iVMS-4000 (V2.0)

Client Software

User Manual

Table of Contents

Chapter 1 Welcome to iVMS-4000 (V2.03.07)

1.1 Overview

The iVMS-4000(V2.0) is the client application specially developed for the embedded DVR/DVS. It is applicable to DVR, hybrid DVR, NVR, DVS, IP Camera, IP Dome, audio/video decoder, and iVMS-2000 client software as well.

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 Windows7/Windows 2008 (32/64-bit)
Windows 2003/Windows XP/Windows 2000 (32-bit)
CPU: Intel Pentium IV 3.0 GHz or models above
RAM: 1G or above
Display: 1024×768 resolution or above

1.3 Convention

Conventions are as follows in this manual:

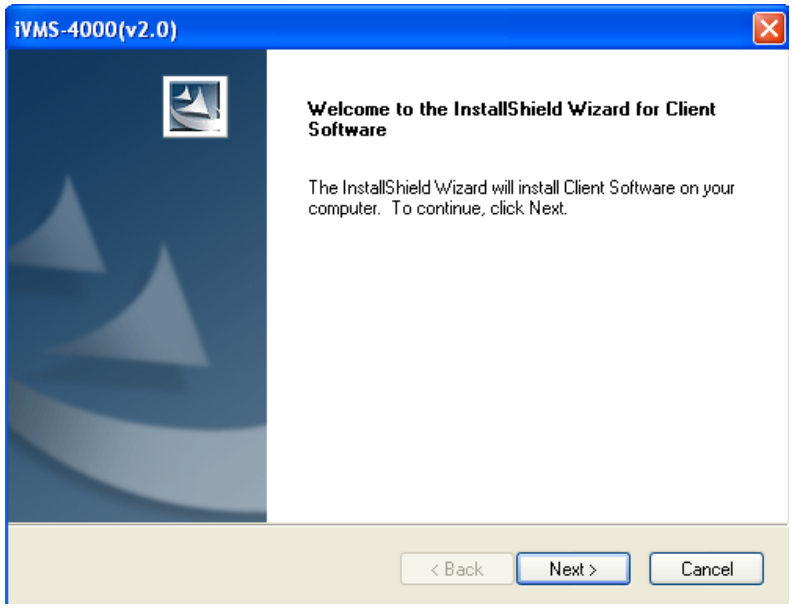
- DVR, hybrid DVR, NVR, DVS, IP Camera and IP Dome are all referred to as *device*
- *Click* refers to left click mouse
- *Double click* refers to double left click the mouse

Chapter 2 Install & Uninstall

2.1 Install the Software

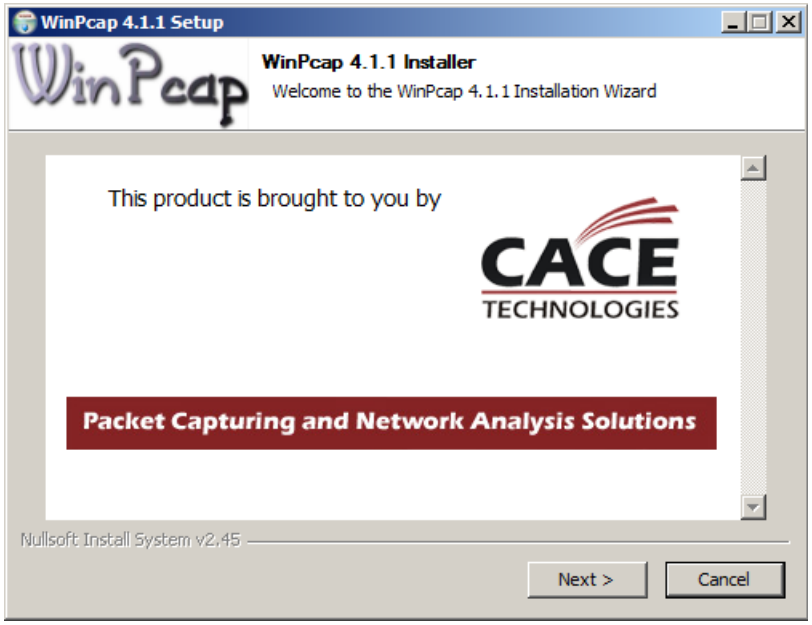
Double click the program file 

to enter the following Install Shield Wizard as shown below:



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

1. Enter start menu, select “All programs” > ”iVMS-4000(v2.0)” > ”Uninstall iVMS”, and the Install Shield Wizard shown below will pop up:

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

Chapter 3 Basic Operations

3.1. User Registration

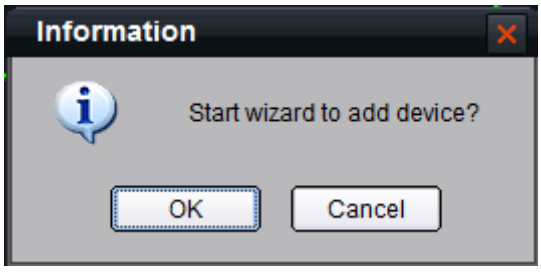
Register is needed when using the software for the first time.

Input the admin user name and password in the dialog box and click "OK".

Note: Enter, Space, and TAB buttons are invalid for the user name and password. The password cannot be empty, and should not contain the illegal characters, such as "**%**" and "**'**". Password should not be less than six characters and copy and paste are not allowed.

Wizard for Adding Device

The wizard is a guide which can get you through the basic operation of the client software.

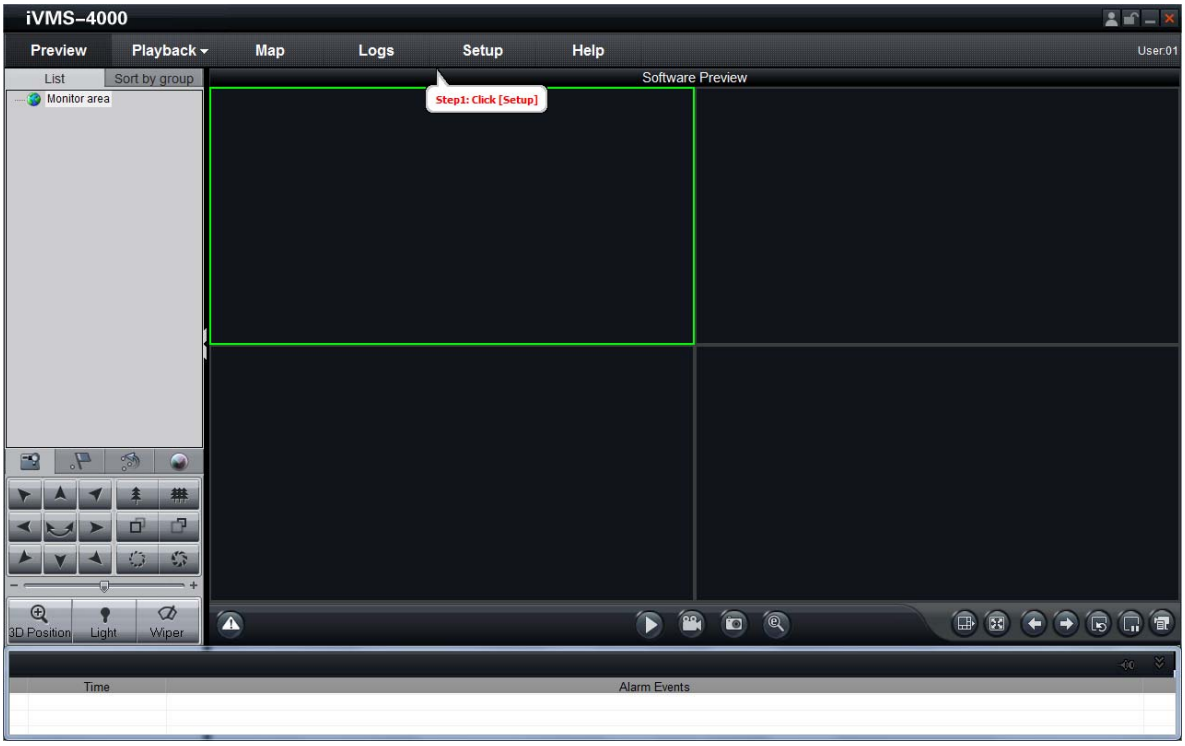


Click "OK" to start the wizard and add the device, or click "Cancel" to exit the wizard.

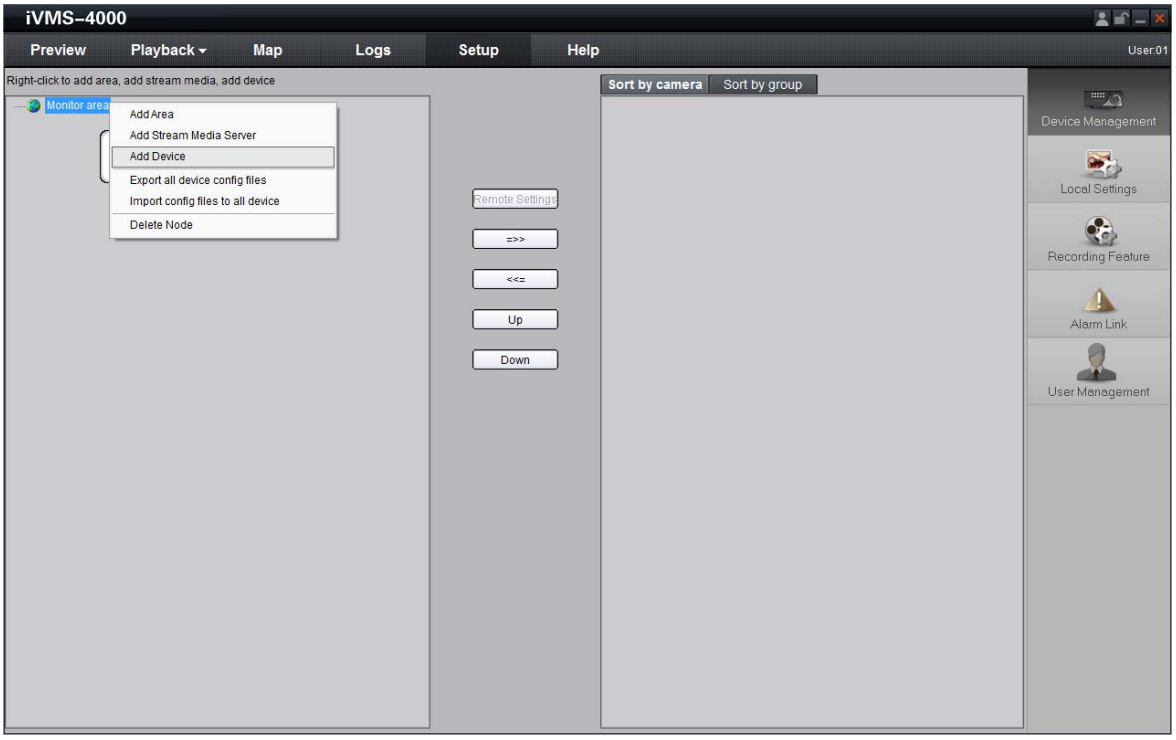
Steps:

1. According to the hint, click 

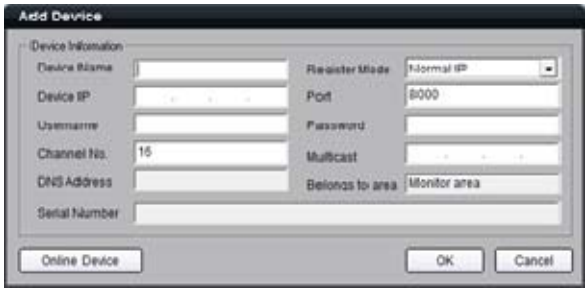
to enter the device adding interface.



2. 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.

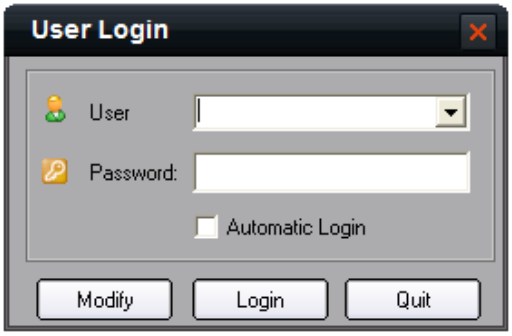


3. Enter the device information in the text box of Add Device interface. Please refer to *Section 4.2 Adding Device* for detailed information.



3.2 User Login

When you start the iVMS software after registration, the login dialog box pops up, shown in the figure 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 you want 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 you want 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 follows:

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:

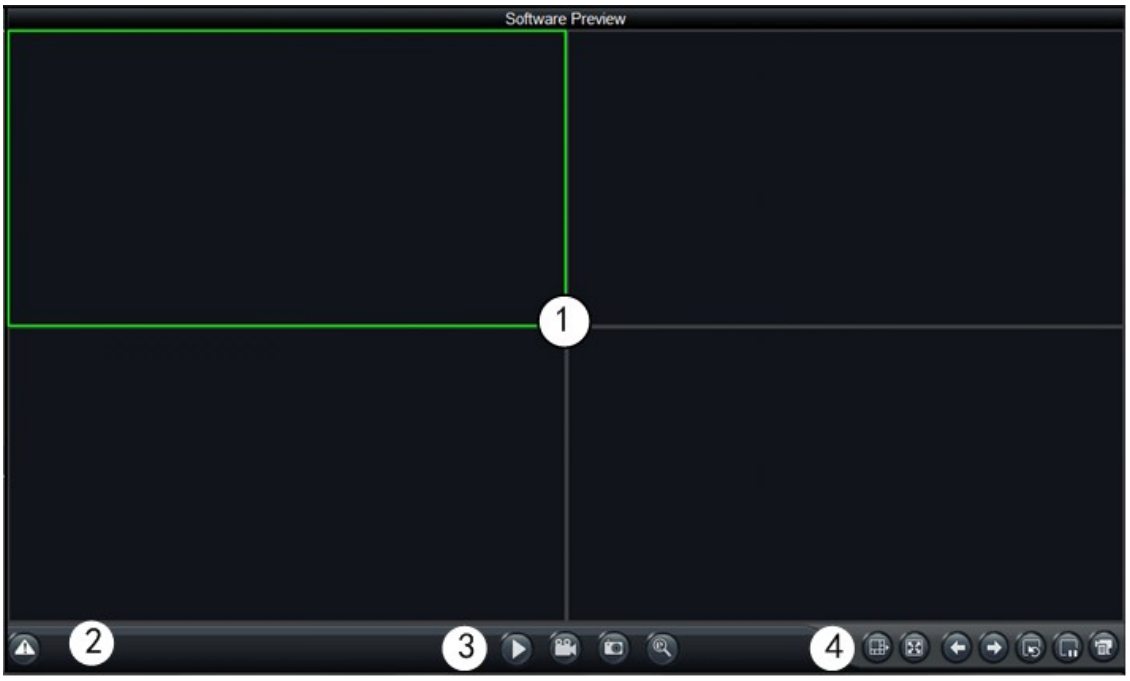
Area	Description
Preview	Enter preview interface for live view, PTZ control, video parameters adjust, etc. User is allowed to enter the software or hardware decoding interface.
Playback	Enter playback interface, including remote VOD and local playback

Map	Enter e-map interface
Log	Enter log query interface
Setup	Enter setup interface
Help	Enter Help (user manual), About (software info), Data import/export and Client Module Configure interfaces

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: play, record, capture and digital zoom		4	Advanced functional buttons: window 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

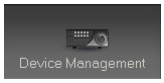
Alarm Information Area:

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.

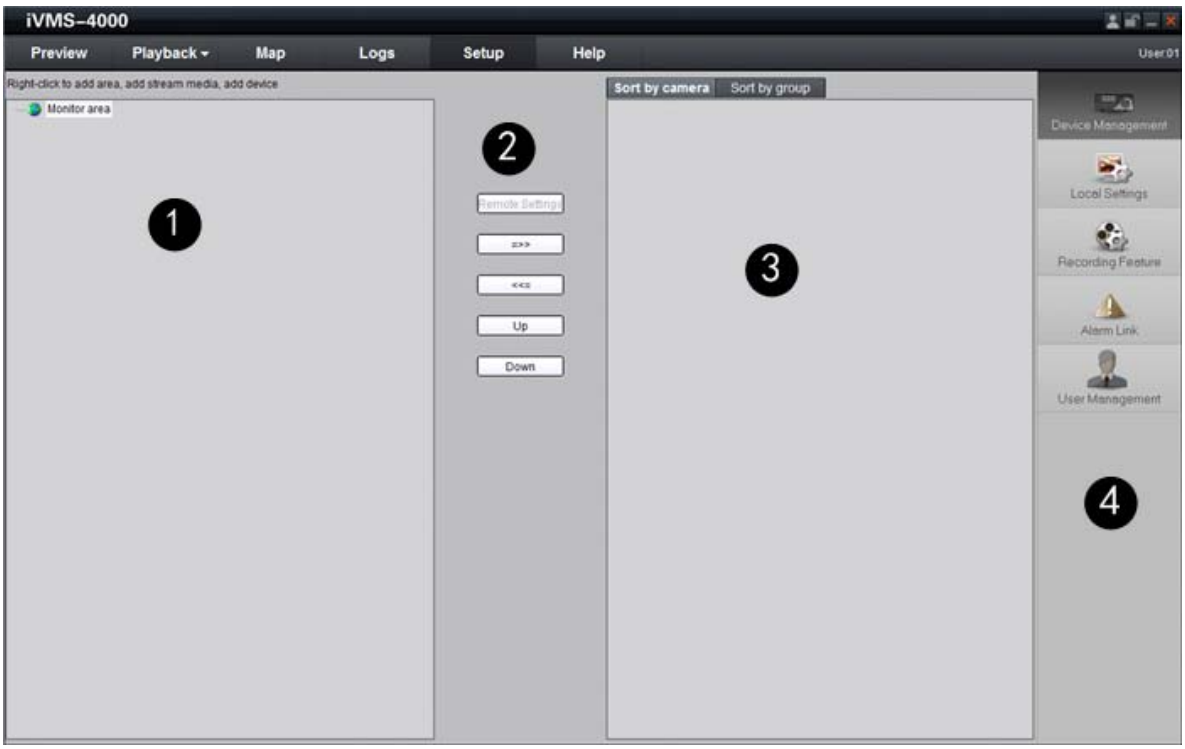
Click  to hide the alarm information area, or click  to resume the display.

Chapter 4 Device Management

Before any operations, you need to add device and configure it. Click 

to enter the configure mode, and then click 

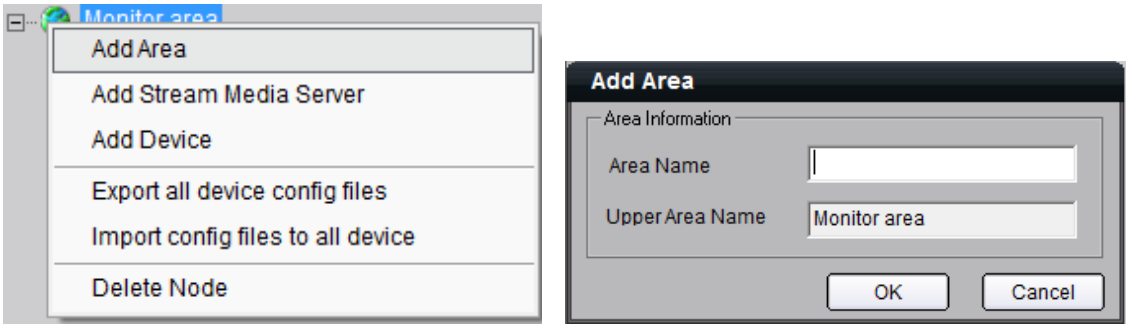
to manage the device.



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”. You 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 empty and should not contain the invalid characters, including “**%**” and “**’**”.

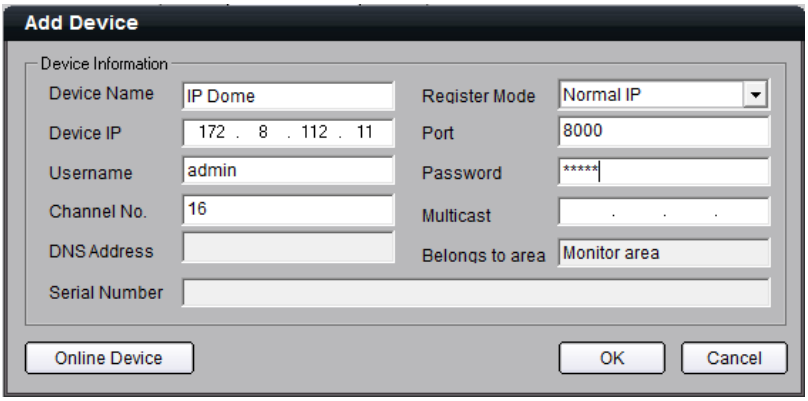
Note: When you select “Delete Node”, the sub areas, stream media servers, and devices under the root of this area will be deleted as well. Before doing that, you need to stop current preview or recording, otherwise there will be warning information popping up.

4.2 Adding Device

Right click the area name icon 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, and port and channel No. Click the “OK” button to finish adding device.



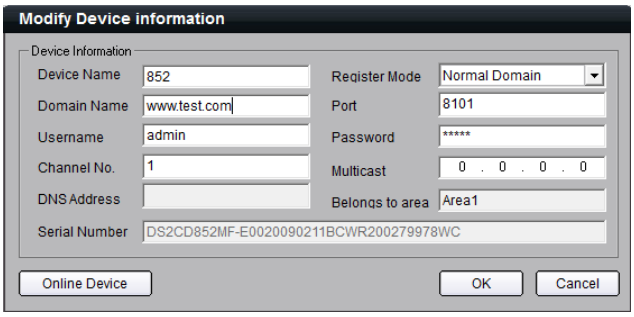
The description about the adding interface:

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

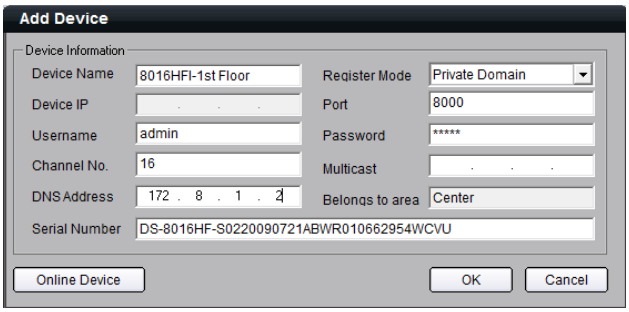
Normal domain mode

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



Private domain mode

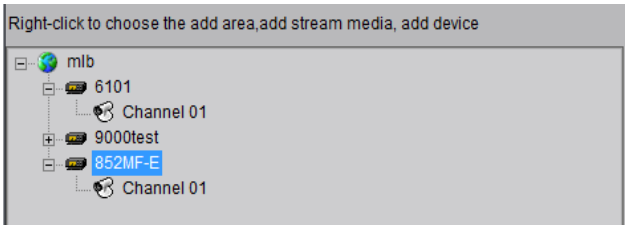
Private domain: If you select private domain, please input the correct device serial number and IP address of IP server in the text box of DNS Address.



Note: In private domain mode, if you input device serial number, the iVMS software will 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 entered here must be the same with the name in the device.

Click "OK" to finish adding device.

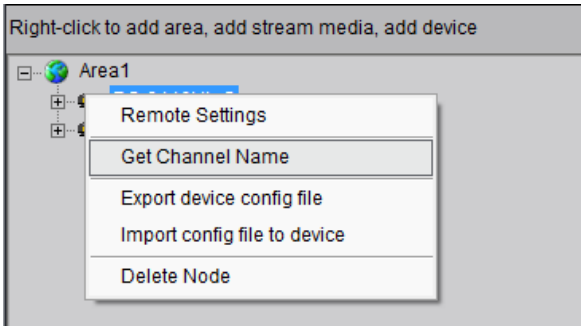
Right-click menu is available, double click the node can modify the device parameters. If the device is not online or not connectable, some options are invalid.



Note: Up to 50 devices can be added.

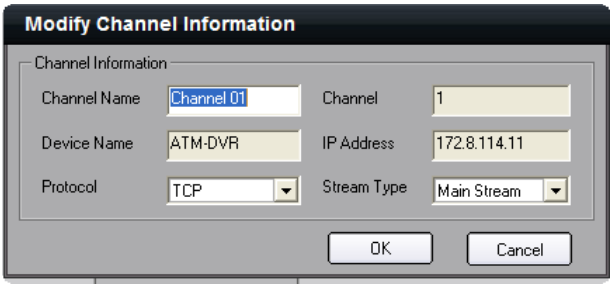
4.3 Channel Configuration

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



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

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



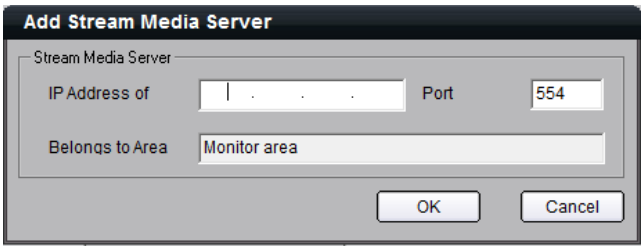
Channel Name	Current channel name, editable
Channel	Channel number of the device, unchangeable
Device Name	Device name, unchangeable
IP Address	Device IP address that unchangeable
Protocol	Select connection protocol: TCP, UTP, MCAST and RTP.
Stream Type	Choose main or sub stream for the channel

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

4.5 Stream Media Server Configuration

When the connections is reach the limit of the device or the bandwidth is not enough, you can add the stream media server to forward real-time video stream, then it can reduce the load 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.

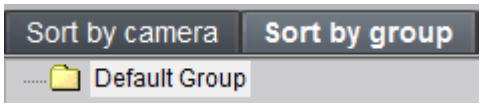


4.6 Group Configuration

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

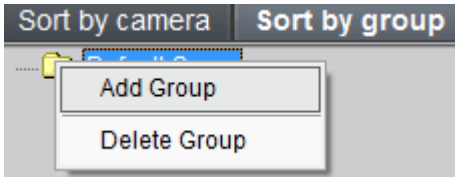
4.6.1 Sort by group

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

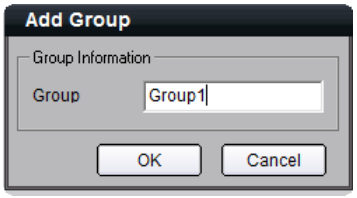


Steps:

1. Right click in the empty area and you will see sub menu as shown on the right.
2. Select “Add Group”.

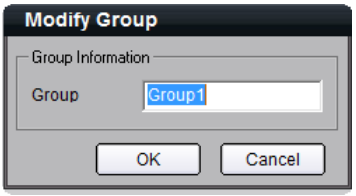


3. Input the group name and click “OK”.



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

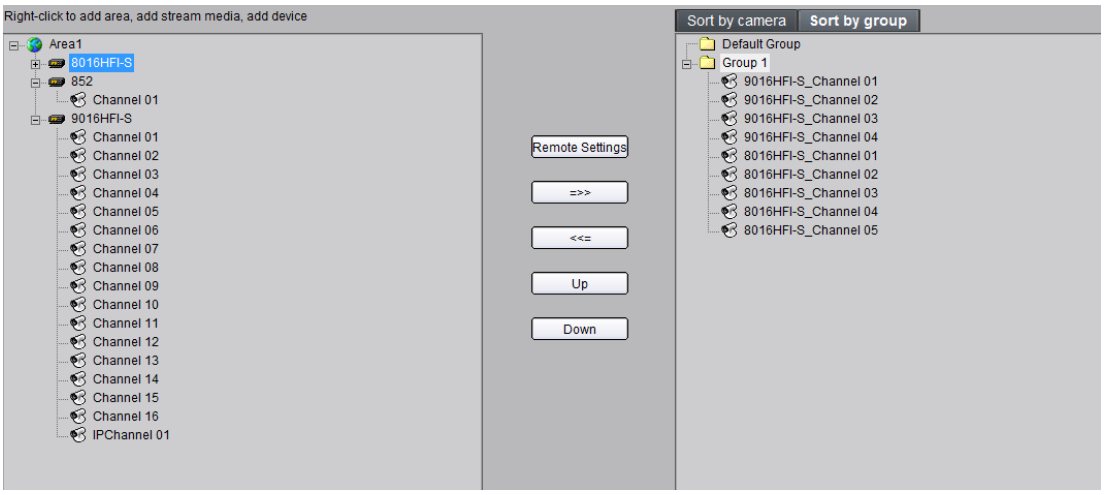
characters, including "**%**" and "**'**".

4.6.2 Channel

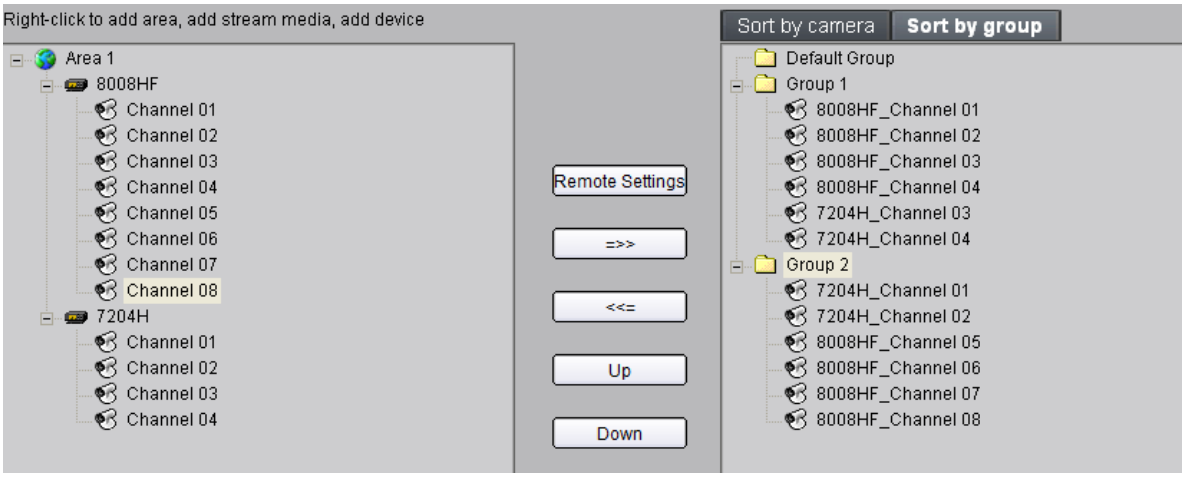
After adding the group, the channels in the site tree can be moved to the selected group.

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.



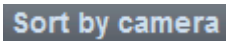
Use Up and Down keys to adjust the channel sequence in the group list.

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 

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 

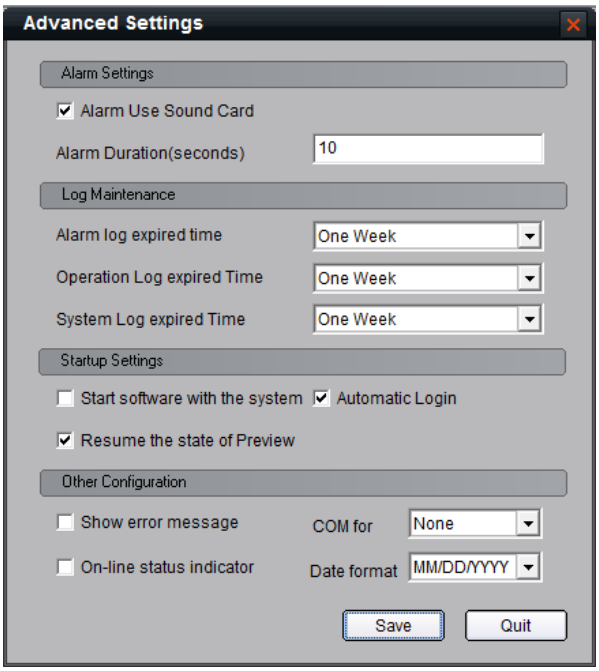
key to delete the channel in the sort by camera area.

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

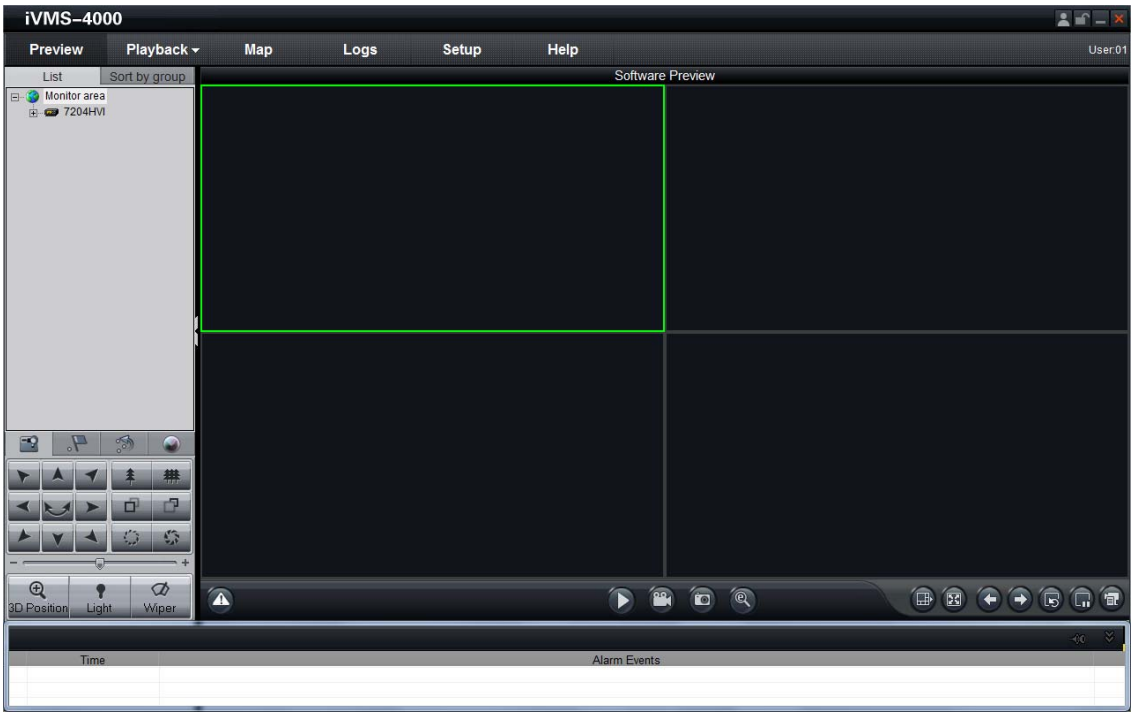
Chapter 5 Preview

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 by default and up to 64 window divisions can be configured. You 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

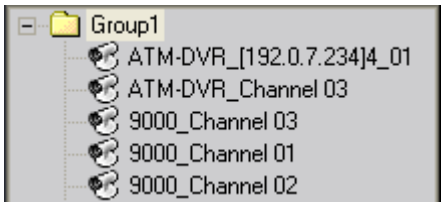
5.1.1 Play by Node

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

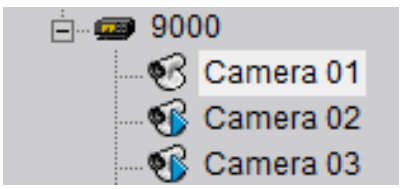
Click the “Sort by group” to enter this mode. If the “Sort by group” has been configured, then press “” button of the preview interface to view all the corresponding channels in the Sort by group area in the current window divisions. If the channel number is more than the window division number, user 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 .

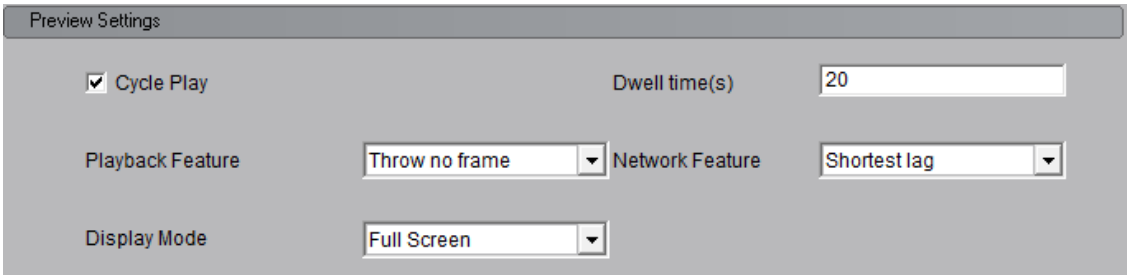
Stop all playing

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.

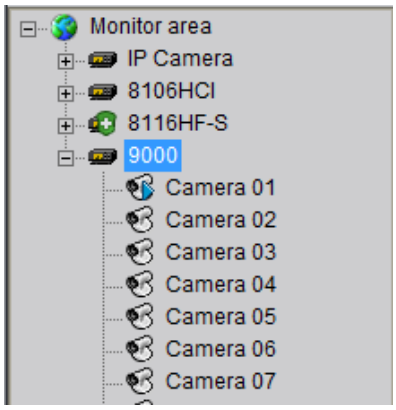
Disable Cycle:

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

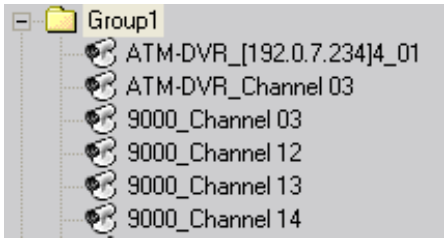
5.2.2 Cycle Play of Device/Group

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.

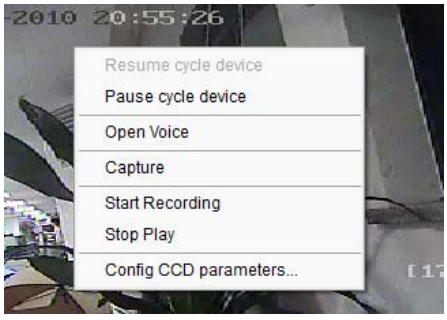


Drag the node of the device to the window, and then all the channels of this device begin to cycle.

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

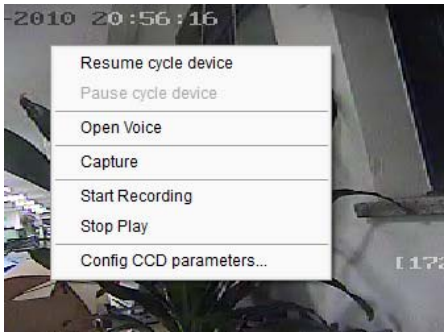
Pause/Resume Cycle

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  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 Multi-screen Cycle

Multi-screen 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

Steps:

1. Click “List” key to display channel list.
2. Click  key to start multi-screen 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.
3. Click button  in the preview panel to stop the channel mixed cycle of short key.
4. 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

Steps:

1. Click “Sort by group” key to display group channel list. (Please stop playing before switching to group channels.)
2. 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.
3. 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.

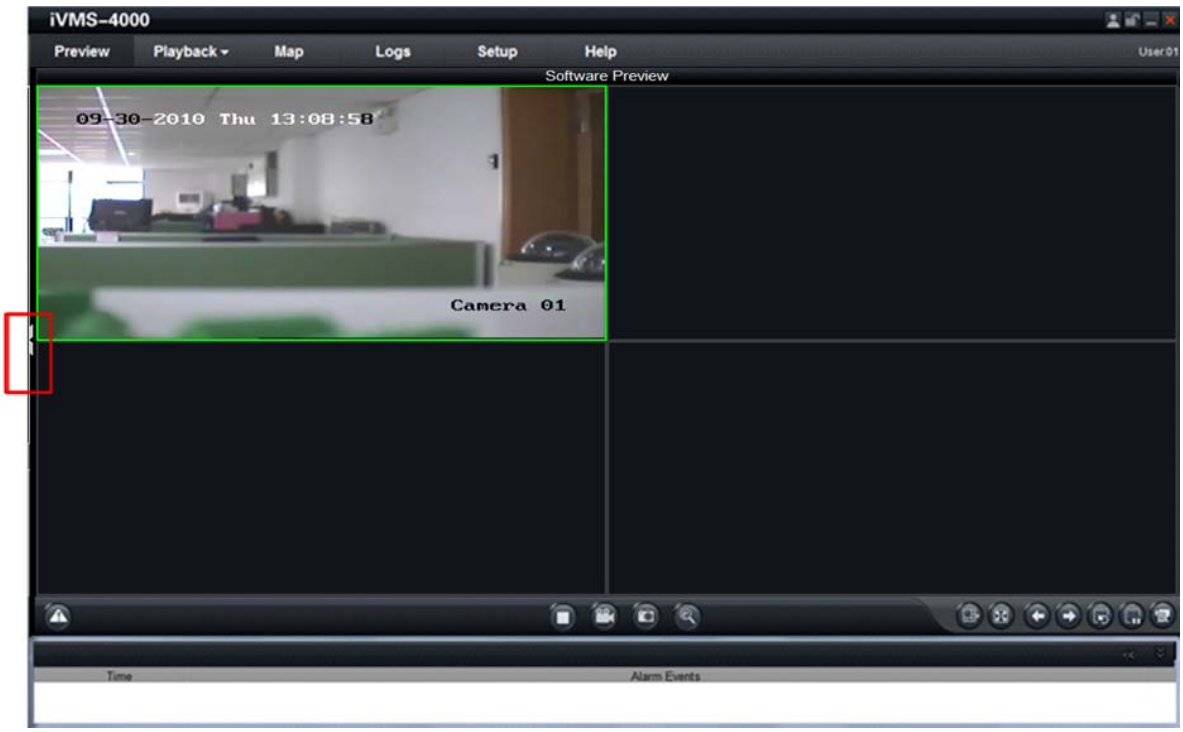
5.3 Preview Control

Full Screen:

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

Hide/Show Site Tree:

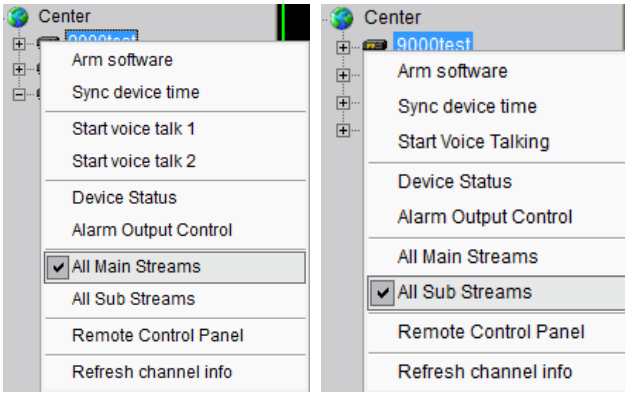
In the preview interface, you can click the hide/show button to hide or show the site tree and PTZ control panel area.



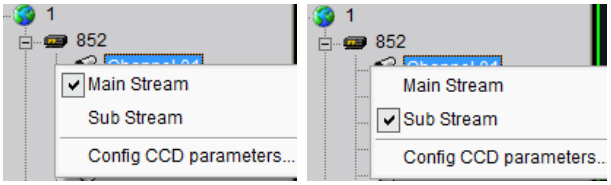
Main/Sub Stream:

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. The default is the main stream.

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



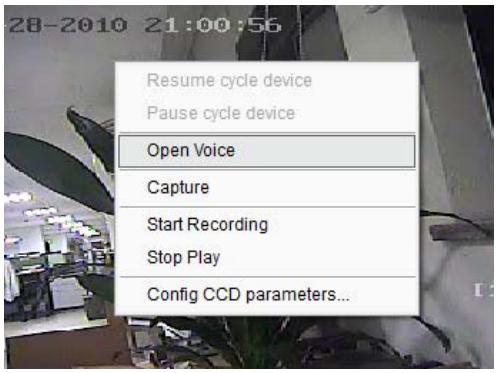
Right click channel name and select “Main Streams” or “Sub Streams” to change the channel stream type.



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.

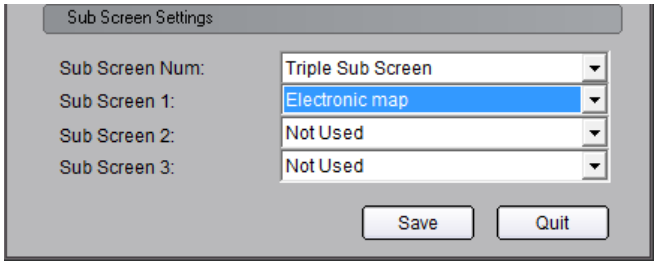
The icons shown on the title bar are described as below:

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

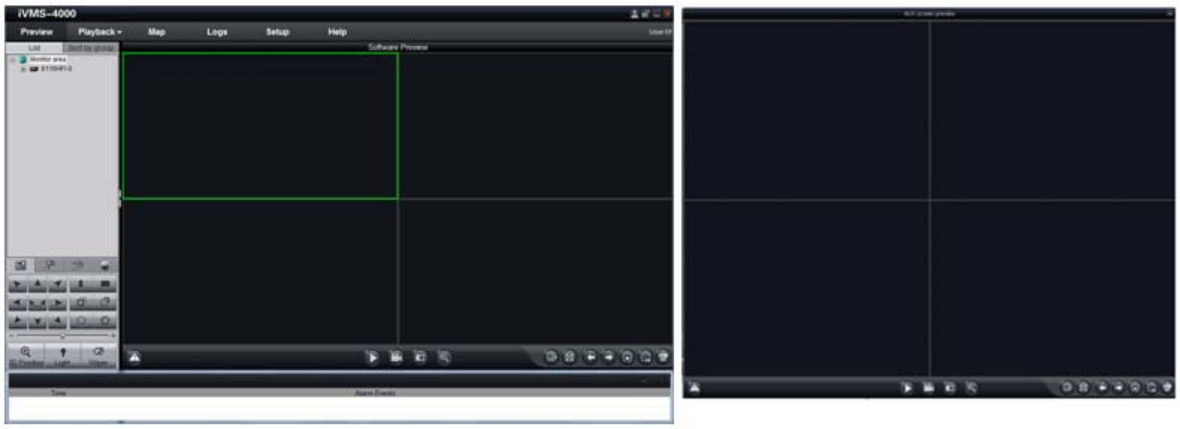
5.4 Sub-screen Preview

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.

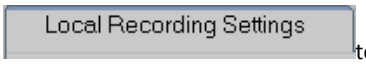
Note: If the channel is in the recording mode, click “Stop” button to stop recording, and the preview, cycle play are stopped as well.

5.5.1 Recording

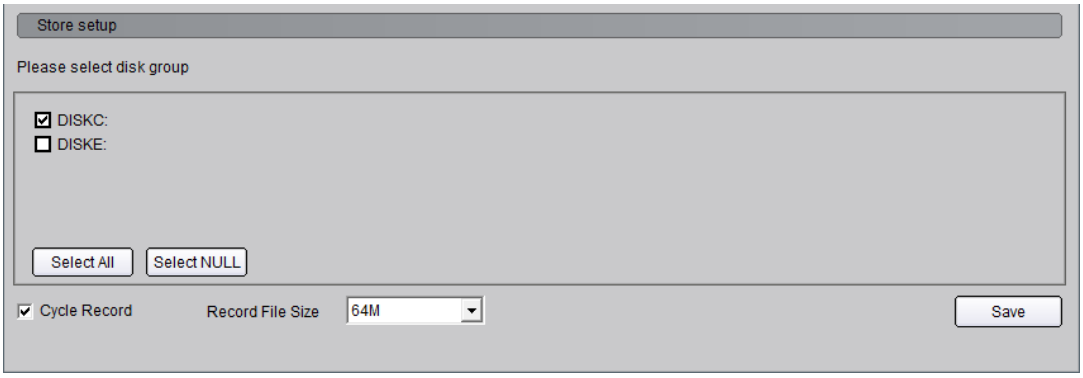
Record Disk Configuration

Click 

> 

> 

to enter the Local Recording Settings interface:

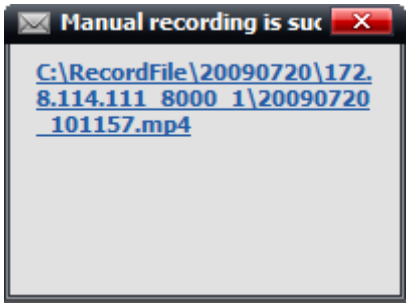


Select the saving hard disk of recorded files in “Store setup”.

Instant Recording

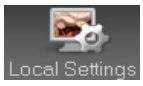
When previewing, click the button  to start recording, and the icon changes to  , and the channel icon changes to  . Click the button  to stop recording.

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



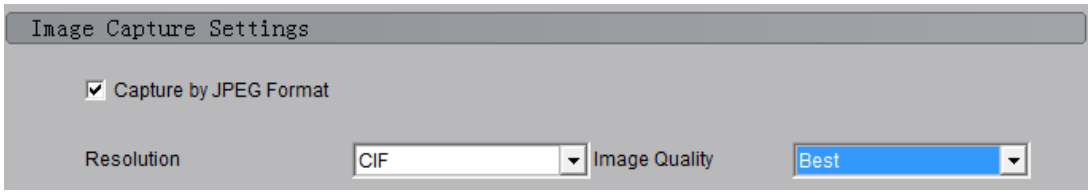
5.5.2 Capture

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.

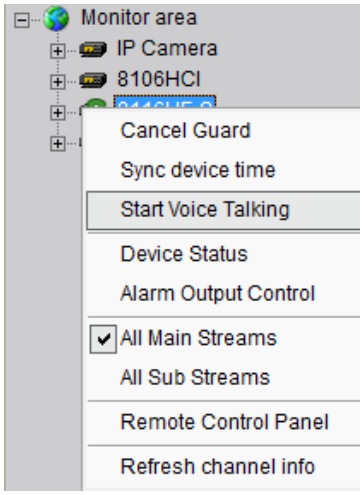
Note: iVMS-2000, DS-9500 series NVR and some models of network cameras support the picture captured in BMP format only in the preview mode, and when the format is set to JPEG, it will be failed to capture video pictures.

5.6 Others

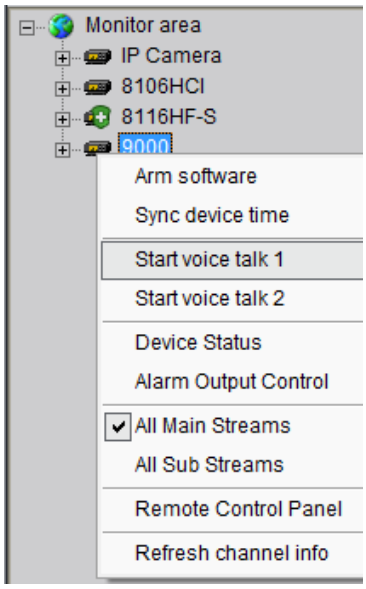
5.6.1 Voice Talk & Broadcast

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.



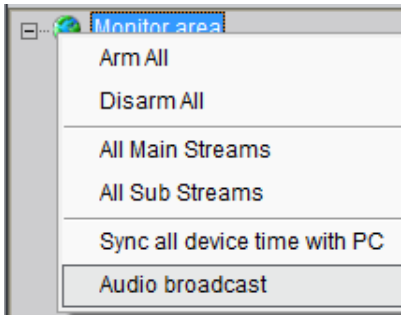
If the device is DS-9000 DVR, then there will be two voice talk channels for choice.



Note: You can only enable the voice talk for 1 channel by the client software at a time.

5.6.2 Audio Broadcast

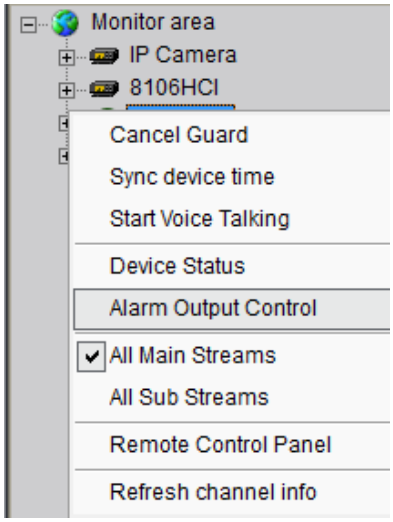
Right click area name and select “Audio Broadcast” to talk to the area.



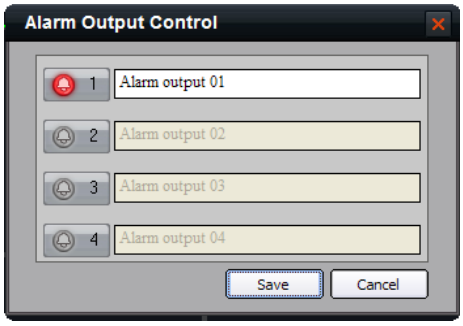
1.6.3 Alarm Output Control

Steps:

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

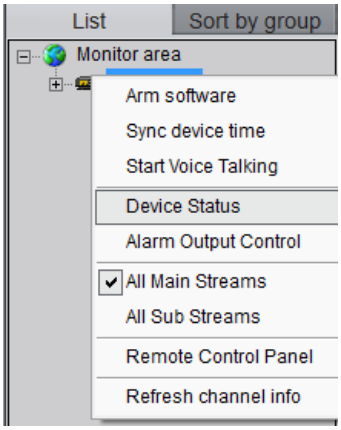


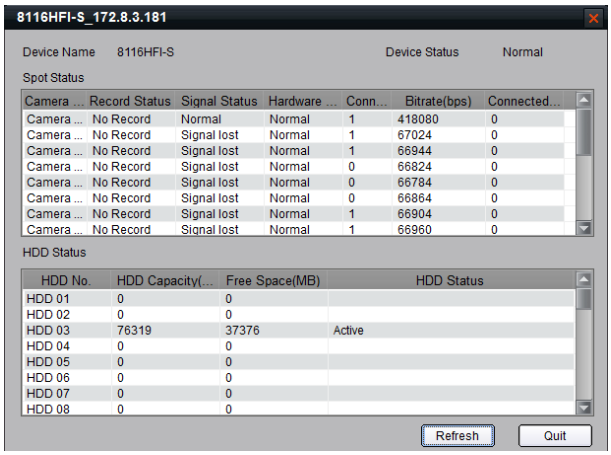
3. Click  and it will become  key, which then allows user to enable the alarm output and activate the name modified function. Re-click  key to turn off the alarm output.



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.

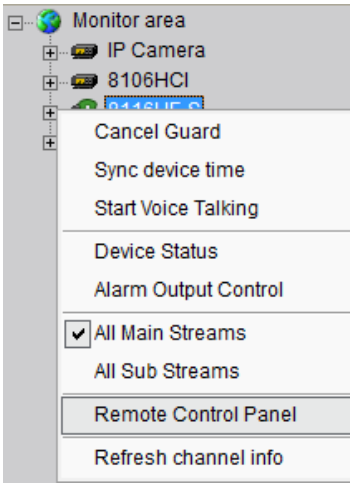


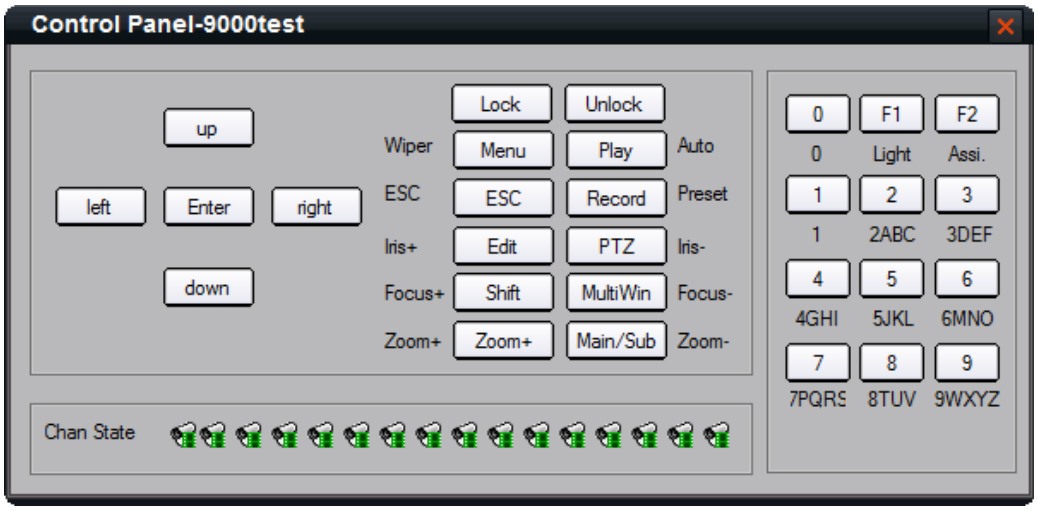


Note: Some options will turn gray and become unavailable if the device doesn’t support the functions.

5.6.5 Remote Control Panel

In the preview mode, right click the device name on the list, and click the remote control panel in the submenu popping out.


Monitor area
IP Camera
8106HCI
Cancel Guard
Sync device time
Start Voice Talking
Device Status
Alarm Output Control
All Main Streams
All Sub Streams
Remote Control Panel
Refresh channel info


Control Panel-9000test
up
left
Enter
right
down
Lock
Unlock
Wiper
Menu
Play
Auto
ESC
ESC
Record
Preset
Iris+
Edit
PTZ
Iris-
Focus+
Shift
MultiWin
Focus-
Zoom+
Zoom+
Main/Sub
Zoom-
Chan State
0
F1
F2
0
Light
Assi.
1
2
3
1
2ABC
3DEF
4
5
6
4GHI
5JKL
6MNO
7
8
9
7PQRS
8TUV
9WXYZ

Chapter 6 PTZ Control

6.1 RS-485 Parameters Configuration

Before PTZ operations, please make sure that RS-485 parameters has been correctly configured in the client software.

Note: To control an IP dome, you can skip the procedures in this chapter.

Steps:

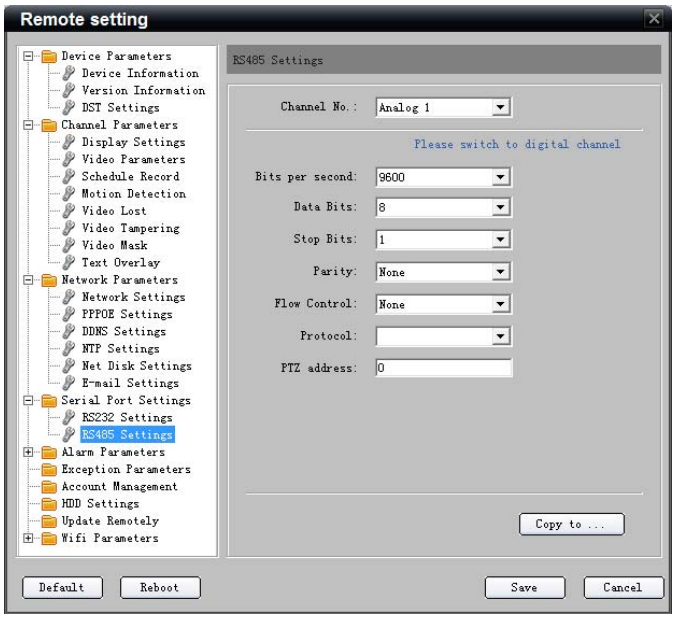
1. Click “Setup” and enter the corresponding interface.

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

2. Click Serial Port Settings to unfold the menu, shown in the figure below.

Set right parameters of the each channel.

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



6.2 PTZ Control

After a correct setting of the RS-485 parameters, return to the preview interface and you can control PTZ.

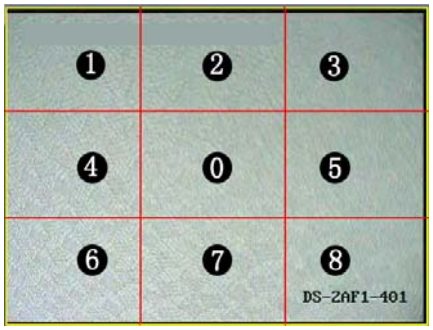
There are 8 keys to control PTZ directions, and the slide bar is used to change PTZ speed, which is adjustable from level 1 to 7, with the default speed of 4.

Click  key to start auto scan.

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

You can also operate the PTZ in the live view screen. You can control PTZ by clicking and dragging in the live view window.

See the following figure: There are nine areas, when the mouse moves to area 1-8, the mouse curser turns to: 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.



6.3 3D Positioning

Click “3D Positioning” in the PTZ control panel, the cursor on the screen change to , click the left key of the mouse and draw an area you want to zoom.

The direction of drawing by the cursor decides whether you want to zoom in or out. Drag from up left to down right to zoom in; drag from down right to up left to zoom out.

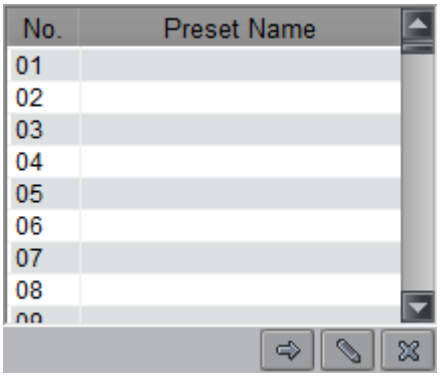
Note: This function is only available as private protocol is supported by PTZ.

6.4 Preset

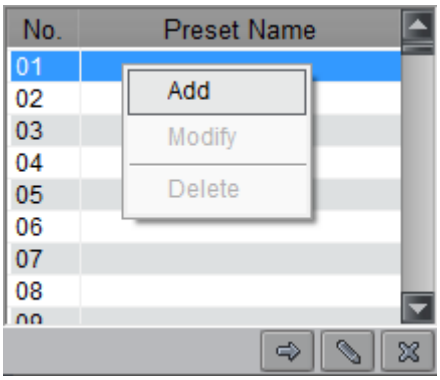
The preset means the focus point of the PTZ camera which you want the camera to move to by calling it. Set the preset according the following steps.

Steps:

1. Select one channel and click the  key on the PTZ control panel and enter preset editing interface.



2. Select one live view screen, and right click the preset list and choose Add or click  to add the preset.



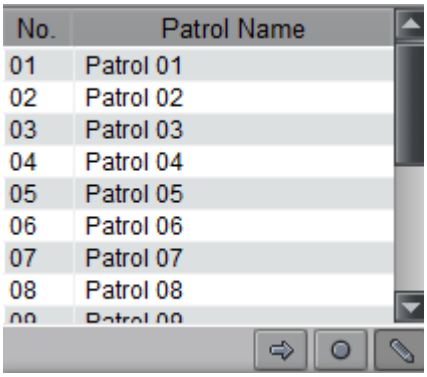
3. Move the PTZ to the position you want, and click “Add” to input preset name, then click OK to finish.
4. Then double click preset in list or click  to call it. And the PTZ camera can move to the preset point.
5. Right click preset to modify or delete this preset, click  can also delete the preset.

6.5 Patrol

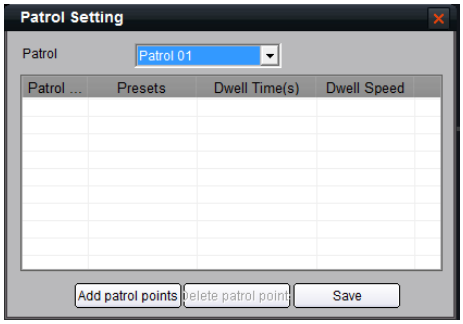
The patrol of the PTZ camera is a set of movement of the camera, and to set the patrol is to link the presets together. After adding two or more presets for one channel, you can set a patrol with presets for PTZ. After you set the patrol, calling it, the PTZ will move to the presets one by one.

Steps:

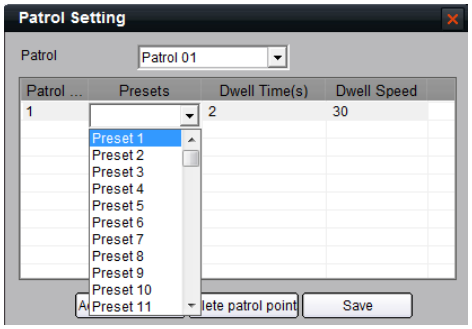
1. Select one channel and click  key to show patrol list of the channel.



2. Click  or right click patrol name then select the preset you would like to add in patrol path.



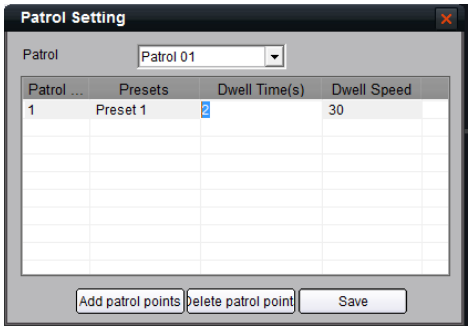
3. Click  add the preset to the patrol, you can also click preset list area to select presets from the list.



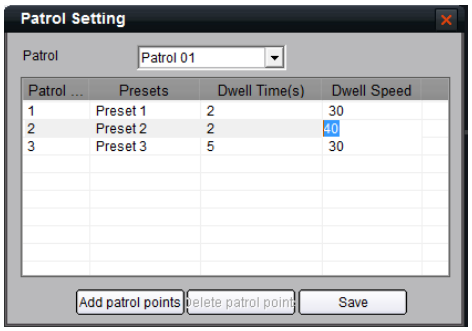
4. Set the time and speed for the patrol.

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

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



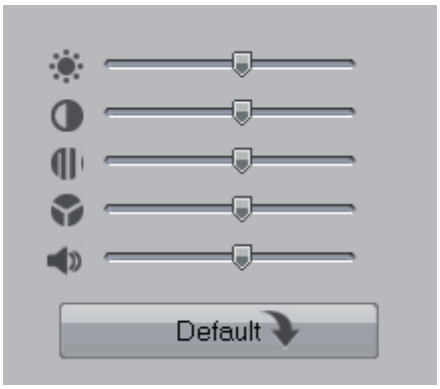
5. Repeat the 2nd and 3rd step to add the presets to the patrol. Then click  key to save the settings.



6. After configuration, you can choose the patrol from the list  , and call/stop them by clicking  or  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	Default	Restore

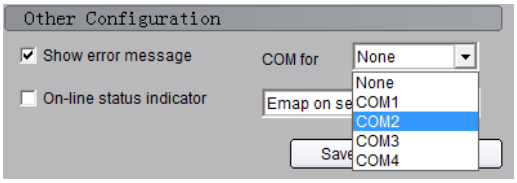
6.7 Keyboard and Joystick Control

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 Setup → Local Settings → Advanced, and select keyboard serial ports (None by default) in "Other Configuration". Click Save to save parameters

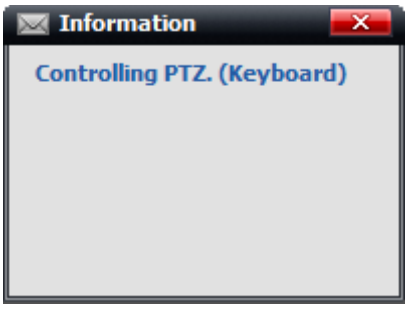


Keyboard control

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.

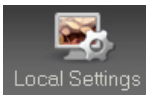


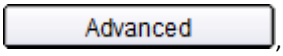
Under the TV Wall Interface, press the buttons of the DS-1003KI keyboard in turn to select the output window division, ”Monitor”->”Number of the decoder sub window ” ->”OK”

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.

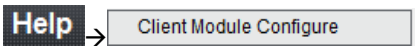
Click 

→ 

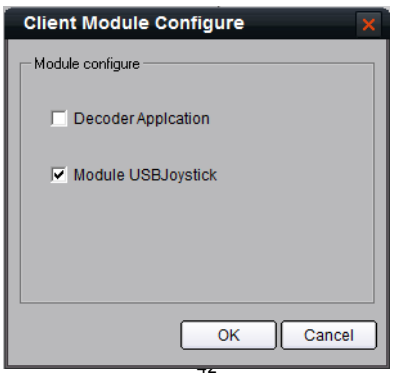
→ 

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

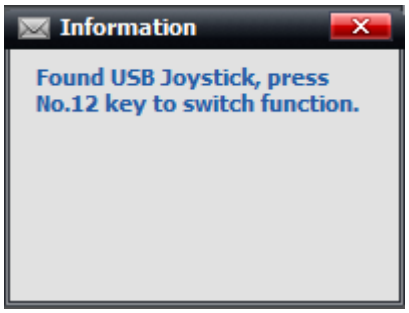
6.8 PTZ Control by Joystick

Click 

on the menu bar to enable the application of decoder module.

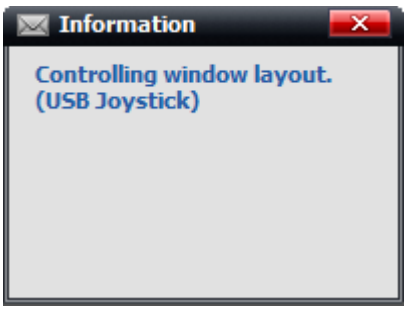


Connect with a USB joystick, and a message will pop up shown as figure on the right, and define “switch button” afterwards.



Press “switch button”, and a message “Controlling 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.



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.

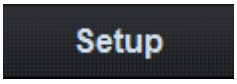
Note: “Switch button” is different according to different models of USB joystick. By default, iVMS software usually defines the last logic button as “Switch button” (e.g. if there are 12 buttons in total, then define the 12nd button as “Switch button”). Different models of USB joystick have different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

Chapter 7 Recording

7.1 Local Recording

There are two kinds of recording types according to the storage place of the record files, the local recording which means you keep the record files on the local disk and NVR storage server recording which keeps the record file on the NVR storage server.

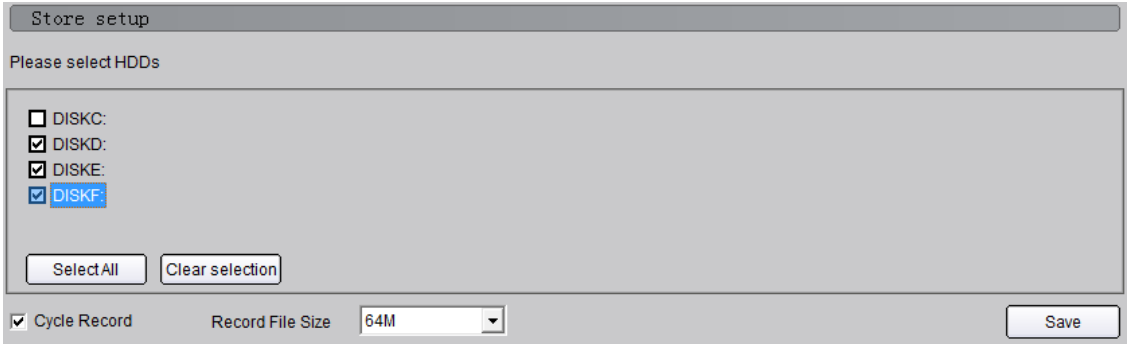
7.1.1 Storage Setup

1. Click 

and then 

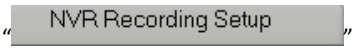
to enter record setting interface

It can set the record file storage disk partition and the maximum record file size can also be customized.



HDDs selection	☑ Choose hard disk of the recorded files storage
Cycle record	☑ Each disk space is less than 2G, the earliest recorded files will be overwritten to continue recoding.
	☐ Leave it blank then 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	For each record file maximum size, 32M/64M/128M/256M can be selected

7.2 NVR Storage Server Recording Configuration

The video of the devices can be recorded on the NVR storage server. You can remotely configure the recording schedule and playback the recorded files of the NVR storage server by client software. Click " 

" to enter the NVR configuration interface.

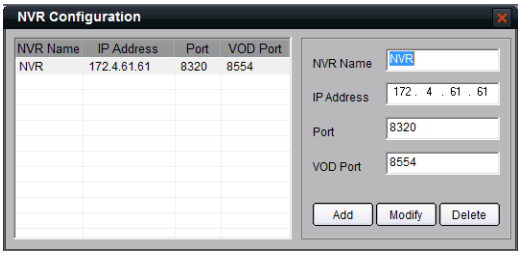
Note: Only the admin user can configure the NVR Recording.

7.2.1 Adding NVR Server

Steps:

1. Click NVR Configuration key to enter NVR configuration interface.

2. Input the NVR server name, IP address and port, and click Add key to add the NVR storage server.



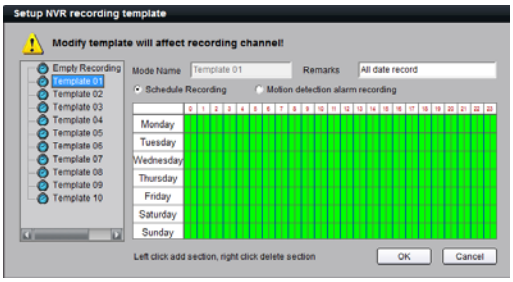
Note: Up to 16 NVR servers can be added to the iVMS software. The default server port and VOD port are 8320 and 8554.

7.2.2 NVR Recording Mode Configuration

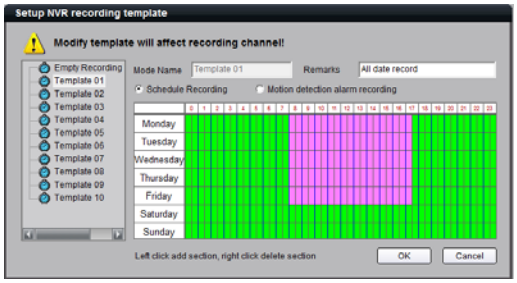
After having finished the adding of NVR server, you can define the recording template for the schedule recording settings.

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

2. Select the record template, and then set the recording schedule for the template.
3. Left-click the mouse on the template to set recording schedule.



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



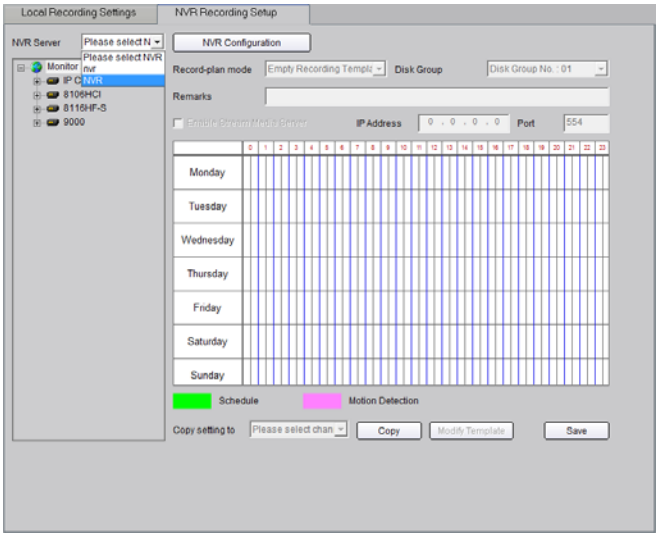
5. Click “OK” to finish modifying the template.

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

7.2.3 NVR Recording Schedule Configuration

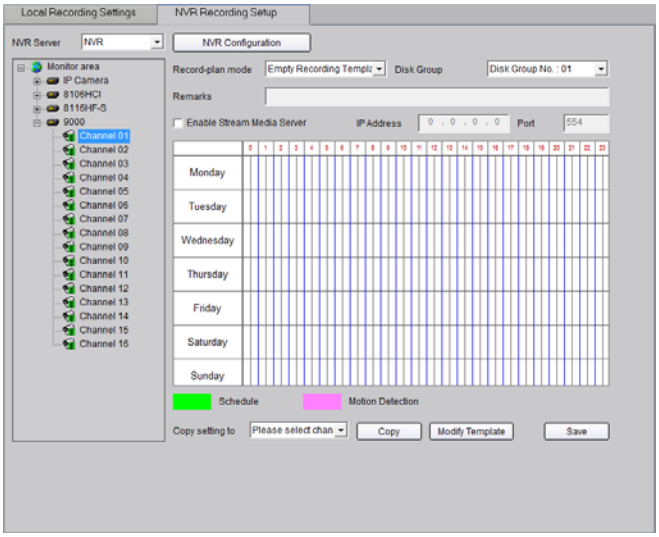
You should configure the recording schedule by client software to enable the NVR to realize the integral storage of record files over network. Operate the following steps:

1. Select the NVR server from the NVR drop-down list. (All the added NVR servers are listed here.)



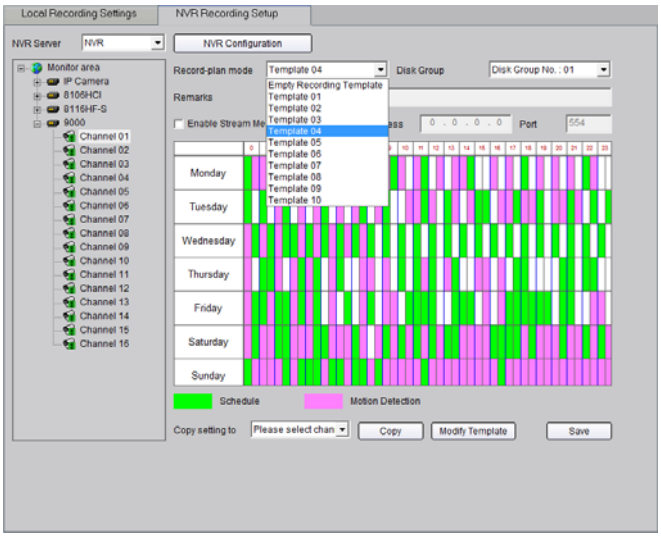
2. Select the device or channel for recording

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

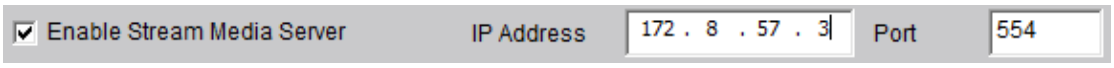


3. Configure the recording schedule.

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



If required, you 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

Four playback modes are provided by the client software and can be selected by clicking  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 abnormal video, e.g., moving persons or objects, etc.

8.1 Remote VOD

Click 

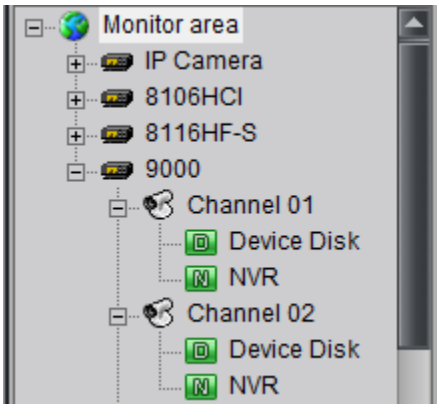
in the menu bar and then select “Remote VOD” from the drop-down list to enter the remote VOD interface.

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

8.1.1 Remote VOD

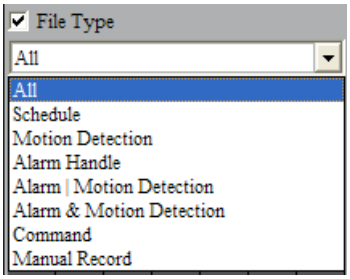
1. Select the window for playback and the channel from the site tree.

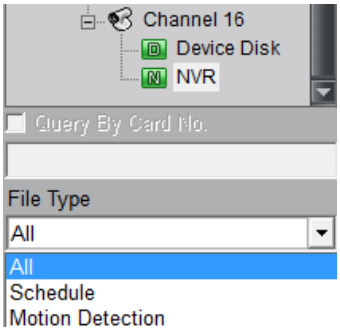
For the channel which has been configured with NVR recording, there will be available with two options under the channel name in the site tree: ***Device Disk*** and ***NVR***.

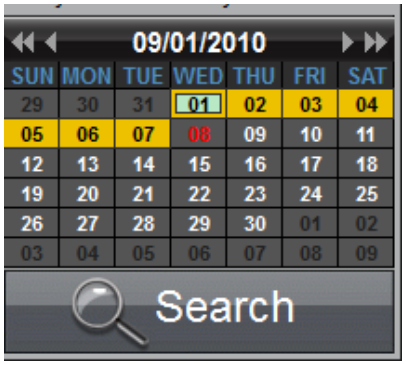


2. Select recorded file type and query time. You can hold and drag the left key of mouse to select multiple dates for search.

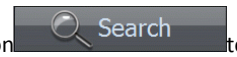
If NVR recording is selected, then only the Schedule and Motion Detection record file types are available.



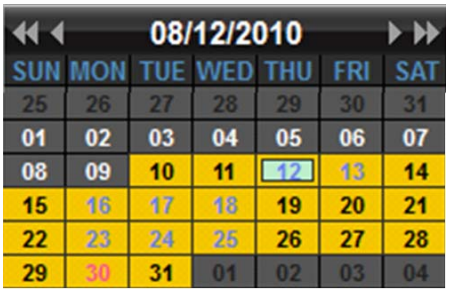




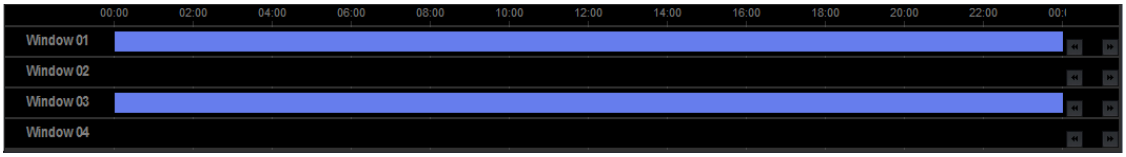
3. Add information of card number. For ATM DVR, you can enable “Query by Card No.” and input the overlaid card number to search. Other device can skip this step.

4. Click the button 

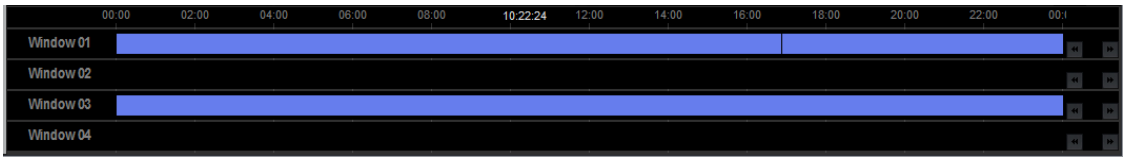
to search the recorded files matching the condition. If there are record files existed in the current day, the number icon on the calendar is pink, otherwise, it is red; while for other dates being searched, the number icon is blue when there are record files existed, or in black when there is no file found.



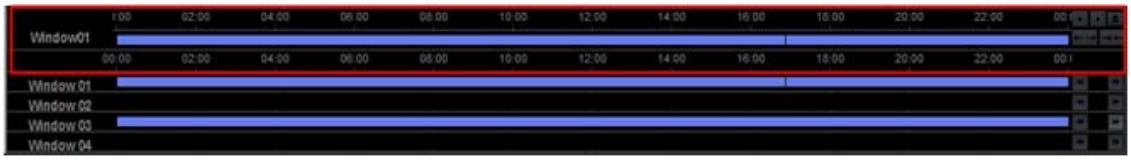
The time bar area is used to show the time segment for the record files. You can click the  or  to move to the previous or next day of the record files.



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



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

And if there are some tags been added to the record files of the device, when you play the video, you can see the red vertical line in the process bar. See the figure below.

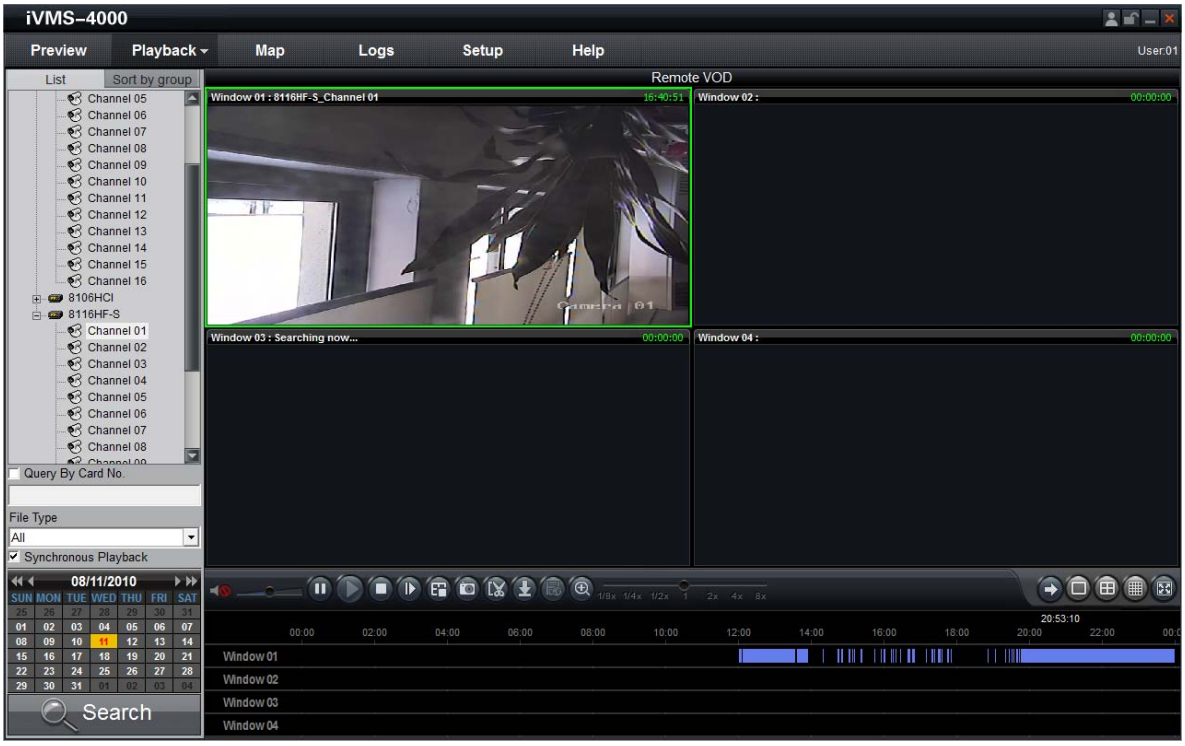
You can click and play it by tag.

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			Clip Video
	Voice volume			Download
	Pause			Remote backup
	Play			Digital zoom
	Stop			Play Speed adjusting
	Play by single frame			Page down(for time bar area)
	Stop all			1/4/16 screen split
	Capture			Full Screen

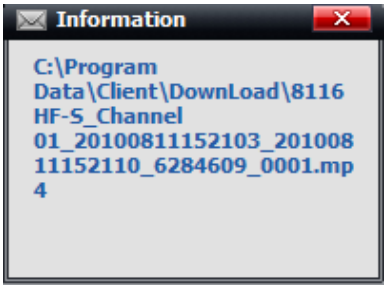
Note: The remote backup function is special for DS-9500 series NVR.

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

The audio can only be enabled for one channel when playback for many channels synchronously. If the audio of next window is enabled, 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 clip.

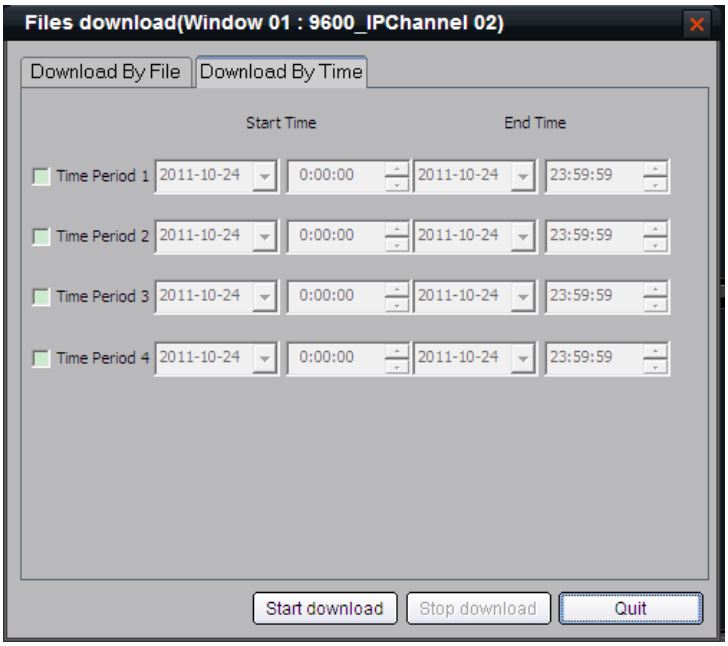


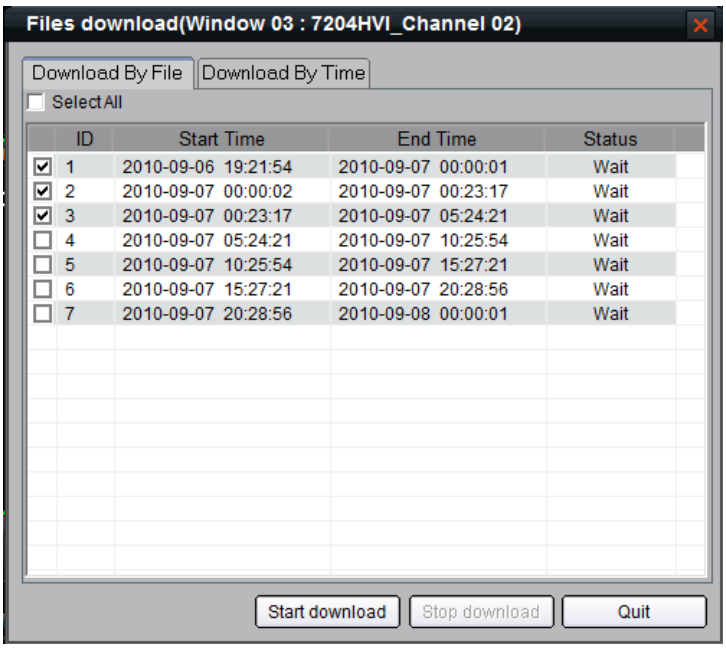
Record File Download

Download by File

After searching the recorded file, you can click  to download file to local PC.

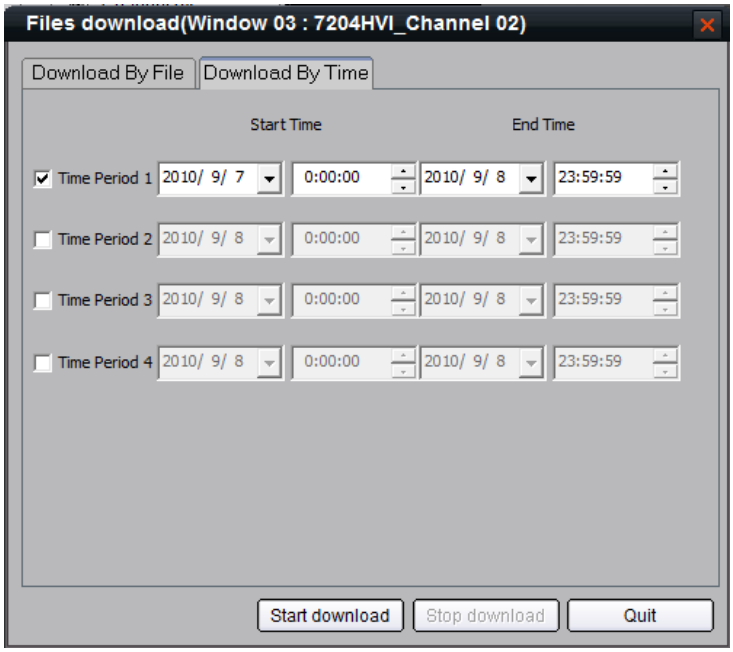
In the Files Download interface, select Time Download option to enter the Time Download interface. Set the period with the start time and end time and then click the “Start download” button to download the record files and save them to your local computer





Download by Time

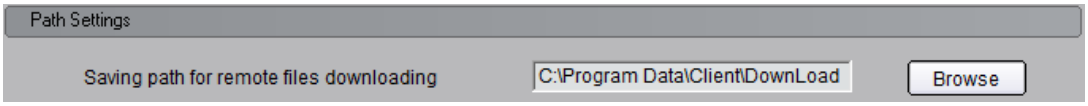
In the Files Download interface, select Time Download option to enter the Time Download interface. Set the period with the start time and end time and then click the "Start download" button to download the record files and save them to your local computer.



After downloading, the message box with the saving path of the record file pops out.

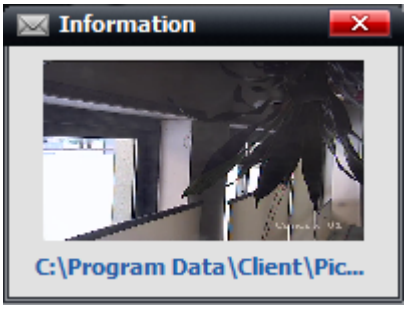
The default saving path for the record clips and download is *C: \Program Data \Client\DownLoad*.

You may go to “Configure” → “Local Settings” → “Path Settings” to change the saving path.



Playback Picture Capture

You 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.

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 clicking and rolling the mouse, you can zoom in or out as well.

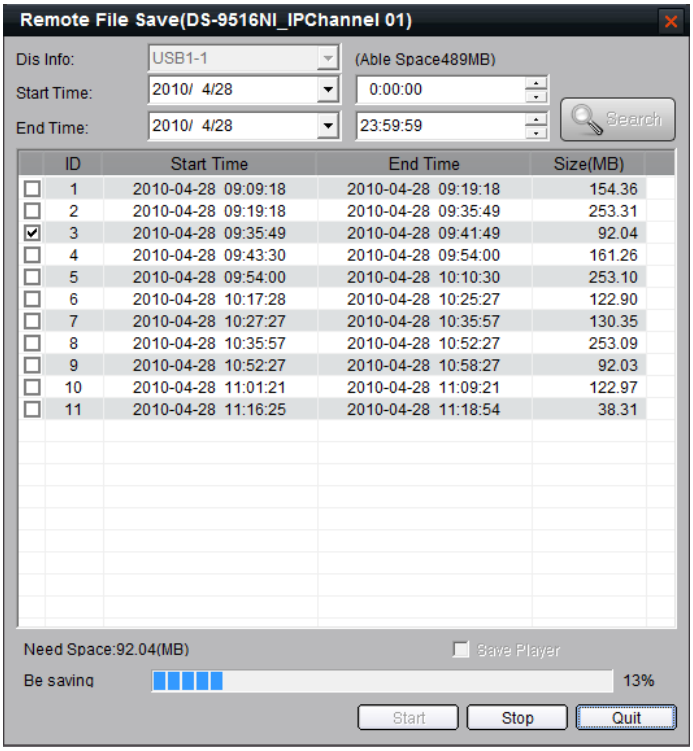
Click the  button again to close the digital zoom.

Backup record files to the external storage devices

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

1. Connect the compatible external storage device to the appointed port of the NVR.
2. Click the  button on the playback window of the client software, to open the remote file saving interface.
3. Select the storage device to which you want to export the record files, set the time period and search, then the corresponding record file will be listed.
4. Select the file you want, click “Start” button to backup the record file. You can see the saving process at the bottom of the message box.

You can also select the “Save Player” option, and then the player will be copy to your external device as well.



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

8.2 Local Playback

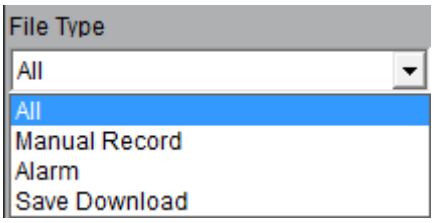
Click  from the menu bar and then select “Local Playback” from the drop-down list to enter the local playback interface.

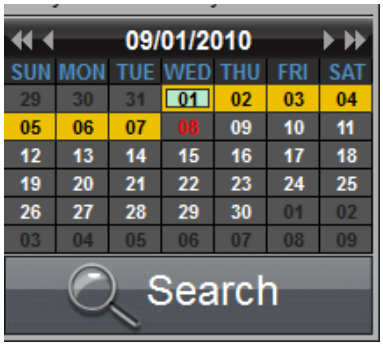
Area	Description		Area	Description
❶	System		❷	Device list
❸	Playback windows		❹	Query area
❺	Play control buttons		❻	Time bar

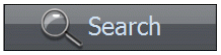
8.2.1 Local Playback Query

Steps:

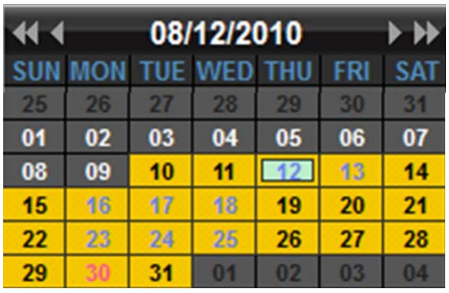
1. Select the playback channel and window.
2. Select record file type and set the query time. You can hold and drag the left key of mouse to select multiple dates for search.



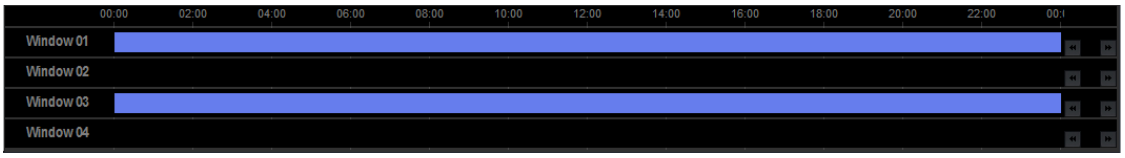


3. Click 

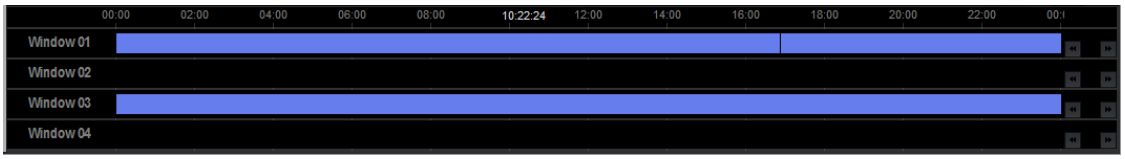
key to search the matched recorded files. If there are record files existed in the current day being searched, the number icon is pink, otherwise, it is red; while for other dates being searched, the number icon is blue when there are record files existed, or black when there is no file found.



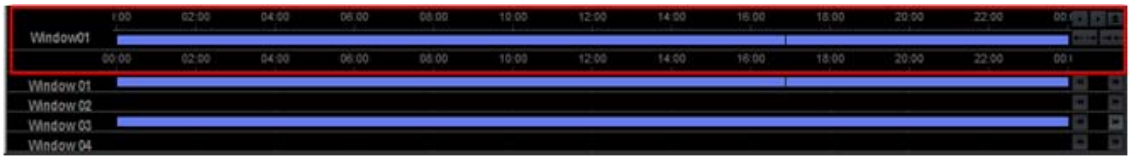
The time bar area is used to show the time duration for the record files. You can click the or to move to the previous or next day of the record files.



4. Click the button to start playback. You can locate the time by dragging mouse to the desired position on the time bar.



You 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.

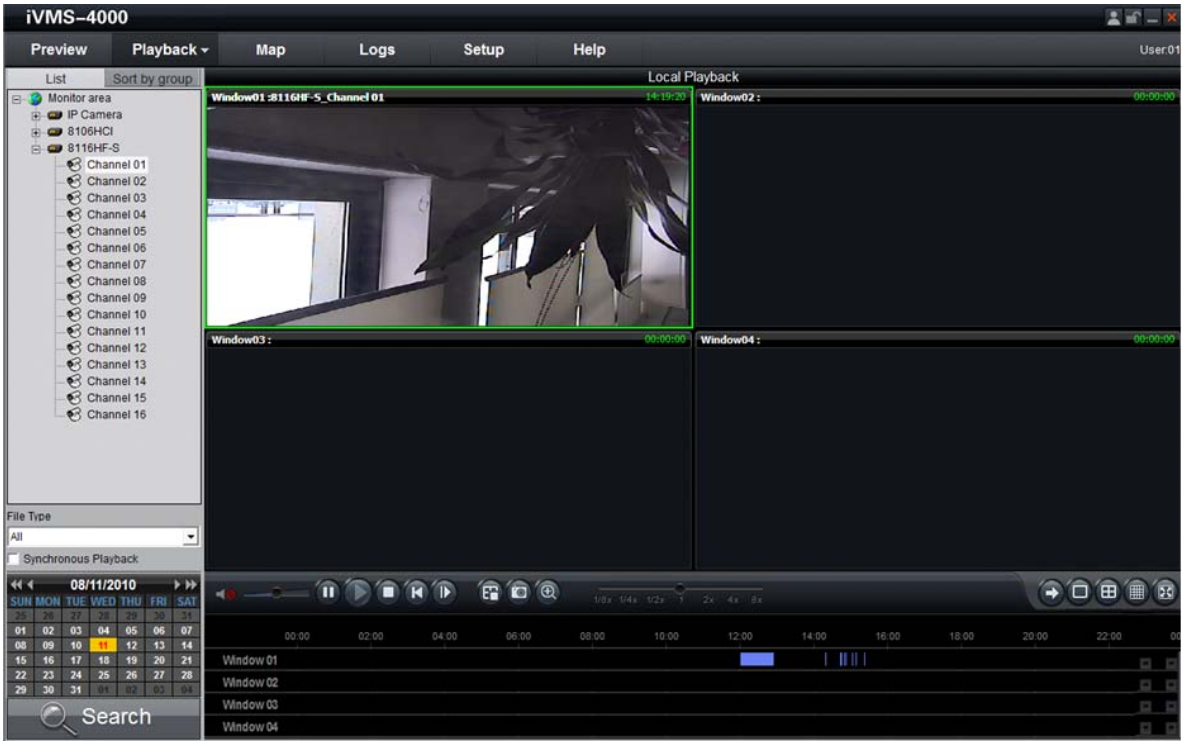


Select one channel and then drag it into playback window. If there is recorded file in this day, software will play back it from the very beginning of this day.

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

Screen display for the playback:



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:

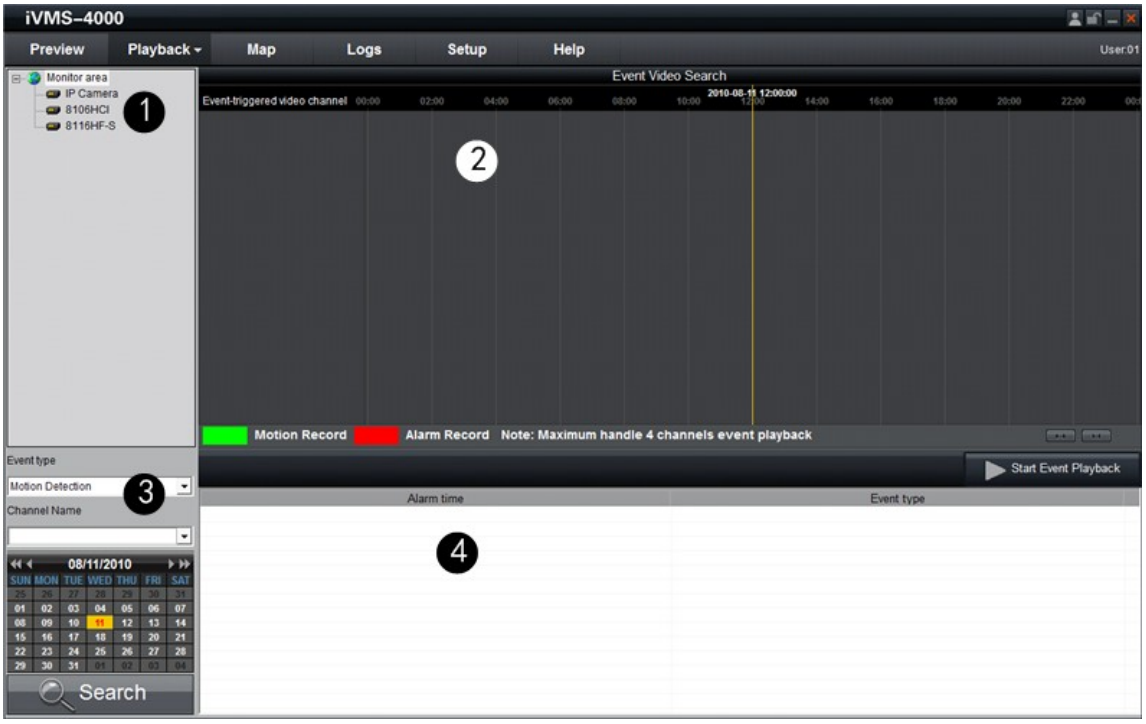
In the single frame playback mode, every time you click button, the recorded files will play forward by one frame.

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.



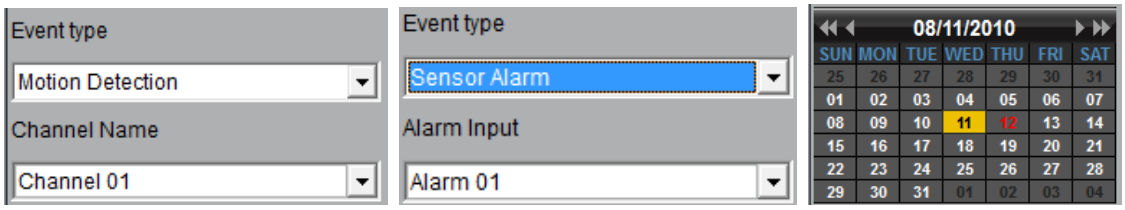
Area	Description		Area	Description
❶	Device list		❷	Time line
❸	Search options		❹	Log info

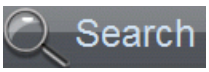
Note: Event playback function is supported by DS-9000/9100 series DVR, with firmware version 1.1 or higher.

8.3.1 Record Search

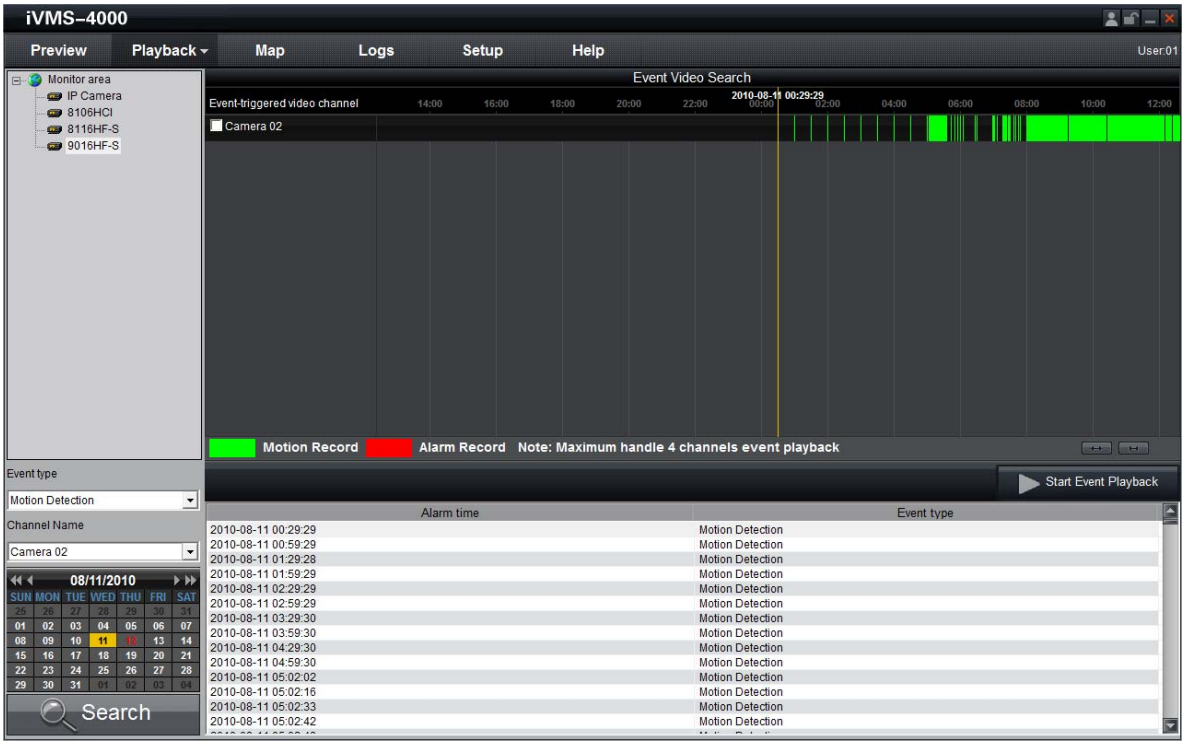
Step1: select a device.

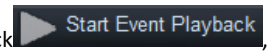
Step2: select the event type to motion detection or sensor alarm, and then select the channel/alarm input number, as well as the event date.



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

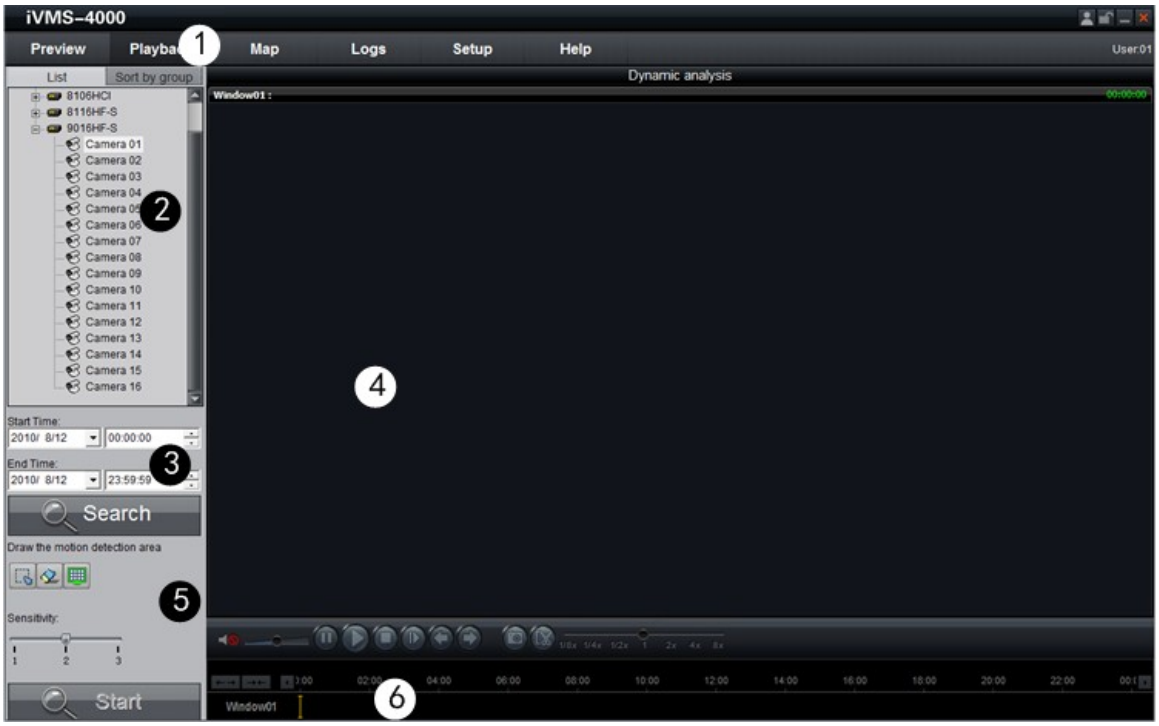
The software only can open voice of one window at the same time. If the voice of the next window is opened then the voice of the previous will be closed automatically.

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.

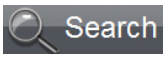
Note: Only the DS-9000/9100 DVR supports this function, and the version should be V1.2 or higher.



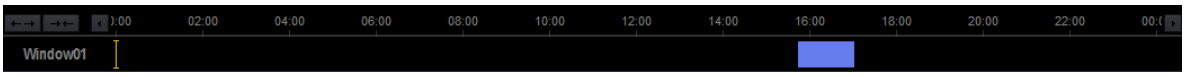
Area	Description		Area	Description
❶	System Area		❷	Device Area
❸	Time period Area		❹	Playback Area
❺	Dynamic analyze Area		❻	Time line Area

8.4.1 Record Searching

Steps:

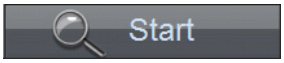
1. Select the channel you want to playback and analyze.
2. Set the start time and the end time, the maximum length of period could be two days.
3. Click 

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.

4. 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.

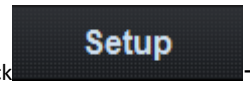
Previous/Next Event

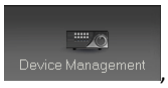
With the dynamic analyze function, if multi record clips are deleted, user can click or to select the previous or next clip.

Chapter 9 Remote Configuration

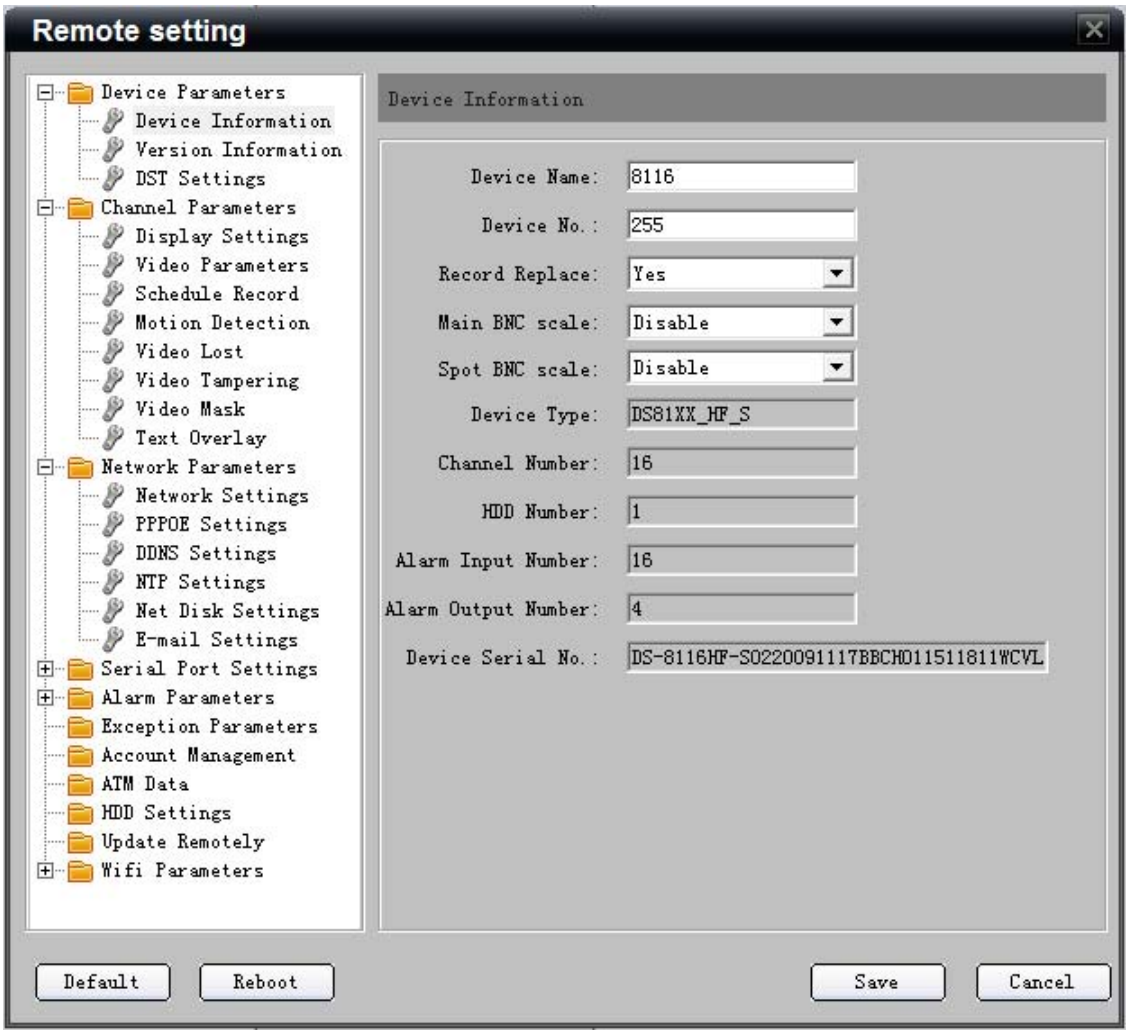
9.1 Remote Device Configuration

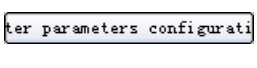
You can remotely configure the parameters of the device connected the client software, including recording schedule, alarm schedule of the device, etc.

Click 

→ 

, and then click the device in the left list 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 

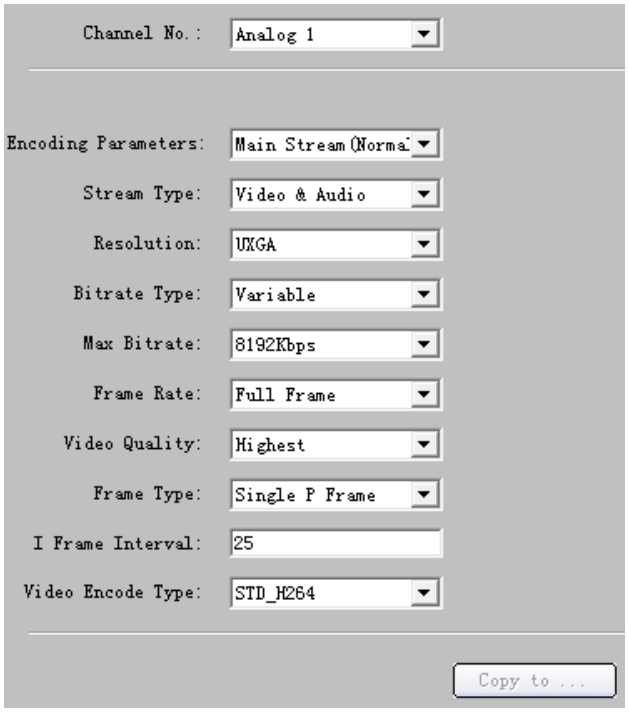
key in the pop-up menu to enter the configuration interface.

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.



Parameters	Description
Encoding Parameters	Main/Sub stream or 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	You could select different encode type of standard H.264, MPEG4 or private H.264.

9.1.1.2 Schedule Recording

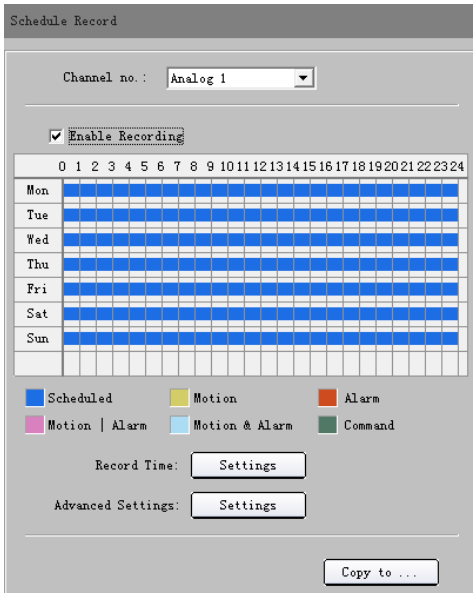
Purpose:

Follow the procedure to remotely set the recording schedule for the device.

Steps:

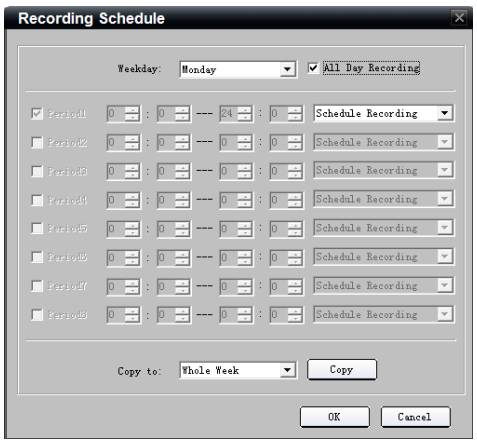
Select Channel Parameters → Schedule Recording to enter configuration interface.

1. Enable recording by clicking the tick.

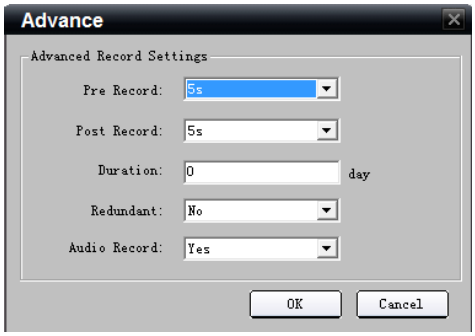


2. Click “Settings” of the “Record Time” to enter recording schedule configuration interface.
3. Select “Weekday” to set the schedule for certain day of the week or the whole week for recording time.
4. Click Schedule Recording for the recording type. You can choose the “All Day Recording” or set the time duration for recording yourself, and no more than 8 time duration can be set.

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



5. Click “Settings” icon after the “Advanced settings” to enter advanced setting interface. You can set pre/post record time.



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

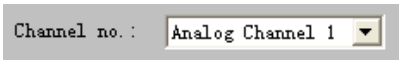
Parameters	Description
Duration	Time for storage of recorded files in redundant disk; record files expired will be deleted.
Redundant	Redundant for this channel or not (When redundant disk is available)
Audio Record	Recorded files include audio or not

9.1.1.3 Motion Detection Recording

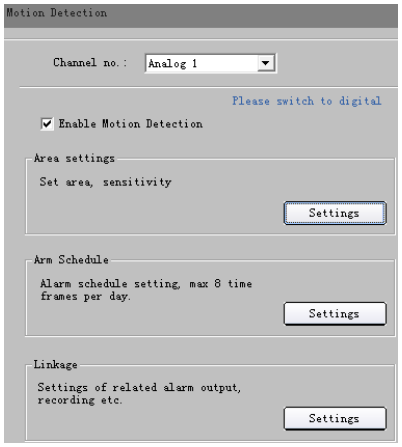
Click Motion Detection to enter motion detection recording interface.

Steps:

1. Select channel number for motion detection.



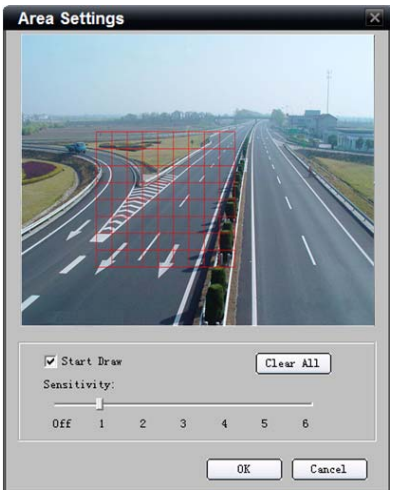
2. Check the checkbox before Enable Motion Detection to activate “Setting Area”, “Arm Schedule” and “Linkage” settings.



3. Set the motion detection area and sensitivity level.

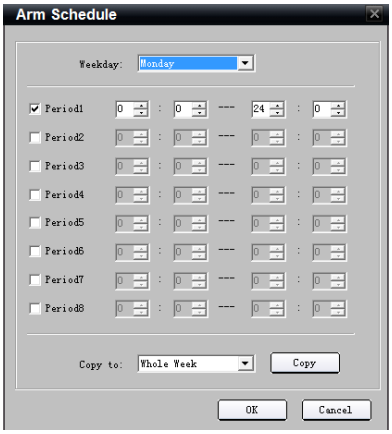
The sensitivity level is from 1 to 6.

Check the checkbox of “Start Draw”, and select the detection area by using mouse.



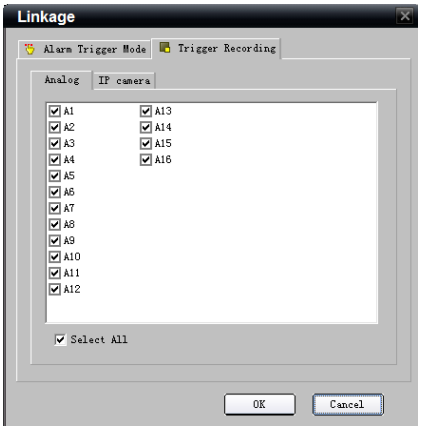
4. Set the motion detection functioning time.

If you set the arming schedule, the motion detection will be automatically enabled according to the schedule. “Arm Schedule” can be one day or the whole week, and 8 time duration can be set for one day.

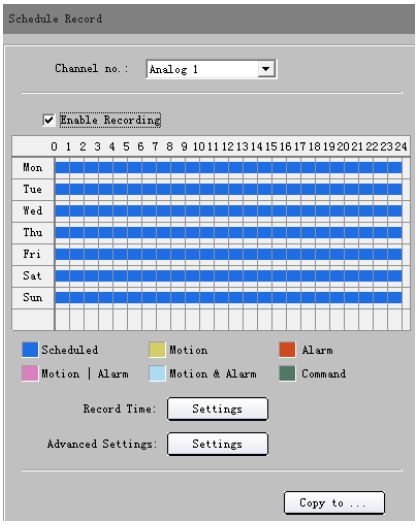


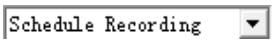
5. Set the “Trigger Recording” for alarm linkage action.

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



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

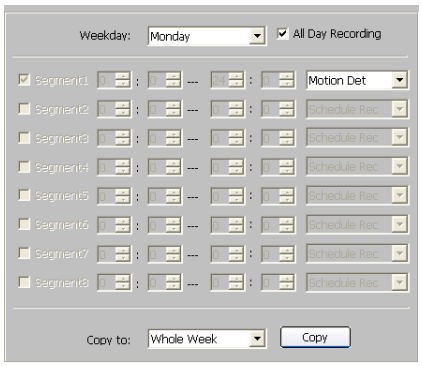


7. Set the detection recording time.
   1) Click “Settings” of “Record Time”.
   2) Select “Weekday” to set the schedule for certain days of the week or the whole week for recording time.
   3) Click 

for the recording type and change it to 

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

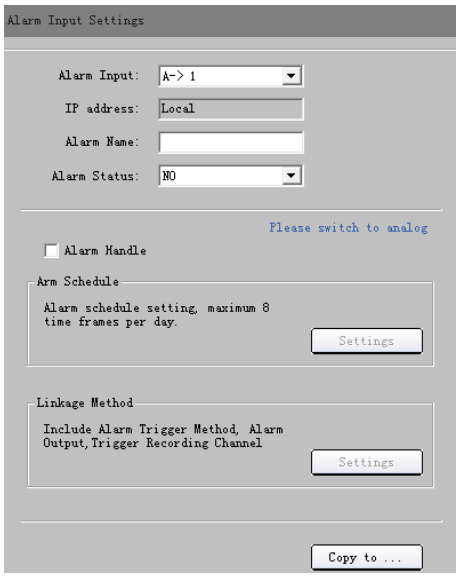
Note: The time duration can’t be overlapped each other. The valid time is the intersection of the motion detection time and motion detection recording time.



9.1.1.4 Alarm Recording

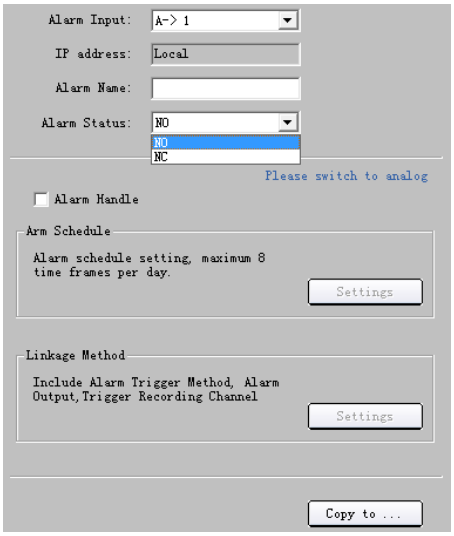
Select Alarm Parameters → Alarm Input Settings

1. Select alarm input.

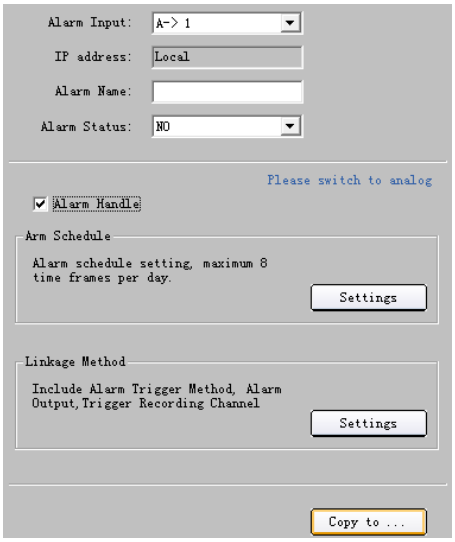


2. Select the type of alarm input, “NO” or “NC”.

Note: The settings take effect after rebooting.



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



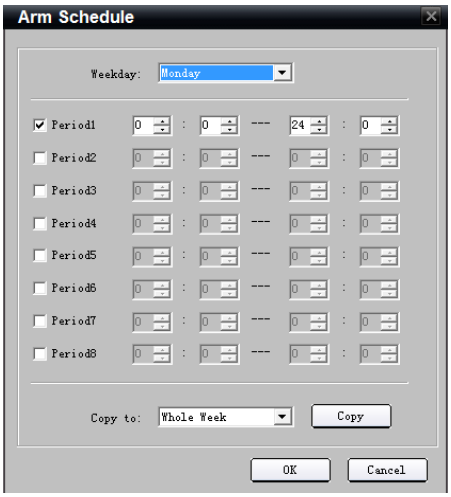
4. Set the arming schedule (functioning time) for alarm input.

Click “Settings” in “Arm Schedule” menu.

Select “Weekday” to set the schedule for certain days of the week or the whole week for arming time.

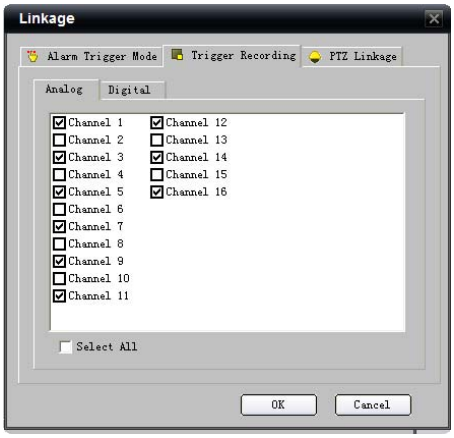
The “All Day Record” or 8 time duration can be selected.

Note: The time duration cannot be overlapped.

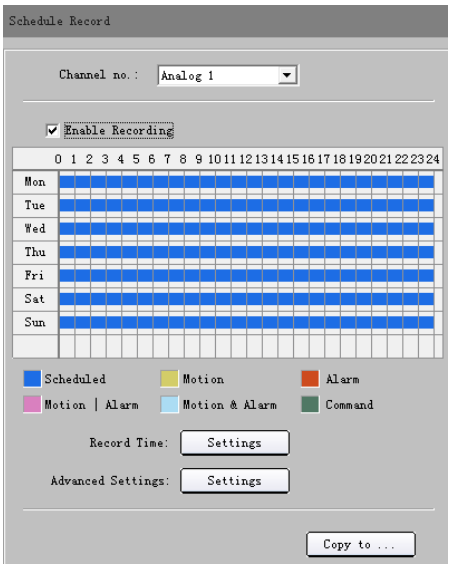


5. Select the “Trigger Recording” tab to configure the recording parameters triggered by the alarm.

Check the checkbox in front of the channel number to enable the recording channels you want.



6. Enter schedule recording interface. Click Enable Recording to enable Recording.



7. 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 cannot 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”.

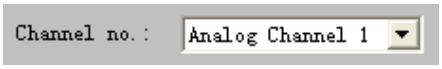
9.1.2 Alarm

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

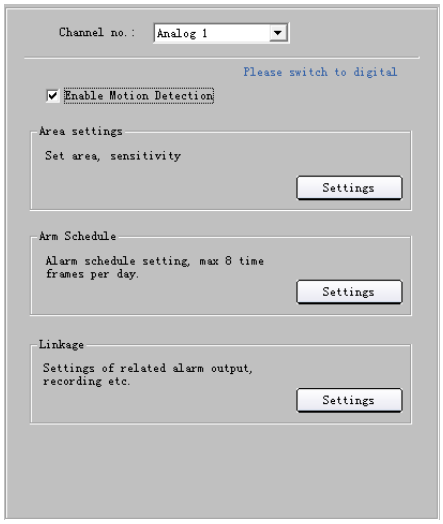
9.1.2.1 Motion Detection Alarm

Steps:

1. Select channel number for motion detection.



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



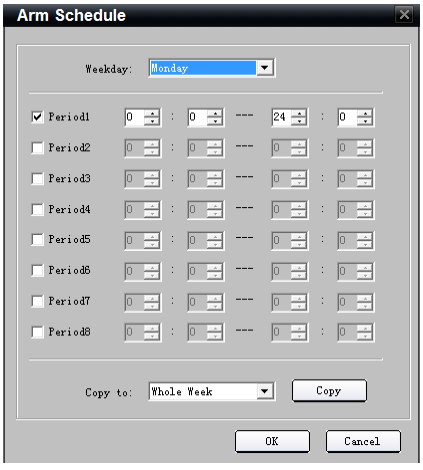
3. Set the motion detection area and sensitivity.

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

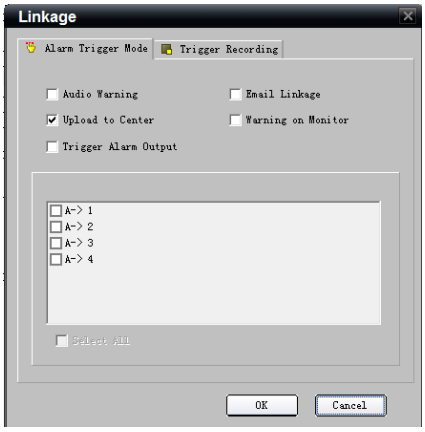
Enable “Start Draw”, and select the detection area by using mouse.

4. Set the detection time.

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



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



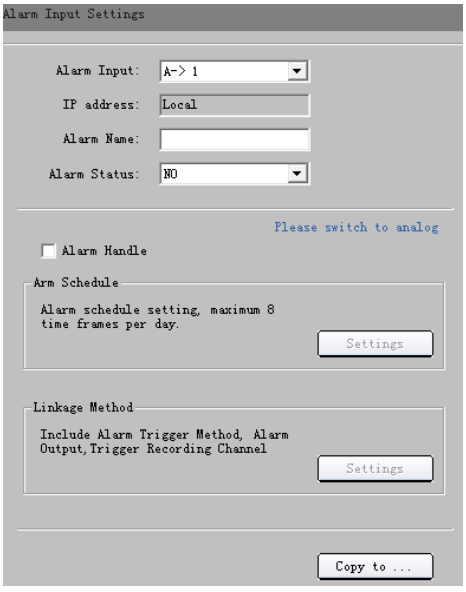
Alarm Linkages Description:

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

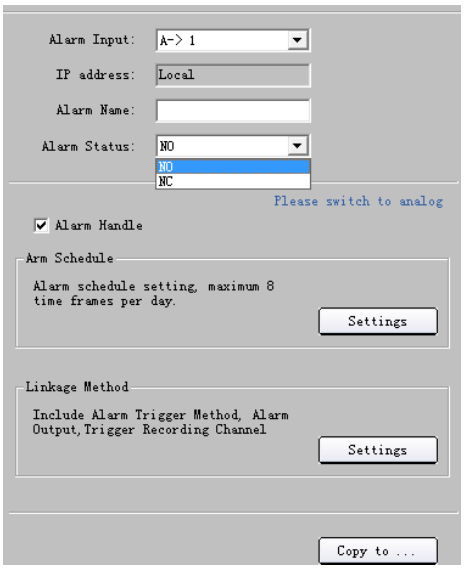
Select Alarm Parameters → Alarm Input Settings

1. Select alarm input.

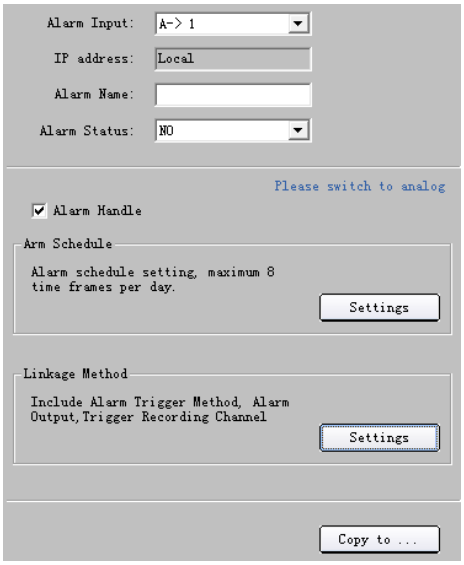


2. Select the type of alarm input, “NO” or “NC”.

Note: The settings will become effective after rebooting.



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

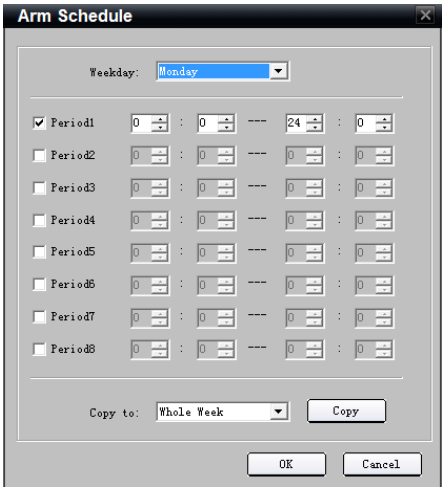


4. Set the arm schedule time for alarm input.

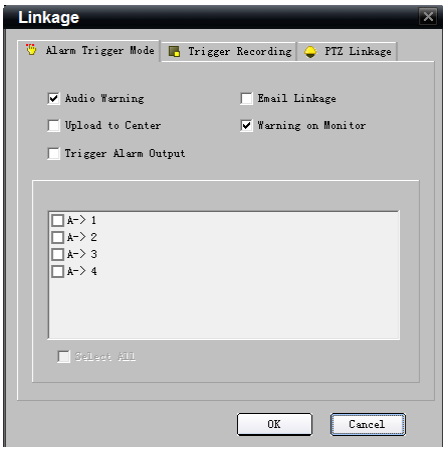
Click “Settings” in “Arm Schedule” menu.

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.

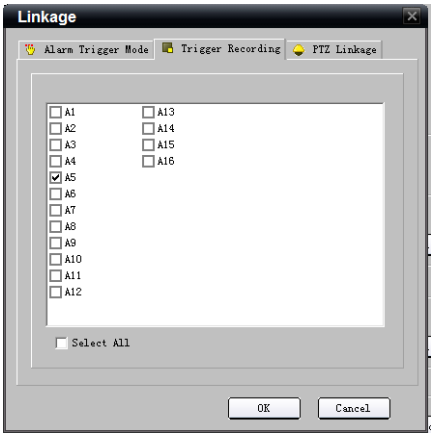
Note: The time of each segment cannot be overlapped.



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

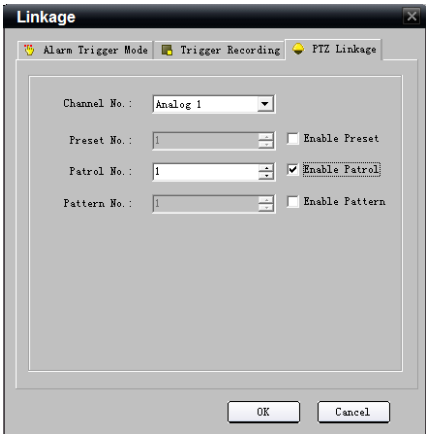


6. Set Trigger Recording for signal level alarm.



7. 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

You can set the video loss alarm linkage in this interface.

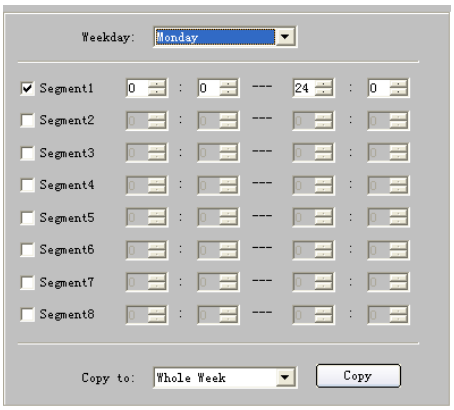
Steps:

1. Select the channel number for video loss.
2. Select Channel Parameters → Video Lost

3. Enable “Video Loss” to activate settings of “Arm Schedule” and “Linkage”

4. Set the arm schedule for video loss.

1) Click “Settings” in “Arm Schedule” menu.

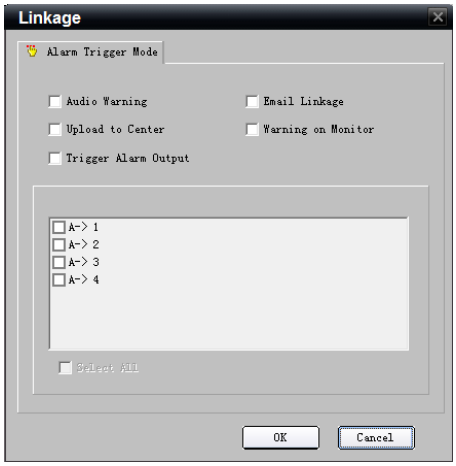


2) Select “Weekday” as some day of the week or the whole week for the arm schedule. The “All Day Record” or 8 time periods can be selected as well.

Note: The time duration cannot be overlapped.

5. Set linkage action for video loss.

Click “Settings” in the “Linkage” menu. And then you can choose the alarm triggered action such as the audible warning, the Email linkage and so on.

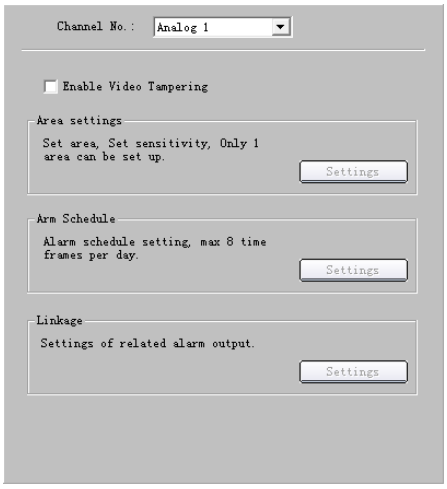


9.1.2.4 Video Tampering

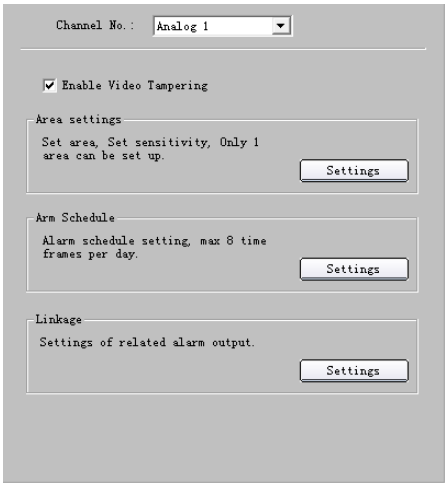
Steps:

1. Select the channel number for video tampering.

Channel Parameters → Video Tampering



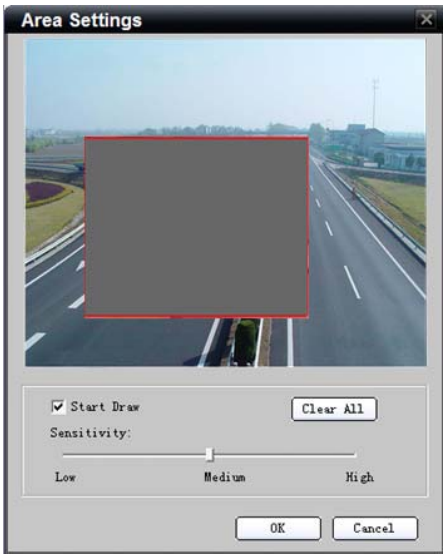
2. Check the checkbox before Enable Video Tampering Alarm to activate settings of “Setting Areas”, “Arm schedule” and “Linkage”



3. Set the video tampering detection area and sensitivity level.

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

Enable “Start Draw”, and draw the video tampering detection area by mouse.

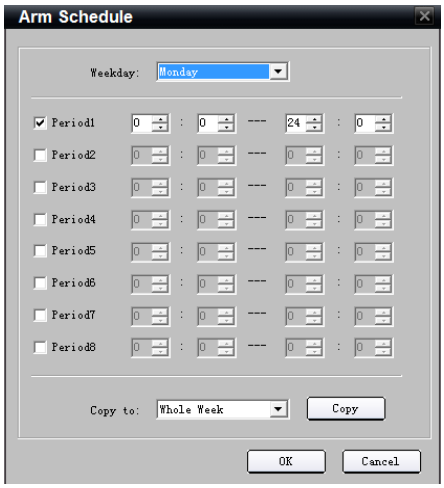


4. Set the arm schedule for video tampering.

Click “Settings” in “Arm schedule” menu.

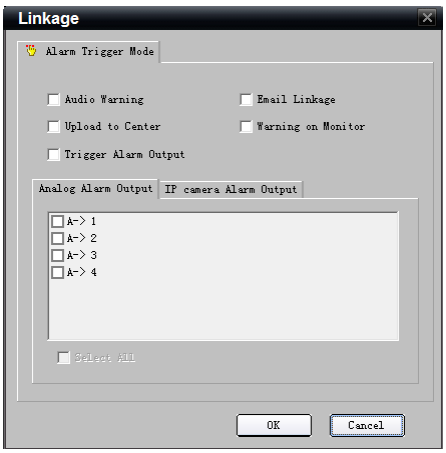
Select “Weekday” to set the schedule for certain days of the week or the whole week for the arm schedule. The “All Day Record” or 8 “Segments” can be selected as well.

Note: The time duration cannot be overlapped.



5. Set linkage action for video tampering.

Click “Settings” in the “Linkage” menu.

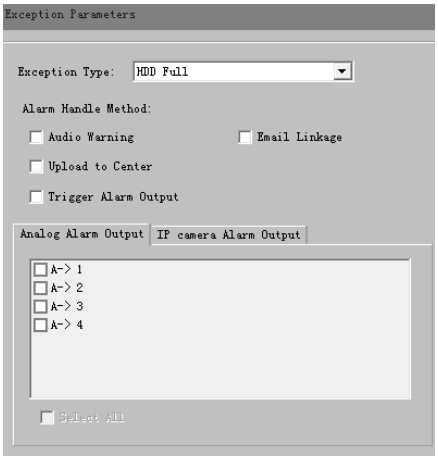


9.1.2.5 Exceptions

Exception parameters are configured for the alarm triggered by the abnormal events, which is includes “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).

Steps:

1. Select the exception type and handling method.
2. Select Exception Parameters to enter configuration interface.
3. You can set the Exception Type, Handling method and Alarm Output channels in this interface.

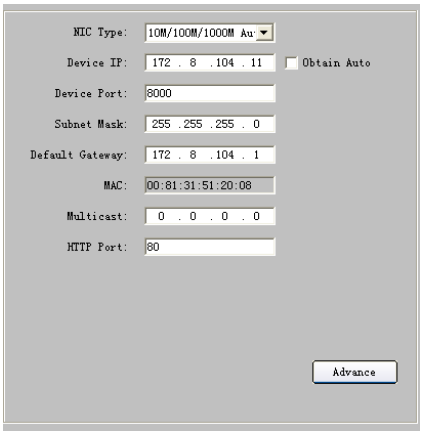


9.1.3 Network Configuration

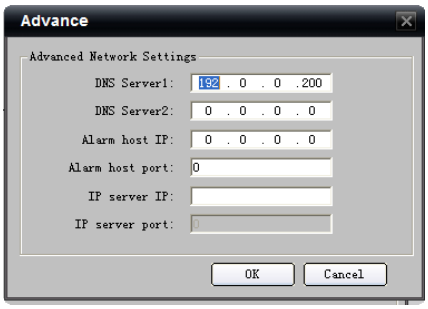
9.1.3.1 Basic Configuration

Steps:

1. Select Network Parameters → Network Settings
2. 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 in LAN automatically.



3. Select "Advance" to enter advanced configuration interface.



Parameters	Description
DNS1 DNS2	Preferred and spare DNS server

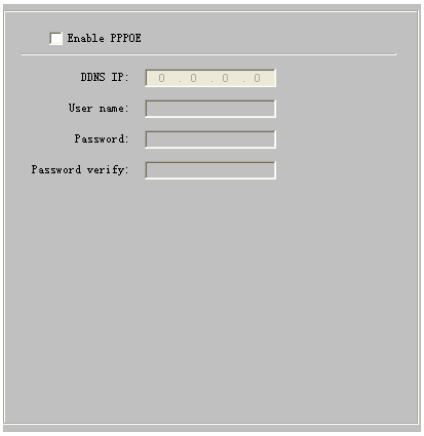
Alarm host	Alarm signal can be uploaded to the alarm host with this IP address automatically
IP sever	IP address of IP server

9.1.3.2 PPPoE Settings

Steps:

1. Select Network Parameters → PPPOE Settings
2. Enable PPPoE by checking , enter the user name and password, then save the changes and reboot the device to take effect of the parameters.

If succeed at dialing, the current IP address will be displayed in the blank “DDNS IP” field.



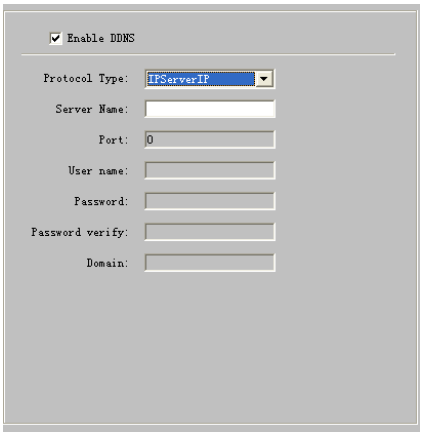
9.1.3.3 DDNS Settings

DNS can solve the problems caused by dynamic IP.

Steps:

1. Click Network Parameters → DDNS Settings
2. Check the checkbox before Enable DDNS.

If the “IPServerIP” is selected as protocol, then input the address of the host on which the IP server is running.

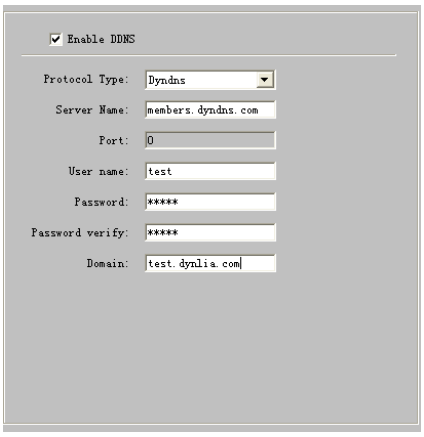


If the “Dyndns” is selected as protocol:

Server Name: Input the domain name of the server, such as members.dyndns.org;

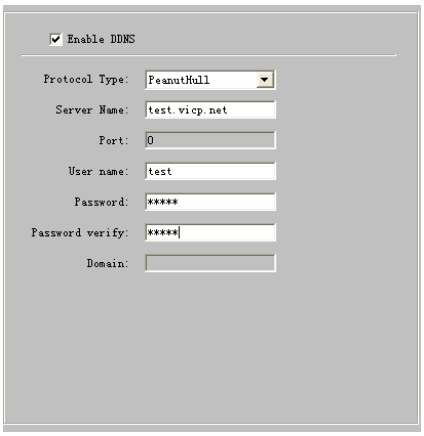
Domain: the domain name that you have applied for the device, such as test.dynlia.com;

User name, password and verify: the account information that you 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 Settings

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

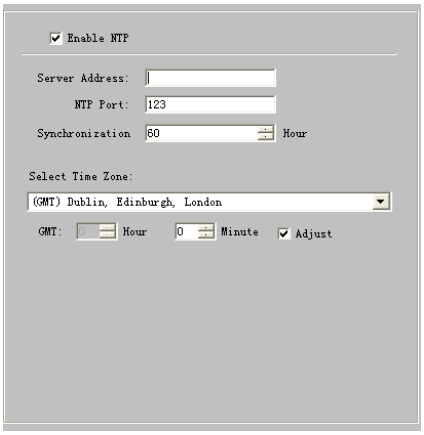
Steps:

1. Select Network Parameters → NTP Settings
2. Tick to enable NTP function.

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

Note: If the device is connected to the public network, the IP address of NTP server should be the address of the NTP server which can provide time synchronization.

If the device is connected to private network, you can build a NTP server with the NTV software by yourself and put the address of the NTP server in the server address field.



9.1.3.5 Net Disk

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

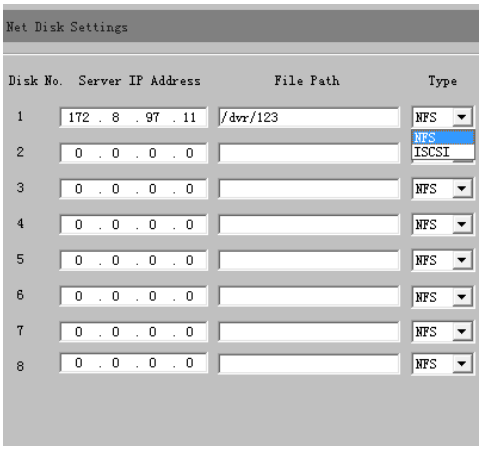
Steps:

1. Select Network Parameters → Net Disk Settings
2. Input the IP address of NAS server in the “Server IP address” field; input the saving path allocated by NAS server in the “File Path” filed.

Note:

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

The iSCSI protocol is only applicable for the 90 / 91 series DVR with version 1.2 or above, and the 95 / 96 series NVR.



9.1.3.6 E-Mail Setting

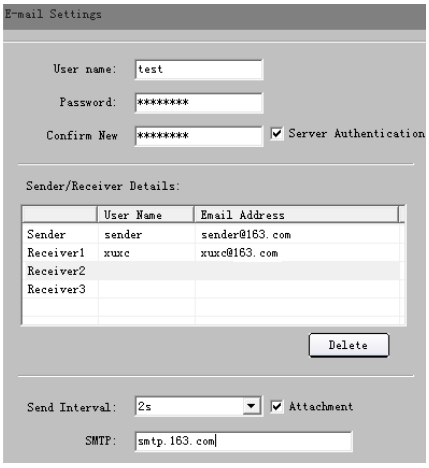
Through E-mail configuration, the e-mail can be sent to the designated mailbox when there is an alarm.

Steps:

1. Select Network Parameters → E-mail Settings
2. If server authentication is needed, check the checkbox (i.e.☑) and input user name and password.
3. Input the sender and recipient information, if the captured picture also needs to be sent, you can check the

checkbox before “Attachment” (i.e.).

Note: Make sure that the device supports email sending function.

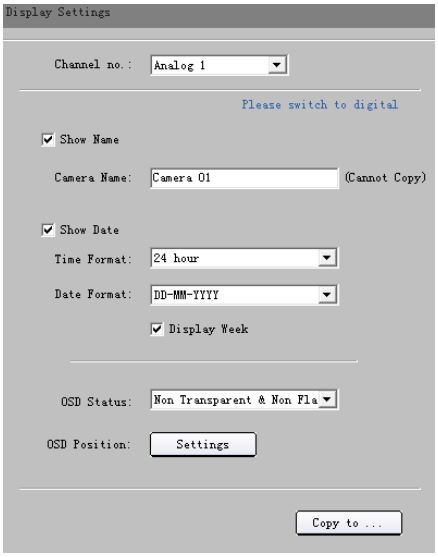


9.1.4 Channel Configuration

9.1.4.1 Channel Display Settings

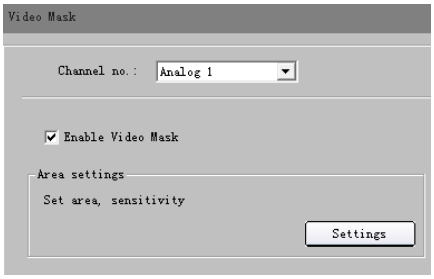
Steps:

1. Select Channel Parameters → Display Settings
2. You can configure channel name, OSD and related parameters here.

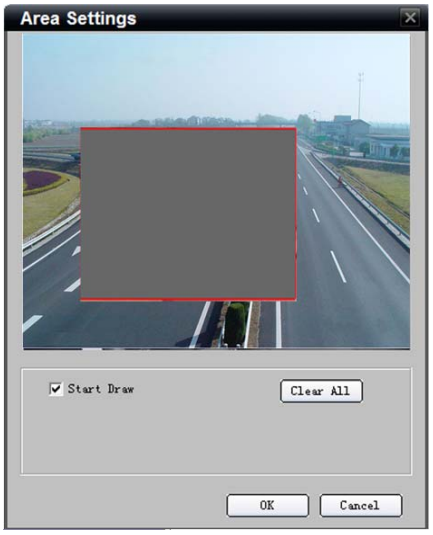


9.1.4.2 Privacy Mask

1. Select channel number, and enable video mask (i.e.).
2. Select Channel Parameters → Video Mask



3. Set the privacy mask area.
   1) Click “Settings” to enter area set menu.
   2) Check the checkbox before “Start Draw” (i.e.☑), select the mask area by clicking and dragging the mouse.

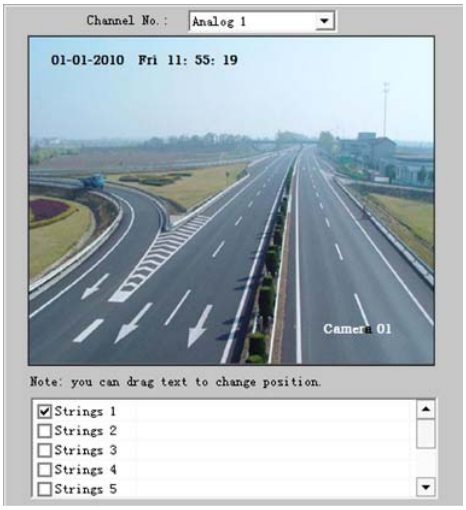


9.1.4.3 Text Overlay

You can add text on the screen of the channel.

Steps:

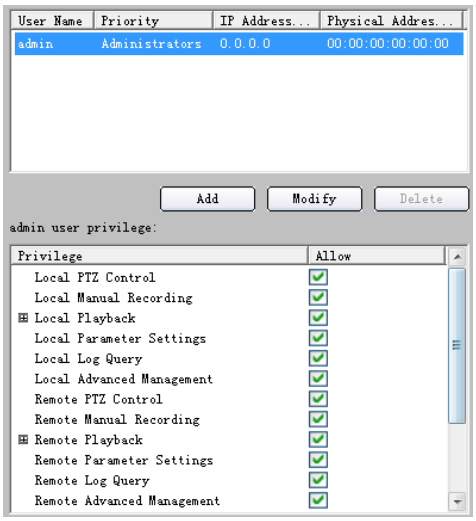
1. Select Channel Parameters → Text Overlay
2. Check the checkbox before “Strings 1” (i.e.☑) to enable text overlay, double click the strings area to input the characters you want to overlay on the screen.



9.1.5 Account Management

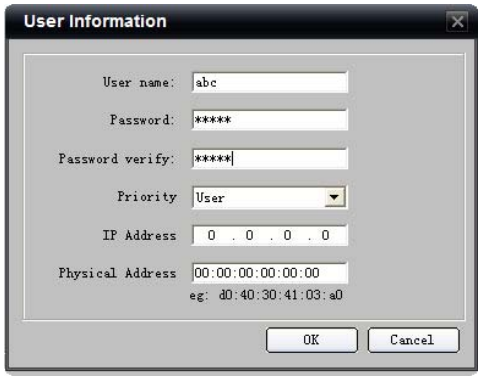
The default user name and password of device administrator are “admin” and “12345”. Administrator can remote add, delete users or distribute permission for users. There are two levels of the newly added users: user and operator. (For “Remote Configuration” permissions, operator has “Voice Talk” permission, user does not; for “Channel Configuration” permission, operator has all the permission, user has local playback, remote playback permission only.)

1. Select Account Management



2. Click “Add” to add user.

Note: If you set the IP address or physical address for the user login, only the PC with these IP address or physical address can visit the device through network as the user.

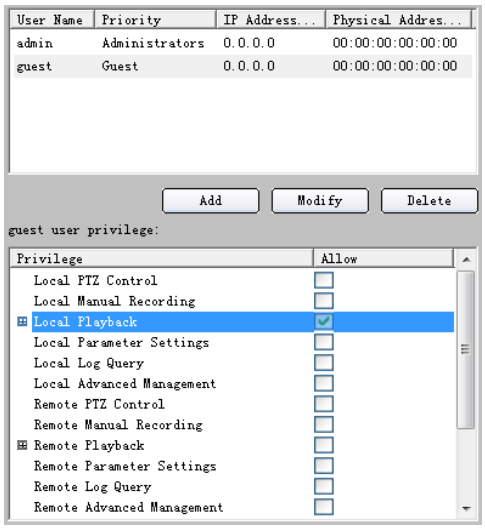


After adding the user, click “Modify” to change the user name and password; click “Delete” to delete the user.

Status means permission granted, status means permission not granted.

Click to unfold the channels, and set the permission for each channel.

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



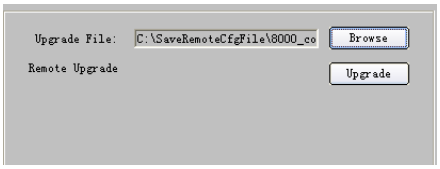
9.1.6 Others

9.1.6.1 Remote update

You can upgrade the device remotely by the client software.

Steps:

1. Click Update Remotely
2. Click “Browse” to search the upgrade file saved in your PC, click “Upgrade” to start upgrade remotely.



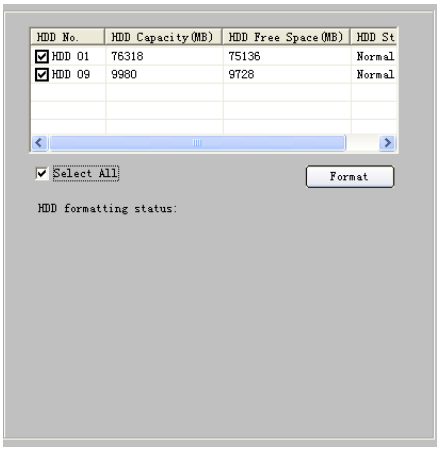
9.1.6.2 HDD Format

You can also format the hard disk of the device by the client software.

1. Click HDD Settings

2. Check the checkbox before the HDD number, and then you click **Format** to format the HDD.

Note: Please backup the data before formatting hard disk in case of information loss.



9.1.6.3 Zero-channel Settings

Sometimes you need to get a remote view of many channels in real time from the client software, in order to decrease the bandwidth requirement without affecting the image quality, Zero-channel encoding is supported as an option for you.

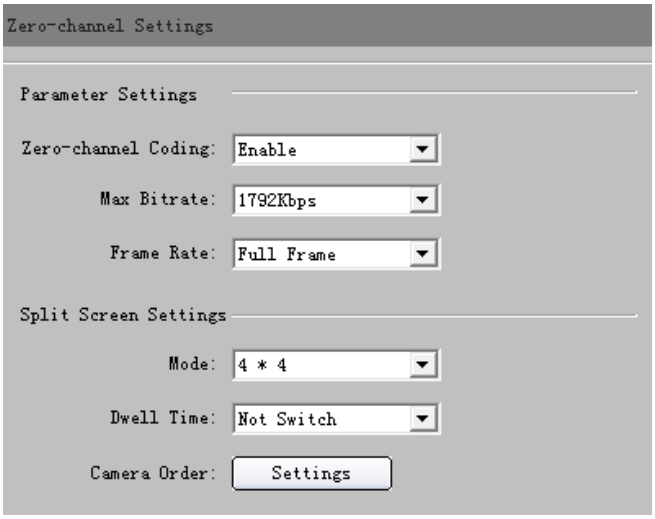
You need to set the zero-channel encoding parameters in the device.

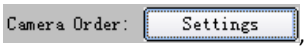
Note: this function is supported by the 9000 / 9100 series DVR with the version 1.2 or above and 9600 series NVR.

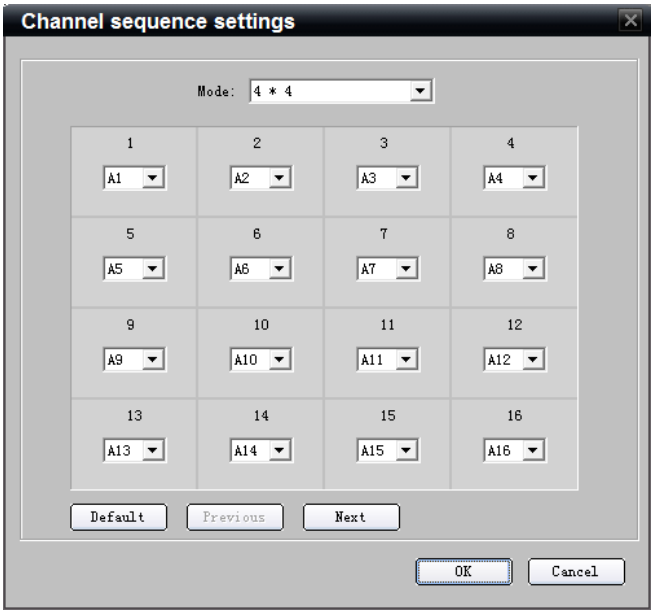
When you add a device which enables the zero-channel function, then the channels number you add will be one more than the actual analog channels, and the last channel of the device will be zero-channel. The priority of the zero-channel is higher than IP camera channel, so for the hybrid-DVR, you need to set the channel number to be one more than the actual the analog and IP channel number to display the zero-channel in the client software.

Steps:

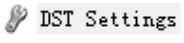
1. Click Zero-channel Settings, into the setting interface. You could enable it and then set the Bitrate, Frame rate, Split mode and the dwell time.



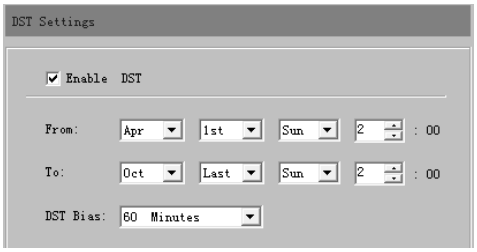
2. Click  , into the channel sequence settings interface, user could set the mode and the channel display sequence.



9.1.6.4 DST Settings

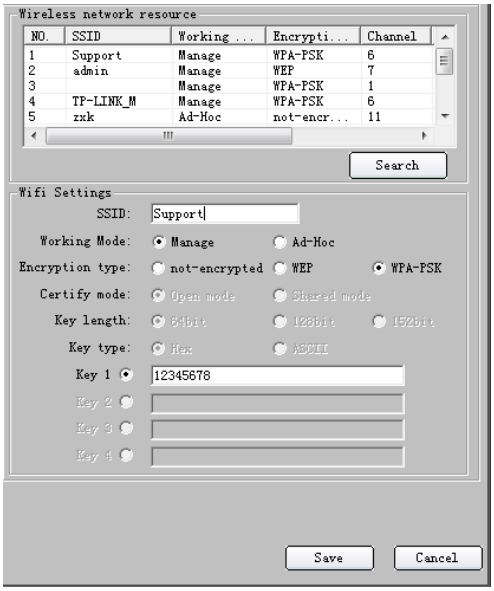
1. Click the  to enter the DST setting interface.
2. Click the check box of “Enable DST”, and then set the start time and the end time of DST, and the DST bias time.

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

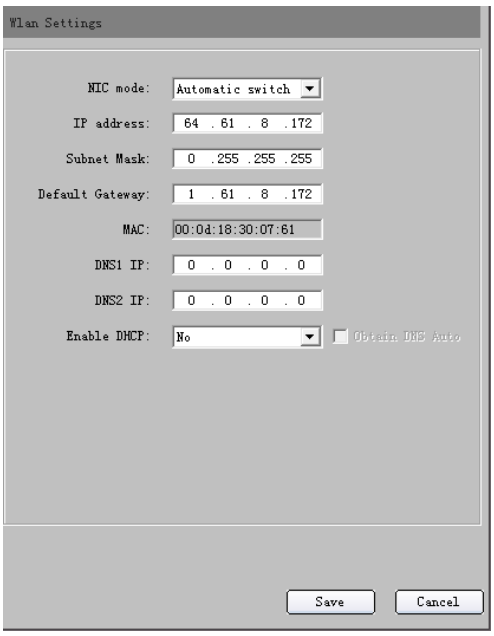


9.1.6.5 Wifi Settings

1. Click the Wifi Settings to enter the Wifi Settings interface.
2. You 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.

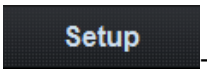


3. Click the Wlan Settings to enter the Wlan Settings interface to set the NTC mode and other wireless parameters.



9.2 iVMS-2000 Remote Configuration

You can remotely configure parameters of the iVMS-2000 by the client software.

1. Click 

→ 

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

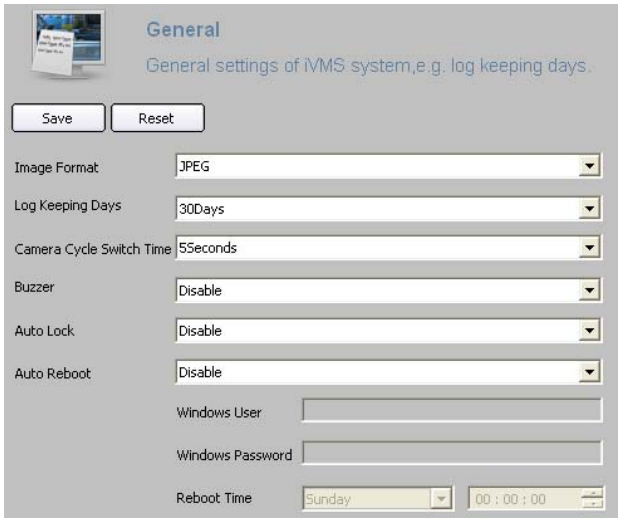
Note: Please refer to the user manual of iVMS-2000 for more detailed instructions about the iVMS-2000 remote configuration.

9.2.1 General Settings

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

Click 

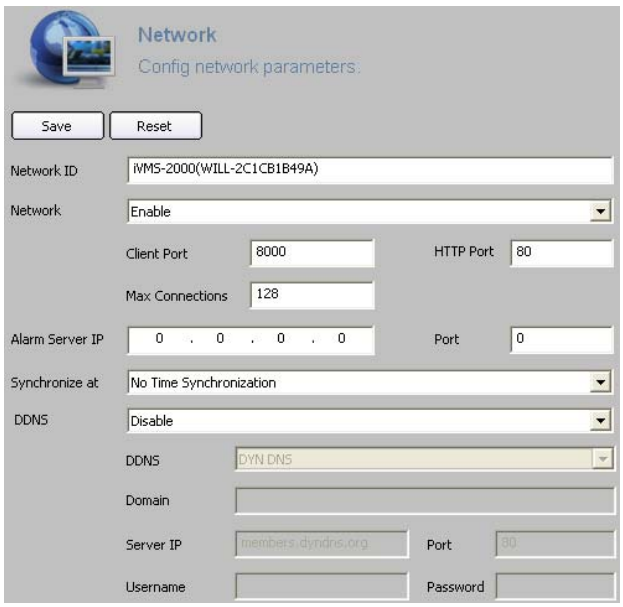
to set the general parameters. Click “Save” button after finish configuration.



9.2.2 Network Settings

Click 

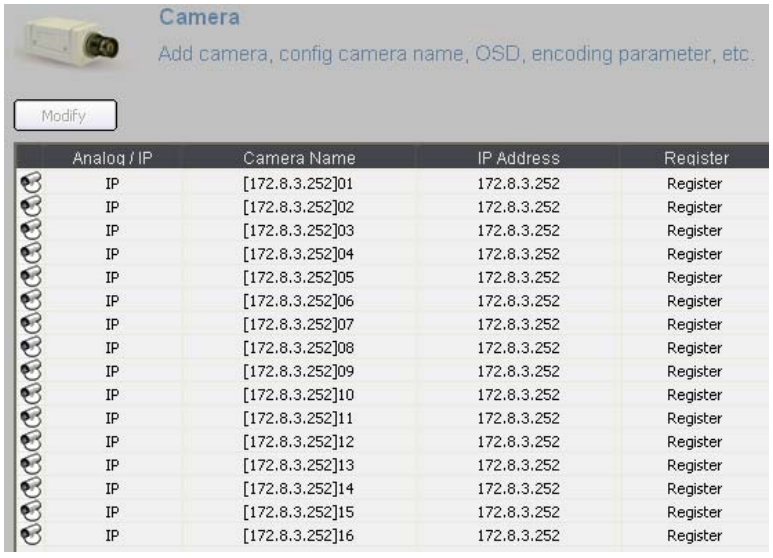
to set the network parameters. Click “Save” button after finish configuration.



9.2.3 Camera Settings

Click 

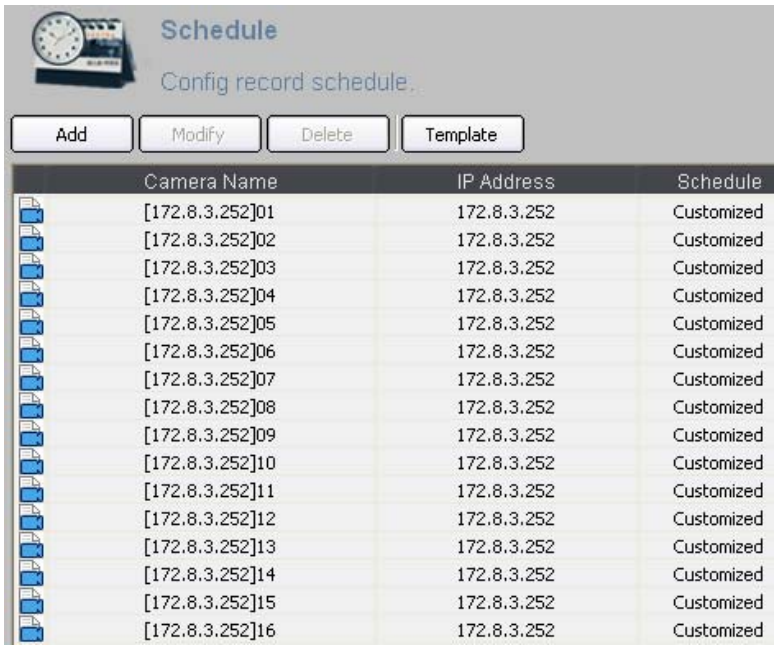
to set the camera parameters. Click “Save” button after finish configuration.



9.2.4 Schedule Settings

Click 

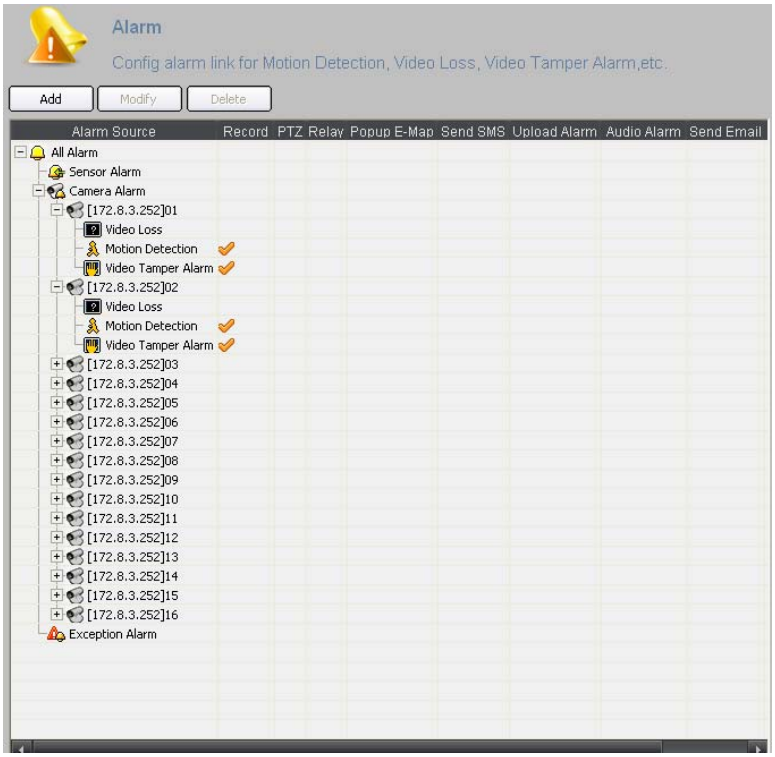
to set record schedule.



9.2.5 Alarm Settings

Click 

to set Alarm link.



9.2.6 User Settings

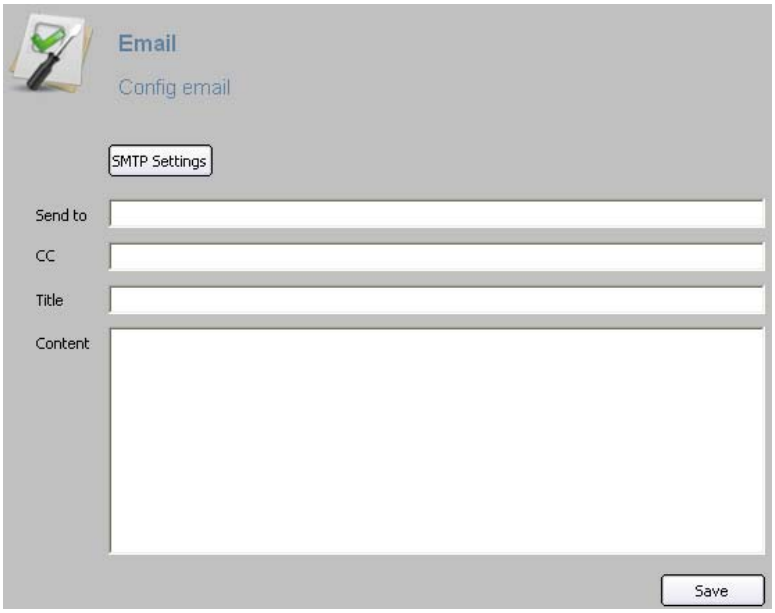
Click 

to set account information.

9.2.7 E-mail Settings

Click 

to set e-mail information.



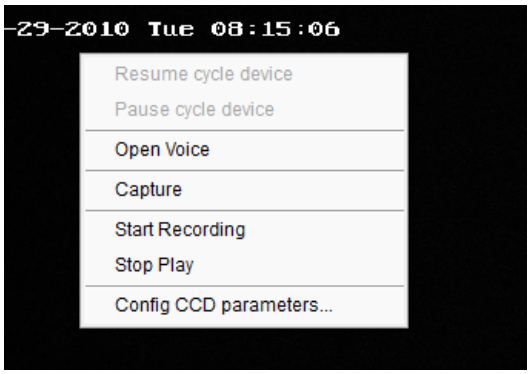
9.3 Remote Config CCD Parameters

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

note:

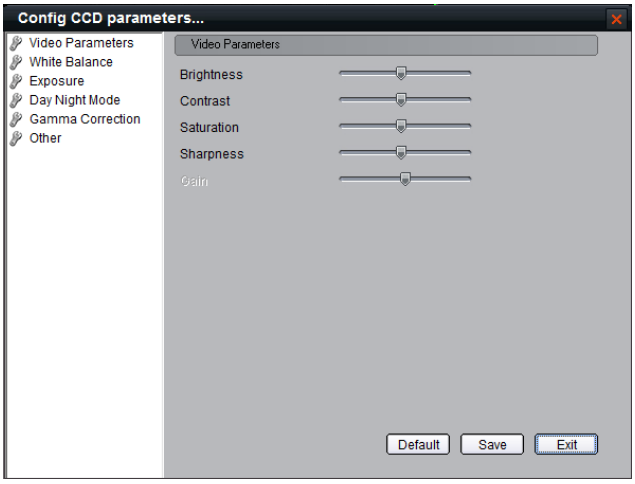
1, this funciton need the camera supporting.

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



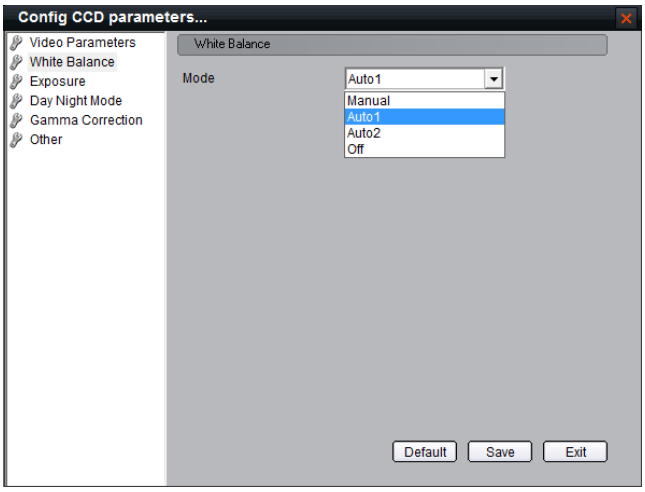
Video Parameters Configuration

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



White Balance Configuration

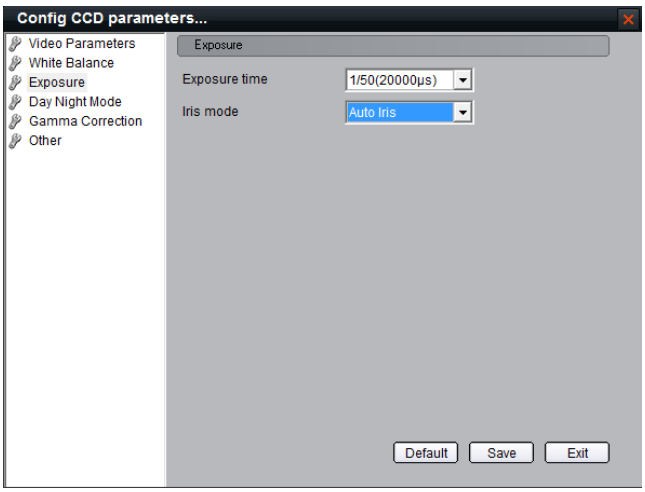
Set the white balance mode. “Manual”, “Auto 1”, “Auto 2” and “Off” for your need



Exposure

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

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

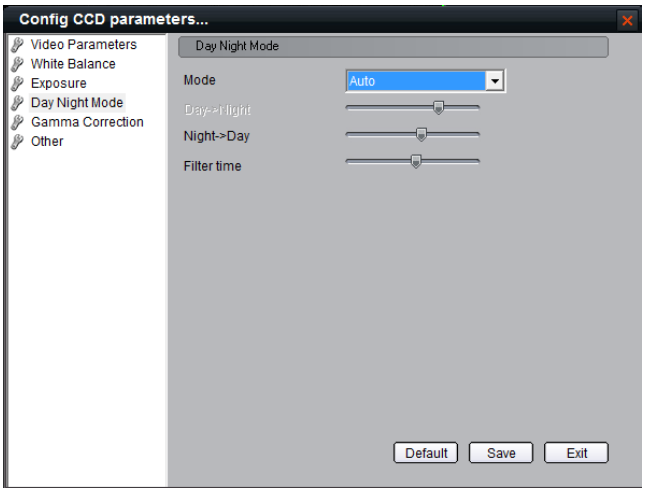


Day/Night Mode

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.

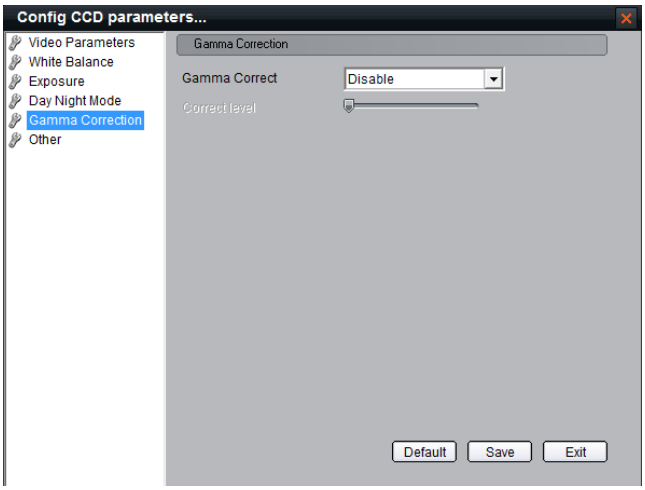


Gamma Correction

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.

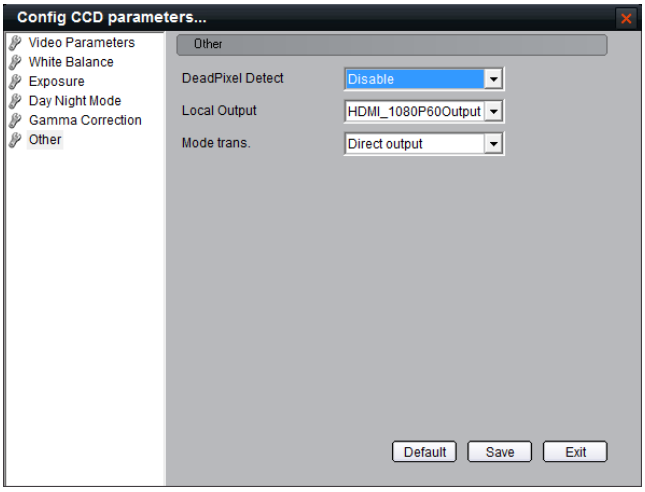


Other

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

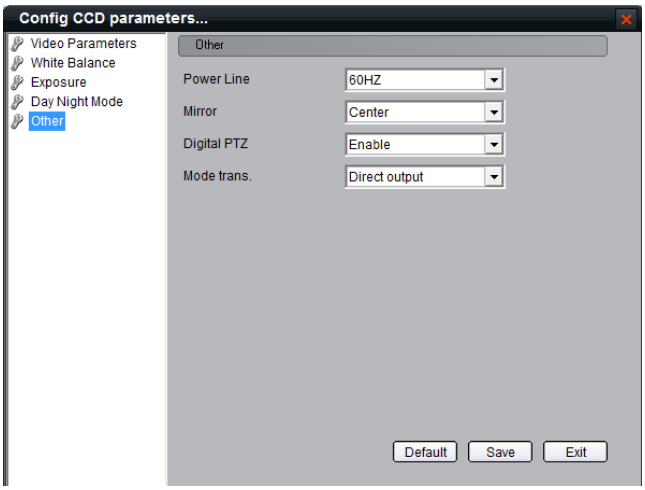
On the right is for model of 886, 876.

You 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.

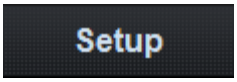
User could set the “Power Line” 50/60HZ, Mirror settings, Digital PTZ switch and Mode trans.



Chapter 10 Alarm Linkage

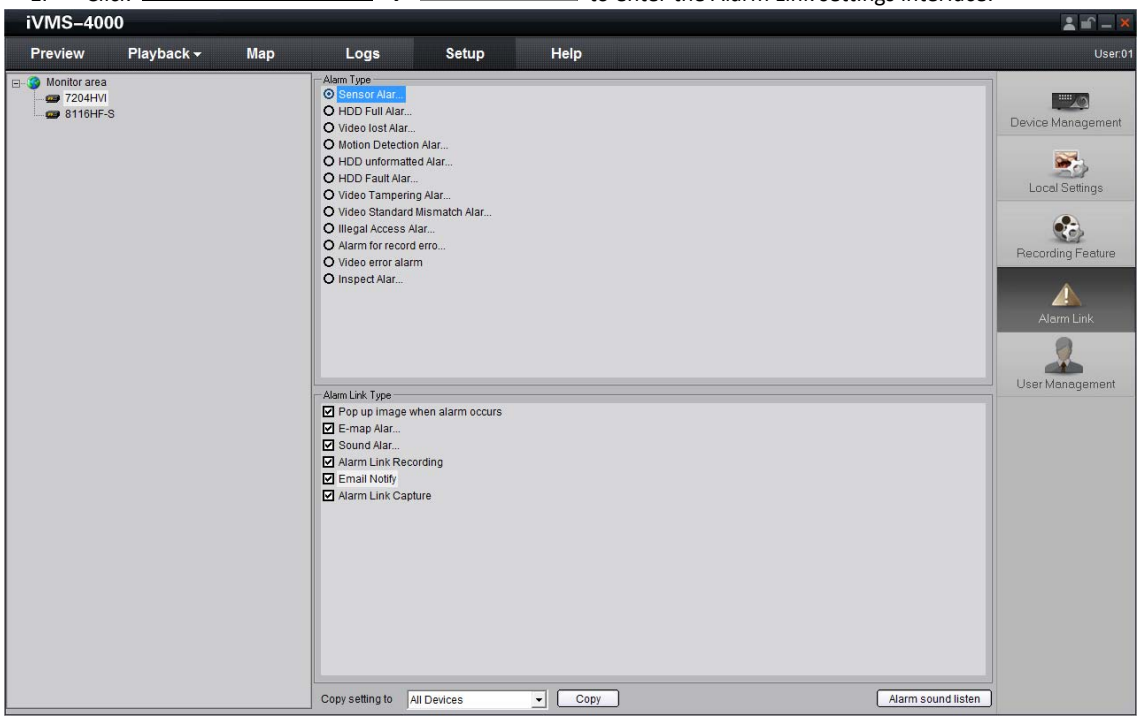
iVMS software can configure different linkage actions for them.

10.1 Alarm Link Configuration

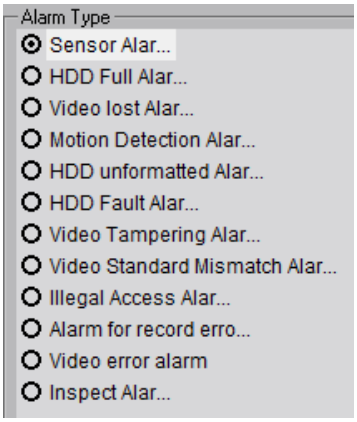
1. Click 

→ 

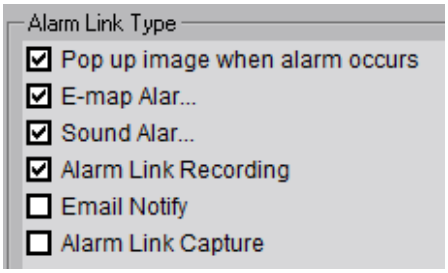
to enter the Alarm Link settings interface:



2. Select the device from the device area on the left, activate the alarm type and alarm linkage type options.
3. Select the alarm type, after selected, the alarm type status will become  .



4. Select the alarm linkage type for the alarm type, and status change to  .

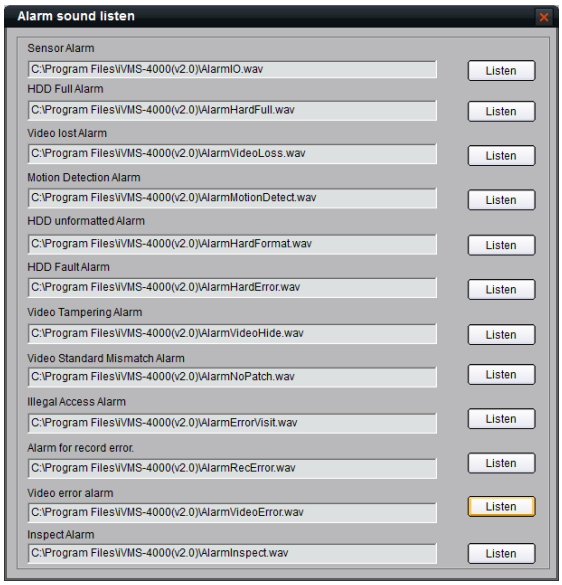


Descriptions on Alarm Linkage Type

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.

Click the Alarm sound listen at the bottom of the Alarm Link Settings interface to enter the following interface:



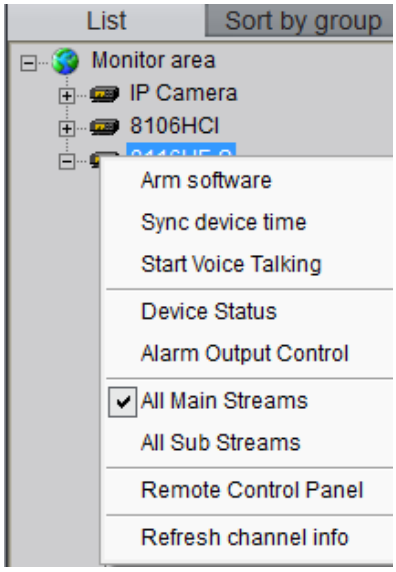
Click the Listen button to listen the alarm sound of the alarm type as required. And it also allows user to access the installation path of the client software and replace the default alarm sound file with the *wav* file of the same name.

10.2 Alarm Arming & Disarming

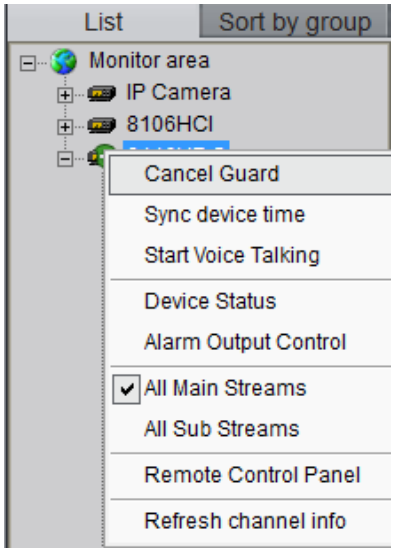
You can choose “Arm software” and “Cancel Guard” to decide whether to handle alarm signal or not.

Steps:

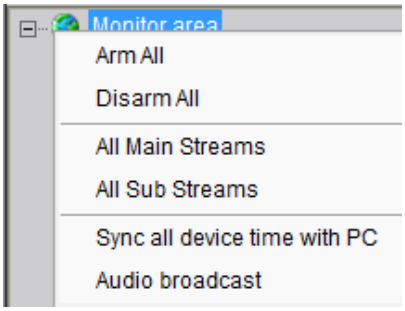
1. Right click the device name in the preview mode, and select “Arm software” to enable monitoring the alarm of the device; and the icon of the device will become as .



2. 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.



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

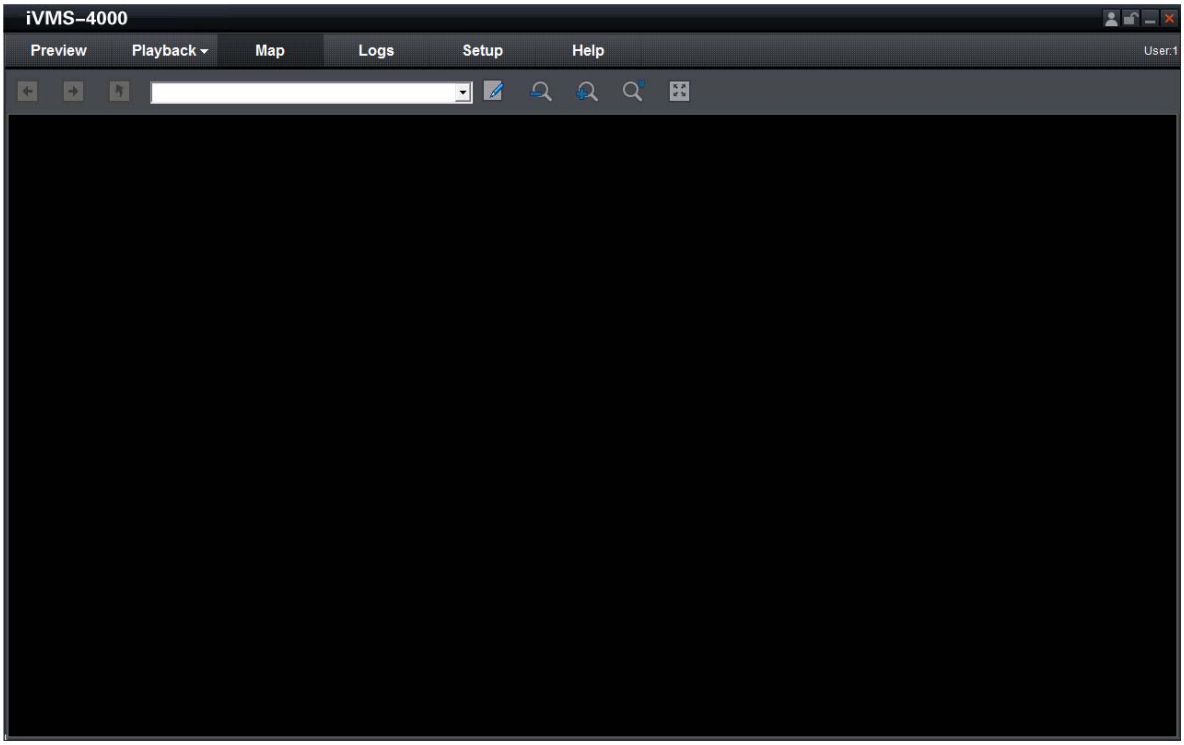


After the device or the area is guarded, the alarm linkage will take effect when there is an alarm of the device.

Chapter 11 E-Map

Steps:

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

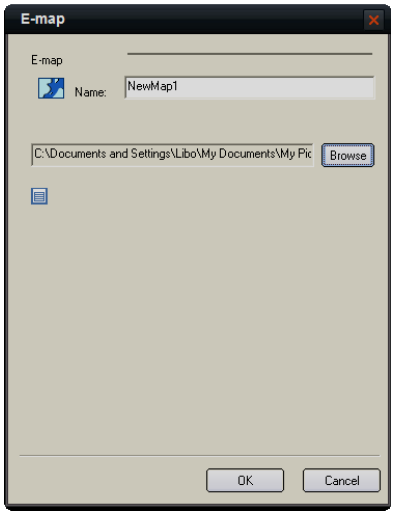
Step1: Click button to enter map edit mode, the cursor will become as

Step2: Right click the black area and select “Add Map” (or click button to display Map Info Area and right click info area to 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.

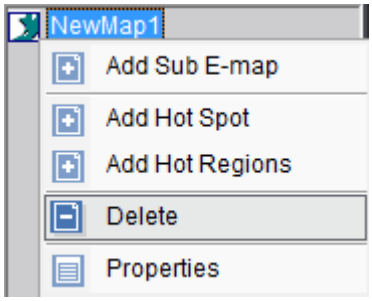
Note: Supported file formats are BMP & JPEG.



Step4: To add sub map, right click the image name in the map info area or the image itself, and select “Add Sub E-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.

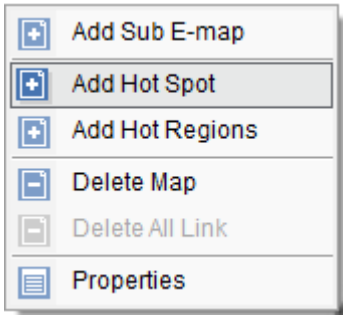
11.2.1 Hot Spot

You can mark out the location and live view of the monitoring points on the e-map as a hot spot.

Add Hot Spot

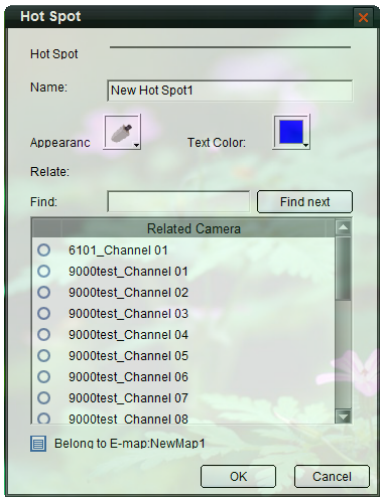
Steps:

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



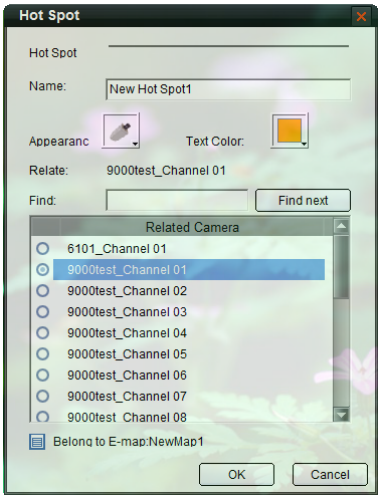
2. Input the name of hot spot, and click  to select an icon for the hot spot.

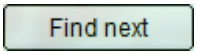
3. You can also click  to change the color of characters.

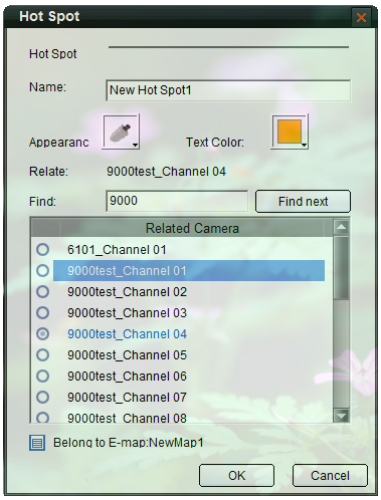


4. Select the channel you want to relate to in the list “Related Camera”, and click “OK”.

After adding hot spot, move the mouse to the icon of hot spot and the cursor will change to  , then you can move the hot spot by clicking and dragging.



Input the key words in the “Find next” blank, click  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.

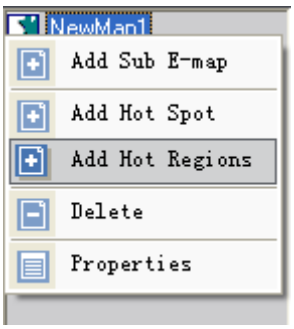
11.2.2 Hot Region

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

Add Hot Region

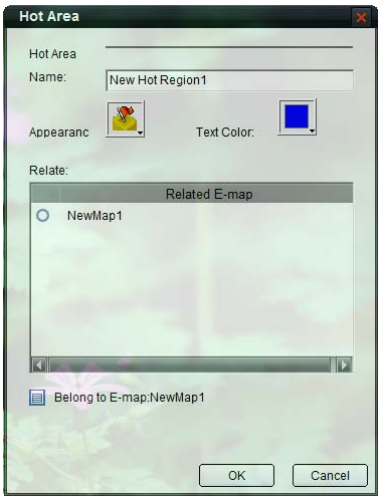
1. Enter hot region adding interface.

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



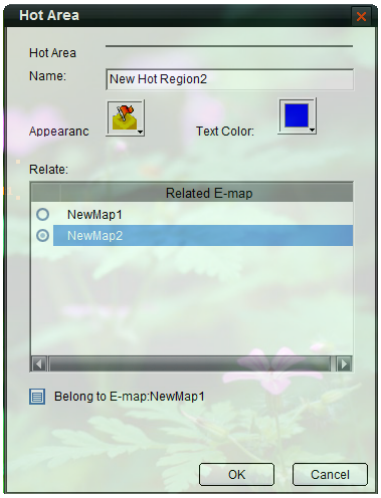
2. Input the name of the hot region, click  button to select icon for hot region.

You can also click  to change the color of characters.



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

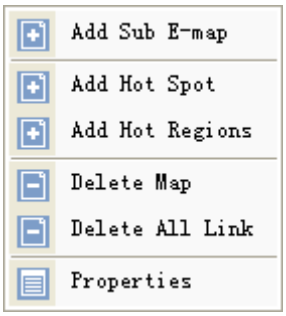
Note: You cannot edit map unless it is in the edit mode.

Edit Hot Region

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

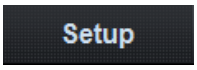
Select “Delete” to delete the hot region; select “Properties” to change the name, appearance and related map of the hot region.

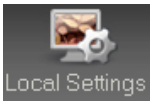
Right click the map in the edit mode, select “Delete All Link” to delete the all hot spot and region of the map.


Add Sub E-map
Add Hot Spot
Add Hot Regions
Delete Map
Delete All Link
Properties

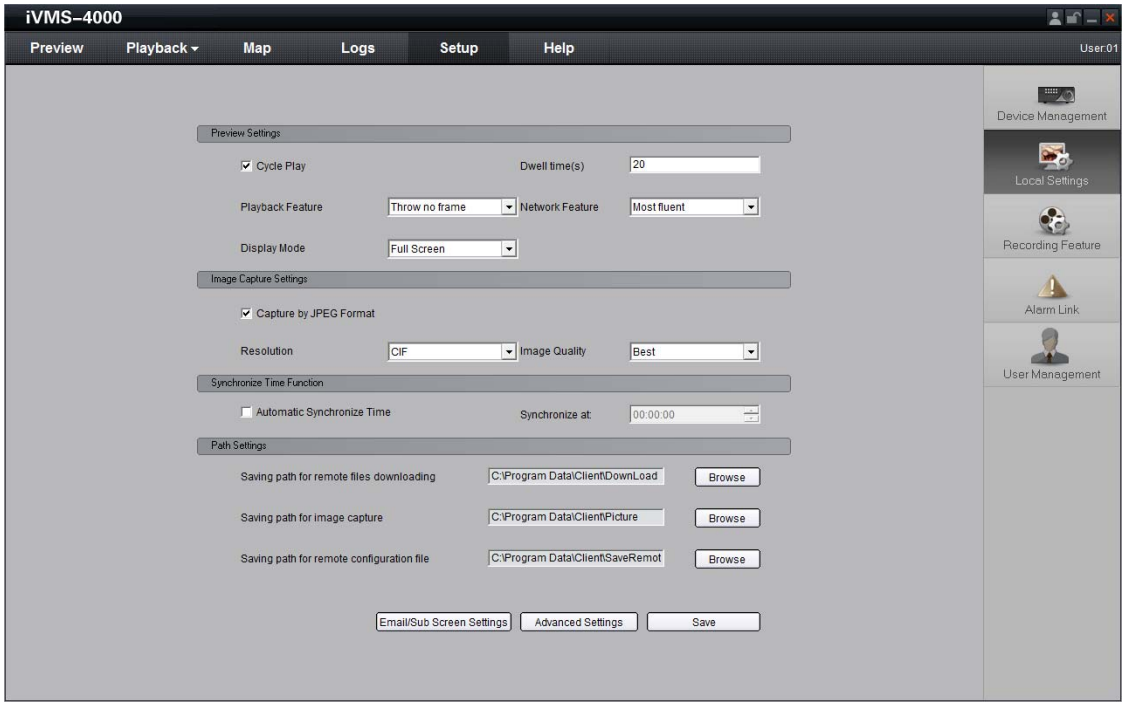
Chapter 12 Maintenance

12.1 Software Configuration

Click 

→ 

to enter the following interface:



Descriptions on Software Configuration:

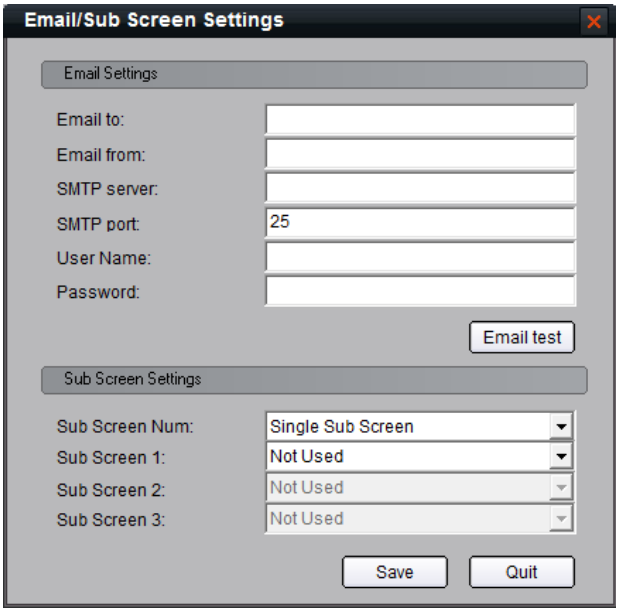
Software Configuration	Descriptions	Descriptions
Preview Settings	Cycle Play	☑ means enable it
	Dwell Time	Set the time of cycle play
	Playback Feature	Configure the playback performance, whether to drop B frame
	Network Feature	Set the instantaneity and fluency for preview
	Display Mode	Set the display 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

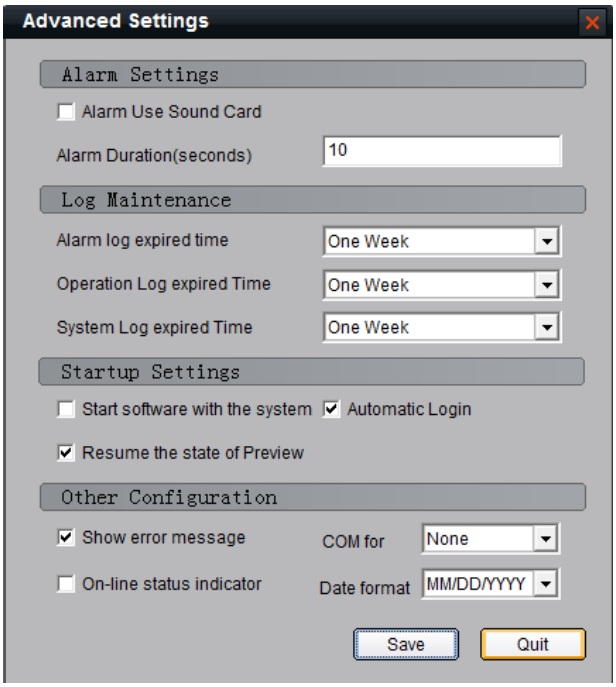
Click Email/Sub Screen Settings to enter the E-mail/Sub Screen Setting interface.

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.

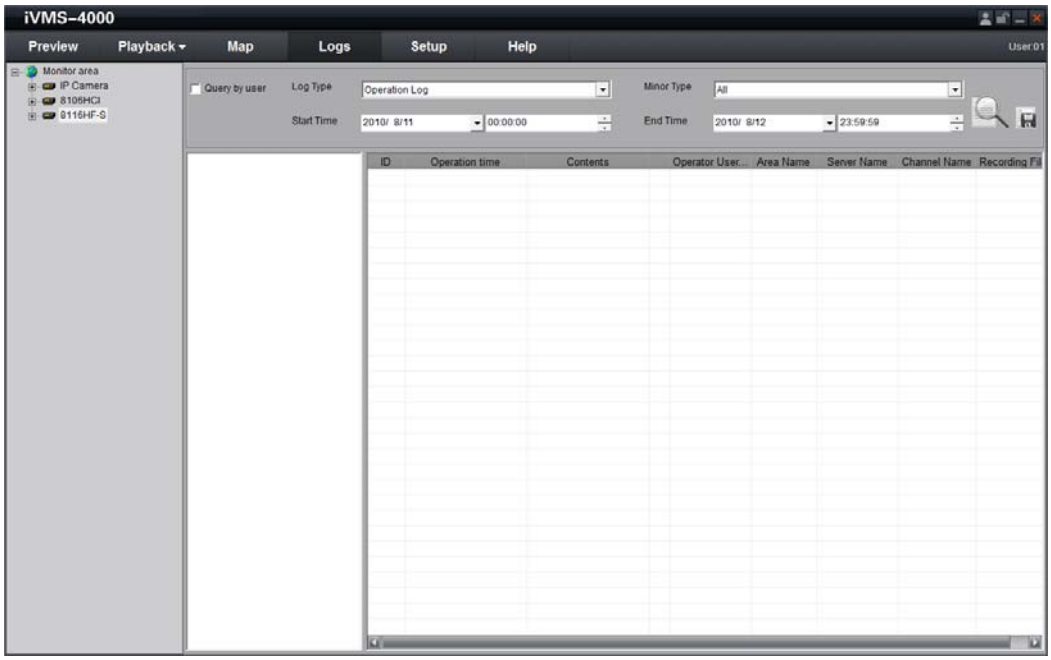
12.2 Log Management

Click  to enter the manage interface

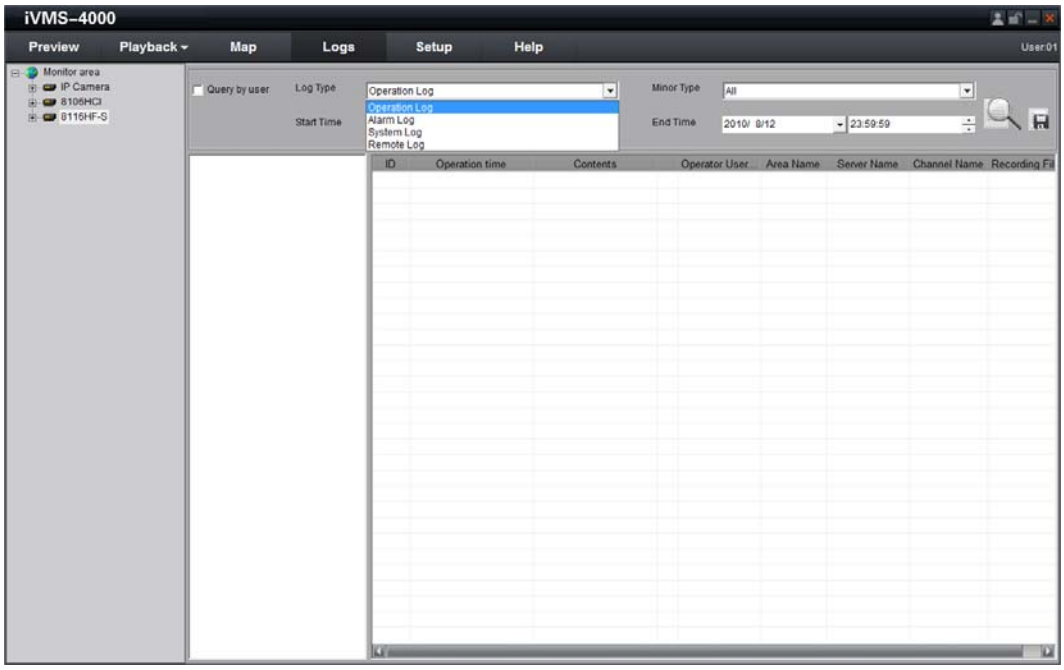
12.2.1 Log Query

Steps:

1. Select the area, device or channel you want to search from.



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



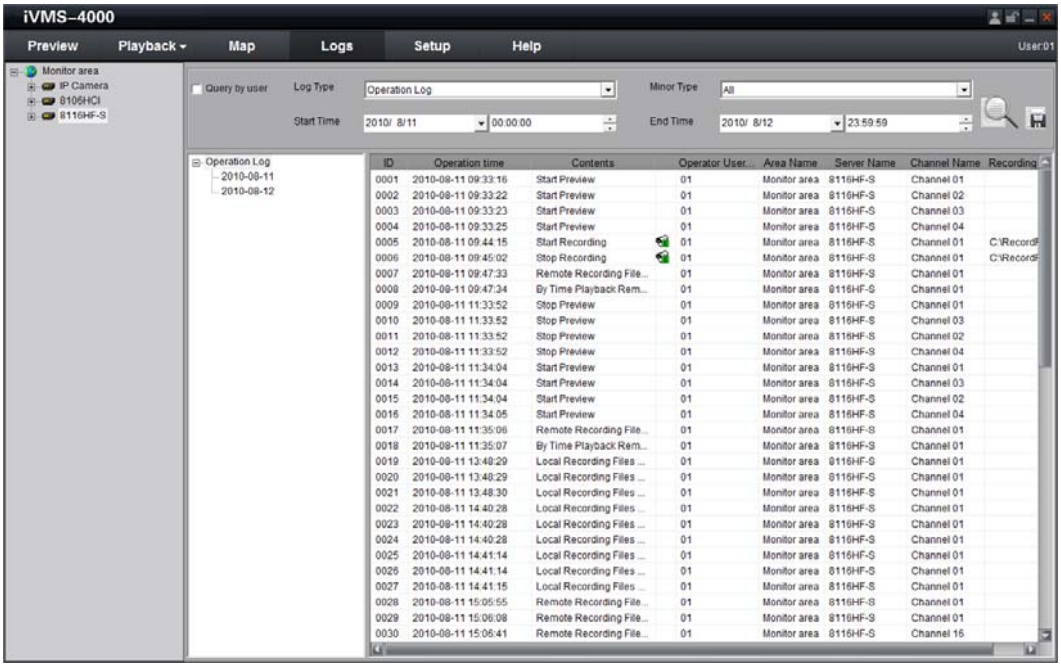
System Log: Record information on login, logout and software configuration.

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.

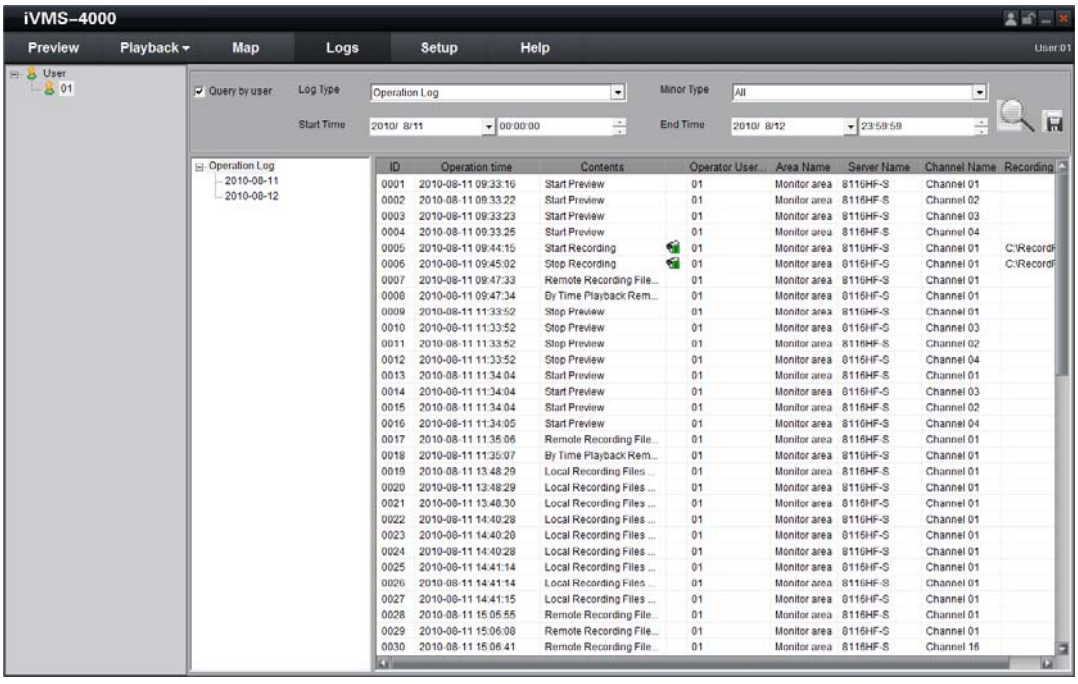
Remote Log: Record information on operations of the remote device.

3. 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:

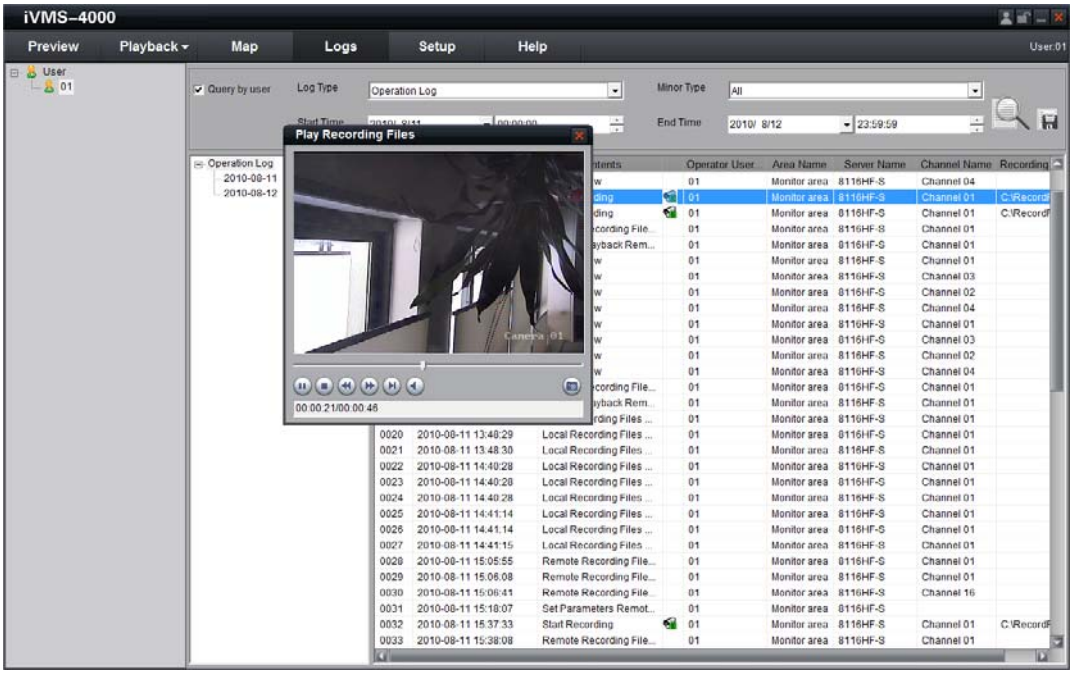
1. The “Description” option is only supported by DS-9000/9100 series DVR with the version of 1.1.0 or higher.
2. Up to 36000 local logs or 2000 remote logs can be searched and displayed. If it is failed to search the related log results, you can shorten the searching time or select the specific log type.

12.2.2 Play Back Linked Recording

If the logs contain linked recordings, 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	

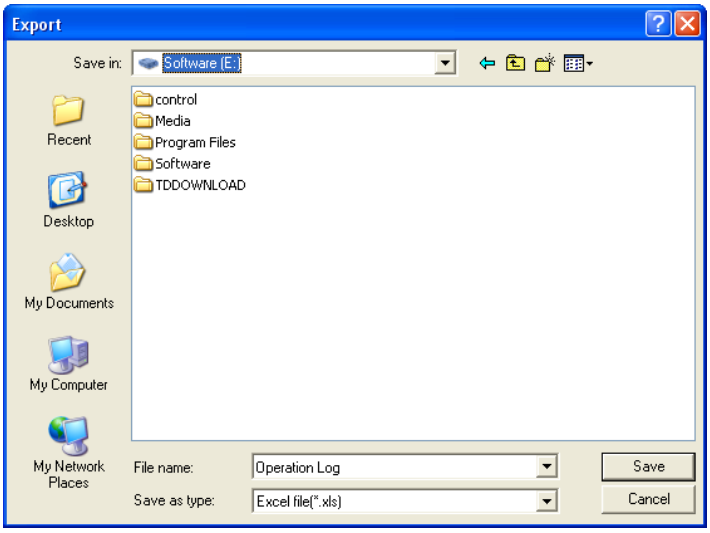
1. Click the log with the icon in the list to play back the linked recordings.



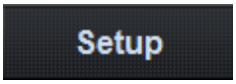
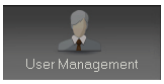
Similarly, if the logs contain captured alarm linked pictures, then you can click the icon in the list to play back the corresponding alarm pictures.

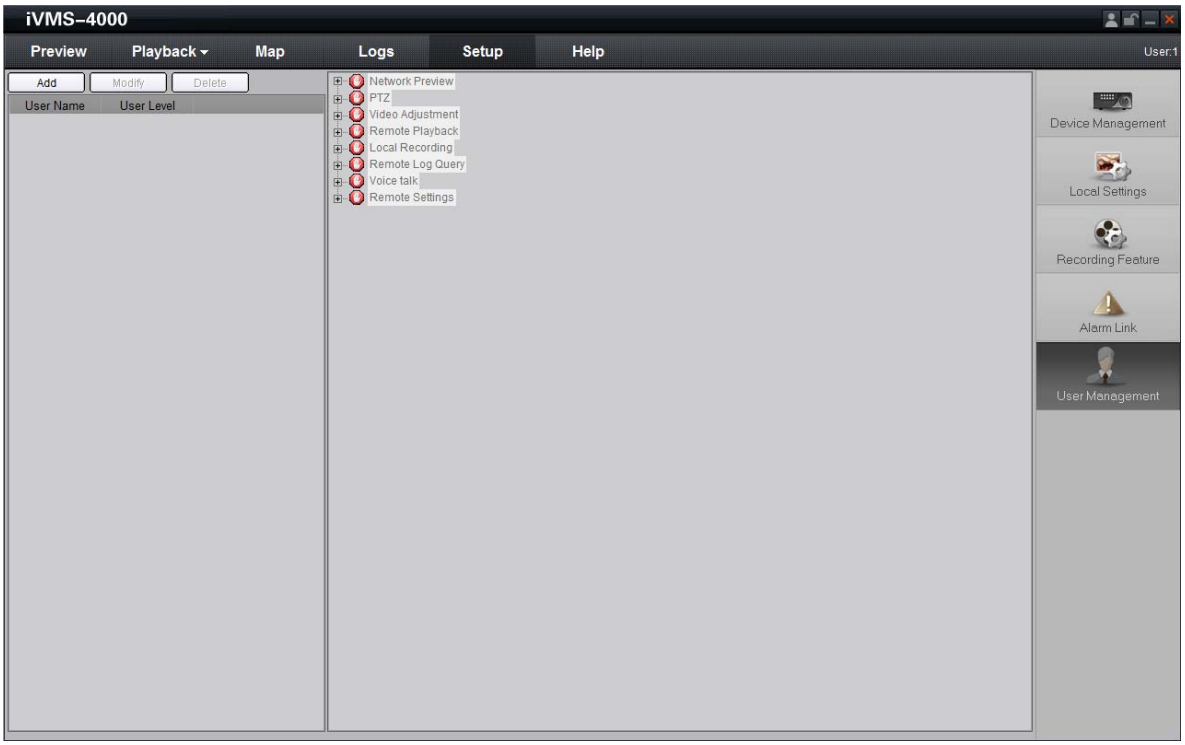
12.2.3 Export Log

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



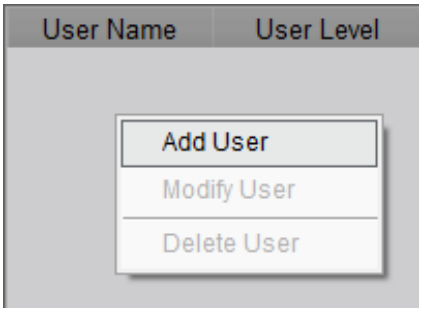
12.3 User Management

Click  →  to enter the User Management interface:



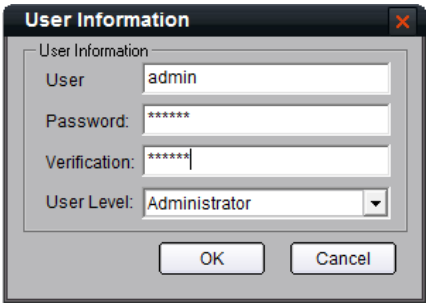
12.3.1 Add & Delete User

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



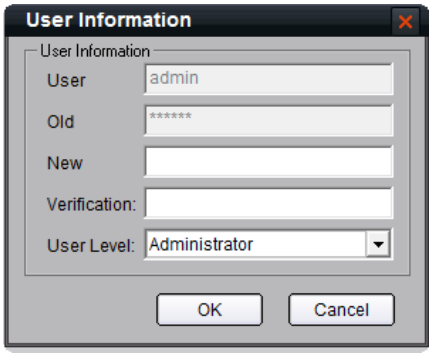
2. Input the user name, password and select the level for user, then click “OK” to finish.

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.



3. 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:

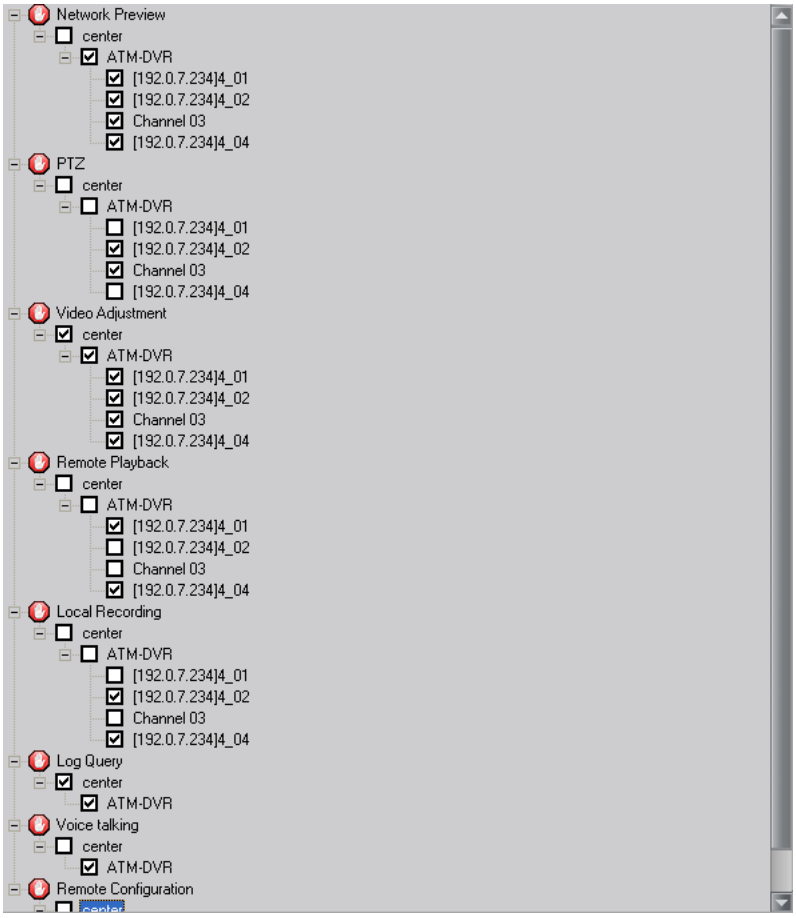
User Type	Privilege	Descriptions
Registered User	Add user	Add administrator and normal user
	Modify user	Modify the levels of all users and permissions of normal users
	Operation Privilege	Granted all permission by default, cannot be changed.
Administrator	Add user	Add normal user

	Modify user	Modify the permissions of normal users
	Operation Privilege	With all permissions by default, cannot be changed.
Others	Add user	No permission
	Modify user	No permission
	Operation Privilege	No local configuration permission needs to set the permission 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 exporting and importing the configure data, select “Data export” option, software will

save the configure data to local file; select “Data import” option, software will apply the configure file to the current software account.

Note:

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

Chapter 13 Hardware Decode Control

If the video/audio decoding card is installed in the computer, the 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

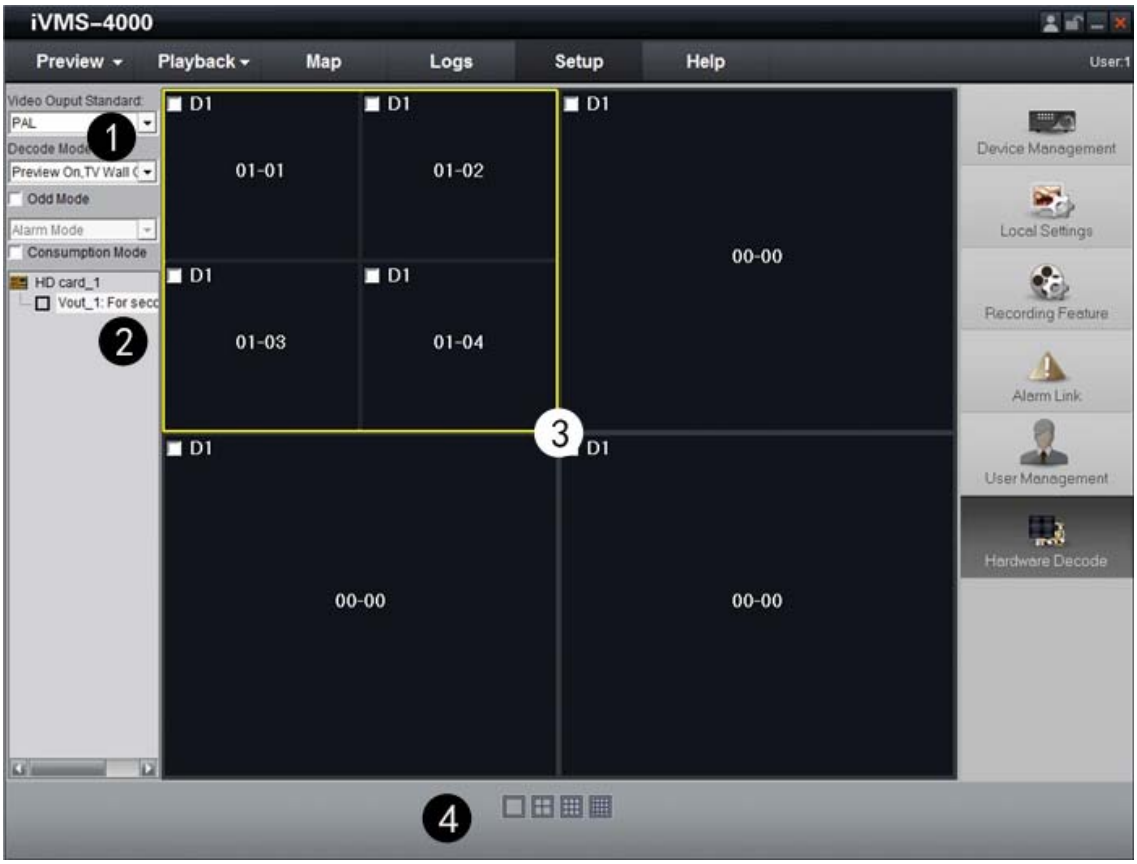
Before hardware decode on TV Wall, you need to configure the card output and window division mode, or else it will be in the default decode mode.

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.

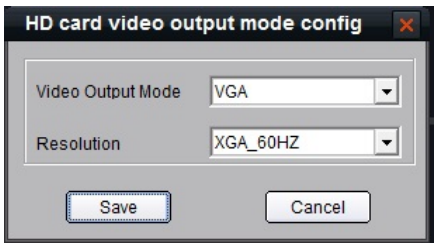
Note: Do not output more than 4 channels at CIF or 2 channels at 4CIF resolution from the DS-4002MDI card; and do not output more than 8 channels at CIF or 4 channels at 4CIF resolution from the DS-4004MDI card.

13.3 Decoding 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.

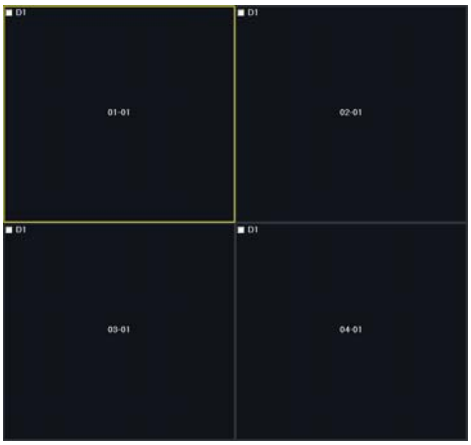
Select the resolution and then click Save to complete settings.



13.4 Hardware Decode Output Window Configuration

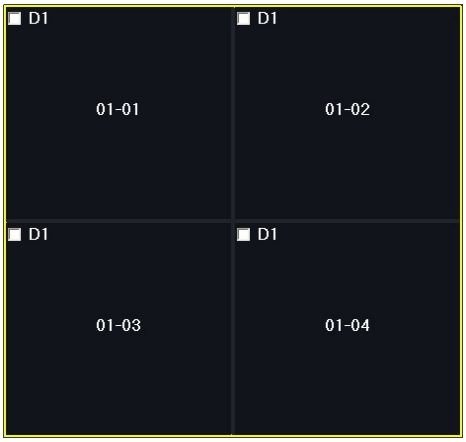
The “output window panel” has a multi-window division according to the total MDI card BNC number. One window is related to one BNC.

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.

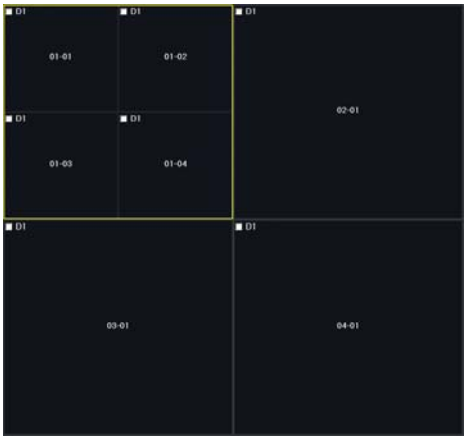


Select one window on “output window panel” and click the window division button to select a window division on this BNC output.

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.



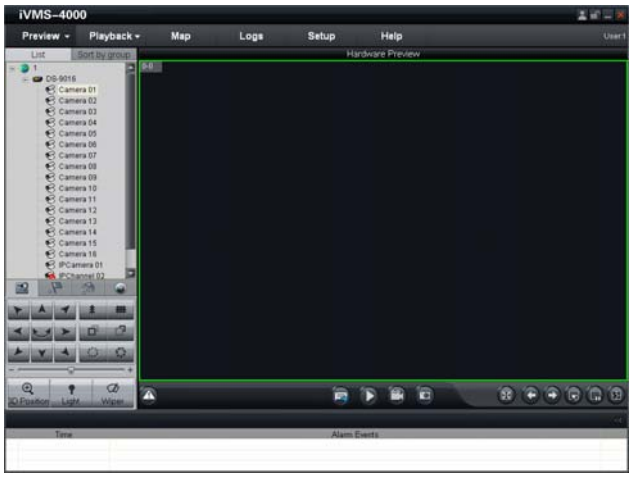
Tick the check box of  to  , and then the specified channel will be decoded and displayed on the current window at D1 resolution.



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

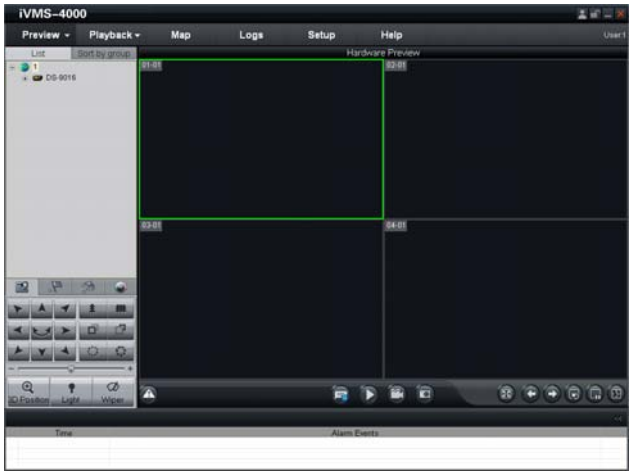
13.5 Hardware Decode Preview

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”.

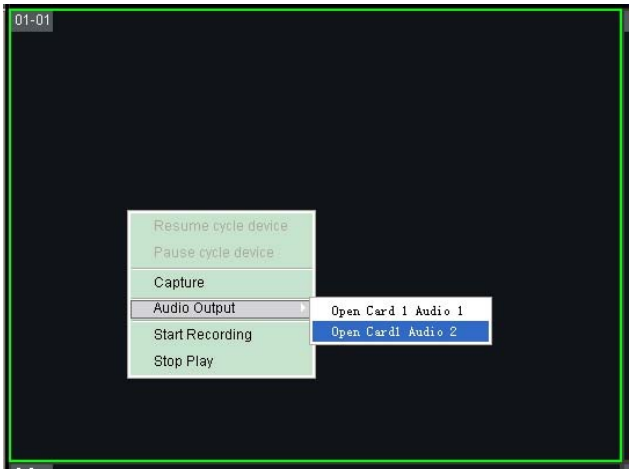
The windows beyond the limited maximum decoding channels will not be displayed.



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 you can select the audio output channel of the hard decoding card.

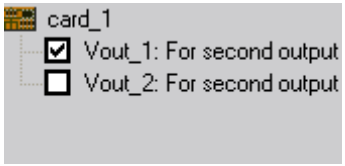
For example, for 4004MDI card which can decode 8 channels at CIF resolution, the first 4 channels’ audio output can select “Open Card 1 Audio 1” and “Open Card 1 Audio 2”, and the last 4 channels’ audio output can select Open Card 1 Audio 3” and “Open Card 1 Audio 4”.



13.6 Secondary Output of Hardware Decode

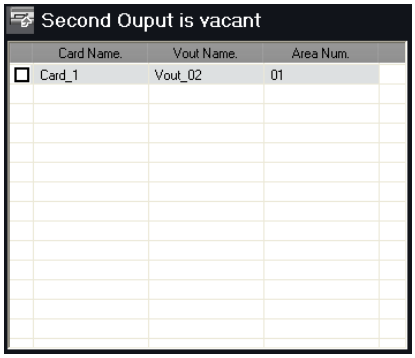
The MD card can output the decoded images twice. Take 4002MD card for example, one 4002MD card can decode 4 channels CIF images, assume they are channel01, channel02, channel03, and channel04; if one decoding channel is set as 4 divisions and separately display channel01, channel02, channel03, and channel04, 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.

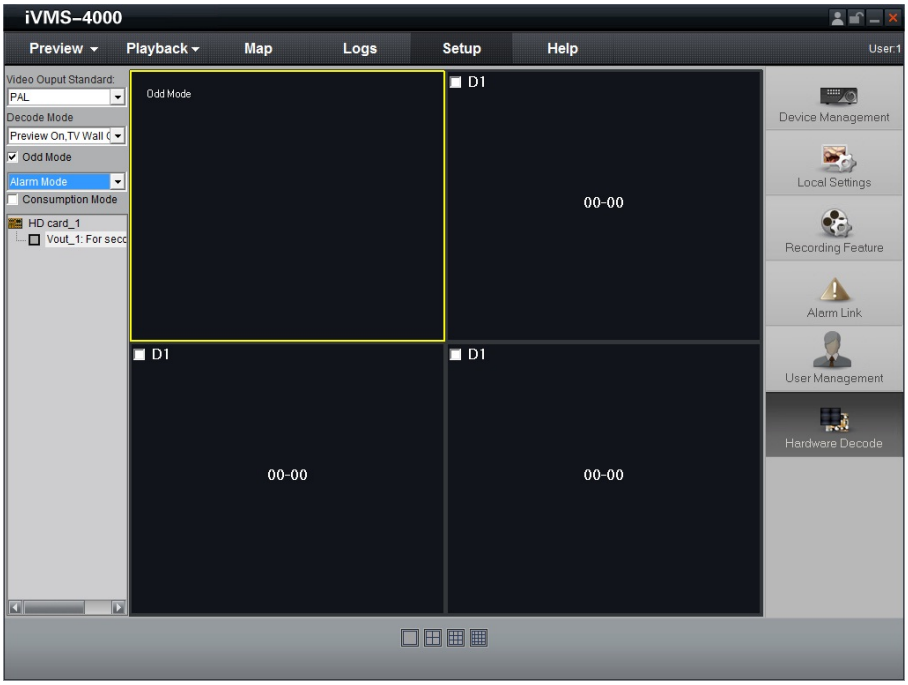


13.7 Special Decode Mode

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”.



Appendix Revision History

V2.04.01

New Feature Added:

Playback

Playback by tags function is added.

V2.03.07

Added new features:

Configuration

1. Add the module configuration selection for “Decoder Application” and “Module USB Joystick” in Help menu.
2. Separate Decoder Application client for operation by selecting “Decoder Application” in the Setup interface of iVMS-4000.

Decoder

3. Support adding, modification and deletion of third-party IPC.
4. Search recording files of multiple days through the Decoder Application client.
5. Search type of record files for playback can be selected to NVR and Device Disk.
6. Support transparent channel configuration.
7. Acquire display, streaming and decoding information.
8. Configure position, size and decode type for decode output windows.

V2.03.04.0200

Added new features:

Support the access of DS-6101DI series video decoder.

Add the 2-division window display mode on TV wall.

Modified chapter:

Delete the Chapter of Hardware Decode Control.

V2.03.03

Added new features:

1. Support the 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.