# Client Software-4000(V2.00.02) User Manual

## Index

Chapter 1 Welcome to Client Software-4000 (V2.0)	1
1.1 Overview	1
1.2 Computer Disposition Request	1
1.3 Convention	1
Chapter 2 Install & Uninstall	2
2.1 Install the Software	2
2.2 Uninstall Software	3
Chapter 3 Basic Operations	4
3.1 Run & Login	
3.1.1 Used for the first time	4
3.1.2 Add Device Wizard	4
3.1.3 User Login	6
3.2 GUI Introduction	7
Chapter 4 Device Management	
4.1 List Configuration	10
4.1.1 Add Device	11
4.1.2 Channel Configuration	
4.1.3 Channel Configuration of 9000 series DVR	13
4.1.4 Add Stream Media Server	15
4.1.5 Import & Export Configuration Files	
4.2 Group Configuration	16
4.2.1 Group	16
4.2.2 Channel	17
4.3 Short Key Configuration	18
Chapter 5 Preview	19
5.1 Non-cycle Preview	20
5.1.1 Play by Node	20
5.1.2 Short Key Preview	20
5.1.3 Stop Playing	20
5.2 Cycle Play	21
5.2.1 Configuration	21
5.2.2 Mixed Cycle	22
5.2.2.1 Cycle Play of Short Key Channels	22
5.2.2.2 Cycle Play of Group Channels	22
5.2.3 Cycle Play of Device/Group	22
5.2.4 Pause Cycle	23
5.2.5 Resume Cycling	23
5.3 Preview Control	24
5.4 Voice Control	25
5.5 Recording & Capture	25
5.5.1 Recording	25

5.5.2 Capture	26
5.6 Hardware Decode	26
5.6.1 Hardware Decode Configuration	26
5.6.1.1 Hardware Decode Mode Configuration	27
5.6.1.2 Hardware Decode Output Window Configuration	28
5.6.2 Hardware Decode Preview	29
5.6.3 Secondary Output of Hardware Decode	30
5.7 Others	31
5.7.1 Voice Talk & Broadcast	31
5.7.2 Alarm Output Control	32
5.7.3 Device Status	32
5.7.4 Remote Control Panel	33
Chapter 6 PTZ Control	34
6.1 RS-485 Parameters Configuration	34
6.2 PTZ Control	34
6.2.1 Direction Control	34
6.2.2 Partial Zoom	35
6.2.3 Preset	35
6.2.4 Sequence	36
6.3 Video Parameters Configuration	37
6.4 Keyboard and Joystick Control	38
6.4.1 DS-1002KI, DS-1003KI keyboard control PTZ	38
6.4.2 Joystick control PTZ	39
Chapter 7 Recording & Playback	40
7.1 Recording	40
7.1.1 Local Recording	40
7.1.2 Store Setup	42
7.1.3 NVR Storage Server Recording Configuration	42
7.1.3.1 Add NVR Server	43
7.1.3.2 NVR Recording Mode Configuration	44
7.1.3.3 NVR Recording Schedule Configuration	44
7.2 Playback	45
7.2.1 Remote VOD	45
7.2.1.1 Remote VOD Query	46
7.2.1.2 Playback Control	47
7.2.2 Local Playback	49
7.2.2.1 Local Playback Query	49
7.2.2.2 Playback Control	50
Chapter 8 Remote Configuration	52
8.1 Remote Recording Configuration	53
8.1.1 Encoding Parameters Configuration	53
8.1.2 Schedule Recording	54
8.1.3 Motion Detection Recording	54
8.1.4 Alarm Recording	56

8.1.5 Other Recording Modes	58
8.1.6 PCDVR Remote Configuration	59
8.1.6.1 Camera Configuration	60
8.1.6.2 IO Device	71
8.2 Alarm	72
8.2.1 Motion Detection Alarm	72
8.2.2 Signal Level Alarm	73
8.2.3 Video Loss	74
8.2.4 Video Tampering	76
8.2.5 Exceptions	77
8.3 Network Configuration	78
8.3.1 Basic Configuration	78
8.3.2 PPPoE	78
8.3.3 DDNS	79
8.3.4 NTP	79
8.3.5 NFS	80
8.3.6 E-Mail	80
8.4 Channel Configuration	81
8.4.1 Channel Display Settings	81
8.4.2 Video Mask	81
8.4.3 Text Overlay	82
8.5 Account Management	82
8.6 Others	84
Chapter 9 Alarm Linkage	85
9.1 Linkage Configuration	85
9.2 On Guard & Off Guard	86
Chapter 10 E-Map	88
10.1 Add Map	88
10.2 Map Configuration	89
10.2.1 Hot Spot	89
10.2.1.1 Add Hot Spot	90
10.2.1.2 Edit Hot Spot	91
10.2.2 Hot Region	91
10.2.2.1 Add Hot Region	91
10.2.2.2 Edit Hot Region	92
Chapter 11 Utilities	94
11.1 Software Configuration	94
11.2 Log Management	96
11.2.1 Log Query	96
11.2.2 Playback Linked Recordings	98
11.2.3 Export Log	99
11.3 User Management	99
11.3.1 Add & Delete User	100
11.3.2 User Rights Distribution	101

Appendix 1	103
V2.00.01 New Features	103
V2 00 02 New Features	103

## Chapter 1 Welcome to Client Software-4000 (V2.0)

#### 1.1 Overview

Client software-4000(V2.0) is the application specially developed for embedded DVR. It is applicable to DVR, DVS, IP Camera, and IP Dome.

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

#### 1.2 Computer Disposition Request

Operating System: Microsoft Windows 2000 or versions above

CPU: Intel Pentium IV 2.4 GHz or models above

RAM: 1G or above

Display: 1024×768 resolution or above

#### 1.3 Convention

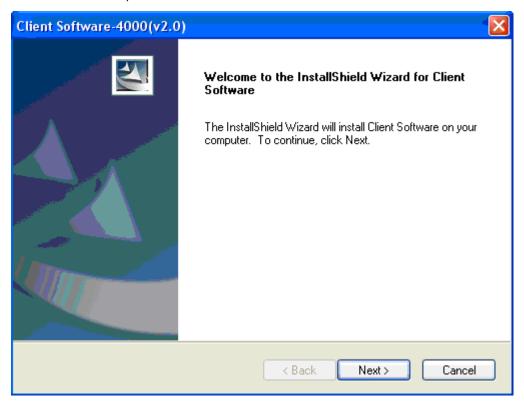
Conventions as follows in this manual:

- ◆ DVR, 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 mouse

## Chapter 2 Install & Uninstall

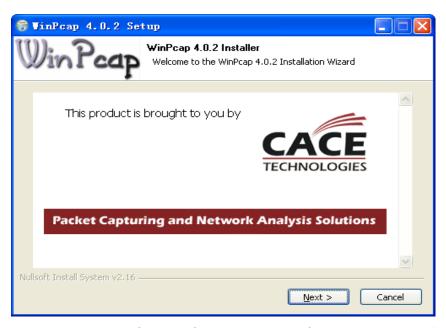
#### 2.1 Install the Software

Double click the software and you will see the wizard shown as below:



Click "Next" to continue, and input the user information, software installed location according to the hints.

After that, a SADP installation wizard will pop up; click "Next" to start to install WinPcap, shown as below. If it is already installed, the installation can be canceled.



Note: SADP is used as the on-line device finder; this function is unavailable if the WinPcap is not installed.

#### 2.2 Uninstall Software

Enter start menu, select "All programs"  $\rightarrow$  "Client Software-4000(v2.0)"  $\rightarrow$  "Uninstall Client Software", and the dialog box shown as below will pop up:



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

## Chapter 3 Basic Operations

#### 3.1 Run & Login

Path: "Start"→"All Programs"→"Client software-4000(v2.0)"→" Client software-4000(v2.0)"

#### 3.1.1 Used for the first time

User needs to register an administrator if the client software is used for the first time, shown as below:

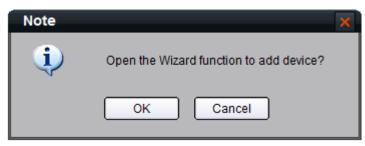


Input the user name and password and click "Register", then user can login as the administrator.

Note: Enter, Space, TAB is invalid in the user name and password. The password cannot be null, and should not contain the following characters, including "%" and """. Password should not be less than six and does not support the copy and paste.

#### 3.1.2 Add Device Wizard

After registered super user and logged in, the note of start wizard will pop up, shown as figure below:

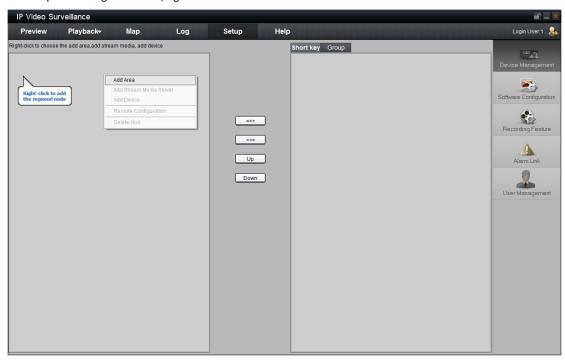


Click "OK" to start the wizard and add the device, click "Cancel" to exit the wizard.

1<sup>st</sup> step: According to the hint, click setup to enter adding device interface.

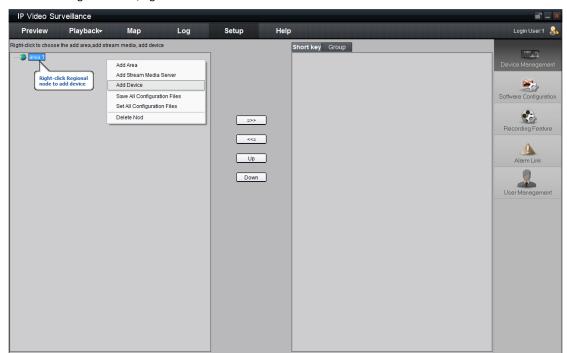


 $2^{\mbox{\scriptsize nd}}$  step: According to the hint, right click to add device.



Input a name in the blank of Area Name; click "OK" to save the area.  $\label{eq:continuous}$ 

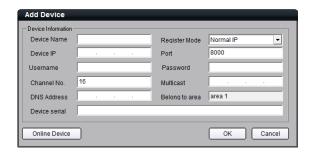




3<sup>rd</sup>: According to the hint, right click the area name to add the device.

Input device information in the blank of Area device.

Find more @ 4.1.1 Add device.



#### 3.1.3 User Login

After the administrator registered, when user open the client software, the login dialog box will pop up, shown as below:

Input user name and password, then click "Login" to start using the client software.



Click Automatic Login

to auto save the user name and password, user does not need to input them when

logged in next time.

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

If the user name or password is incorrect, the dialog box will pop up, shown as below:



If user wants to cancel login, please press "Quit".

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

#### 3.2 GUI Introduction

There are 6 areas of Client software GUI, shown as below:



Area	Description	Area	Description
0	System Area	0	Menu Area
6	Device Area	4	Preview Area
6	PTZ Control Area	6	Alarm Info Area

#### **System Area:**

Button Description	
--------------------	--

?	Help button, click to show Help (user manual) and About (Edition Info)
ਰੰ	Lock button, click to lock the interface, mouse status shown as 📆, re-click to activate
	login window, and input the correct password to unlock the interface.
	Minimize button
×	Exit button

Minimize the client 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 to choose from.

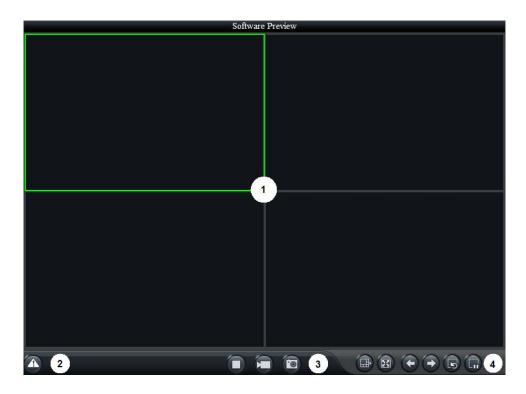
#### Menu Area:

Area	Description
Dravious	Enter preview interface (If the decoding card is installed in PC, then enter the software
Preview	or hardware decoding interface)
Setup	Enter configure interface
Playback	Enter playback interface, including remote VOD and local playback
Log	Enter log query interface
Мар	Enter e-map interface
Help	Enter help (user manual) and about (software info)

#### **Device Area:**

Mode	Description				
List	Display by list				
Group	Display by group				

#### **Preview Area:**



Area	Description	Area	Description
0	Display windows	<b>2</b>	Alarm indicator
6	Basic function	Ø	Advanced function

#### **PTZ Control Area:**

Icon	Options	Description			
<b>=2</b>	PTZ	Control PTZ			
4.	Presets	Configure and call the preset			
<b>3</b>	Sequence	Configure and call the sequence			
	Video	Brightness, contrast, saturation, hue and volume adjustment			

#### **Alarm Info 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 "and turns to "

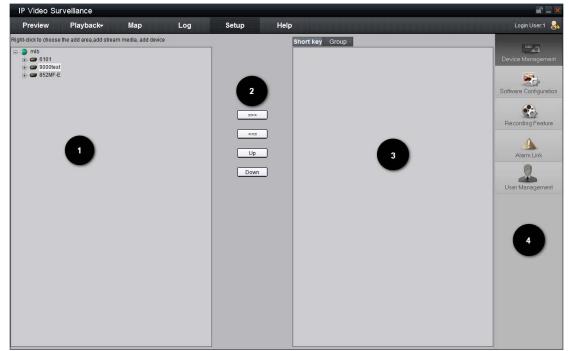
## Chapter 4 Device Management

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

Setup

to enter the configure

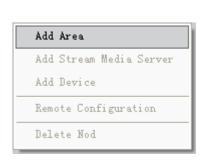
mode, and then click Device Management to manage the device.



Area	Description	Area	Description
0	List Area	<b>2</b>	Configuration Buttons
6	Group/Short key Area	4	Navigation Bar

#### 4.1 List Configuration

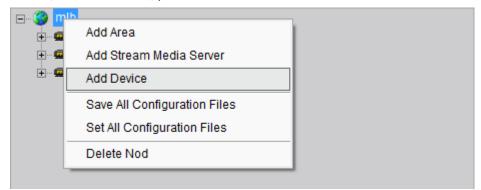
The list area is empty when the client software runs for the first time, right click in this area you can choose to add area.





Input a name in the blank of Area Name; if there is no upper area, the blank of Upper Area Name is not enabled.

After area added, right click the area name and the sub-menu will pop up, shown as figure below. Select "Add Area", you can add sub area, select "Delete Nod", you can delete the area.



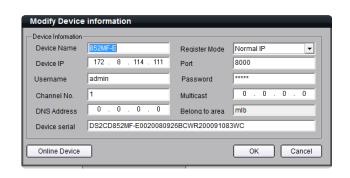
Note: Enter, Space, TAB is invalid in the area name, which cannot be null, and should not contain the following characters, including "%" and """.

Note: User can max add 50 areas here.

Note: When the option "Delete Nod" selected, the sub areas, stream media servers, and devices under the root of this area will be deleted as well. Before that, you need to stop preview or record, otherwise there will be warning information popping up.

#### 4.1.1 Add Device

Right click the area and select "Add Device"; the sub menu will pop up. You can also add PCDVR here in the same way with other devices.

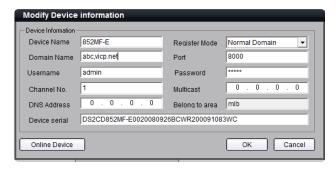


Options	Description
Device Name	User-defined
Register Mode	Normal IP, Private Domain, Normal Domain
Device IP	IP address of the device
User Name	User name of the device (default: admin)
Password	Password of the device (default: 12345)
Channel No.	The channel number of the device
Port	Device port (default: 8000)

Multicast Address	Used when visiting the device by the way of multicast, or else leave it blank		
DNS Address	IP address of IP server when adopting private domain, or else leave it blank		
Device serial No.	Used when adopting private domain, or else leave it blank		

LNote: When adopting private domain, if you input device serial number, which can be used for obtaining the IP address from IP server; If not, the IP address can be obtained by device name from IP server, i.e. in that case, the device name that input here should be the same with the one in the device.

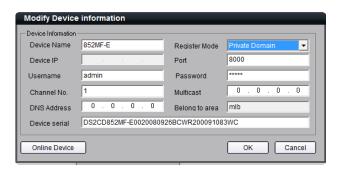
If you select normal domain, please filling the blank of domain name with the registered domain name.



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

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

Click OK to finish adding device. Right-click menu is available, double click the node can modify the device parameters.



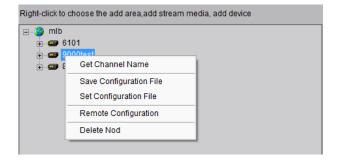




Note: 50 devices can be added here at most.

#### 4.1.2 Channel Configuration

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





Tips: Main stream is for device encoding; sub stream is for network transmission.

Double click the channel name and the "Modify Channel Information" dialog box will pop up.



Channel Name	Current channel name that can be changed.
Channel	Channel number of the device, unchangeable
Device Name	Device name that 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: The channel name will be replaced with the name saved in the device, if the option "Get channel name"

is selected.

#### 4.1.3 Channel Configuration of 9000 series DVR

If the 9000 series DVR is added to client software, then the IP channel management and enable or disable analog channel functions are available.

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

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

Note: 9000 series DVR can not

preview and record this channel after it is disabled, unless it is enabled again.

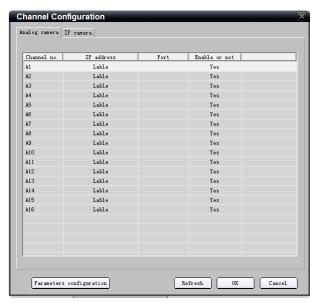
Click "IP camera" to enter the interface of IP channel management.

Click "Add" to add IP channel.

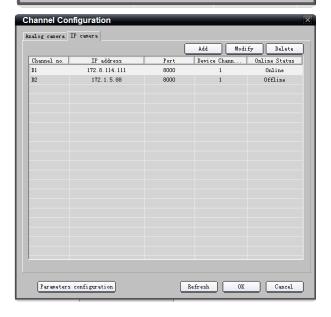
Input the IP address, user name,
password and port, and then click "OK".

Double click the selected channel to modify the parameters.

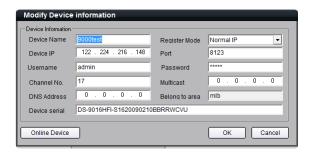
Click "Delete" to delete the selected channel.







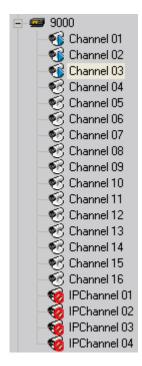
After that, you can change the channel number according to the added channels. Double click the device name to modify the device information.



Note: 9000 series DVR max supports adding 16 analog channels, 8-ch IP Camera, please refer to the user manual of DS-9016HFI-S for more details.

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

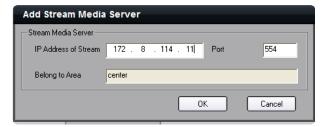
If IP channel can not be connected, the n shown as



#### 4.1.4 Add Stream Media Server

Adding stream media server can solve the network confined problem and reduce the bandwidth stress.

Right click the device name and select "Add Stream Media Server". Input the IP address and Port (default 554) of server, then press "OK".



Note: If the channel is being previewed or recorded, the settings will become effective after preview and recording restarted.

Double click the server to modify the parameters.

Right click the server and select "Delete Nod" to delete server.



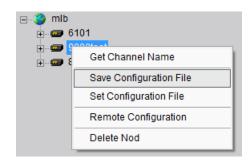
Note: No more than one stream media server can be added to one area, however, of which stream media server can be added in sub area.

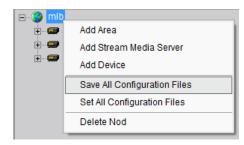
#### 4.1.5 Import & Export Configuration Files

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

Click "Save Configuration File" to export configuration file and "Set Configuration File" to import configuration file.

Right click area name and select "Save All Configuration File" to export all configuration files, and "Set All Configuration File" to import all configuration files.





#### 4.2 Group Configuration

Click the Group button to enter group area management window.

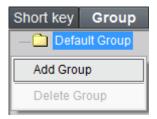
#### 4.2.1 Group

There is the default group. You can add channels in it or delete it.



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

Select "Add Group".



Input the group name and click "OK".



Double click the group name to change the group name.

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

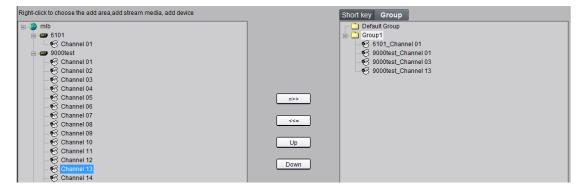


Note: Enter, Space, TAB is invalid in the group name, which cannot be null, and should not contain the following characters, including "%" and "".

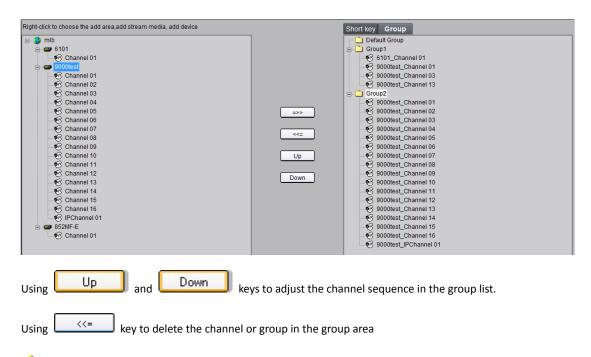
#### 4.2.2 Channel

After adding the group, the channels in the list area can be moved to selected group.

Select the channel from the list area, and click key and move it to the group. The type of channel name in the group area is as "device name channel name of the list area".



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



Note: One channel can be added to one group for only once. Different groups can contain the same channel.

Max 50 channels can be added to one group.

#### 4.3 Short Key Configuration

Click Short key button to enter short key management window. Only the channels can be added to the short key area.

Select the channel from the list area, and click >>> key and move it to the short key area. The type of channel name in the group area is as "device name\_channel name of the list area".

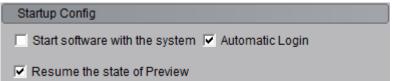
Select the device from the list area, and click >>> key to add all the channels of the device to the short key area.

Using <-> key to delete the channel in the short key area

## Chapter 5 Preview

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





Play windows are divided into 2×2 mode, max support 64 window divisions.



#### Preview Panel Buttons Descriptions:

Area	Description	Area	Description
	Play		Record
<b>a</b>	Capture		Window division
<b>5</b> 3	Multi-screen		Previous/Next page
	Resume cycling all the device		Stop cycling all the device

Note: The window division and channel sequence can be remembered by the Client Software as exited, and will play automatically after login 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 (not enable cycle preview)

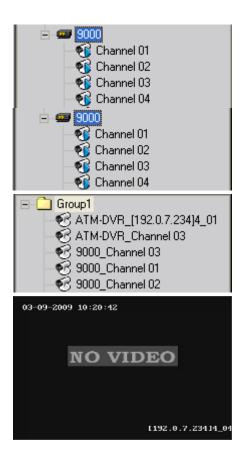
Double click the channel name to preview the corresponding cameras

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.

The play window shows as the figure on the right.



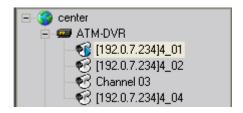
#### 5.1.2 Short Key Preview

If the short key has been configured, then press "Play" key of the preview interface to view all the corresponding channels in the short key area in the current window divisions. Find more @ 4.3 Short Key Configuration

#### 5.1.3 Stop Playing

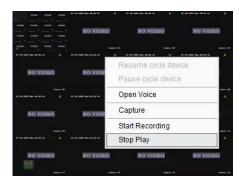
There are 3 ways to stop live preview.

The play icon is  $\P$ , double click it to stop previewing this channel and the icon will become



Right click in the play window and the play menu will pop up. Click "Stop Play" and the live view will stop.

Meanwhile the play icon will become

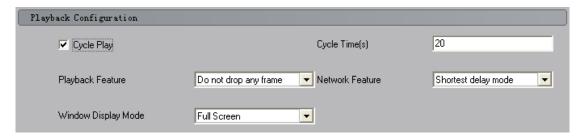


Click the key in the preview panel to stop all the live view channels.

#### 5.2 Cycle Play

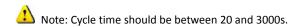
#### 5.2.1 Configuration

Click Setup key to enter the configuration interface. Then enter the local configuration by click "Software Configuration" key.



#### **Enable Cycle:**

Click to enable cycle play, and input the cycle time, then press "Save" and return to preview interface.



#### Disable Cycle:

Click Cycle Play to disable cycle play and save.

#### 5.2.2 Mixed Cycle

Mixed cycle mode enables client software cycle previews channels of the group or short key, the default window division is 2×2.

#### 5.2.2.1 Cycle Play of Short Key Channels

Click "List" key to display channel list.

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

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

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

Note: Click button or to pause the channel sequence cycle of short key. This function needs short

key configuration first (Find more @ 4.3 Short Key Configuration)

#### 5.2.2.2 Cycle Play of Group Channels

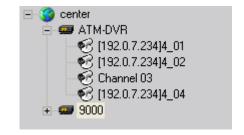
Click "Group" key to display group channel list. (Please stop playing before switching to group channels.)

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

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

#### 5.2.3 Cycle Play of Device/Group

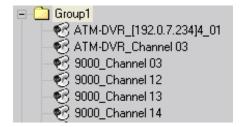
Double click the device name and all the channels of the device begin to cycle in the selected window division from the  $\mathbf{1}^{\text{st}}$  channel.



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





#### 5.2.4 Pause Cycle

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



Click "Pause all cycle devices" key to pause all the cycling channels.

#### 5.2.5 Resume Cycling

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 all cycle devices" key to restart all the paused channels.

#### 5.3 Preview Control

#### **Full Screen:**

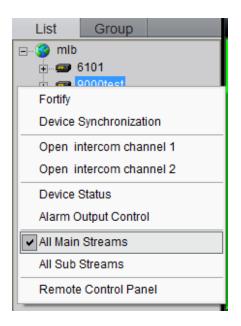
When previewing, click key to preview in full screen, to exit click key.

#### Enlarge:

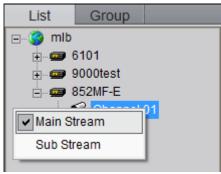
When in the multi-screen preview mode, double click the selected image to enlarge it, double click again to resume.

#### Main/Sub Stream (Available for hardware preview):

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



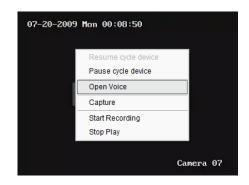
Right click channel name and select "All Main Streams" or "All Sub Streams" to change the channel stream type.



Tips: 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.

#### 5.4 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.



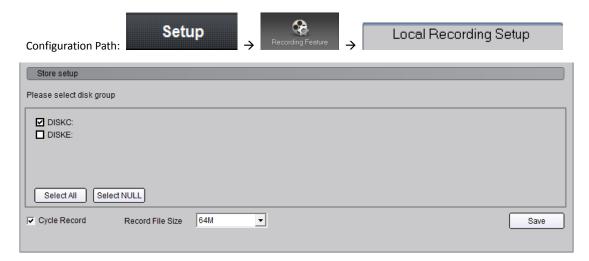
Note: The software only can open voice of one window at the same time. If the voice of the next window is opened then the voice of the previous will be closed automatically.

#### 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.

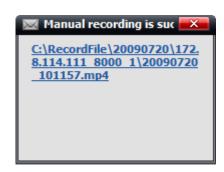
#### 5.5.1 Recording



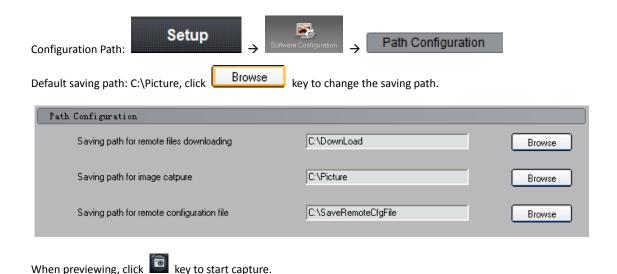
Select the saving hard disk of recorded files in "Store setup".

When previewing, click key to start recording, and the icon becomes as . The channel icon becomes as

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



#### 5.5.2 Capture



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

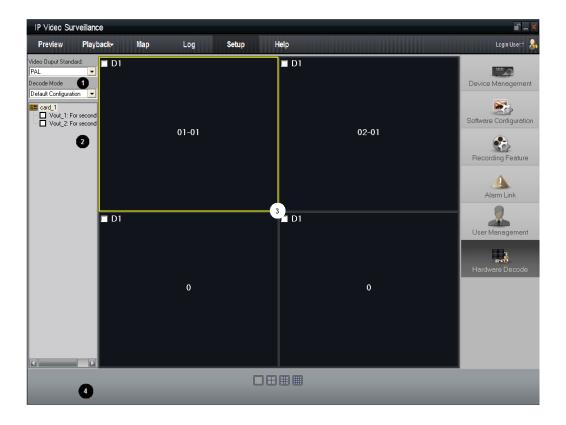


#### 5.6 Hardware Decode

If there is video/audio decoding card installed in the computer, then this function can be available.

#### 5.6.1 Hardware Decode Configuration





The area descriptions are as follows:

Area	Description	Area	Description
0	Configuration Area	0	Decoding Card Info Area
6	Output Window Area	4	Window Division Mode Select Area

- Configuration Area: 2 options including Video Output Standard & Decode Mode.
- **2** Decoding Card Info Area: Show the information of the decoding cards and channels.
- Output Window Area: Configure the output mode of decoding channels.
- Window Division Mode Select Area: Select window division mode.

#### 5.6.1.1 Hardware Decode Mode Configuration

The decoding card installed in the PC can be recognized and initialized automatically as client software starts up, and the information will be displayed in the decoding card info area. The icon means decoding card and the sub-nodes show the information of decoding channels.

The hardware decoding modes of MD card including: default, preview on & TV wall on, preview off & TV wall on.

Hardware Decode Mode	Descriptions
Default	Each 4002MD card decodes 2 channels; each 4004MD card decodes 4 channels and so

Configuration	on. Support decoding and cycling play.		
TV wall on &	The images from the play window of client software and TV wall are decoded by MD		
Preview on	card, which needs to configure in the hardware decode configuration.		
TV wall on &	The images from the TV wall are decoded by MD card; the images from the play window		
Preview off	of client software are decoded by CPU.		

If the resolution of all the images is CIF, then the max decoding channel number is: 4 channels for each 4002MD card; 8 channels for 4004MD card.

If the resolution of all the images is D1, then the max decoding channel number is: 2 channels for each 4002MD card; 4 channels for 4004MD card.



Tips: Video Output Modes including PAL & NTSC.

Note: The video output mode of images from device and TV wall need to be the same standard, or else the image will become abnormal.

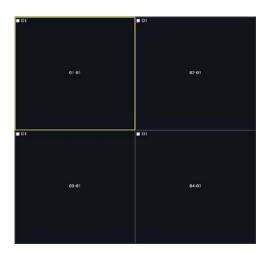
#### 5.6.1.2 Hardware Decode Output Window Configuration

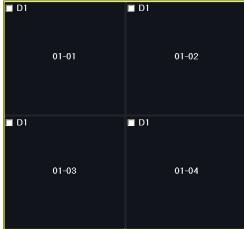
The "output window panel" has a multi-window division according to the total MDI card BNC number. One window is related to one BNC.

Take one 4004MDI card for example, there are 4 BNCs and the "output window panel" will show you 4 windows division. Window is named as 01-01, 02-01, 03-01 and 04-01.

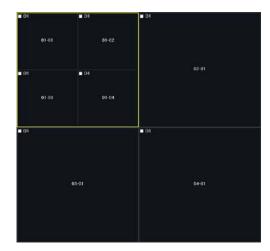
Select one window on "output window panel" and click window division button to select a window division on this BNC.

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





Tick the check box D on each window to set the channel decode D1 resolution stream.



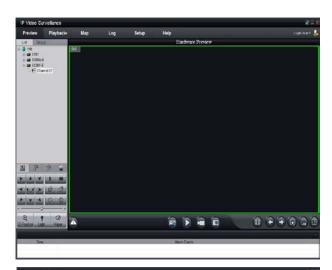
Note: If the default mode is selected, then each decoding channel outputs one single image and division mode is invalid.

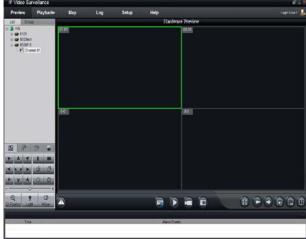
#### 5.6.2 Hardware Decode Preview

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

Click then start to decode, at the moment, preview windows layout will switch to the layout which set in "output window panel".

The window exceed maximum decode channel won't be displayed.





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

#### 5.6.3 Secondary Output of Hardware Decode

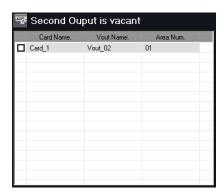
MD card can output the decoded images twice. Take 4002MD card for example, one 4002MD card can decode 4 channels CIF images, assume they are channel01, channel02, channel03, and channel04; if one decoding channel is set as 4 divisions and separately display channel01, channel02, channel03, and channel04,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



Vout\_1: For second output

Vout\_2: For second output

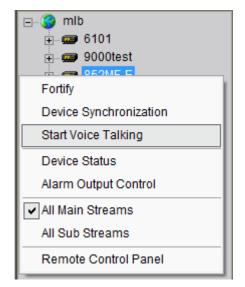
card\_1

#### 5.7 Others

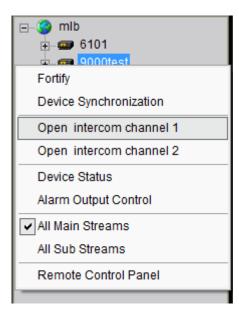
#### 5.7.1 Voice Talk & Broadcast

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.

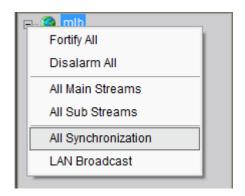


If the device is 9000 DVR, then there will be two voice talk channels for choice.



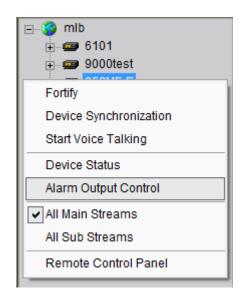
Note: Client software only supports one voice talk at one time

Right click area name and select "LAN Broadcast" to talk to the area.

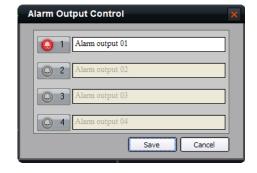


# 5.7.2 Alarm Output Control

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

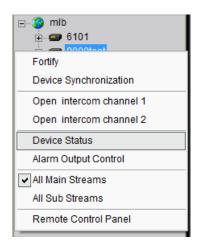


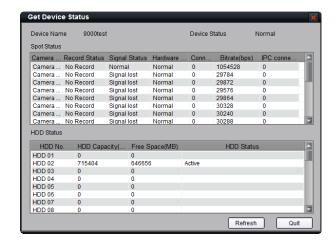
Click and it becomes key, so as to turn on the alarm output and activate the name modified function, re-click key to turn off the alarm output.



### 5.7.3 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.



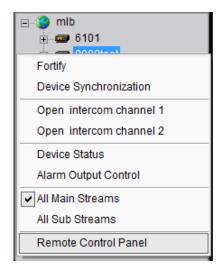


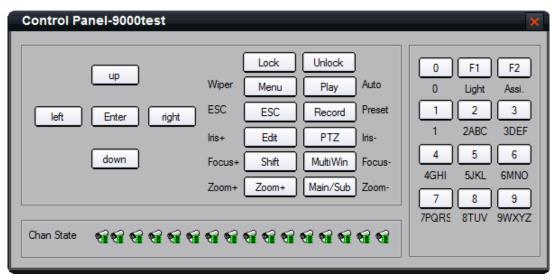
### 5.7.4 Remote Control Panel

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

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

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





# Chapter 6 PTZ Control

# 6.1 RS-485 Parameters Configuration

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

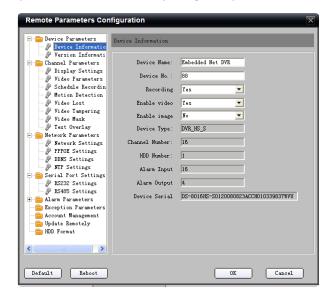
Click "Configure" and enter the corresponding interface.

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

Click = Serial Port Settings to unfold the options, shown as figure on the right.

Note: RS-485 configuration must be

the same with PTZ configuration.



### 6.2 PTZ Control

Return to preview interface and user can control PTZ.

### 6.2.1 Direction Control

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

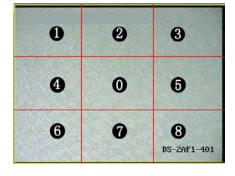
Click key to start auto scan.

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



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

Drag Control: There are 3×3 nine areas, when the mouse moves to area 1-8, the mouse icon will become as:  $\mathbf{0}$ ;  $\triangle$ ; •  $\checkmark$ ; •  $\triangle$ ; •  $\triangleright$ ; •  $\triangleright$ ; •  $\checkmark$ , and continued to move the mouse along the direction shown by arrows, PTZ will move to the same directions.



Note: This function is only available for software decode.

### 6.2.2 Partial Zoom

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

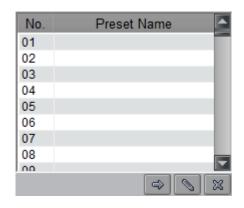
Drag from up left to down right to zoom in; drag from down right to up left to zoom out.



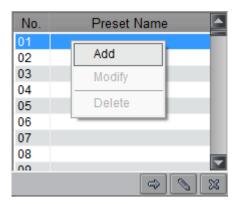
Note; This function is only available as HIKVISION protocol is selected for PTZ.

### 6.2.3 Preset

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



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



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

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

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



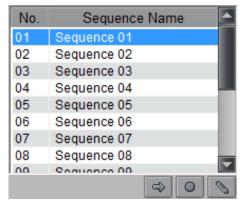
# 6.2.4 Sequence

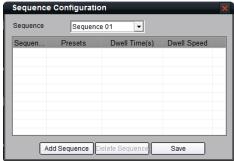
After adding two or more presets for one channel, you can set a sequence with presets for PTZ.

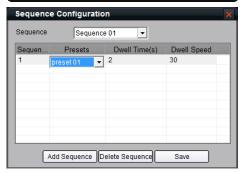
1<sup>st</sup> step: select one channel and click key to show sequence list.

2<sup>nd</sup> step: Click or right click sequence name then select the preset you would like to enter sequence configure menu.

3<sup>rd</sup> step: Click Add Sequence add the sequence, you can also click preset area to select presets from the list.



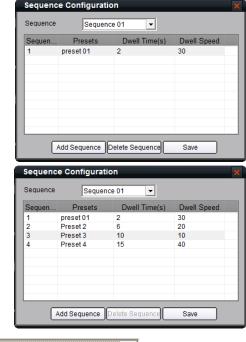




4<sup>th</sup> step: Set the time and speed for the preset.

Note: Dwell time is between 1 and 128s; dwell speed is between 1 and 140.

 $5^{th}$  step: Repeat the  $2^{nd}$  and  $3^{rd}$  step to add the presets to the sequence. Then click Save key to save the settings.



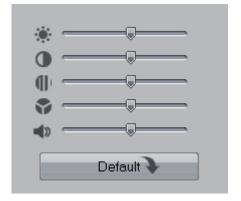
After configuration, you can choose the sequences from the list Sequence, and call/stop them

by clicking and keys.

# 6.3 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
0	Saturation	•	Hue
<b>∢</b> »	Volume	Default	Restore

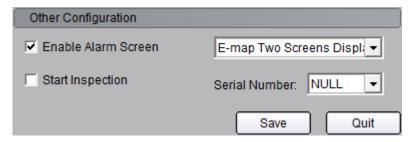
# 6.4 Keyboard and Joystick Control

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

# 6.4.1 DS-1002KI, DS-1003KI keyboard control PTZ

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.





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.







ports as NULL by default to release the serial ports.

## 6.4.2 Joystick control PTZ

Insert USB joystick, and a message will pop up shown as figure on the right, and define "switch button" afterwards.

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

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

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







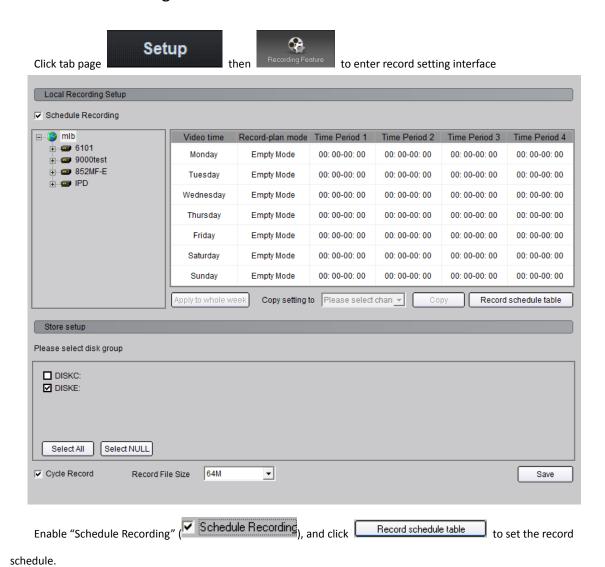
Note: "Switch button" is different according to different models of USB joystick. By default, client software usually defines the last logic button as "Switch button" (e.g. if there are 12 buttons in total, then define the 12<sup>nd</sup> button as "Switch button").

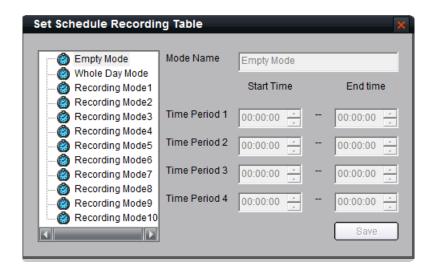
Different models of USB joystick have different buttons, which decide the number of callable presets.

# Chapter 7 Recording & Playback

# 7.1 Recording

# 7.1.1 Local Recording



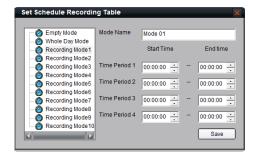


You can choose "Whole Day Recording Mode" or you can define the recording mode for your own demands.

Select Recording Mode, then you can configure the schedule mode.

1<sup>st</sup> step: Input the mode name.

2<sup>nd</sup> step: Set the time periods, and click "Save" to finish.

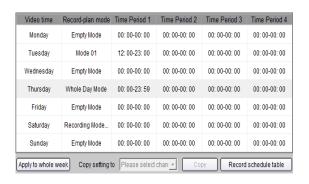


Set recording schedule:

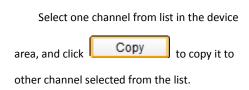
First click the device or channel name to activate the recording schedule configuration.

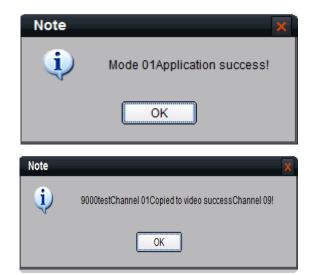


Select the recording date and mode.









## 7.1.2 Store Setup

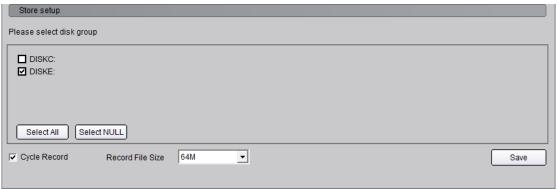
Under "Local Recording Setup" there is "Store Setup" menu.

Choose saving hard disk of the recorded files from disk group.

If "Cycle Record" is selected, and each disk space is less than 2G, the earliest recorded files will be overwritten to continue recoding.

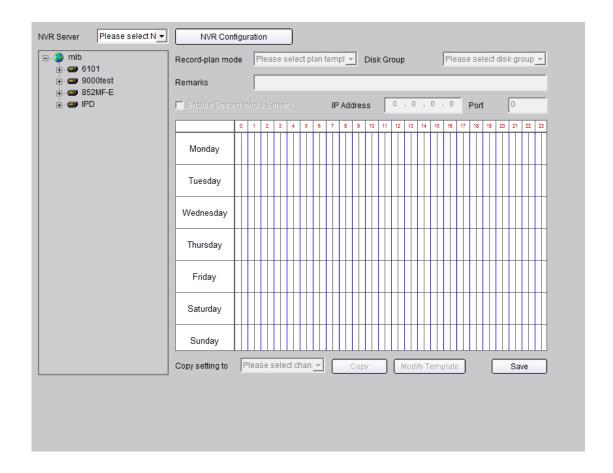
If not, when the disk is full, the "Disk Clean" will pop up, after cleaning disk and if the disk space is larger than 2G, the schedule recording will restart.

Record file size can be selected (32M/64M/128M/256M).



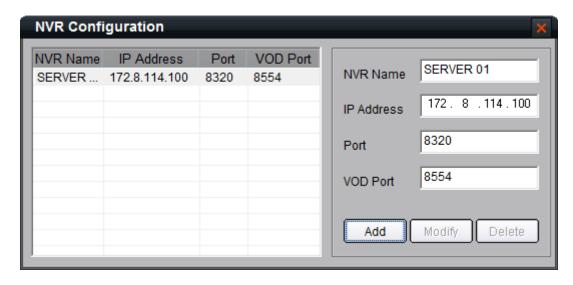
# 7.1.3 NVR Storage Server Recording Configuration

You can remote configure the recording schedule and playback the recorded files of the NVR storage server through client software, shown as figure below.



#### 7.1.3.1 Add NVR Server

Click NVR Configuration key to enter NVR configuration interface.



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

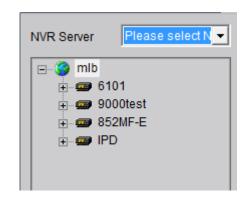
Note: Max 16 NVR servers can be added to the client software. The default server port and VOD port are 8320 and 8554.

### 7.1.3.2 NVR Recording Mode Configuration

1<sup>st</sup> step: Select added NVR servers from

Please select N 

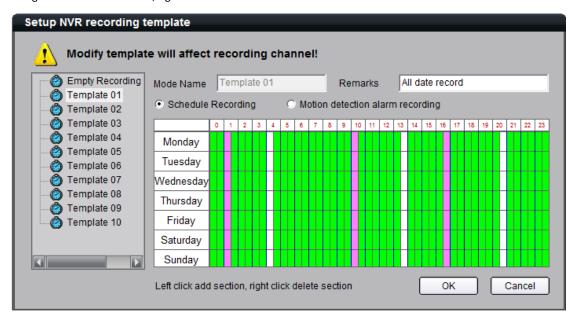
✓ list to enable modifying recording schedule.



2<sup>nd</sup> step: Set the recording time for the mode.

Click the mouse to add recording schedule; right click to cancel recording schedule. Then click <a href="ModifyTemplate">ModifyTemplate</a> key to save the settings.

Select "Template 01" and recording type including "Schedule Recording" & "Motion Detection Recording". The using left click to add section, right click to delete section in the date area.



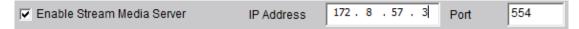
Note: The unit of recording mode is half an hour, green means schedule recording, pink means motion detection recording, white means no recording.

### 7.1.3.3 NVR Recording Schedule Configuration

1<sup>st</sup> step: Select the device or channel for recording



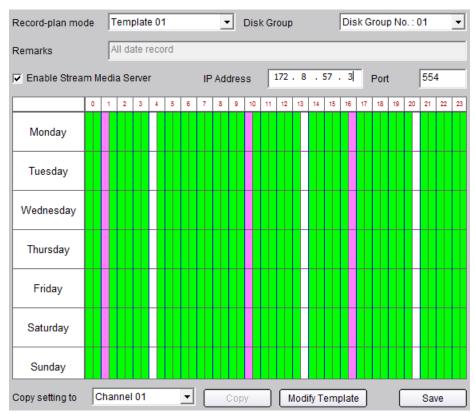
2<sup>nd</sup> step: If necessary, enable stream media server and input the IP address and port.



3<sup>rd</sup> step: Configure the recording schedule.

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

Click key to finish configuration.



# 7.2 Playback

There are 2 options for playback, one is local playback and the other is remote VOD, which can be chosen by clicking

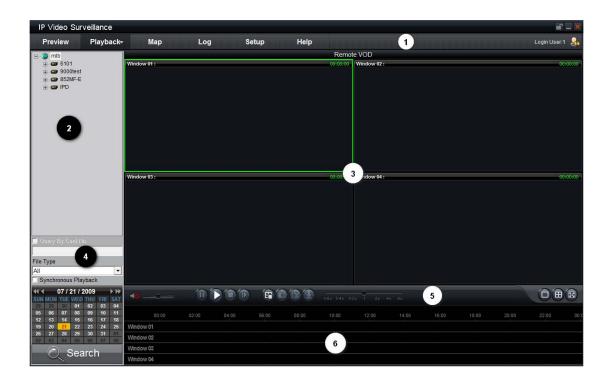


Local Playback: Searching the recorded files from hard disk of PC.

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

### 7.2.1 Remote VOD



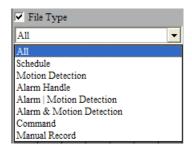


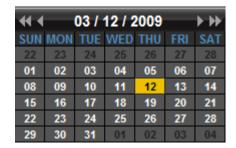
Area	Description	Area	Description
0	System Area	0	Device Area
6	Playback Windows	4	Query Area
6	Play Control Buttons	0	Time Axis Area

### 7.2.1.1 Remote VOD Query

1<sup>st</sup> step: Select the playback channel and window.

 $2^{\text{nd}}$  step: Select recorded files type and query time.





3<sup>rd</sup> step: Add information of card number. For ATM DVR enable "Query by Card No." and input the overlaid card number to search. Other device can skip this step.

4<sup>th</sup> step: Click key to search the matched recorded files, if there is, then it will shows in the time axis area.



5<sup>th</sup> step: Click key to start playback. You can choose time by dragging mouse to the time you want on the time axis.



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

If you enable synchronous playback, then the 4 windows will playback synchronously. If the start time of the 4 windows is not same, the most ahead window will wait for other windows until they reach the same time point.

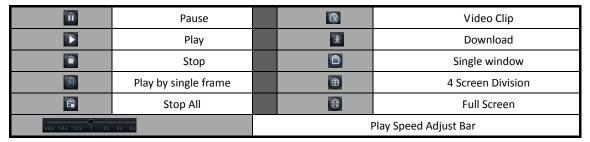
### 7.2.1.2 Playback Control

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



Descriptions on playback buttons:

Button	Description	Button	Description
<b>√</b> 0	Open/Close Sound	6	Capture





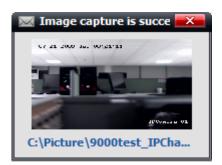
In the single frame playback mode, every time you click button, the recorded files will play forward by one frame

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.

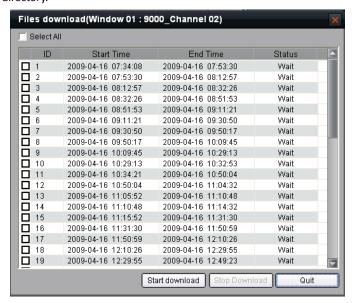
During playback, click once to set begin time of video clip, click it again to set end time of video clip. After saving the video clip, a message will be raised, click it to open video segment.

C:\DownLoad\9000 Channe
| 02 20090416124839 200
| 90416124847 45861390 00
| 01.mp4

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.



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

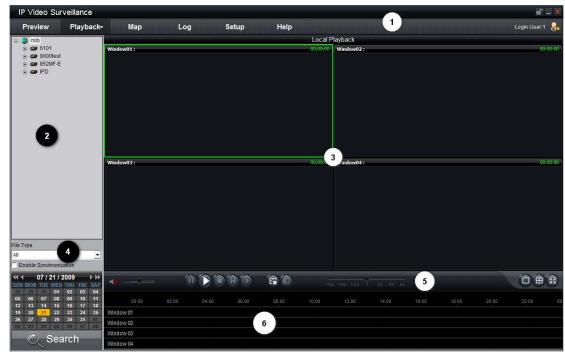


You may go to "Configure" → "Software Configure" → "Path configuration" to change the saving directory.



# 7.2.2 Local Playback



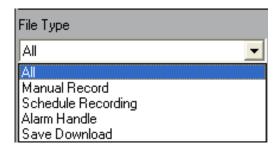


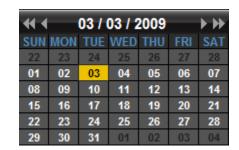
Area	Description	Area	Description
0	System Area	0	Device Area
6	Playback Windows	4	Query Area
6	Play Control Buttons	6	Time line Area

## 7.2.2.1 Local Playback Query

<sup>1&</sup>lt;sup>st</sup> step: Select the playback channel and window.

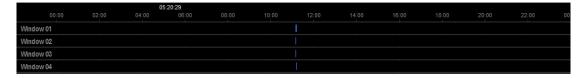
<sup>2&</sup>lt;sup>nd</sup> step: Select recorded files type and query time.





3<sup>rd</sup> step: Click key to search the matched recorded files, if there is, then it will shows in the

time axis area.

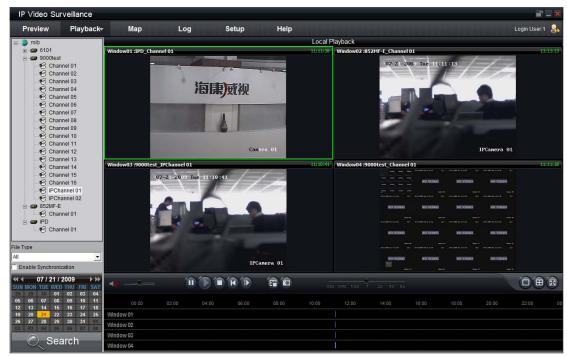


4<sup>th</sup> step: Click key to start playback. You can choose time by dragging mouse to the time you want on the time axis.

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

# 7.2.2.2 Playback Control

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



Descriptions on playback buttons:

Button Description		Button	Description
--------------------	--	--------	-------------

<b>≪</b>	Open/Close Sound		<b>=</b>	Stop All
	Pause		<b>©</b>	Capture
	Play			Single Screen
	Stop		<b>(a)</b>	4 Screen Division
	Play by single frame		<b>E</b>	Full Screen
<b>®</b>	Return to Beginning			
1/8x 1/4x 1/2x 1 2x 4x 8x		Play Speed Adjust Bar		

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.





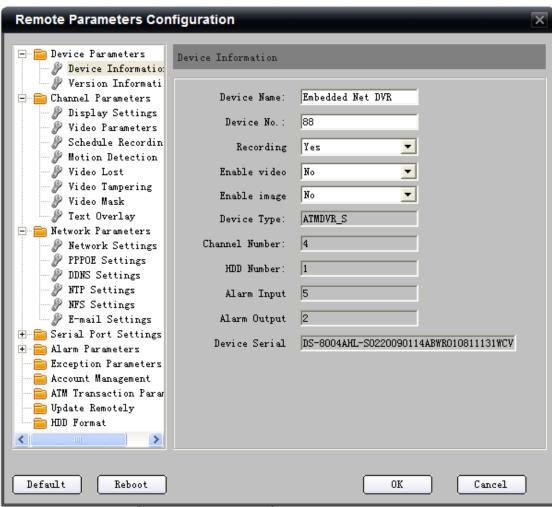
In the single frame playback mode, every time you click button, the recorded files will play forward by one

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.

# Chapter 8 Remote Configuration

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





If the device is 9000 series DVR, after clicking the "Remote Configuration" then you need to click ter parameters configuration key in the pop-up menu and enter the configuration interface.



Note: Remote configuration of PCDVR via client software is not available right now.

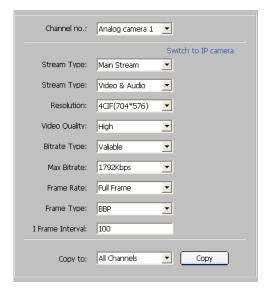
# 8.1 Remote Recording Configuration

# 8.1.1 Encoding Parameters Configuration

Select Channel Parameters > P Video Parameters to enter encoding parameters configuration interface.

Note: If the device is 9000 series, click "Switch to IP

Channel" and select IP channel to configure the parameters of IP camera.

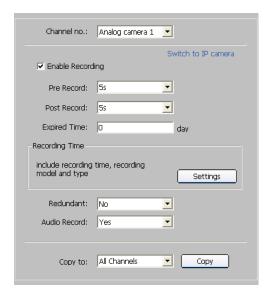


Parameters	Description
Dual Stream	Main/Sub stream and Event Parameters
Stream Type	Video&Audio or Video stream
Resolution	Recording Resolution
Bit Rate Type	Variable & Constant
Max Bit rate	Maximum bit rate of the compressed stream
Frame Rate	Record frame rate, from 1/16 to full frame
Frame Type	BBP,BP & Single P frame
I frame interval	The interval between 2 I frames

## 8.1.2 Schedule Recording

Select Channel Parameters > / Schedule Recording to enter configuration interface.

Enable recording by clicking the tick.



Note: "Recording Expired" "Redundant" and "Audio Record" are only available for 9000 series DVR.

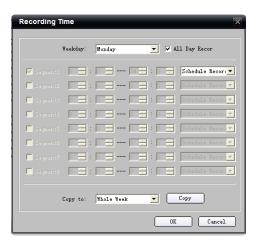
Parameters	Description			
Redundant	Redundant for this channel or not (When redundant disk is available)			
Recording Expired Storage life of recorded files in redundant disk, expired data will be deleted				
Audio Record	Recorded files include audio or not			

Click "Settings" of the "Recording Time" to enter recording schedule configuration interface.

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

Click Schedule Recording type. The "All Day Record" or 8 "Segments" can be selected as well.

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



## 8.1.3 Motion Detection Recording

Click Motion Detection to enter motion detection recording interface.

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

1<sup>st</sup> step: Select channel number for motion detection.

 $2^{nd}$  step: Enable motion detection to activate "Setting Area", "Fortify Time" and "Linkage" settings.

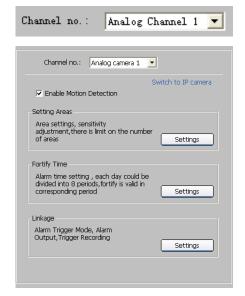
3<sup>rd</sup> step: Set the motion detection area and sensitivity.

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

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

4<sup>th</sup> step: Set the detection time.

"Fortify Time" can be one day or the whole week, and 8 segments for one day.

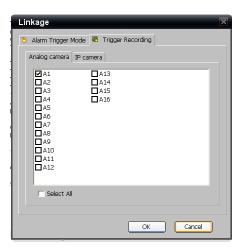






5<sup>th</sup> step: Set the "Trigger Recording" for linkage.

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

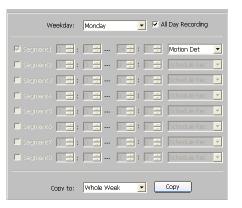


 $6^{\text{th}}$  step: Set the detection recording time.

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

Click for the recording type. The "All Day Record" or 8 "Segments" can be selected as well.

Note: The time of each segment can not be overlapped. The valid time is the intersection of the motion detection time and motion detection recording time.



## 8.1.4 Alarm Recording

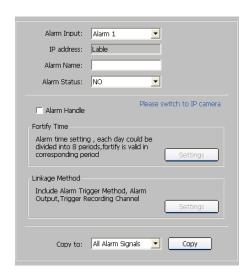
Select 

Alarm Parameters → Alarm Input Settings

1<sup>st</sup> step: Select alarm input.

Note: If the device is 9000 series DVR, you can click

"Switch to IP channel" to configure the alarm input of IP channel.



2<sup>nd</sup> step: Select the type of alarm input, "NO" or "NC".

Note: The settings will become effective after rebooting.

3<sup>rd</sup> step: Enable "Alarm Handle" to activate "Fortify Time" & "Linkage Method".

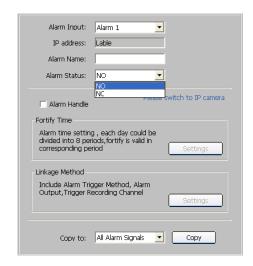
4<sup>th</sup> step: Set the fortify time for alarm input.

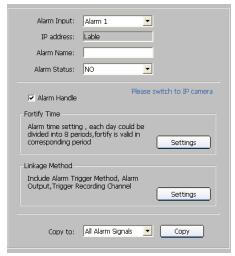
Click "Settings" in "Fortify Time" menu.

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

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

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



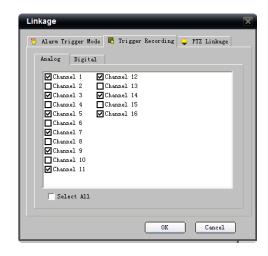




5<sup>th</sup> step: Set recording channel triggered by alarm.

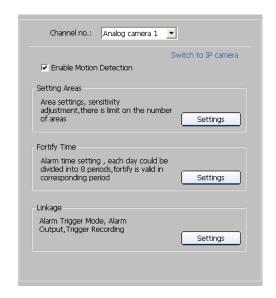
Click "Settings" in "Linkage" menu and select "Trigger
Recording" tab.

Enable the recording channels you want.



6<sup>th</sup> step: Enter schedule recording interface. Click

Enable Recording to enable Recording.



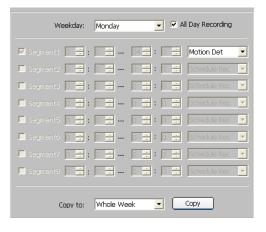
7<sup>th</sup> step: Set the recording time for alarm input.

Click "Settings" in "Recording Time" menu.

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

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

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



# 8.1.5 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".

## 8.1.6 PCDVR Remote Configuration

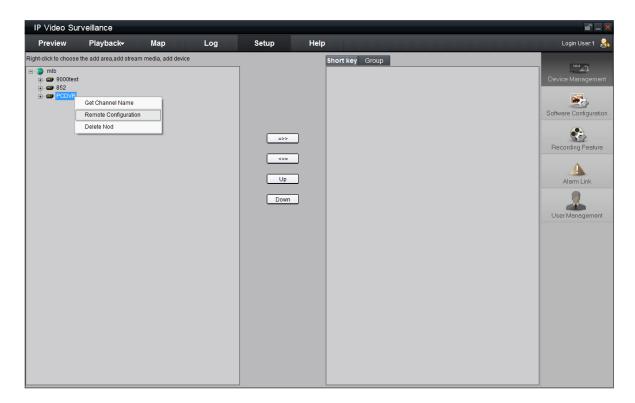
In this version of client software, the PCDVR can be added and configured remotely.

Please refer to 4.1.1 Add Device for details on adding PCDVR.

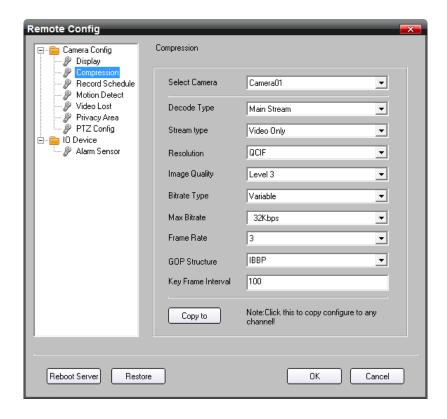
After PCDVR added in client software, you can right click the device name and select "Remote Configuration".



→ Right click the device and select "Remote Configuration"



Remote Configuration contains two parts: Camera Configuration and IO Device.



### 8.1.6.1 Camera Configuration

Camera Configuration contains 7 parts: Compression, Display, Recode Schedule, Motion Detect, Video Lost, Privacy Area and PTZ Configuration.

#### 1. Compression

[Select Camera] Select a camera.

[Decode Type] The type of decode.

Decode Type contains tows types: Main Stream and Sub Stream.

#### a. Main Stream

Main Stream parameters contain: Stream Type, Resolution, Image Quality, Bit rate Type, Max Bit rate, Frame Rate, GOP Structure, Key Frame Interval.

[Stream Type] setup the stream type;

[Resolution] setup the resolution. It can setup the resolution dynamically while recording;

[Image Quality] setup the image quality;

[Bit rate Type] setup the bit rate type. VBR: variable bit rate; CBR: constant bit rate;

[Max Bit rate] the maximum bit rate;

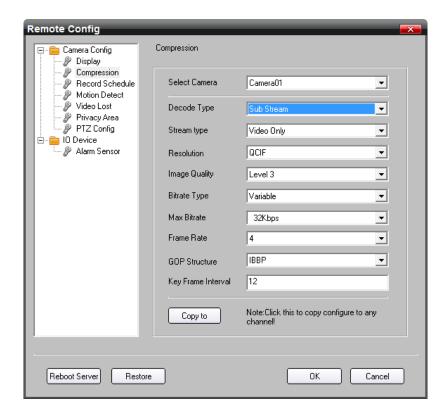
[Frame Rate] setup the frame rate;

[GOP Structure] setup frame group mode;

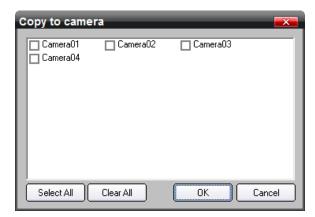
[Key Frame Interval] setup the interval of I frame. This parameter will affect the image quality.

#### b. Sub Stream

Sub Stream contain: Image Quality, Bit rate Type, Max Bit rate, Frame Rate, Key Frame Interval, shown as figure below.

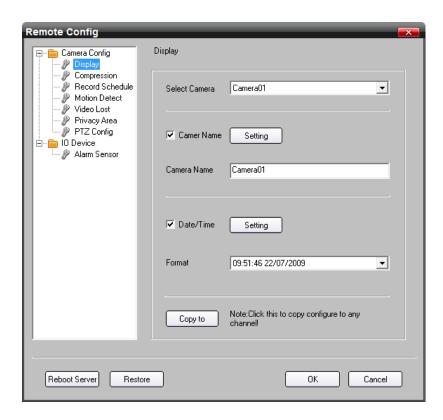


Press [Copy to] to copy Compression parameters to any camera that you selected.



### 2. Display

Display setup contains Camera Name and Date/Time setup.



[Select Camera] Select a camera.

### a. Camera Name setup

Setting the camera name and its position: Select the **[Camera Name]** check box, input the name directly and press **[Setting]** to enter the setup window. Drag and drop the icon **Camera01** to change its position.



### b. Date/Time setup

Setting the Date/Time format and position:

Select the **[Date/Time]** check box, select a format and press **[Setting]** to enter the setup window. Drag and drop the icon

09:54:59 22/07/2009 to change its position.

Press [Copy to] to copy Display parameters (but containing no Camera Name) to any camera that you selected.



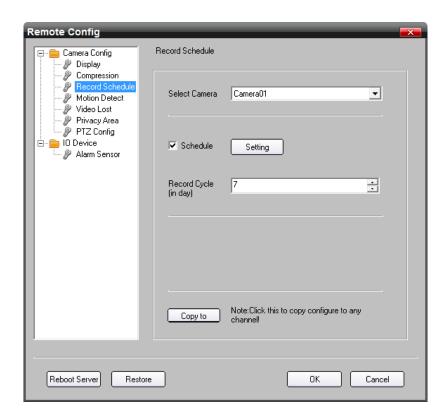


### 3. Recode Schedule

[Select Camera] Select a camera.

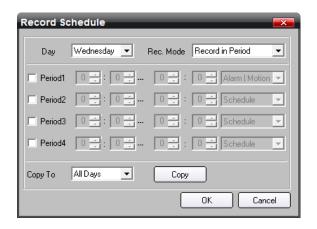
Select the  $\mbox{\bf [Schedule]}$  check box to set Recode Schedule.

[Record Cycle (in day)] The recordings reserving time



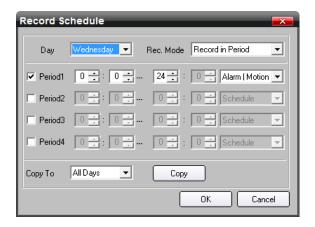
Press [Setting] to set the time of record

[Day] select one day, [Rec. Mode] support
[Record All Day] and [Record in Period], if you select
[Record All Day], the record period will not need to
be configured.

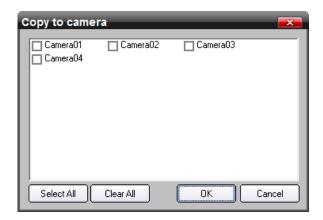


Otherwise, the record period needs to be configured:

[Period x] section time of recording. It can be set in [Record in Period] mode only; [Copy to] copy the parameters to other days; In [Rec. mode], if [Record all day] is enabled, the record mode is [Schedule] by default; if [Record in Period] is enabled, the record mode can be [Schedule], [Alarm | Motion], and [Schedule] record.

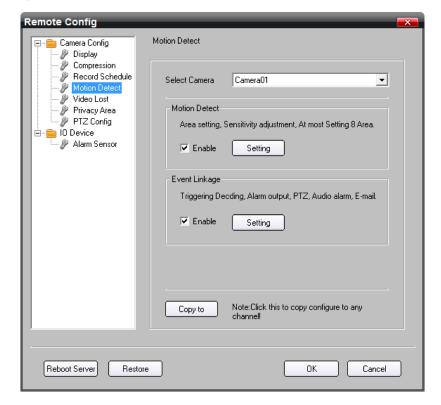


Press [Copy to] to copy Recode Schedule parameters to any camera that you selected.



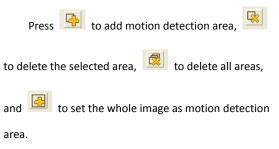
#### 4. Motion Detect

[Select Camera] Select a camera.



#### a. Motion Detect

Select the [Enable] check box and press [Setting] to set areas.



**[Sensitivity]** Sensitivity of motion detection, which has 7 grades 0-6.

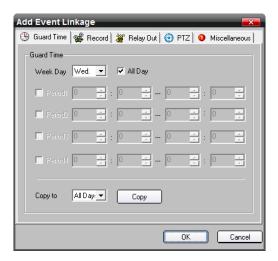
[Motion value] The percent of motion areas in selected area, it is variable from 1 to 100.

### b. Event Linkage

Guard Time: Users can configure guard time as all day or 4 periods.

Trigger Record: Select the **[Enable]** check box, then set the **[Pre-record]** time and **[Post-record]** time, select the camera to record.



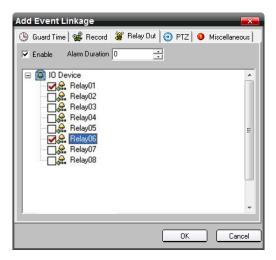


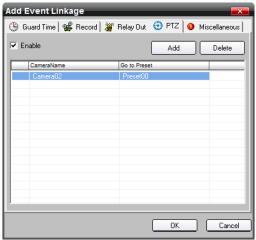


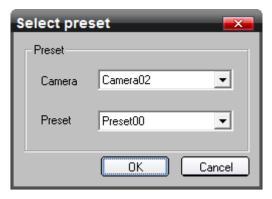
Firstly, select the **[Enable]** check box, secondly, set the **[Alarm Duration]** and select the relay port.

PTZ: Firstly, select the [Enable] check box.

Secondly, set the **Calling Preset** by clicking the **[Add]** button.







Miscellaneous: Select the **[e-Map]** check box to trigger e-Map, **[Audio]** and an audio file to trigger audio alarm, and **[E-mail]** to trigger Email.

In the setup of triggering Email, if users want to send Email with snapshots, users should select the [Attach Snapshot] check box and the camera.

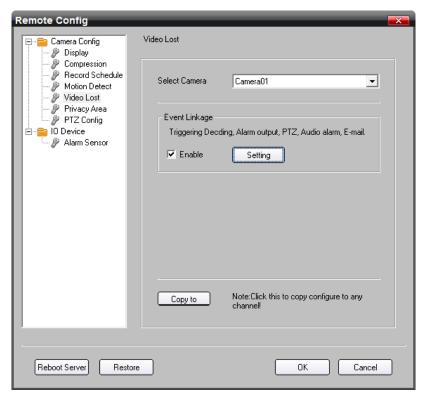
Press [Copy to] to copy Motion Detect parameters to any camera that you selected.



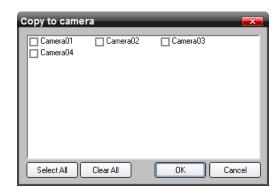


#### 5. Video Lost

[Select Camera] Select a camera. If Users want to set the event linkage of Video Lost, users should select the [Enable] check box and press [Setting]. The event linkage of Video Lost is the same with Motion Detect.



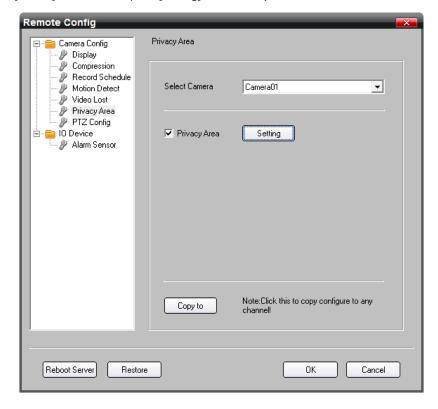
Press [Copy to] to copy Video Lost parameters to any camera that you selected.



#### 6. Privacy Area

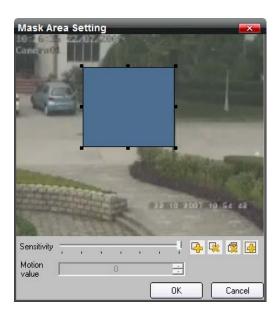
[Select Camera] Select a camera.

Select the [Enable] check box and press [Setting] to set Privacy Area.





Press [Copy to] to copy Privacy Area parameters to any camera that you selected.





## 7. PTZ Configure

[Select Camera] Select a camera.

Select the **[Enable]** check box to set the PTZ parameters.

[Protocol] select a protocol;

[Address] Input the PTZ address;

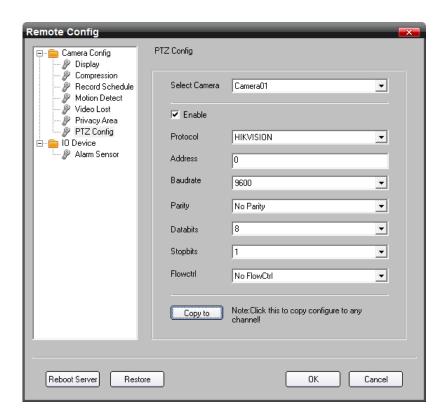
[Baud rate] select the baud rate;

[Parity] select Parity check;

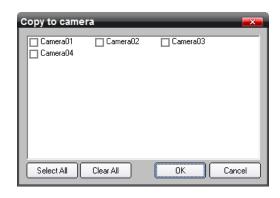
[Data bits] select the data bits;

[Stop bits] select the stop bits;

[Flow ctrl] select the flow control mode.



Press [Copy to] to copy PTZ Configure parameters to any camera that you selected.



## 8.1.6.2 IO Device

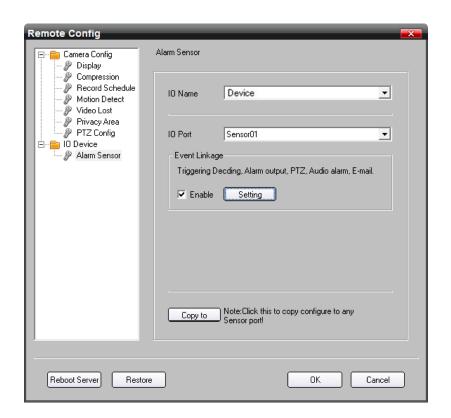
IO Device contains only 1 part: Alarm Sensor.

[IO Name] Select an IO Device.

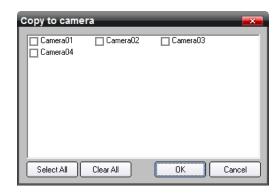
[IO Port] Select a Sensor of the current IO Device.

If Users want to set the event linkage of Alarm Sensor, users should select the **[Enable]** check box and **press** 

[Setting]. The event linkage of Alarm Sensor is the same as Motion Detect.



Press [Copy to] to copy Alarm Sensor parameters to any IO port of the current IO Device that you selected.



## 8.2 Alarm

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

## 8.2.1 Motion Detection Alarm

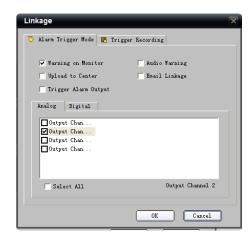
1<sup>st</sup> step: The same with the 1<sup>st</sup> step of <u>8.1.3 Motion Detection Recording</u>

2<sup>nd</sup> step: The same with the 2<sup>nd</sup> step of <u>8.1.3 Motion Detection Recording</u>

3<sup>rd</sup> step: The same with the 3<sup>rd</sup> step of <u>8.1.3 Motion Detection Recording</u>

4<sup>th</sup> step: The same with the 4<sup>th</sup> step of <u>8.1.3 Motion Detection Recording</u>

5<sup>th</sup> step: 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 9000 series, triggering alarm		
	output of IP channel can be selected as well.		

## 8.2.2 Signal Level Alarm

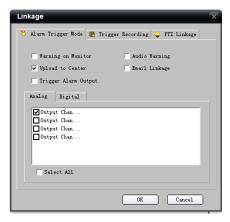
1<sup>st</sup> step: The same with the 1<sup>st</sup> step of <u>8.1.4 Alarm Recording</u>.

2<sup>nd</sup> step: The same with the 2<sup>nd</sup> step of <u>8.1.4 Alarm Recording</u>.

3<sup>rd</sup> step: The same with the 3<sup>rd</sup> step of <u>8.1.4 Alarm Recording</u>.

4<sup>th</sup> step: The same with the 4<sup>th</sup> step of <u>8.1.4 Alarm Recording</u>.

5<sup>th</sup> step: Set the alarm linkage for signal level and select alarm output channel.

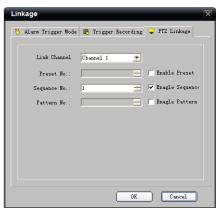


6<sup>th</sup> step: Set PTZ linkage for signal level alarm.



Note: Alarm input can link PTZ of several

channels, but one channel can only link one option of preset, sequence and pattern.



## 8.2.3 Video Loss

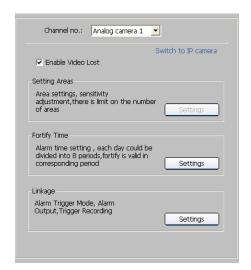
1<sup>st</sup> step: Select the channel number for video loss. Select ☐ Channel Parameters → 🎤 Video Lost

Note: If the device is 9000 series DVR, you can click

"Switch to digital channel" to configure the video loss of IP channel.



2<sup>nd</sup> step: Enable "Video Loss" to activate settings of "Fortify Time" and "Linkage"



3<sup>rd</sup> step: Set the fortify time for video loss.

Click "Settings" in "Fortify Time" menu.

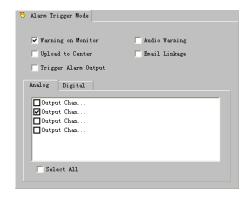
Select "Weekday" as some day of the week or the whole week for the fortify time.

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

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

4<sup>th</sup> step: Set linkage for video loss.

Click "Settings" in the "Linkage" menu.



## 8.2.4 Video Tampering

Note: If the device is 9000 series DVR, you can click

"Switch to digital channel" to configure the video tampering of IP channel.

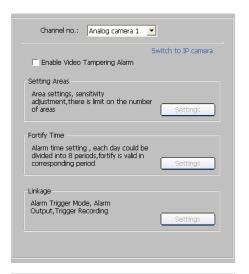
2<sup>nd</sup> step: Enable "Video Tampering Alarm" to activate settings of "Setting Areas", "Fortify Time" and "Linkage"

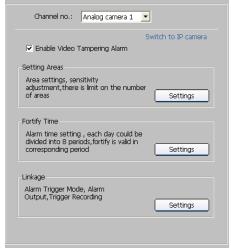
3<sup>rd</sup> step: Set the video tampering area and sensitivity.

The sensitivity can be divided into three levels: Low,

Medium, and High.

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







4<sup>th</sup> step: Set the fortify time for video tampering.

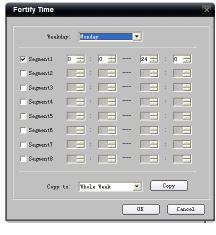
Click "Settings" in "Fortify Time" menu.

Select "Weekday" as some day of the week or the whole week for the fortify time.

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

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

5<sup>th</sup> step: Set linkage for video tampering. Click "Settings" in the "Linkage" menu.



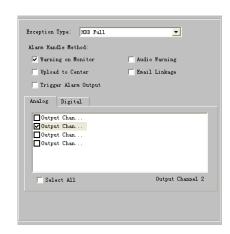


## 8.2.5 Exceptions

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

Select the exception type and handle method.

Select Exception Parameters to enter configuration interface.



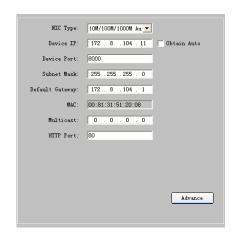
## 8.3 Network Configuration

## 8.3.1 Basic Configuration



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

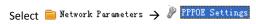
Select "Advance" to enter advanced configuration. You can configure preferred DNS server1 and spare DNS server2, IP address of alarm host and IP server.





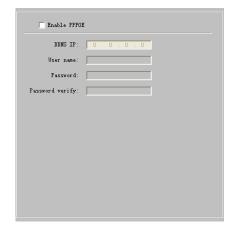
Parameters	Description	
DNS1 DNS2	Preferred and spare DNS server	
Alarm host	Alarm signal can be uploaded to the IP address automatically	
IP sever	IP sever IP address of IP server	

## 8.3.2 PPPoE



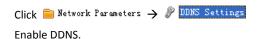
Enable PPPoE by ticking , input the user name and password, then save the changes and reboot the device to make the parameters become effective.

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

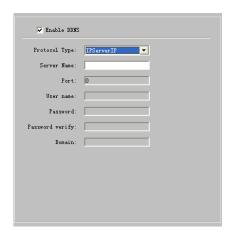


## 8.3.3 DDNS

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



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

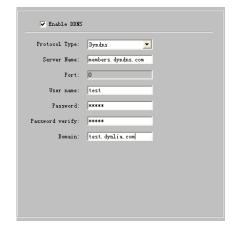


If the "Dyndns" is selected as protocol:

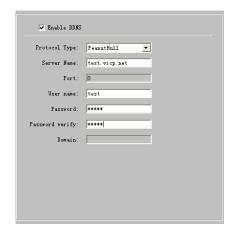
Server Name: Input the IP address of the server, such as members.dyndns.org;

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

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

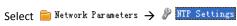


If the "Peanut Hull" is selected as protocol: Input the user name and password applied on the Peanut Hull website to visit the device by the applied domain name.



## 8.3.4 NTP

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

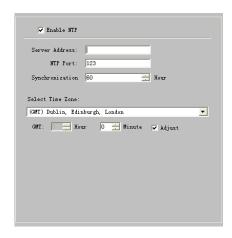


Tick Ito enable NTP function.

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

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

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



## 8.3.5 NFS

By NFS configuration, recorded data can be saved to the network storage disk provided by NAS server.

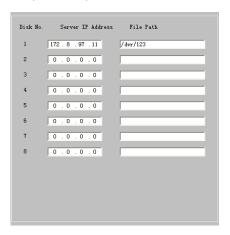


Input the IP address of NAS server in the blank "Server IP address"; input the saving path allocated by NAS server in the blank "File Path".



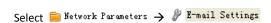
Note: Make sure that the device supports NFS function

and NAS server allocated the storage space correctly. DS-9000 device does not support NFS function.



### 8.3.6 E-Mail

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



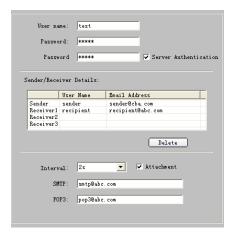
If server authentication is needed, enable it (i.e. ) and input user name and password.

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



Note: Make sure that the device supports email

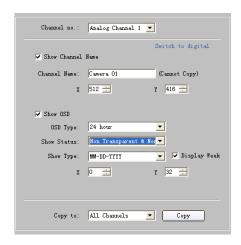
function and NAS server allocated the storage space correctly. DS-9000 device does not support email function.



# 8.4 Channel Configuration

## 8.4.1 Channel Display Settings

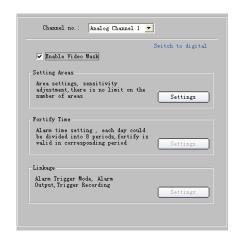




## 8.4.2 Video Mask

1<sup>st</sup> step: Select channel number, and enable video
mask (i.e. ✓).
Select Channel Parameters → Video Mask

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



2<sup>nd</sup> step: Set the mask area.

Click "Settings" to enter area set menu.

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



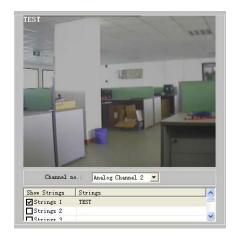
## 8.4.3 Text Overlay

You can add characters on the screen of the channel.

Select 🚞 Channel Parameters  $ightarrow \slashed{P}$  Text Overlay

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

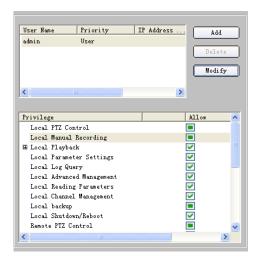
Note: If the device is DS-9000, then only analog channel support text overlay.



## 8.5 Account Management

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

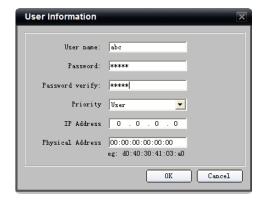
Select 🗀 Account Management



Click "Add" to add user.

Note: If you set the IP address or physical address,

and then only the PC with the same IP address or physical address can visit the device through network.



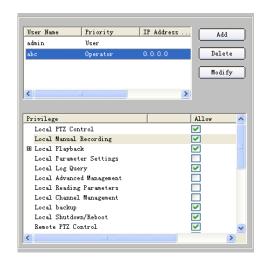
Click "Modify" to change the user name and password; click "Delete" to delete the user.

Status means privilege granted, status means privilege not granted.

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

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

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



## 8.6 Others

Remote Upgrade:

Click 🚞 Update Remotely

Click "Browse" to search the local upgrade file, click

"Upgrade" to start upgrade remotely.



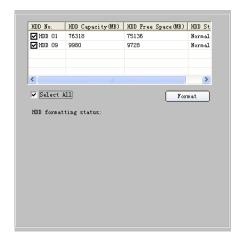


Click = HDD Format



Note: Please backup the data before formatting

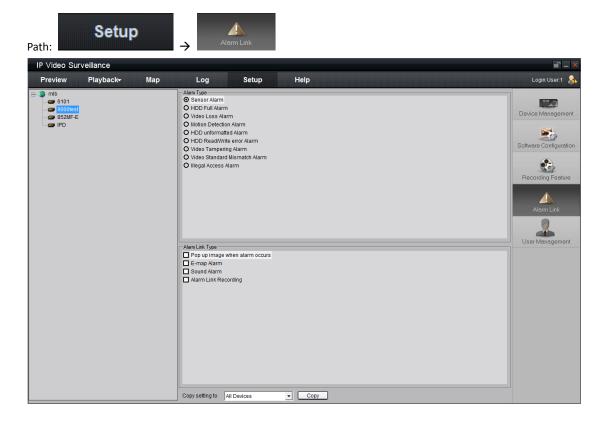
hard disk.



# Chapter 9 Alarm Linkage

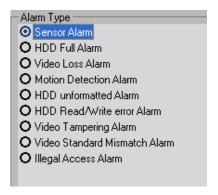
According to the various alarm signals uploaded from the device, client software can configure the different linkages for them.

## 9.1 Linkage Configuration

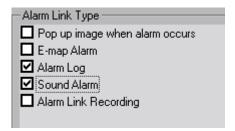


<sup>1&</sup>lt;sup>st</sup> step: Select the device from the device area on the left, activate the alarm type and alarm linkage type options.

 $2^{nd}$  step: Select the alarm type, after selected, the alarm type status will become  $\odot$ .



3<sup>rd</sup> step: Select the alarm linkage type for the alarm type, and status means selected.



### **Descriptions on Alarm Linkage Type**

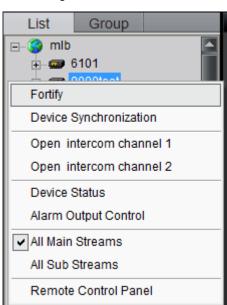
Linkage Types	Descriptions	
Pop up image when alarm occurs	Pop up single screen image when alarm occurs	
E-map Alarm	When alarm occurs, the related hotspot in the e-map twinkles	
Alarm Log	Record a log on the alarm information when alarm received	
Sound Alarm	Alarm triggers local alarm sound	
Alarm Link Recording	Alarm triggers local recording of alarm channel	

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

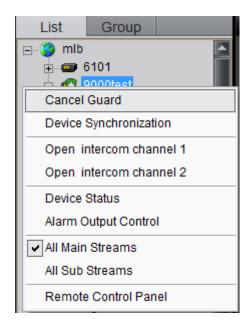
## 9.2 On Guard & Off Guard

You can choose "On Guard" and "Off Guard" to decide whether to handle alarm signal or not.

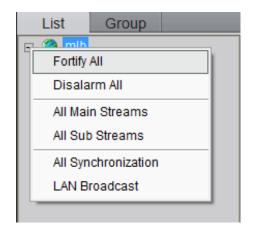
Right click the device name in the preview mode, and select "Fortify" to enable to monitor the alarm of the device; and the icon of the device will become as.



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



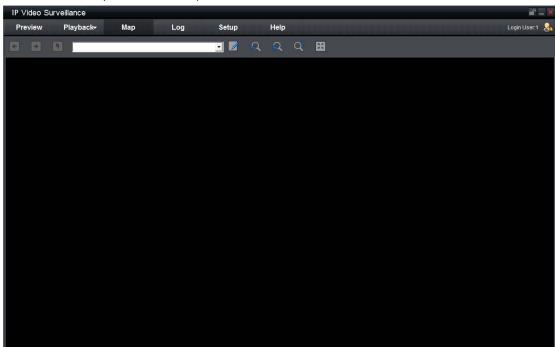
Right click the area name, select "Fortify All" or "Disarm All" for the whole devices of the device.



After the device or the area fortified, the alarm linkage will become effective when there is an alarm of the device. You need to re-fortify when client software restarts.

# Chapter 10 E-Map

Click key to show the e-map window.



### **Toolbar Buttons Descriptions:**

Buttons	Descriptions	Buttons	Descriptions
	Enable/Disable Map Edit	K 71 K 21	Enter/Exit Full Screen
Q	Zoom Out	+	Previous Page
Q	Zoom In	<b>→</b>	Next Page
Q	Zoom Adjustment	ħ	Upper Level

# 10.1 Add Map

1<sup>st</sup> step: Click button to enter map edit mode, the cursor will become as

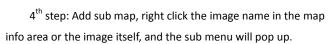
2<sup>nd</sup> step: Right click the black area and select "Add Map" (or click button to display Map Info Area and right click the area and select "Add Map"), then the add map window will pop up.

3<sup>rd</sup> step: 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.



Select "Add Sub E-map" to add sub map.

Select "Properties" to change the map name and image file.

Select "Delete" to delete the selected map.





# 10.2 Map Configuration

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

## 10.2.1 Hot Spot

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

## 10.2.1.1 Add Hot Spot

1<sup>st</sup> step: Enter add hot spot interface.

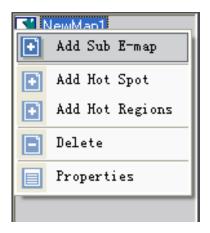
Right click the image name in the map info area or the image itself, and select "Add Hot Spot".

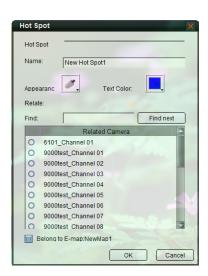
2<sup>nd</sup> step: Input the name of hot spot, click and select the icon for hot spot.

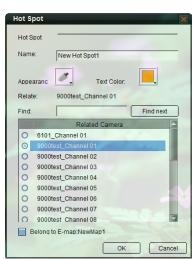
You can also click to change the color of characters.

3<sup>rd</sup> step: Select the channel you want to relate to in the list "Related Camera", and press "OK" to finish.

After succeed to add hot spot, move the mouse to the icon of hot spot, it will become as \( \frac{h}{a} \), and you can move the hot spot by pressing left button and dragging.





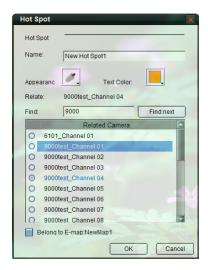


Input the key words in the "Find" blank, click

Find next

to find the channel whose name

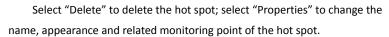
embraces the key words.



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

## 10.2.1.2 Edit Hot Spot

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





## 10.2.2 Hot Region

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

## 10.2.2.1 Add Hot Region

1<sup>st</sup> step: Enter hot region adding interface.
Right click the image name in the map info area or the image itself, and select "Add Hot Regions".

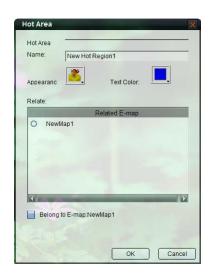


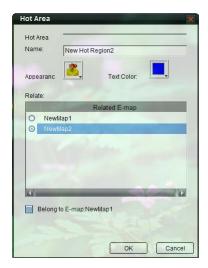
2<sup>nd</sup> step: Input the name of the hot region, click button to select icon for hot region.

You can also click \_\_\_\_ to change the color of characters.

3<sup>rd</sup> step: 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 \hat{h}, and you can move the hot region by pressing left button and dragging.





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

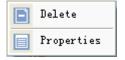


Note: You cannot edit map unless in the edit mode.

## 10.2.2.2 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

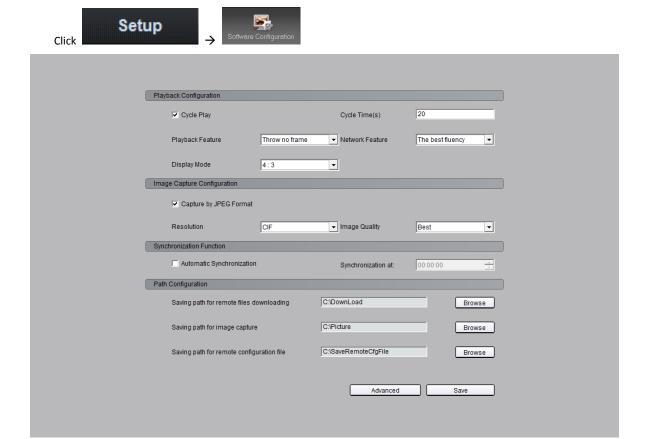
Delete Map

Delete All Link

Properties

# Chapter 11 Utilities

# 11.1 Software Configuration

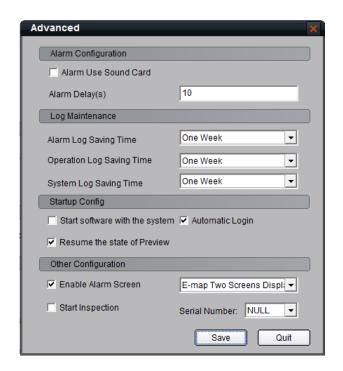


## Descriptions on Software Configuration:

Software Configuration	Descriptions	Descriptions
	Cycle Play	<b>✓</b> means enable it
	Cycle Time	Set the time of cycle play
	Dlayback Footure	Configure the playback performance, whether to drop B
Playback Configuration	Playback Feature	frame
	Network Feature	Set the instantaneity and fluency for preview
	Window Display	Cat the display ratio of provious window
	Mode	Set the display ratio of preview window
lung on County we	Cantura Imaga hu	<b>✓</b> means JPEG format
	Image Capture Capture Image by	means BMP format
Configuration	JPEG 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	Cat the noth for remote downloading recorded files	
	Path	Set the path for remote downloading recorded files	
	Capture Saving	The saving path of captures from preview or playback	
	Path		
	Configuration File	The caving path for experting the configuration file	
	Saving Path	The saving path for exporting the configuration file	

Click "Advanced Configuration" to enter alarm configuration, log maintenance and other configurations.



### Descriptions on Advanced Configuration:

Advanced Configuration	Descriptions	Descriptions
	Alarm Use Sound Card	means audible alarm outputs from sound card
Alarm	Alarm Delay	Set the time length of the alarm delay
Configuration	Alarm Monitoring Port	The port used for the device to upload alarm actively, which
		needs to the same with device configuration.
Log Maintenance	Alarm Log Saving Time	The retention period of the alarm log in the database
	Operation Log Saving Time	The retention period of the operation log in the database
	System Log Saving Time	The retention period of the system log in the database
Other Configuration	Enable Alarm Screen	Pop up the warning dialog box when error occurs
	E-map Two Screen Display	Select two screen display for e-map or remote playback
	Start Inspection	means start to inspect the status of the current devices
	Auto Login	✓ means enable it
	Serial Number	Serial number for keyboard control

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.

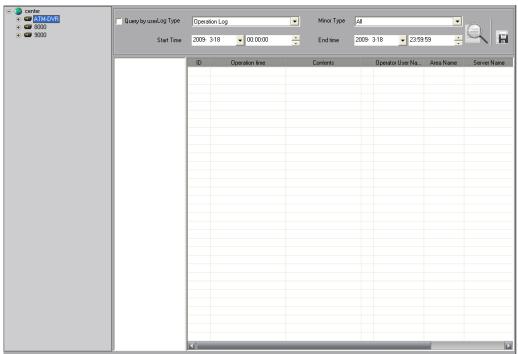


# 11.2 Log Management

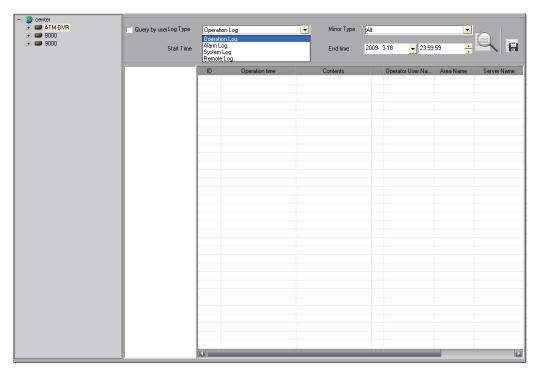
Click Log to enter the manage interface

## 11.2.1 Log Query

 $\mathbf{1}^{\text{st}}$  step: Select the area, device or channel you want to search from.



2<sup>nd</sup> step: Select type and subtype for the log you want to search for.



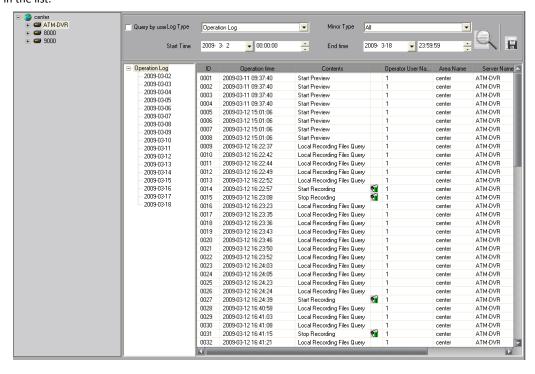
System Log: Record information on login, logout and software configuration.

Operation Log: Record information on the software operation.

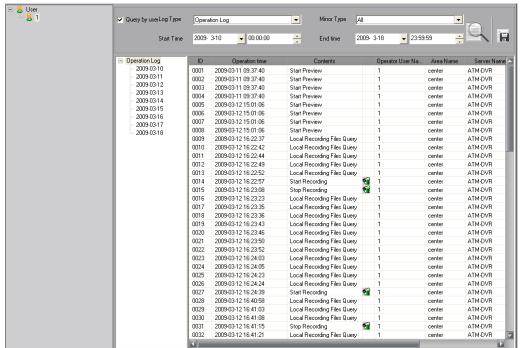
Alarm Log: Record information on the alarm and it needs to be linked as alarm link type.

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

3<sup>rd</sup> step: 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.

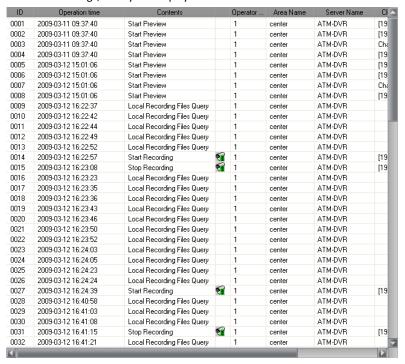


Enable "Query by user" (i.e. ), and you can search log by users.

Note: Up to 2000 logs can be displayed every time.

## 11.2.2 Playback Linked Recordings

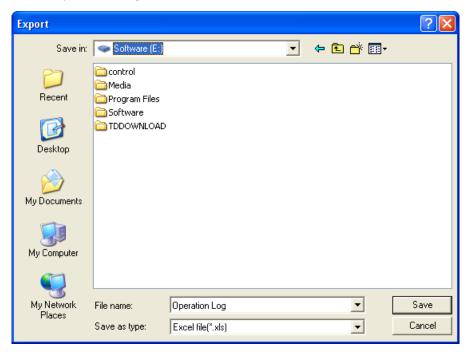
If the logs contain linked recordings, then you can play them back.



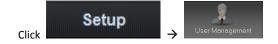
Click icon in the list to play back the linked recordings.

## 11.2.3 Export Log

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



# 11.3 User Management





## 11.3.1 Add & Delete User

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



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

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



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

Note: The administrator registered when the

software ran for the first can change password and user level; super user can change user password, guest has no rights on user management.



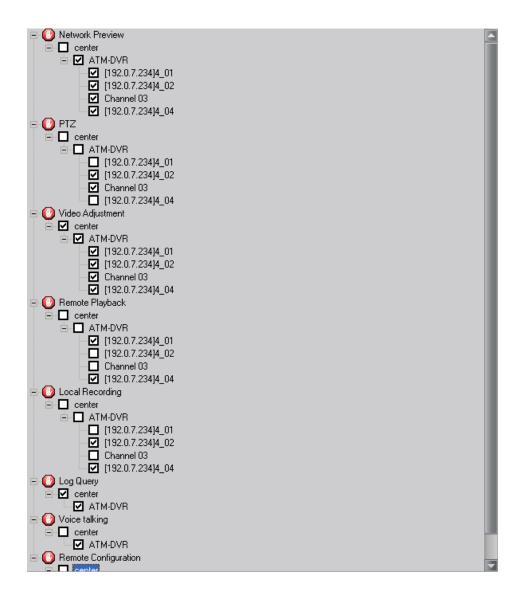
### User Privileges Descriptions:

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

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

## 11.3.2 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.

# Appendix 1

## V2.00.01 New Features

- 1. User friendly GUI
- 2. 32 & 64 divisions are added to window division options.
- 3. User-defined name of alarm out
- 4. Preview window information can be memorized when exiting the client software.
- 5. Support remote playback, NAS VOD, VOD function, intelligent analysis and synchronous playback as well.
- 6. Dual VGA display in remote VOD interface
- 7. Add full screen of multi-channel and control in local playback interface
- 8. Max support 16 NVR server for centralized storage
- 9. Modified double-click enlargement mode in the preview interface
- 10. Pop-up remote configuration menu

## V2.00.02 New Features

#### Preview

- 1. Add ESC button to exit full screen of multi-channel.
- 2. Add preview state resume function.
- 3. Add device remote control panel.
- 4. Add "Start Recording" & "Stop Recording" in the right-click menu when preview.
- 5. Add fortify state resume function.
- 6. Add 1003/1002KI, USB joystick control PTZ function.
- 7. Display thumbnail and save path of the capture, click thumbnail to open capture, save path to open capture folder.

#### Playback

- 8. Add NAS remote VOD function when device is offline (Succeed to playback files on NAS before).
- 9. Add click time bar to fix the position of all playback windows.
- 10. Add pause hint in synchronous playback.
- 11. Unified time bar and play control between remote VOD and local playback.

#### Configuration

- 12. Add startup with windows function.
- 13. Add wizard of add device.
- 14. Add default group.
- 15. Refine buttons of PTZ, video parameters, presets and sequence.
- 16. Add sequence configuration buttons.
- 17. Refine local and NVR recording menu.
- 18. Add motion detection recording in NVR configuration.

### 19. Add PCDVR configuration menu.

#### User

- 20. Input the password when admin change the user account.
- 21. Change "Super User" as "Administrator".
- 22. Add function buttons of "Add User", "Delete User" & "Modify User".
- 23. Add admin password length hint.

#### Map

- 24. Add text color in the hot region and spot menu.
- 25. Add find function in the hot spot menu.
- 26. Up to 4 hot spot images in the map.
- 27. Enlarge hot spot image to 4CIF by double clicking.
- 28. Add previous map resume function when client software restarts.

#### Other

- 29. Add function of pressing F1 to open user manual.
- 30. Reorder the buttons in the main interface.
- 31. Add adjustable alarm info area function.
- 32. Add icon right-click menu after minimizing client software.
- 33. Add button tooltip in playback recordings linked by log
- 34. Move help menu to the main function pane.