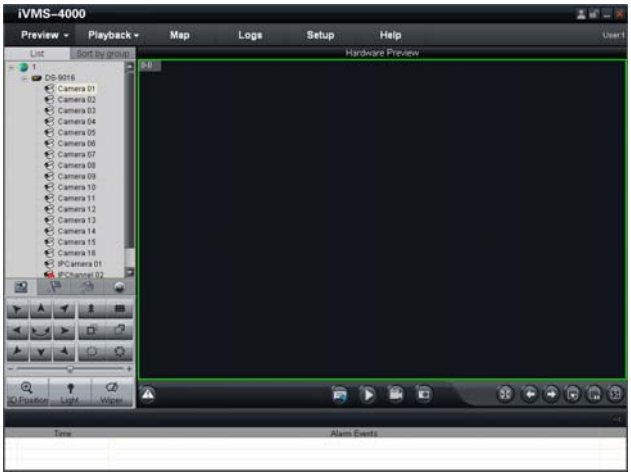
Tick the check box of D1 to ☑, and then the specified channel will be decoded and displayed on the current window at D1 resolution.



Note: If the default mode is selected, then each decoding channel outputs one single image and the division mode is invalid.

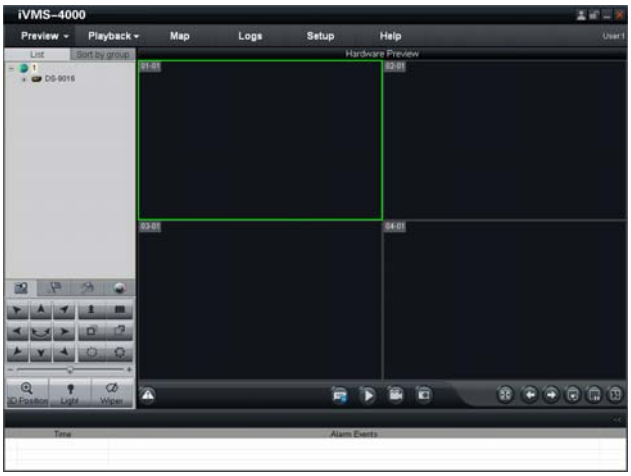
13.5 Hardware Decode Preview

After configuration, click “Preview” key and select “Hardware Preview” to enter the hardware decode interface.



Click  to start decoding, and meanwhile, the preview windows layout will switch to the layout which is set in “output window panel”.

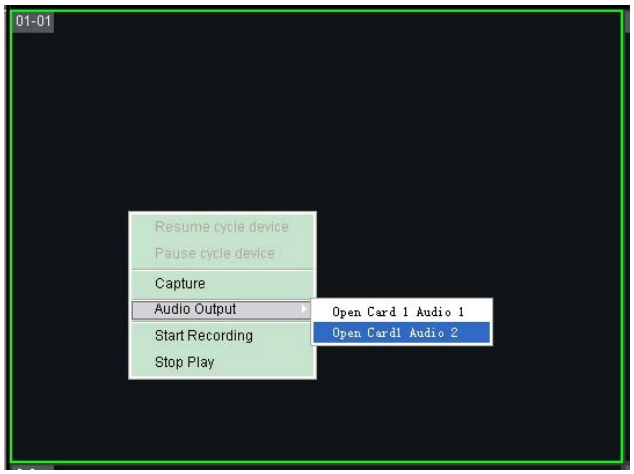
The windows beyond the limited maximum decoding channels will not be displayed.



The basic operations of hardware preview are the same with the software decode. Please refer to sections 5.1-5.5 for more details.

Right click the decoding video window division, and user can select the audio output channel of the hard decoding card.

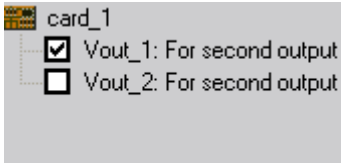
For example, for 4004MDI card which can decode 8 channels at CIF resolution, the first 4 channels’ audio output can select “Open Card 1 Audio 1” and “Open Card 1 Audio 2”, and the last 4 channels’ audio output can select Open Card 1 Audio 3” and “Open Card 1 Audio 4”.



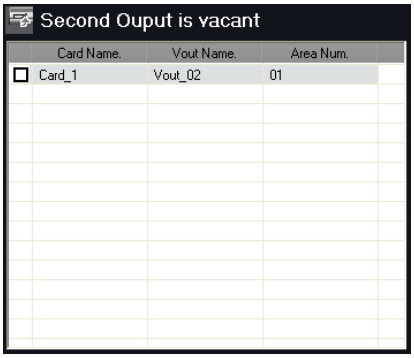
13.6 Secondary Output of Hardware Decode

The MD card can output the decoded images twice. Take 4002MD card for example, one 4002MD card can decode 4 channels CIF images, assume they are channel01, channel02, channel03, and channel04; if one decoding channel is set as 4 divisions and separately display channel01, channel02, channel03, and channel04, then the other decoding channel can only support one division and select one decoding channel to output the image. The descriptions above are defined as secondary output.

Enter hardware decode configuration interface, and tick the channel that set as secondary output and the channel status will become ☑



Click  in the window division to display secondary output list.



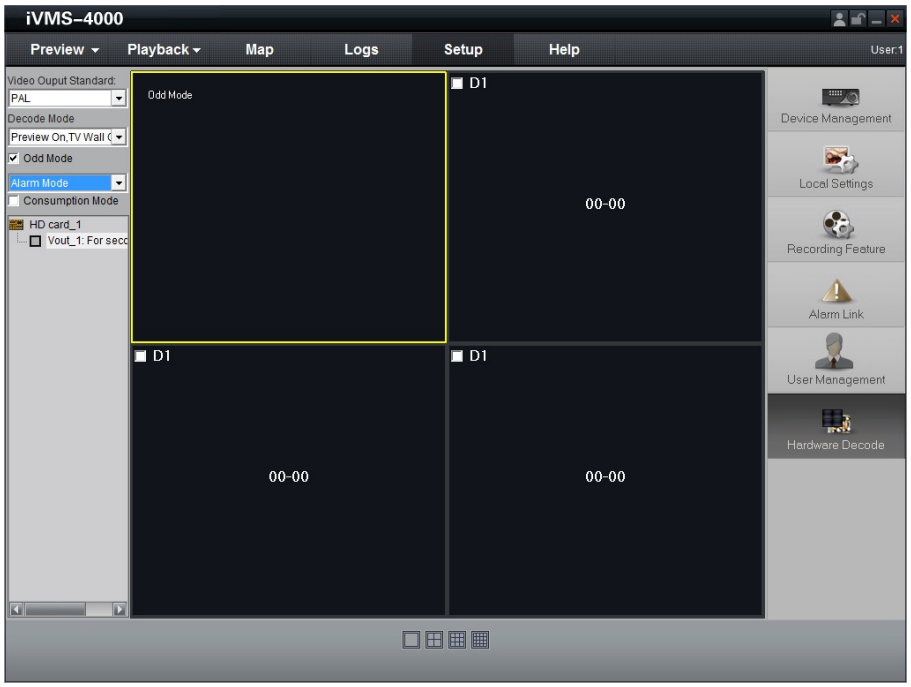
Note: The system will clear the previous configuration information of the secondary output channel.

13.7 Odd Decode Mode

When the Odd Mode is enabled by clicking the checkbox to  in the Configuration Area, the alarm pictures can be outputted by decode card to TV wall when there is alarm occurring.

To enable this function:

1. The exception handle of the device must be select to “Notify Surveillance Center”;
2. The alarm arming must be configured for the device in the preview mode.
3. Enter “Setup”→ ”Alarm link” to set the alarm link type to “Pop up image when alarm occurs”.



Chapter 14 Decoder Control

If the “Client Software(Decoder)” option is selected during the installation of the client software, then the iVMS 4000 client software allows the access of the 6000DI, 6300DI and 6401HDI Decoder for decoding and outputting the network video signal from DVR, DVS, IP Camera and IP speed dome and display of the video on TV wall as well.

14.1 Add Decoder

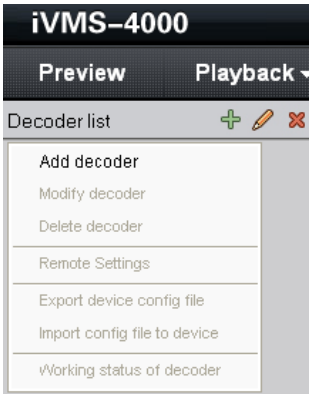
Before controlling the decoder, user needs to add the decoder.

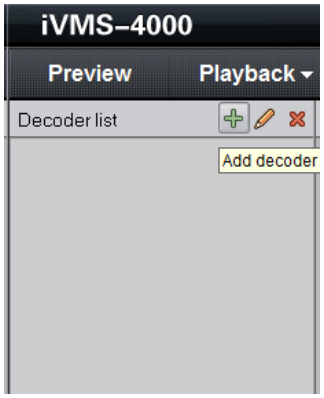
Click 

to enter the decoder setting interface.



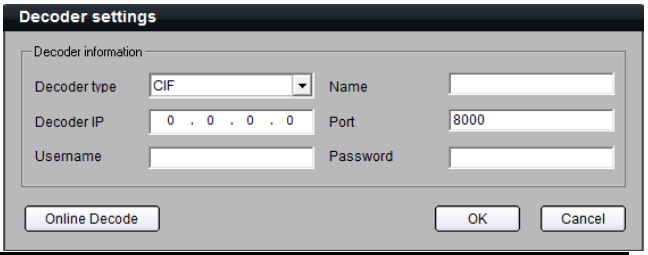
Right click in the Decoder list, select “Add decoder”, or click “”to add decoder.





Input decoder name, IP, Port, Username, Password, click ”OK” to finish adding decoder.

Note: the software supports add device by the click the “Online Device” button.



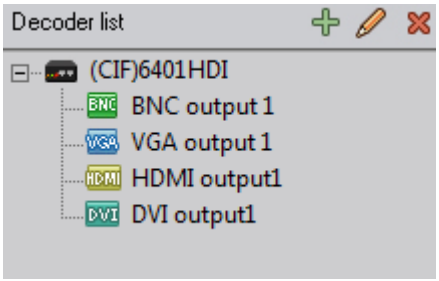
Option	Instruction
Decoder type	CIF, 4CIF, 720P and 1080P can be selected according to your decoder model, different model of decoder could have different decode performance.
Decoder name	The name of the Decoder, it can be user-defined.
Decoder IP	The IP address of the Decoder

Port	The device port of the Decoder
Username/Password	The username and password of the Decoder.

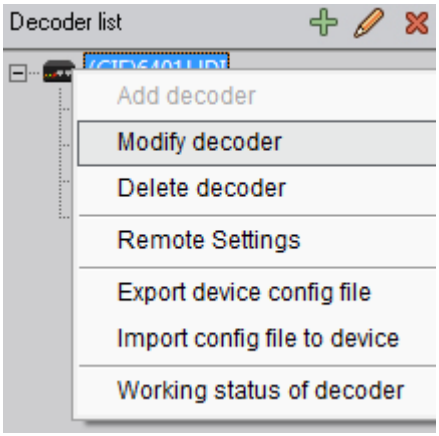
The decoding source of 6000DI, 6300DI and 6400HDI decode source is shown as below:

Decode type	Description						
	DS-6000DI			DS-6300DI			DS-6400HDI
	6001DI	6004DI	6008DI	6301DI	6304DI	6308DI	6401HDI
CIF	1-CH	4-CH	8-CH	4-CH	8-CH	16-CH	4-CH
4CIF	1-CH	4-CH	8-CH	2-CH	4-CH	8-CH	4-CH
720P	Not support			1-CH	2-CH	4-CH	2-CH
1080P	Not support			Not support			1-CH

After added successfully, the decoder channels will be in the decoder list. If the Decoder supports VGA, it will display the VGA output. The 6300DI decoder supports both BNC and VGA output, while 6401HDI supports BNC, VGA, HDMI and DVI output.



Right click a decoder and select Modify decoder, or click "", user can modify it, select Delete decoder, or click "" to delete it.

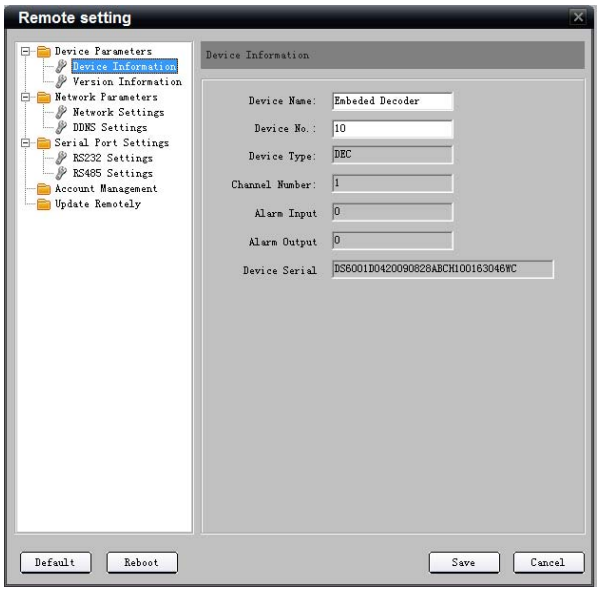


Note: It is recommended to add decoder only in one iVMS-4000 software, avoiding control confusion caused by being added in different software.

14.2 Decoder Configuration

Select a decoder, and right click it and select “Remote Settings” to enter the decoder Remote settings interface.

Refer to *Chapter10 Remote Configuration* for remote parameters configuration.

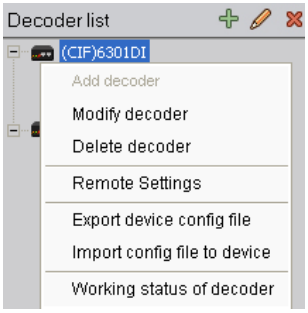


Export/import Config File

Right click a decoder, user can export device config file, saving in “C:\Program Data\SaveRemoteCfgFile” folder by default

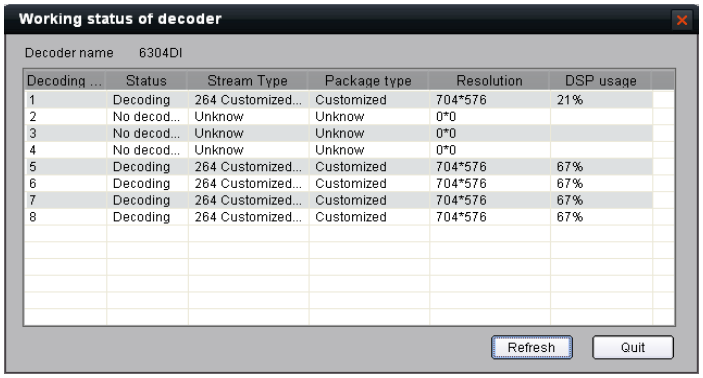
If user saved the config file before, select import config file to device, it will recover the former settings.

Note: make sure the decoders are the same model with same firmware version.



Decoder Status

Select “Working status of decoder”, it will display the status of the decoder



Decoding ...	Status	Stream Type	Package type	Resolution	DSP usage
1	Decoding	264 Customized...	Customized	704*576	21%
2	No decod...	Unknow	Unknow	0*0	
3	No decod...	Unknow	Unknow	0*0	
4	No decod...	Unknow	Unknow	0*0	
5	Decoding	264 Customized...	Customized	704*576	67%
6	Decoding	264 Customized...	Customized	704*576	67%
7	Decoding	264 Customized...	Customized	704*576	67%
8	Decoding	264 Customized...	Customized	704*576	67%

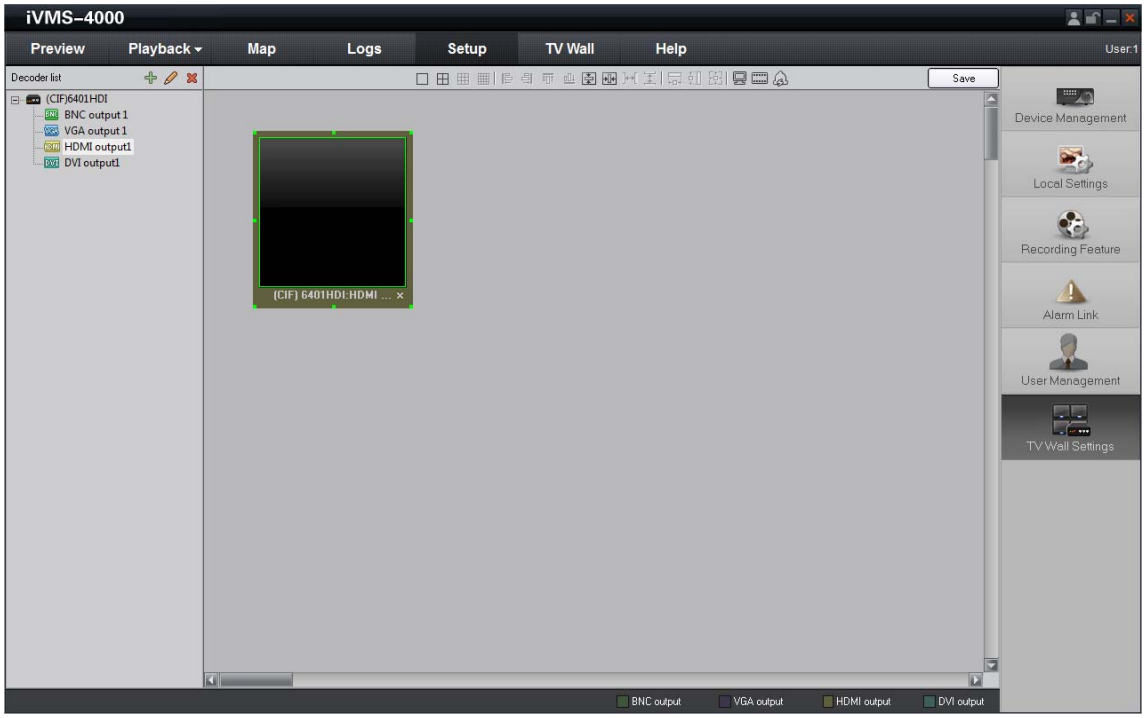
Note: the “Export/import config file” and the “Decoder Status” just support 6300DI and 6400HDI series decoder.

14.3 TV Wall Settings

Enable/Disable decode output

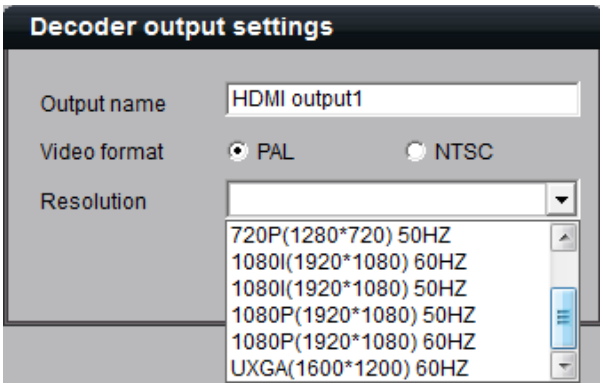
After adding decoder, the decode channel is not in using by default. Drag one channel to the blank interface on the right, it will enable this channel.

After enabled a channel, click "" on the right and bottom corner to disable this channel.



Decode output settings

Double click a channel of the decoder, user can configure the channel name, CVBS output, and the resolution of VGA, DVI and HDMI output.

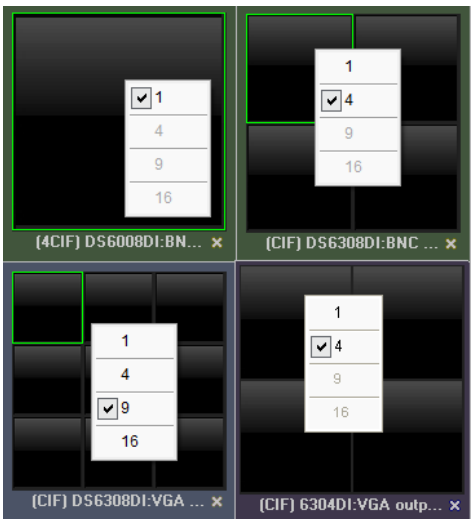


Window division configuration

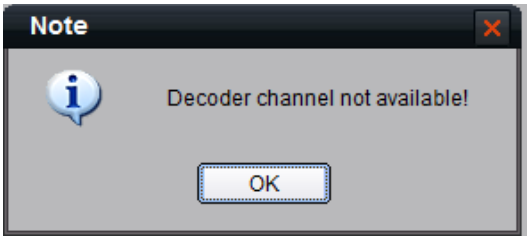
Right click the decoder channel, user can change the division mode.

The section will be different depended on the device type.

Decoder Type	Model	Output channel	Output division
6000DI	6001DI	BNC output	1
	6004DI		
	6008DI		
6300DI	6301DI	BNC output	1,4
		VGA output	1,4
	6304DI	BNC output	1,4
		VGA-1 output	1,4,9
		VGA-2 output	1,4
	6308DI	BNC output	1,4
		VGA-1 output	1,4,9,16
		VGA-2,3,4	1,4
6400HDI	6401HDI	BNC, VGA, DVI, HDMI	1,4



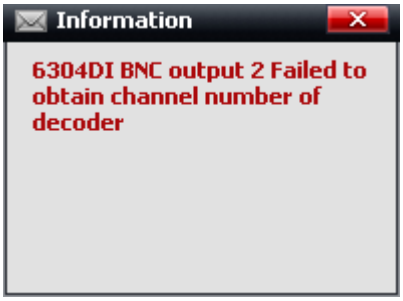
After configured the window division if it is up to the limit of the decoder source, go on enable the decode output channel, it will note “Decoder channel not available!”



Note: the 6304DI decoder has 4-BNC, each two BNC is process on one DSP, and each DSP can process 4-ch CIF, so if the first BNC decode 4-ch CIF, and then if user enables the second BNC, it will pop up the error prompt. The four outputs of 6401HDI just could be selected only one as the default output at the same time.

If user has finished setting the window division, when user set the decode channel beyond the decode sub window, it will be failed.

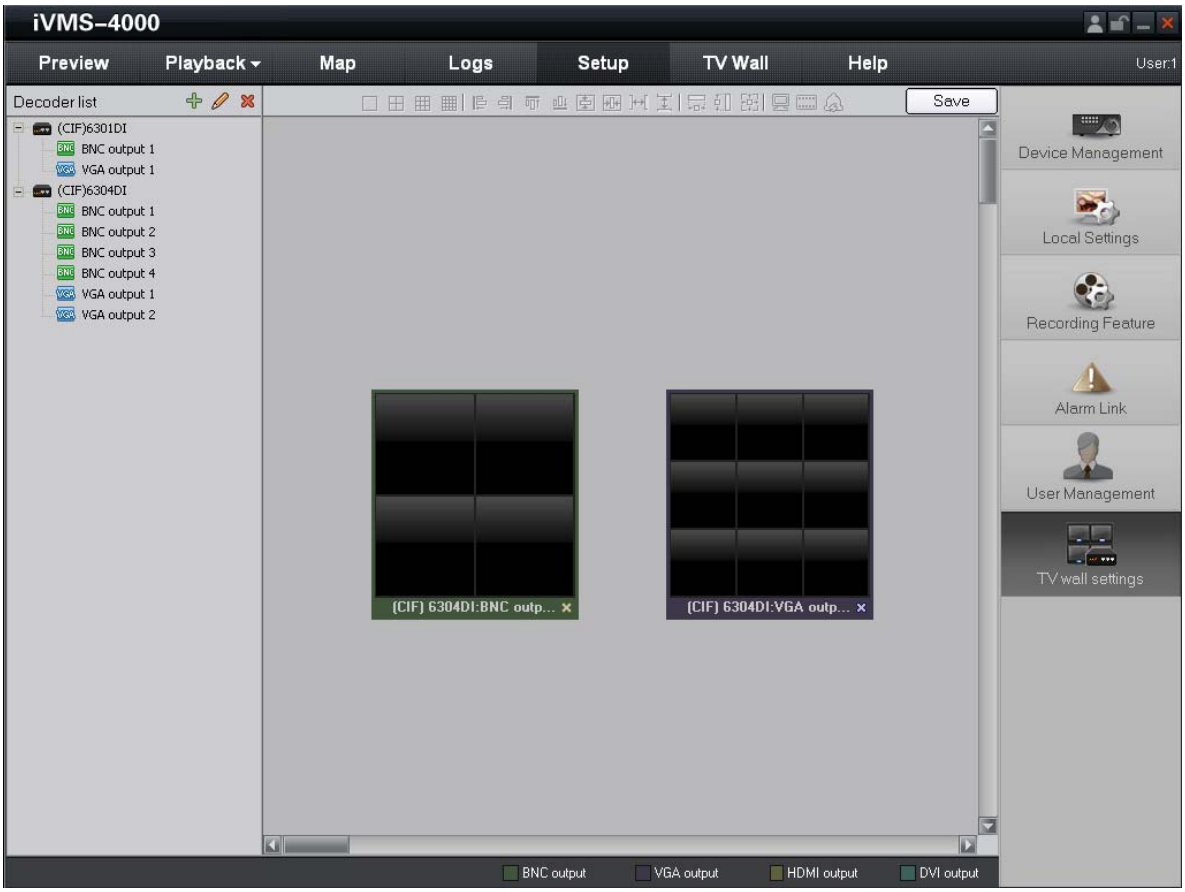
For example, if user set more than 8-channel decode, there will be 2-channel of grey color, and if user use these channels, it will popup the information as the figure on the right.



Decode channel position management

After enable decode output, configured the division, user can change the size and the position of the window.

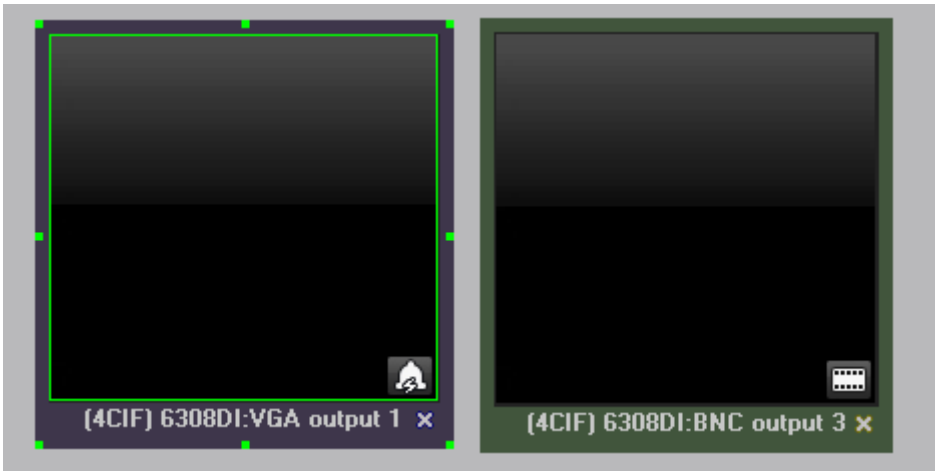
Click the mouse and hold on the title below the window, user can change its position. Drag a border of the decoder, user can change the size of the window.



Decode type setting

Select one window division and then click the buttons on the top to set the decode type.

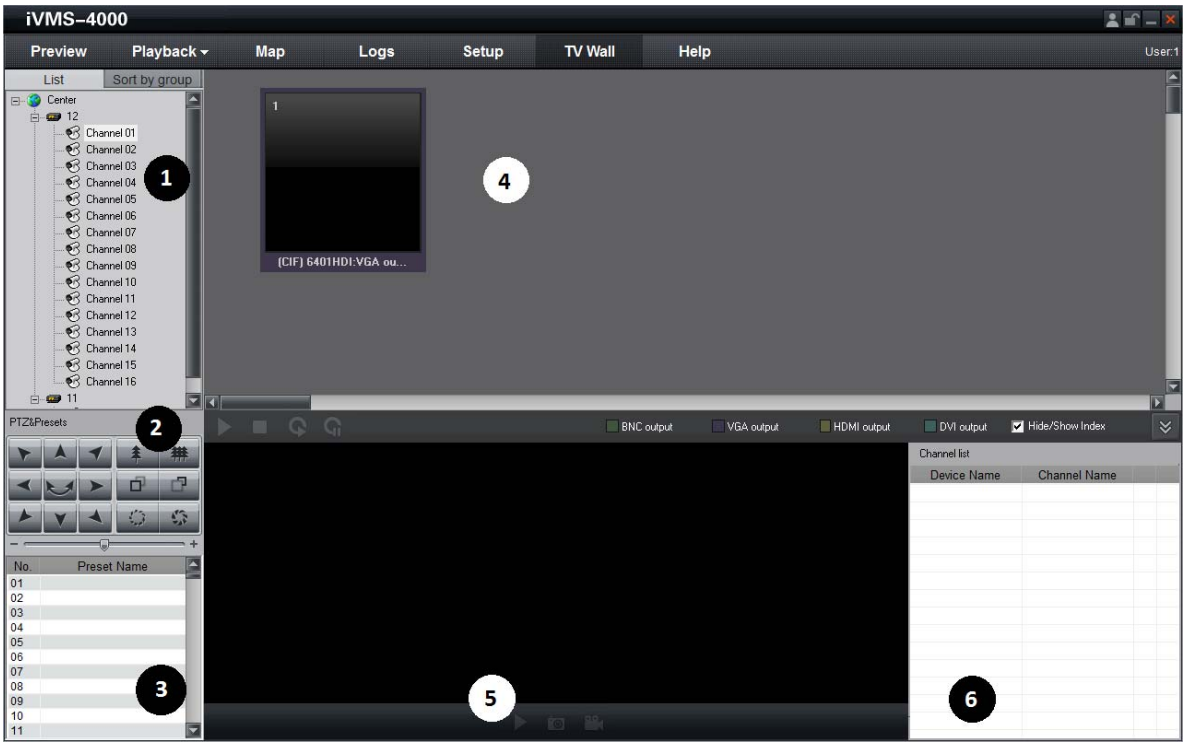
 is the Preview type.  is the Playback type.  is the Alarm type.



Note: This function could be supported by 6300 and 6400 series decoder.

14.4 Decoder Control

After adding decoder configuration, click the tag TV Wall to enter decoder control interface.



Area	Instruction		area	instruction
❶	Device list		❷	PTZ
❸	Preset list		❹	Decode channel display
❺	Decode channel video display		❻	Decode channel state display

Enter TV Wall control interface, the decode channel area will display as user-define. Click to hide the decode video and states, click to resume that.

Decode window are button instruction:

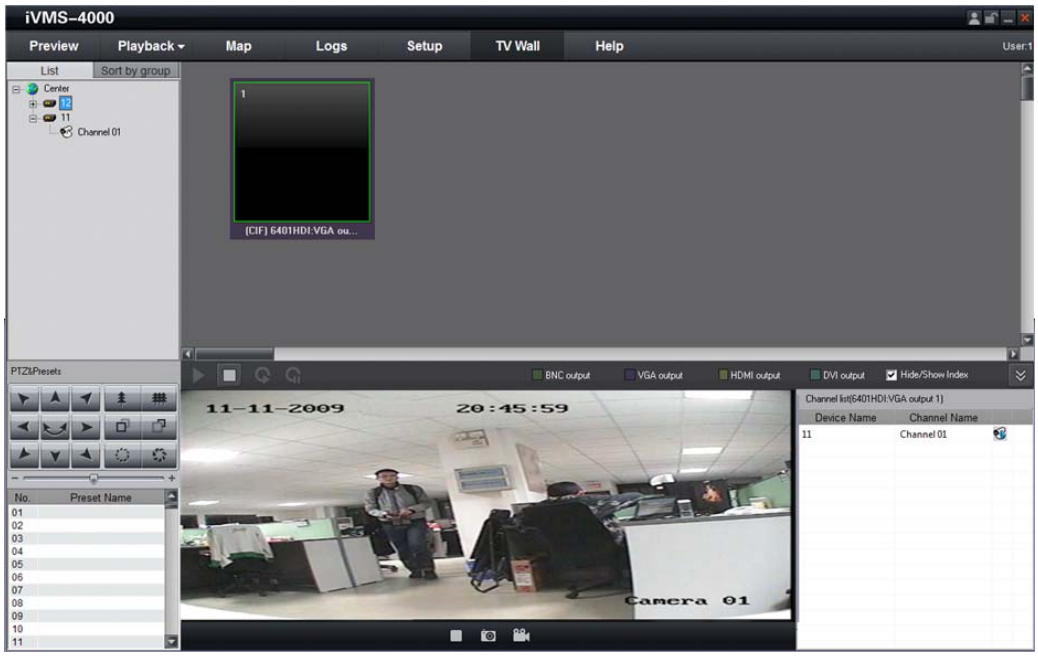
Button	Instruction		Button	instruction
	Device list			PTZ
	Preset list			Decode channel display
Hide/Show Index	Decode channel video display			

Decode preview area button instruction:

Button	Instruction		Button	instruction
	On/Off decode preview			Capture
	Record			

14.4.1 Video Decoding Control

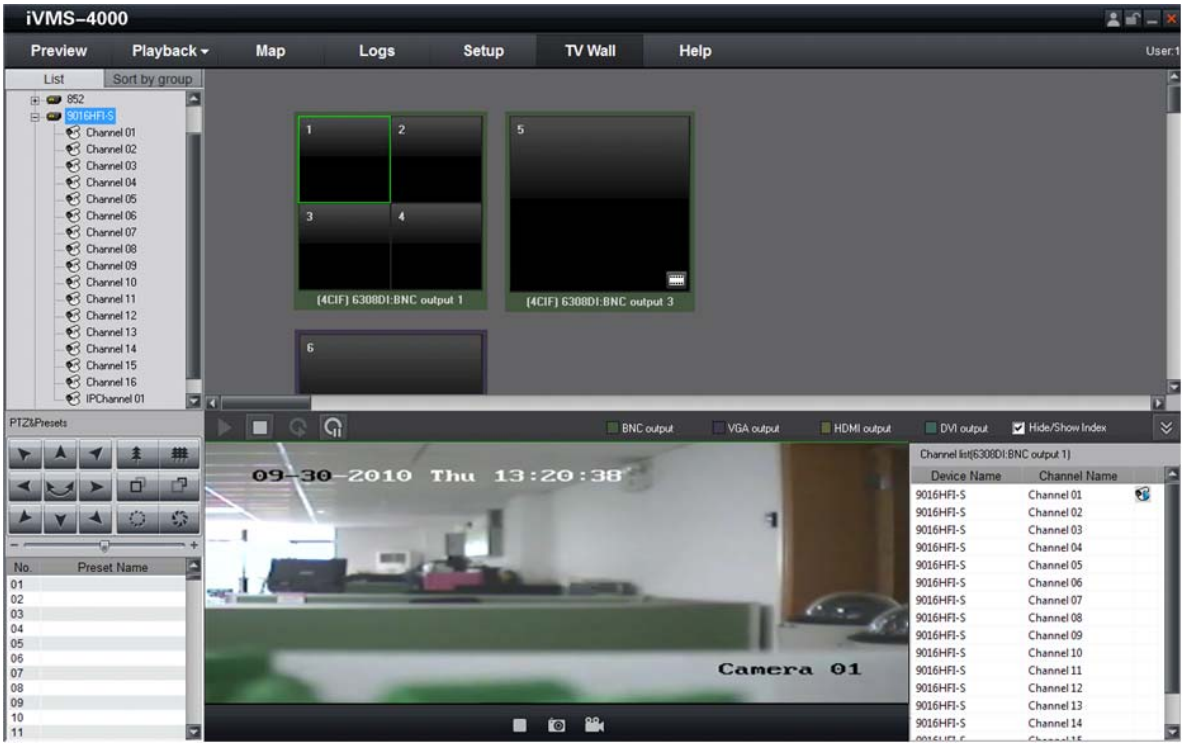
Select the decode window, drag one channel into it and the decoder will start decoding this channel. The decoder video display area will display the real-time video, and the state area will display the states of current division.



Right click the decode channel, select “Stop decoding” or click “ ” to stop current decode division. After stopped, user can right click this division, select “Start decoding” or click “ ” to resume decoding

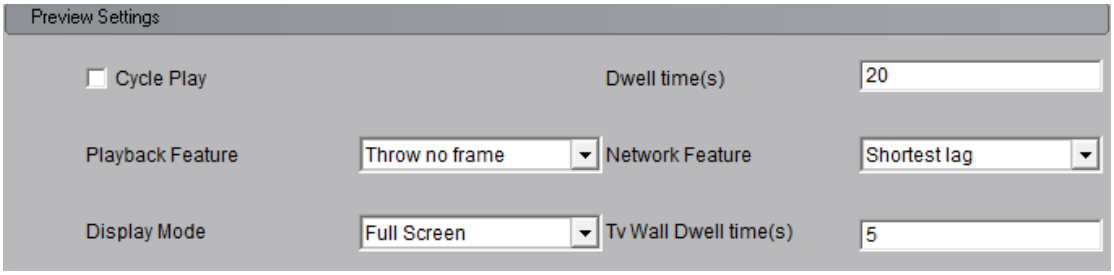
14.4.2 Cycle Decoding Control

Select a window division of a decoder, drag one device node to it, then this decode division will cycle decode all the channels of this device. The decoder video display area will display the real-time video, and the state area will display the states of current division.



Right click the cycle decoding division, select “Pause cycle decoding” or click “” to pause the cycle decoding. Then right click this division, select “Resume cycle decoding” or click “”, it will start decoding again.

Click “Setup” to enter the setup management interface and then click “Local Settings” to enter preview settings interface (refer to the following figure) which allows user to set the TV Wall Dwell Time.



Note: The TV wall dwell time can be set to 5~300sec.

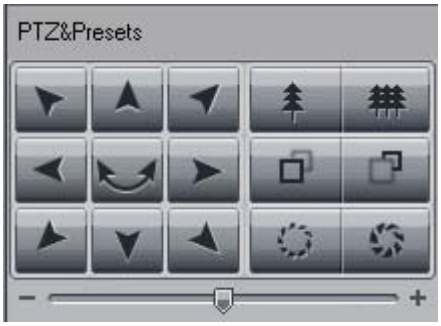
14.4.3 PTZ Control

If the decoder connected PTZ, user can operate the PTZ through this software.

There are 8 keys to control PTZ directions, and the active bar to change PTZ speed, which is adjustable from 1 to 7, and default speed is 4.

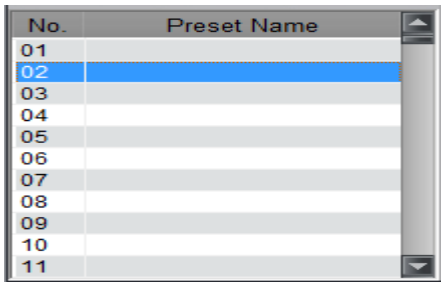
Click key to start auto scan.

Click the function keys on the right to adjust focus, iris and zoom.



When a division cycle decoding, PTZ control will pause, after PTZ control over, cycle decoding will resume.

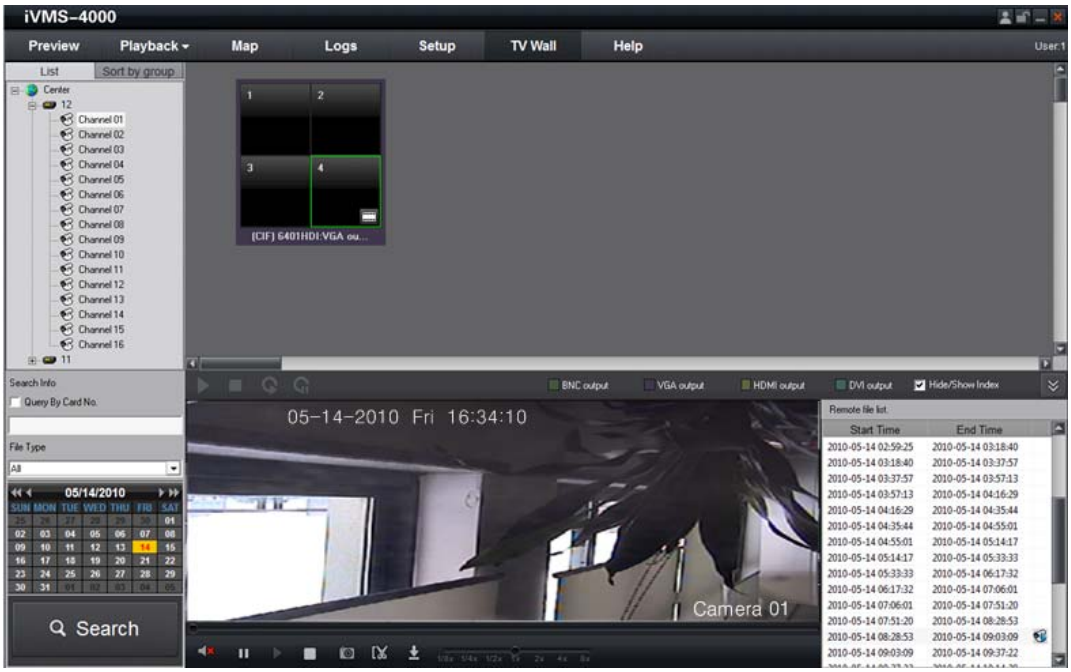
Double the existed preset, it will transfer the preset of current device.



14.4.4 Playback Decode Control

Click a window division of playback type, it will appear the playback decode interface.

Note: This function is supported by 6300DI and 6401HDI series decoder only.



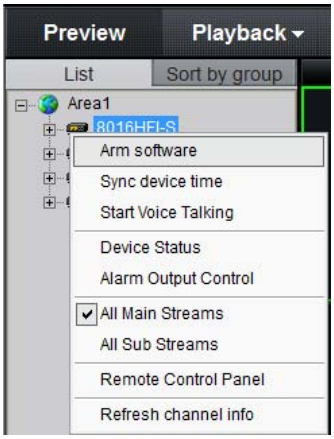
The method of searching, playing and the function of the buttons are the same as Remote VOD, refer to that chapter. Directly drag a channel of the device to the decode window division of playback type, it will automatically search the record of the current day for playback.

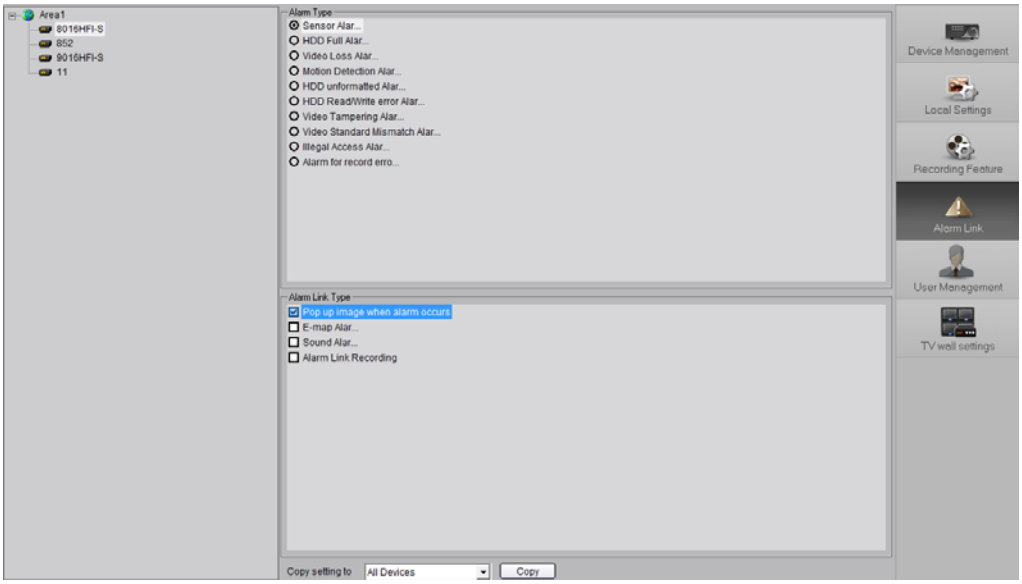
14.4.5 Alarm Decode Control

The decode window division can be set to the alarm decode type, which allows to decode the designated alarm linked recording channel when alarm occurs and then display it on the TV Wall.



This function need user to “Arm software” to a device or a Area. Then set alarm linkage of pop up image when alarm occurs.





Note: This function is supported by DS-6300 and 6400 series decoder only.

Appendix Revision History

V2.03.03

Added new features:

1. Support access of HDI card for hardware decoding.
2. Pop-up alarm pictures on TV wall by hardware decoding.

V2.03.01

Added new features:

Preview

1. Hide/show button of the site tree and PTZ control panel area.
2. Hide/show button of the alarm information area.
3. Settings and display of multiple sub-screens.

Playback

4. Search record files of successive days.
5. Scale up/down of time bar.

Alarm Linking

6. Device inspection alarm
7. Capture for alarm linked pictures.
8. Alarm sound listening function.
9. Notification of alarm information by Email.

Decoder

10. Combine with the Client Software for Decoder.

V2.03.00

Added new features:

Preview

1. Channel status button.
2. *Esc* button for exit from the full-screen mode.

Playback

3. 16-ch synchronous local playback and remote playback.
4. Record files download by time.
5. “Device disk” and “NVR” options for remote VOD.
6. Scheduled and motion detection recording types selectable for NVR playback.
7. Progress bar for files download.

Alarm Linking

8. Video error alarm type.
9. Alarm pictures pop-up even when client software is minimized.

Logs

10. Up to 36000 logs are supported.

Wizard Guide

11. Wizard guide shown in red font.

Configuration

12. Root area node named as “Monitor Area” b default.
13. Alarm sound output by audio card by default.
14. DST settings.
15. Wifi parameters settings.

V2.02.07.1600

Added new features:

Preview

1. Digital zoom in preview mode.
2. Camera parameters configuration.

Configuration

3. Import and export of the configuration files.
4. Alarm of device online/offline by Email.

V2.02.07

Added new features:

Device supported

1. Access of DS-9500 and DS-9600 series NVR.

Playback

2. Remote backup for DS-9500 series NVR.
3. Dynamic analysis.

Configuration

4. ISCSI protocol added during net disk settings
5. Zero-channel settings

V2.02.02

Added new features:

Device supported

1. Access of DS-7600 series NVR/Hybrid NVR.
2. Access of DS-6500 series DVS.
3. Access of iVMS-2000 client software.

Configuration

4. Add “High-consumption decode” mode in hardware decode, and support decoding for DS-9000 and DS-8100 series DVR.
5. iVMS-2000 configuration in remote settings.

V2.02.00

Added new features:

Preview

1. Dual-screen preview.

Playback

2. Event playback.
3. IP server in NVR recording.
4. Search of record files by group for local/remote playback.

5. Digital zoom in local/remote playback.
6. Locate the other channels to the same time of the selected channel for synchronous playback.
7. Drag the channel from the site tree to the window for playback.

Configuration

8. Modify the default saving path for the remote configuration files, remote downloaded files and captured pictures.

Alarm Linking

9. Pop-up alarm pictures on TV wall through the decoding card.

User Permission

10. Normal user with permission to configure and modify NVR recording schedules.

V2.00.02

Added new features:

Preview

1. *Esc* button for exit from the multi-camera preview in full screen mode.
2. Configuration for resume of preview status when client is restarted.
3. Remote control panel of device.
4. “Start Recording” and “Stop Recording” options in software/hardware decode window.
5. “Start Recording” and “Open Voice” options in preview window. With alarm armed, alarm icons will be displayed at the top right corner of window when alarm occurs.
6. Resume alarm arming status of device when client is restarted.
7. PTZ control of cameras connected by 1003KI/1004KI keyboard and USB joystick.
8. Display of thumbnail image and saving path at the bottom right corner when picture capture is successful.

Playback

9. Remote playback of record files stored by NAS even when device is offline.
10. Click the time bar to synchronize all playing windows during the synch playback in local/remote playback mode.
11. Display prompt message when all playing windows are paused during the synch playback in local/remote playback mode.
12. Modify the time bar and play control bar in local playback to be the same in remote playback.

Configuration

13. Auto running of client software when computer is started.
14. Wizard setup guide.
15. Modify buttons for PTZ, video, preset and patrol.
16. Button for patrol settings.
17. Modify display mode of local recording and NVR recording settings.
18. Motion detection recording supported by NVR.

User Management

19. Modify the “Super User” to “Administrator”.
20. “Add”, “Modify” and “Delete” buttons for user management.

Map

21. Customized text colors used in hot region and hot spot.
22. Hot spot linking to related camera.
23. Display of up to 4 hot spot image windows.
24. Enlarge the hot spot window to 4CIF in size by double clicking it.

25. Resume the map before exit when the client is restarted.

Others

26. *F1* button used to open the User Manual.
27. Adjust order of functional buttons on the main interface.