

CM5000

Central Management System

User's Manual



COPYRIGHT

©2014 AVer Information Inc. All rights reserved.

All rights of this object belong to AVer Information Inc. Reproduced or transmitted in any form or by any means without the prior written permission of AVer Information Inc. is prohibited. All information or specifications are subject to change without prior notice.

TRADEMARKS

“AVer” is a trademark owned by AVer Information Inc. Other trademarks used herein for description purpose only belong to each of their companies

DISCLAIMER

No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

In no event will AVer Information Inc. be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

CONTACT INFORMATION

Taiwan & International

No. 157, DA-An Rd., Tucheng Dist., New Taipei City, Taiwan

TEL: 886-2-2269-8535

Web Site: <http://www.aver.com/>

Contents

| | | |
|------------------|---|----------|
| CHAPTER 1 | INTRODUCTION | 1 |
| CHAPTER 2 | CMS INSTALLATION | 2 |
| 2.1 | System Requirements | 2 |
| 2.2 | Installing the CMS Software in Windows..... | 2 |
| 2.3 | Run the CMS System..... | 3 |
| CHAPTER 3 | MONITORING REMOTE NVR/DVR SERVERS..... | 4 |
| 3.1 | Add the NVR/DVR server..... | 4 |
| | Add a DVR/NVR server by DVR List dialog box..... | 4 |
| | Using Auto Search to add a DVR/NVR server..... | 6 |
| 3.2 | Delete the NVR/DVR server..... | 8 |
| 3.3 | Edit the NVR/DVR server..... | 8 |
| 3.4 | Monitoring the NVR/DVR server | 9 |
| 3.4.1 | Add/Delete the Monitor Page..... | 10 |
| 3.4.2 | Rename the Monitor Page..... | 11 |
| 3.4.3 | The Icons on Monitored Channels..... | 11 |
| 3.4.4 | Enable/Disable the Monitored Channel | 12 |
| 3.4.5 | Refresh the Status of Remote NVR/DVR server | 13 |
| 3.5 | Playback in Preview Mode | 14 |
| 3.6 | Playback in Playback Mode | 15 |
| 3.7 | Digital PTZ Function..... | 16 |
| 3.8 | Connect/Disconnect the Monitored Channel..... | 18 |
| 3.9 | Select the Stream of Monitored Channel..... | 19 |

| | | |
|------|--|----|
| 3.10 | Enable/Disable the Sound of the Channel | 20 |
| 3.11 | Switch Multiple Screen to Single Screen Display..... | 21 |
| 3.12 | Hide the Camera List Section..... | 22 |
| 3.13 | Screen Channel Display Mode..... | 23 |

CHAPTER 4 USING THE CMS SYSTEM 24

| | | |
|---------|--|----|
| 4.1 | Familiarizing Functions of Preview Mode..... | 24 |
| 4.1.1 | E-map Setting..... | 27 |
| 4.1.2 | Using the PTZ Control Panel..... | 31 |
| 4.2 | Familiarizing Functions of Playback Mode..... | 33 |
| 4.2.1 | Using the Event Search..... | 38 |
| 4.2.2 | Using the Visual Search..... | 39 |
| 4.2.3 | To Bookmark a Section of the Video..... | 41 |
| 4.2.4 | Backup the Playback Video..... | 43 |
| 4.2.4.1 | Manual Backup..... | 43 |
| 4.2.4.2 | Schedule Backup..... | 45 |
| 4.2.5 | Using the QPlayer to Playback Backup File..... | 50 |
| | Familiarizing Functions of Qplayer..... | 51 |
| 4.2.6 | Output a Video Clip..... | 55 |
| 4.3 | Compact Mode..... | 57 |
| 4.3.1 | Familiarizing Function in Preview Compact Mode..... | 58 |
| 4.3.2 | Familiarizing Function in Playback Compact Mode..... | 61 |
| 4.4 | Log Viewer..... | 65 |
| 4.4.1 | Using the Event Log Viewer..... | 65 |
| 4.4.2 | Using the Alarm Log Viewer..... | 68 |

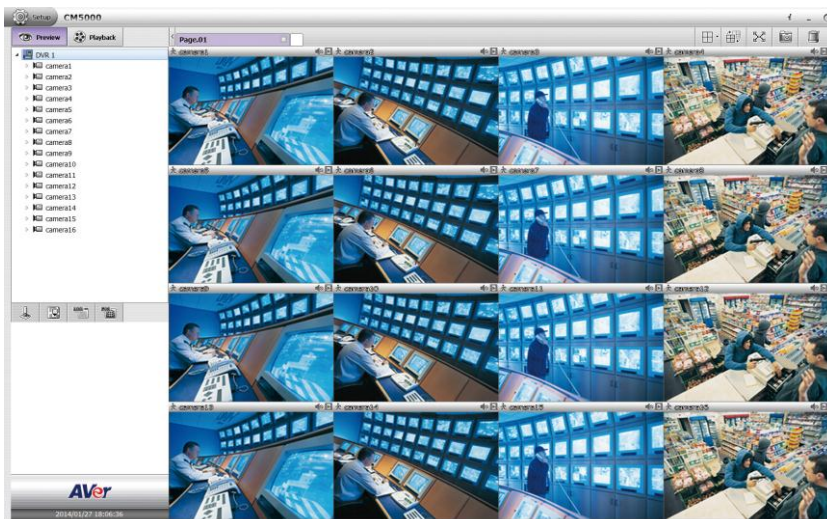
| | |
|---|-----------|
| Viewing the Alarm Event | 68 |
| Searching the Alarm Event Logs | 70 |
| 4.4.3 Using the POS Log Viewer | 72 |
| 4.5 Snapshot the Screen | 73 |
| CHAPTER 5 CUSTOMIZING THE CMS SYSTEM..... | 74 |
| 5.1 Setup the Language of CMS System | 75 |
| 5.2 Import/Export the System Configuration | 75 |
| 5.3 User Account Management | 76 |
| 5.4 Setup Monitor | 78 |
| CHAPTER 6 CUSTOMIZING THE REMOTE NVR/DVR SERVER.... | 79 |
| 6.1 Configuring the Remote NVR/DVR Server..... | 80 |
| 6.1.1 System Setup | 80 |
| General System Setting | 81 |
| System Advanced Setting | 82 |
| Daylight Saving Time Setting | 83 |
| Customizing System Login Setting..... | 84 |
| Customizing System Miscellaneous Setting | 85 |
| Configuration Update | 86 |
| Import the NVR System Configuration..... | 87 |
| Export the NVR System Configuration..... | 88 |
| Upgrading the NVR Firmware..... | 89 |
| Upgrading the IP Camera Module Patch..... | 90 |
| 6.2.2 Network Setting | 91 |
| Setup the NVR Server Name | 93 |
| Network Advanced Setting | 94 |
| Setup the Transmitting Camera | 95 |
| Setup the UPnP | 95 |

| | | |
|-------|--|-----|
| | Setup the Bandwidth Limit..... | 95 |
| | Setup the Network Port..... | 96 |
| 6.2.3 | Storage Setting | 97 |
| | Setup Hard Disk and Event Log Recycle Time | 98 |
| | Hard Disk Calculator | 99 |
| 6.2.4 | Camera Setting..... | 100 |
| | Connecting an IP Camera | 101 |
| | Configuring the IP camera..... | 104 |
| | Info..... | 105 |
| | Basic..... | 106 |
| | Preference | 107 |
| | Exposure..... | 109 |
| | Stream | 110 |
| | ROI | 111 |
| | Smart Stream..... | 112 |
| | Privacy Mask | 113 |
| | Motion Detection..... | 114 |
| | Sensor | 115 |
| | Relay..... | 116 |
| | MFZ | 117 |
| | Setup Camera PTZ function..... | 118 |
| | Setup IP PTZ | 118 |
| | Setup Analog PTZ | 119 |
| 6.2.5 | Schedule Setting..... | 121 |
| | Setup Recording Schedule..... | 121 |

| | |
|-------------------------------------|-----|
| Setting up the Alarm Schedule | 124 |
| 6.2.6 Alarm Setting | 126 |
| Setup the Alarm Condition..... | 126 |
| Setup the Alarm Action | 132 |
| 6.2.7 User Account Setting | 138 |
| Create an User Account | 138 |
| Delete an User Account..... | 141 |
| 6.2.8 I/O Setting..... | 142 |
| Sensor Setting..... | 142 |
| Relay Setting..... | 143 |
| 6.2.9 Setup the iPOS..... | 144 |

Chapter 1 Introduction

The CM5000 (also call CMS) is a central monitoring system that enables user to monitor up to 16 NVR/DVR servers through an internet connection.



Chapter 2 CMS Installation


This chapter describes how to install the CMS software.

2.1 System Requirements


The system spec requirements for CM5000 are listed in following table:

| | Minimum | Recommended |
|---------------------|---|----------------------|
| CPU | Intel Core i5 3.3GHz | Intel Core i7 3.2GHz |
| Main Memory | 1GB | 2GB or higher |
| Video Memory | 512MB | 1GB or higher |
| Hard disk | 160GB or higher | |
| OS | Windows XP, Windows Vista, Windows 7, Windows 8 | |
| Network | 10~100 Mbps Ethernet | |
| Others | DirectX 9.0 or above | |

2.2 Installing the CMS Software in Windows

1. Place the installation CD into the CD-ROM drive then click **Install CM5000**.
2. Select the language of CM5000 system.
3. Please carefully read the license agreement. Click **Yes** to accept the agreement.
4. Then, follow the on-screen instructions to complete the installation.
5. When the installation is completed, click **Finish**.
6. User may now run the CMS program. To run the application, click CM5000 icon () on your PC desktop or click **Start> >AVer >CM5000**.

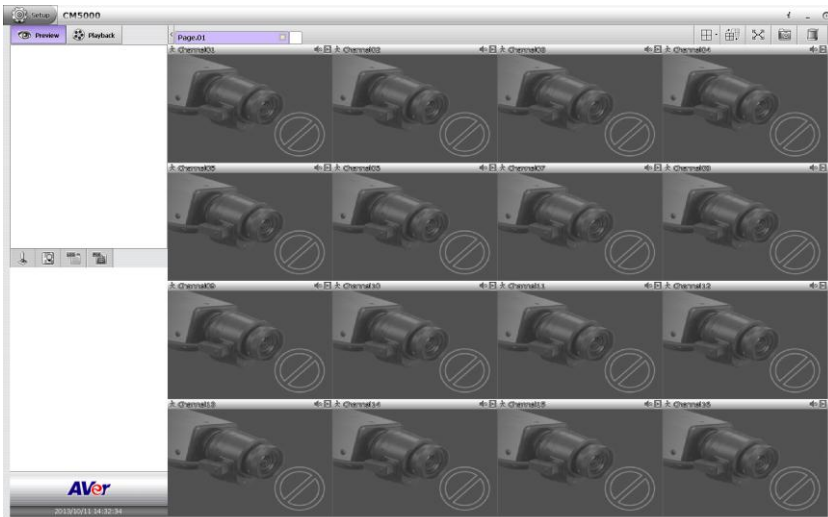
2.3 Run the CMS System

1. Click CM5000 icon () on your PC desktop or click **Start> >Aver >CM5000** to run the CMS application.
2. For the first time login, enter the default ID **admin** and default password **admin**. User may change the login password in User Management(see also [Chapter 5.1](#))



The image shows a dialog box titled "Authorization". Inside the dialog, there is a text prompt: "Please enter your user ID and password." Below this prompt are two input fields: "User ID" and "Password". At the bottom right of the dialog, there are three buttons: a keyboard icon, "Apply", and "Cancel".

3. After login the CMS system, user should see the preview mode of CMS system.



4. To add the remote NVR/DVR server for monitoring, refer to [Chapter 3](#).
5. To use the CMS system, refer to [Chapter 4](#).
6. To configure the remote NVR/DVR server, refer to [Chapter 5](#).

Chapter 3 Monitoring Remote NVR/DVR Servers

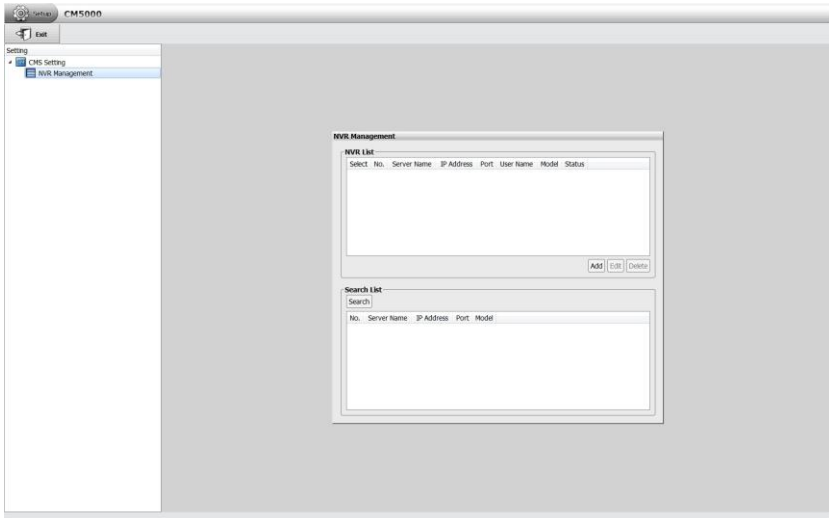
CMS can monitor up to 1000 NVR/DVR servers. The default is 16 NVR/DVR servers, for more than 16 NVR/DVR servers monitoring that user needs to purchase the license. Please contact your local dealer for CMS license purchase.

3.1 Add the NVR/DVR server

There are two ways to add the NVR/DVR for monitoring and configuring. The descriptions will be in following contents.

Add a DVR/NVR server by DVR List dialog box

1. In preview UI, click **Setup** to call out Setup window. In Setup window, click ▷ icon of CMS Setting. Next, select the NVR management and the NVR management page is displayed.



2. Click **Add** button and NVR Information dialog will appear.
3. Enter the following data in DVR List dialog box.
 - **Server Name:** Name of remote NVR/DVR. The name of NVR/DVR server will display when CMS system is connected with NVR/DVR server.
 - **IP/Domain Name:** Enter the IP address of DVR/NVR server. Also, user can enter the domain name instead of IP address if the domain name is available.

- **Port:** The network port of DVR/NVR server. The default is 80.
- **User Name:** The ID uses to login DVR/NVR server.
- **Password:** The password uses to login the DVR/NVR server.

NVR Information

NVR Information

Server Name

IP/Domain Name

Port

User Name

Password

Apply Close Clear

4. Click **Apply** to make a connection.
5. When connection is successful, click ▷ icon of NVR Management and all connected NVR/DVR servers are listed.

CM5000

Exit

General

- CMS Setting
 - NVR Management
 - F25A
 - F25A
 - F25A

NVR Management

NVR List

| Select | No. | Server Name | IP Address | Port | User Name | Model | Status |
|-------------------------------------|-----|-------------|--------------|------|-----------|--------|-----------|
| <input checked="" type="checkbox"/> | 1 | F25A | 10.100.91.37 | 80 | admin | ES016H | Connected |
| <input type="checkbox"/> | 2 | F25A | 10.100.91.55 | 80 | admin | ES016H | Connected |
| <input type="checkbox"/> | 3 | F25A | 10.100.91.54 | 80 | admin | ES016H | Connected |

Ass Edit Delete

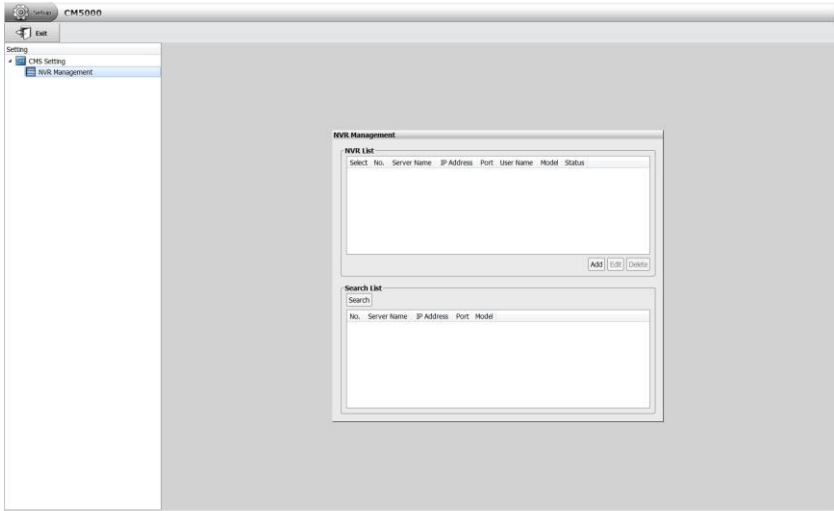
Search List

Search

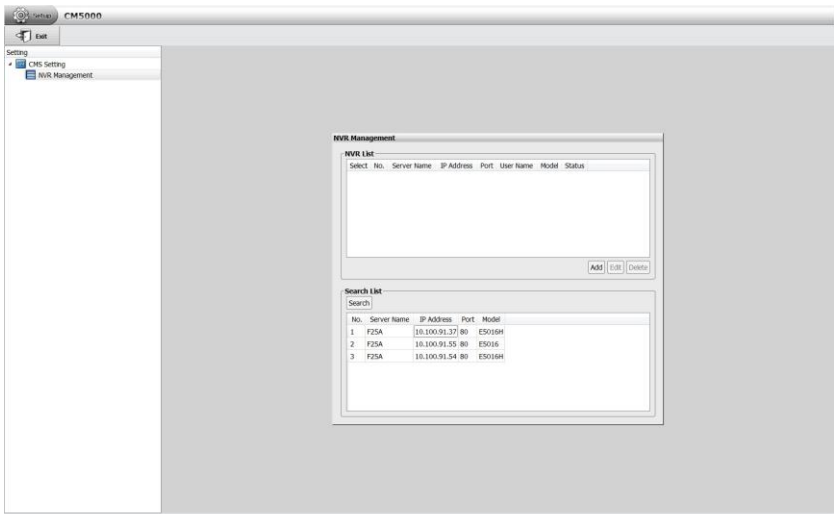
| No. | Server Name | IP Address | Port | Model |
|-----|-------------|------------|------|-------|
| | | | | |

Using Auto Search to add a DVR/NVR server

1. Click **Setup** tab and click ▷ icon of CMS Setting, then, click **NVR Management**. The NVR Management dialog will appear on screen.
2. Next, click **Search** button to start searching remote NVR/DVR servers.



3. After search completing, select the NVR/DVR server that has been found by CMS system and click **Add** button.



4. The NVR Information dialog will appear. Enter the **User Name** and **Password** of remote NVR/DVR server and click **Apply** to make a connection.

NVR Information

NVR Information

Server Name: F25A

IP/Domain Name: 10.100.91.37

Port: 80

User Name:

Password:

Apply Close Clear

5. User should see the NVR/DVR server list in DVR List section after connection is successful.

NVR Management

NVR List

| Select | No. | Server Name | IP Address | Port | User Name | Model | Status |
|-------------------------------------|-----|-------------|--------------|------|-----------|--------|-----------|
| <input checked="" type="checkbox"/> | 1 | F25A | 10.100.91.37 | 80 | admin | ES016H | Connected |
| <input type="checkbox"/> | 2 | F25A | 10.100.91.55 | 80 | admin | ES016 | Connected |
| <input type="checkbox"/> | 3 | F25A | 10.100.91.54 | 80 | admin | ES016H | Connected |

Add Edit Delete

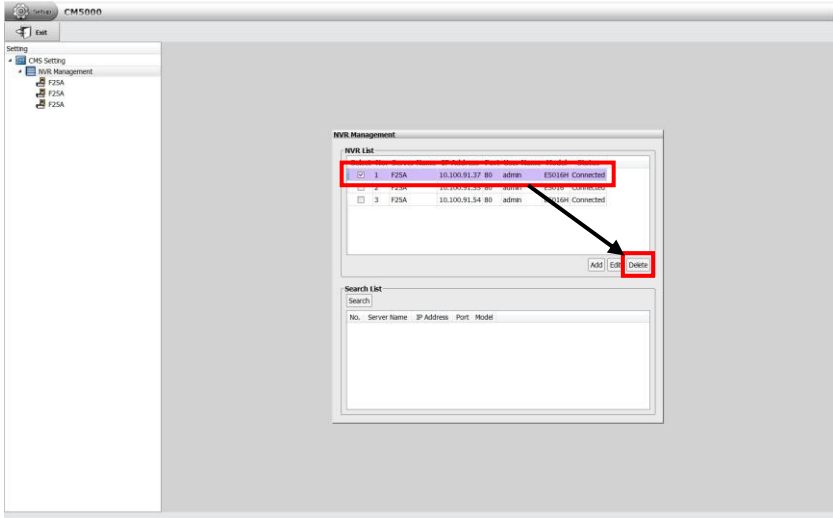
Search List

Search:

No. Server Name IP Address Port Model

3.2 Delete the NVR/DVR server

1. Click **Setup** tab and click ▷ icon of CMS Setting, then, click **NVR Management**. The NVR Management dialog will appear on screen.
2. Select the NVR/DVR server that user wants to delete.
3. Next, click **Delete** button.



3.3 Edit the NVR/DVR server

1. Click **Setup** tab and click ▷ icon of CMS Setting, then, click **NVR Management**. The NVR Management dialog will appear on screen.
2. Select the NVR/DVR server that user wants to edit.
3. Next, click **Edit** button and the NVR Information dialog will appear.
4. In NVR Information dialog, the NVR/DVR server data is displayed and user can modify the NVR/DVR server's information.
5. When is done, click **OK** to apply the new settings.

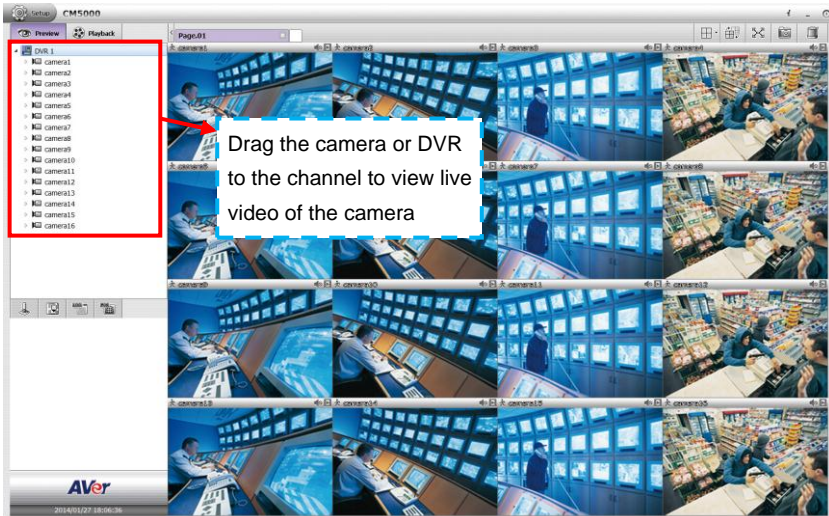
3.4 Monitoring the NVR/DVR server

In CMS system, user can monitor camera channel from different NVR/DVR server. When CMS system is restart or re-login, CMS system will automatically reconnect the NVR/DVR server.

1. In Preview mode, select the NVR/DVR server and click ▷ icon to expand the camera list.
2. Drag the camera that user wants to monitor to the channel screen.
3. User will see the live video of the camera.



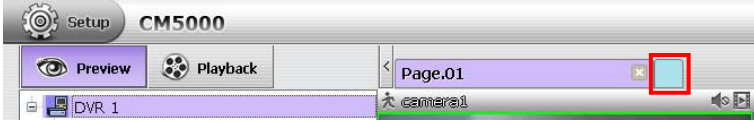
Click and drag the "DVR#" to channel can monitor all cameras of NVR/DVR.



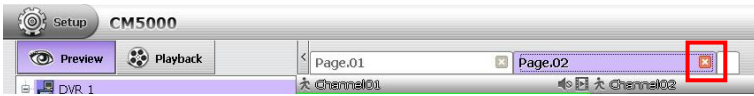
3.4.1 Add/Delete the Monitor Page

In CMS system, user can add up to 4 monitor pages for different monitor combinations.

1. In preview mode, click blank page tab to add a new monitor page.

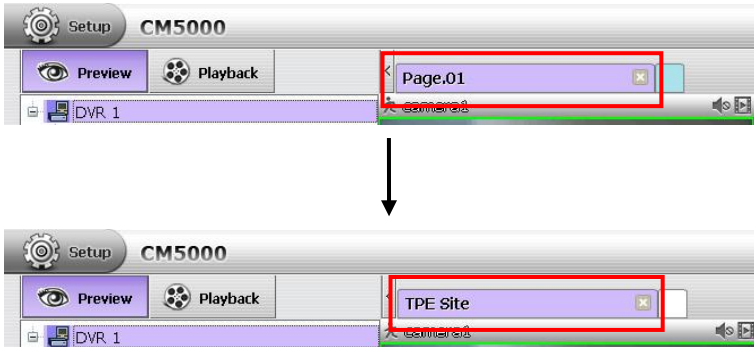


2. In new monitor page, user can drag the cameras from different NVR/DVR server to channel screen for monitoring.
3. To delete a monitor page, click X on page tab.






3.4.2 Rename the Monitor Page

1. Click on text of monitor name (Page #). User should see mouse cursor is flashing.
2. Next, use delete or backspace button on keyboard to erase the original name and enter the new name.
3. When is done, click anywhere on screen to leave the page tab.



3.4.3 The Icons on Monitored Channels

There are some icons on monitored channels and they are explaining in following.

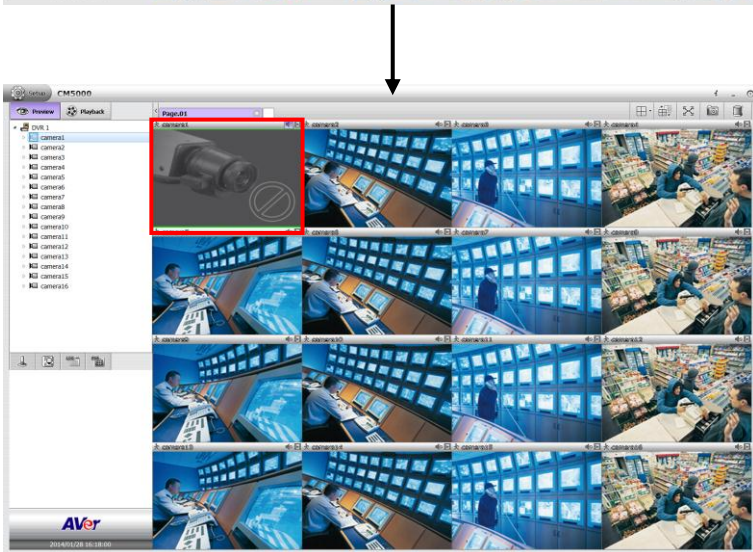
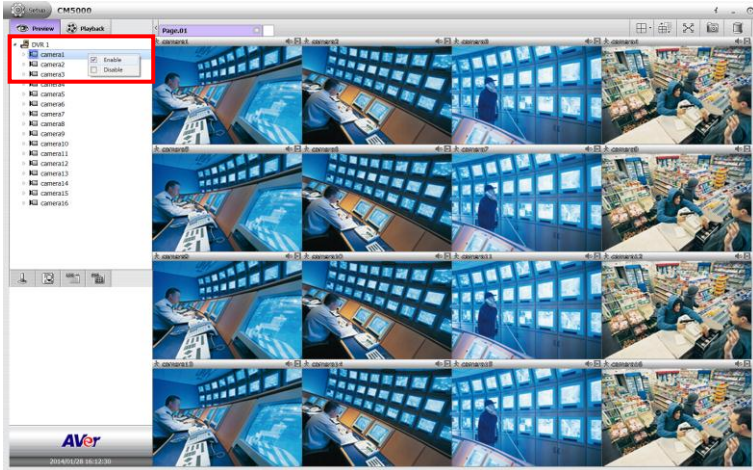
| | |
|---|--|
|  | Indicates the monitored camera motion recording status on NVR/DVR site. <ul style="list-style-type: none">- Red color: The monitored camera is motion recording on NVR/DVR site.- Gray color: The monitored camera is not motion recording on NVR/DVR site. |
|  | Click to playback the monitored camera live video instantly. |
|  | Enable/disable audio play of monitored camera. User can click the icon to enable or disable the play of audio. |

3.4.4 Enable/Disable the Monitored Channel

[Note] This action will apply to remote NVR/DVR site.

In Camera list, user can enable/disable the camera. When camera is disabled, monitor and record function are both disabled on remote NVR/DVR site. In CMS system, user won't be able to see the live video of the camera.

Right-click on the camera in Camera list section, select disable or enable the camera.

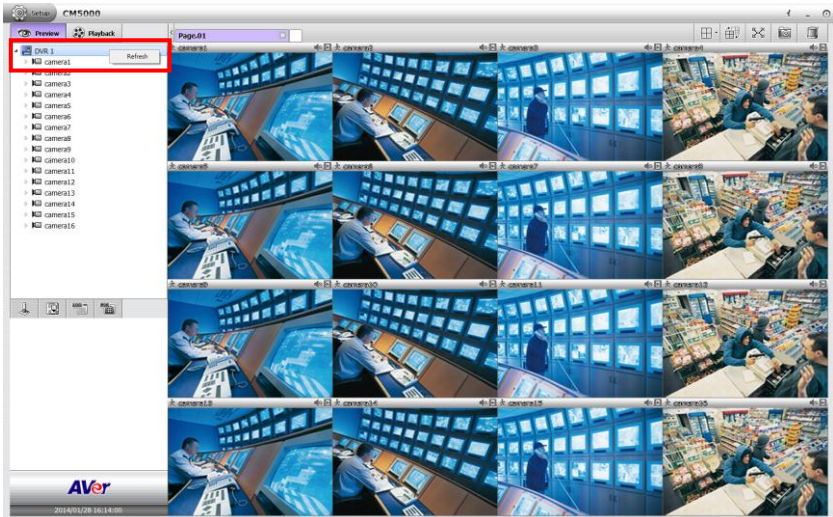


3.4.5 Refresh the Status of Remote NVR/DVR server


[Note] This function can be operated in preview mode only.

The refresh function allows user to update the remote NVR/DVR server status immediately.

Right-click the DVR in Camera List section and select **Refresh**.











3.5 Playback in Preview Mode

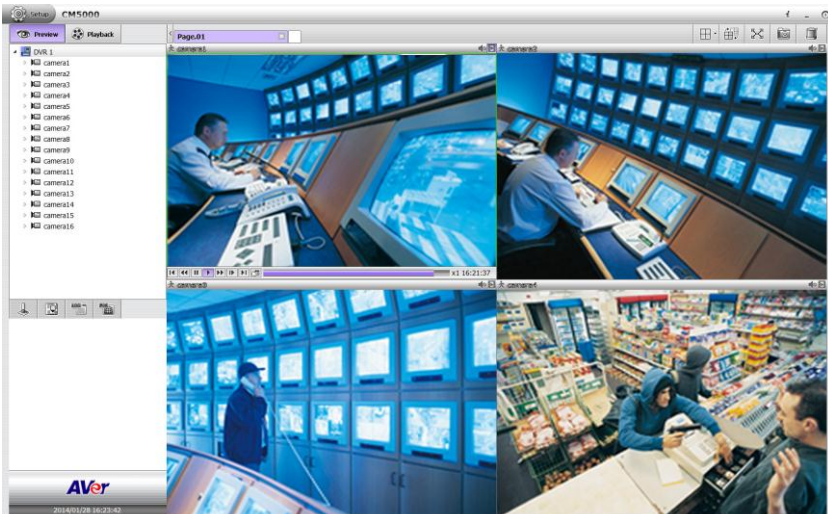
Click  icon on channel to instantly playback the recorded video on remote NVR/DVR server in preview mode. User can playback multiple channels at the same time.

Move the mouse cursor on channel screen, the playback tool bar will appear and use it to control playback status.

■ **Playback tool bar**



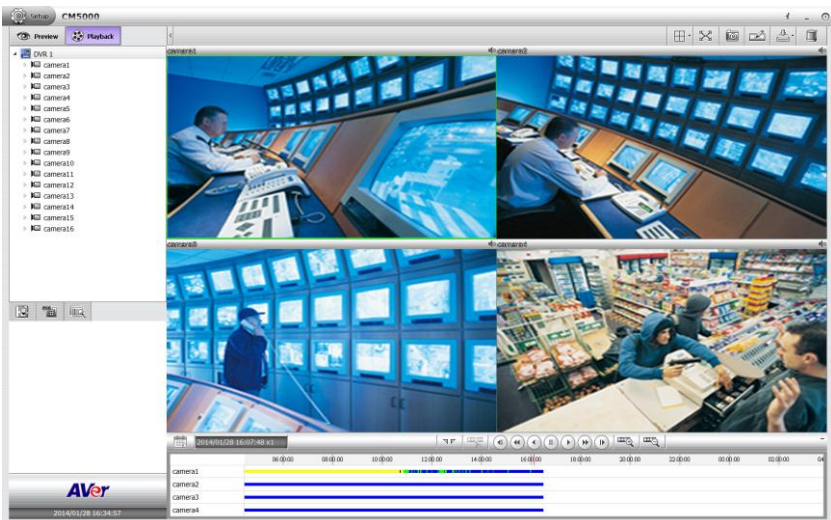
| Button | Function |
|---|--|
|  | Go to the beginning of video. |
|  | Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x. |
|  | Briefly stop playing the recorded video. |
|  | Play the recorded video. |
|  | Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x, or 64x. |
|  | Go to the next frame. |
|  | Go to the end of video. |
|  | Call out the calendar to select the date and time for playback. |



3.6 Playback in Playback Mode

In CMS system, user can view the recorded video of monitored channel which are recorded on remote NVR/DVR server.

1. Click **Playback** tab.
2. In playback mode, the CMS will start playback the recorded video from remote NVR/DVR server. If the remote NVR/DVR server doesn't record, there is no recorded video for playback.
3. All monitor pages are playback at the same time when the system switches to the playback mode.

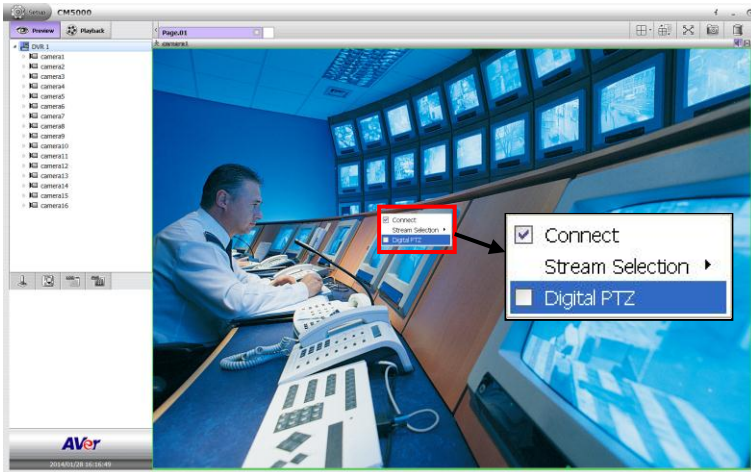


3.7 Digital PTZ Function

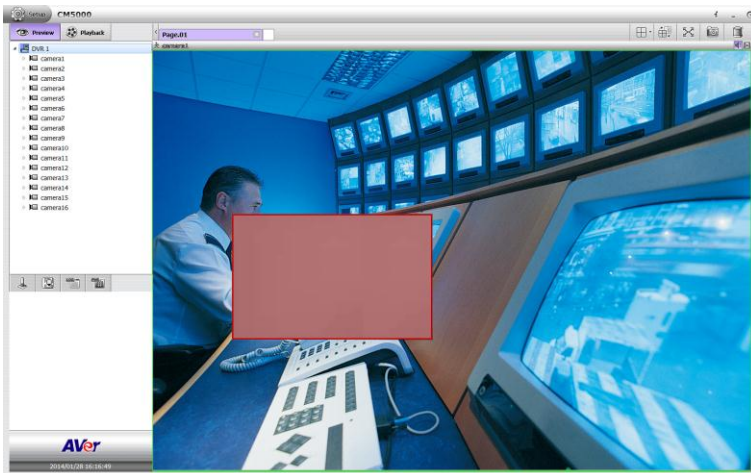
[Note] This function can be operated both in preview and playback mode. The following description is based on preview mode.

The digital PTZ function allows user to enlarge the selected area to view.

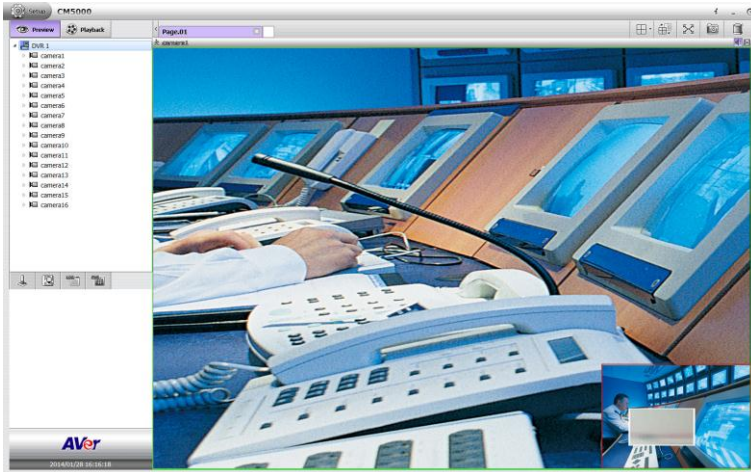
1. Right-click on the channel screen and mark **Digital PTZ** to enable digital PTZ function.



2. When the digital PTZ is enabled, the cursor is changed to cross and user can select an area to enlarge the view.



- The selected area will be enlarged and a sub-window will appear at right bottom of screen. User can move the gray frame of sub-window to view other area of screen in enlarge view.

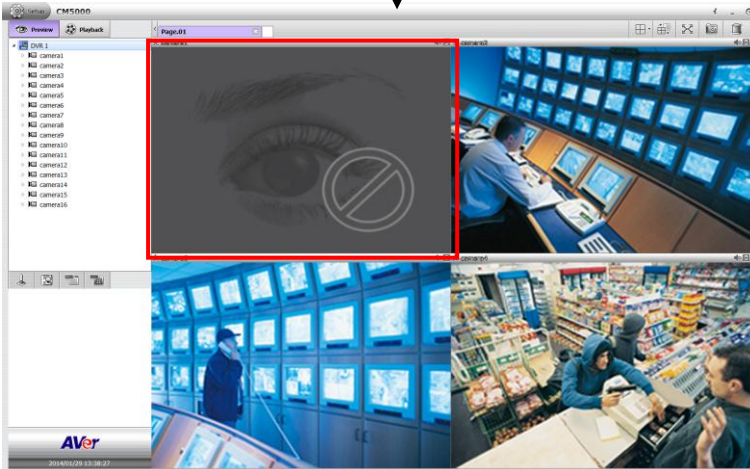
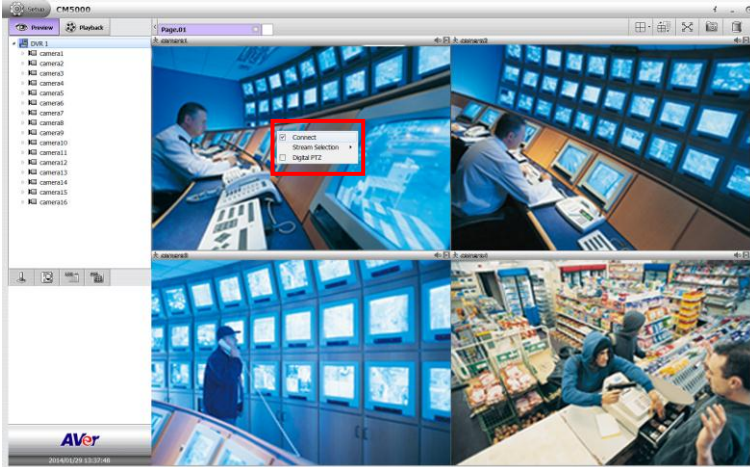


- To disable the digital PTZ, right-click on channel screen and un-mark the Digital PTZ. The channel screen view will back to normal view.

3.8 Connect/Disconnect the Monitored Channel

[Note] This function can be operated in preview mode only.

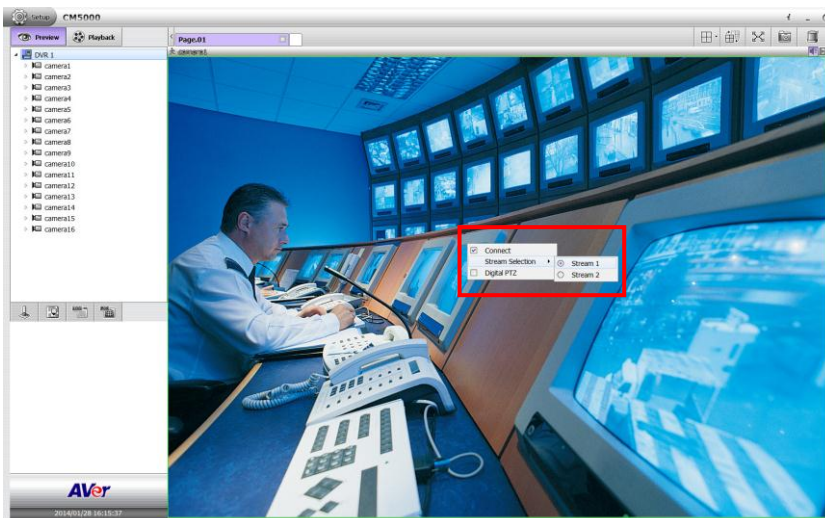
Right-click on monitored channel and un-mark the “**Connect**” to disconnect the connection. When the monitored channel is disconnected, the live video cannot be seemed. Mark the **Connection** again to bring back the live video view.



3.9 Select the Stream of Monitored Channel




[Note] This function can be operated in preview mode only.

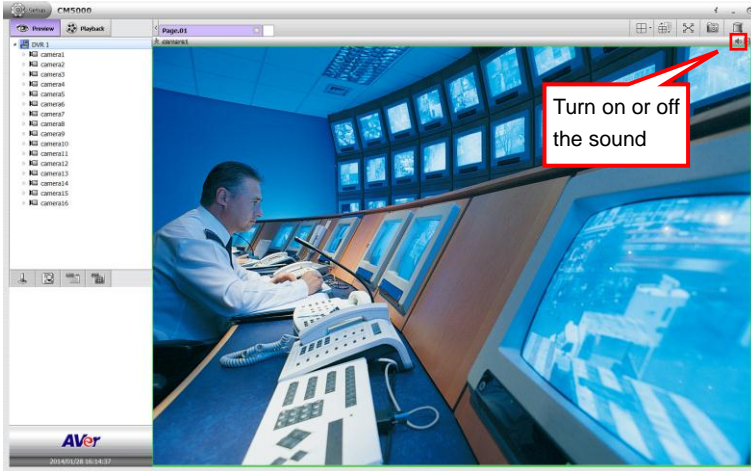
User can select the stream of monitored channel by right-click on screen channel.



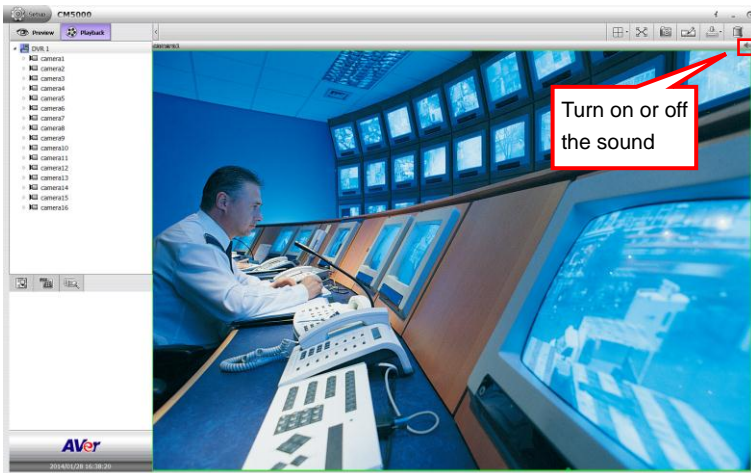
3.10 Enable/Disable the Sound of the Channel

[Note] This function can be operated both in preview and playback mode.

User can click the audio icon  to mute () the sound of channel. Click audio icon () again to turn on the sound.



Preview mode

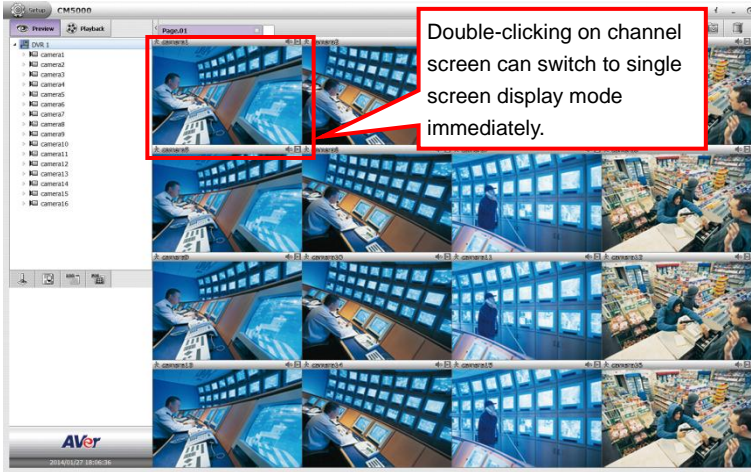


Playback mode

3.11 Switch Multiple Screen to Single Screen Display

[Note] This function can be operated both in preview and playback mode. The following description is based on preview mode.

In multiple screen display mode, user can double-click on the channel screen to switch to single display screen mode. Double-clicking again on channel screen, the screen display will switch back to multiple screen display mode.



Preview mode




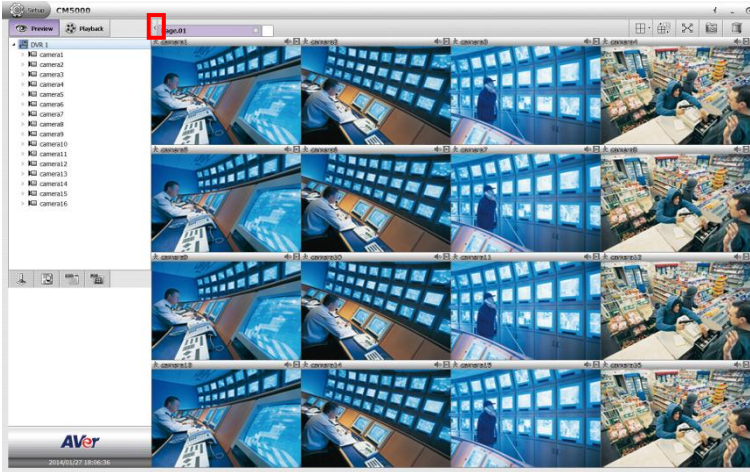
Preview mode

3.12 Hide the Camera List Section

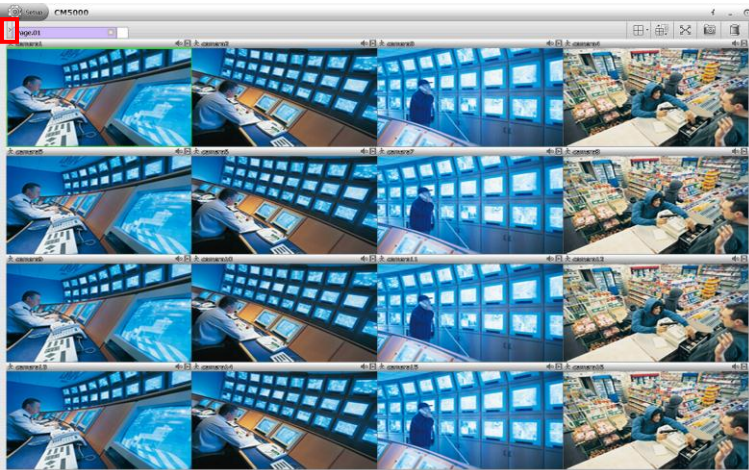
[Note] This function can be operated both in preview and playback mode. The following description is based on preview mode.

User can hide the camera list section to have larger view of screen.

In preview mode/playback mode, click  icon next to preview tab and the camera list will be hidden.



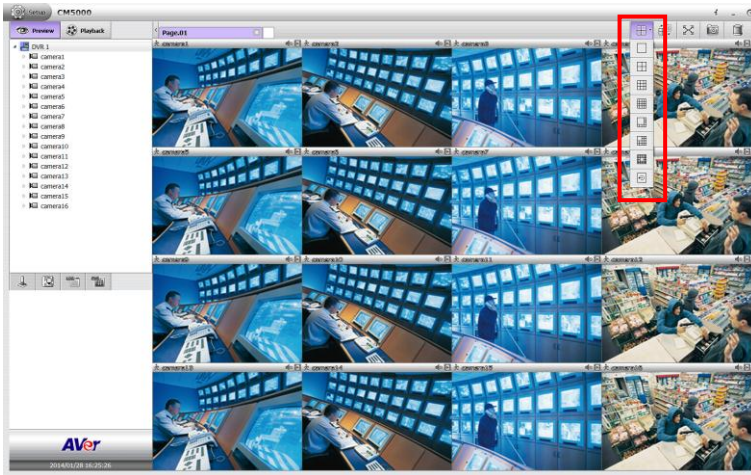
To show the camera list again, click  icon.



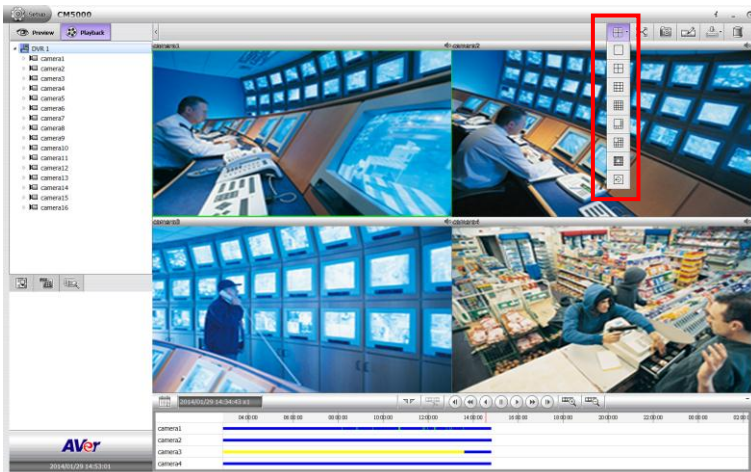
3.13 Screen Channel Display Mode

[Note] This function can be operated both in preview and playback mode.

The CMS system has provided 7 types of screen display mode – single (□), QUAD (田), 9-split screen (九宫格), 16-split screen (十六宫格), 8-split screen (八宫格), 13-split screen (十三宫格), and 33-split screen (三十三宫格). To select the screen display mode, click on the screen display icon. To reset to default screen mode, select the (↺) and all monitored cameras will be cleared.



Preview mode



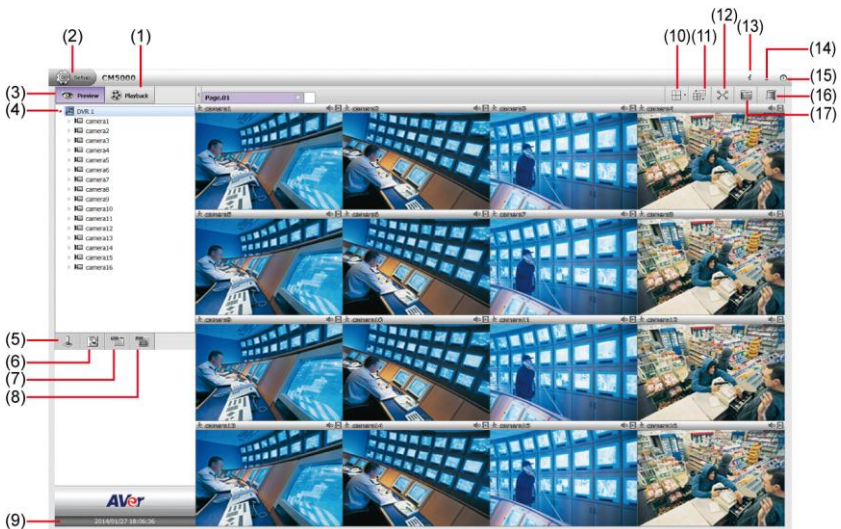
Playback mode

Chapter 4 Using the CMS System


The CMS system is divided into 3 parts – preview, playback, and setup mode. Functions of each mode will be described detail in following chapters.

4.1 Familiarizing Functions of Preview Mode

The preview mode is where user monitors cameras of remote NVR/DVR server and operates logs, PTZ, E-map, and snapshot function.



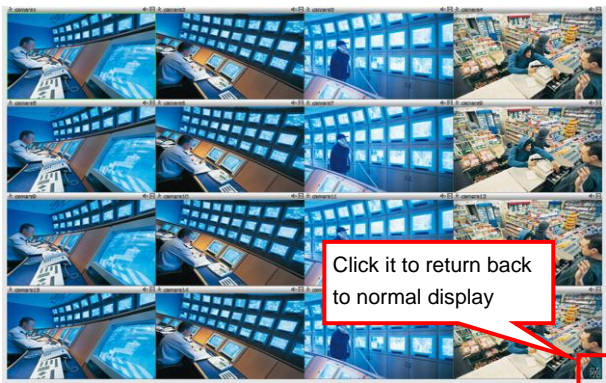
| Name | Function |
|-----------------|--|
| (1) Playback | Switch to Playback mode. This allows you to view the recorded video file. |
| (2) Setup | Click Setup button to configure settings for cameras, recording, network, scheduler, backup, sensors, relays, alarms and user authentication (see also Chapter 6). |
| (3) Preview | Switch to Preview mode. This allows you to view live camera video. |
| (4) Camera list | Lists all cameras of NVR. Click + to expand the list. User can select and drag the camera to video display area to arrange the monitor layout. |
| (5) PTZ | To call out a PTZ setup dialog to configure an appointed PTZ camera (see also Chapter 4.1.2). |

| Name | Function |
|------------------------|---|
| (6) E-map | To load up to 8 desired E-maps in *.JPG and *.PNG image format, and locate cameras, sensors, and relays to desired positions (see also Chapter 4.1.1). |
| (7) Event Log Viewer | Search and display the record of activities that take place in the system (see also Chapter 4.4.1). |
| (8) POS Log Viewer | Search and display POS event logs (see also Chapter 4.4.3). |
| (9) Date and Time | It shows the current system date and time. |
| (10) Split Screen Mode | It provides 7 kinds of split display modes for your selection. User can select the split display modes by clicking the split mode icon. To reset all monitored cameras, select  and all camera channels will be cleared. |



To only display one of the video in the multiple-screen mode, **double click** on the video screen you only want to display.

| | |
|------------------|--|
| (11) AutoScan | Click it to start auto cycle display each channel. |
| (12) Full screen | Use the entire area of the screen to only display the video. To return, press the right button of the mouse or ESC on the keyboard or click the arrow icon. |



Name**Function**

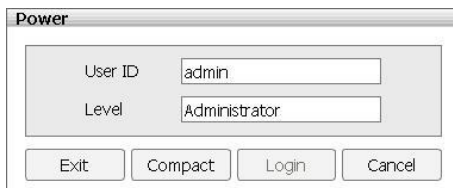
(13) System Information Click it to view NVR system's version and copyright.



(14) Minimize Minimizing the CMS system in system tray.

(15) Power button Call up the Power dialog box.

In the Power dialog box, user may do the following:




- **Exit:** To shutdown the CMS system.
- **Compact:** Switch to compact mode(see also [Chapter 4.3](#)).
- **Cancel:** To exit Power dialog box.

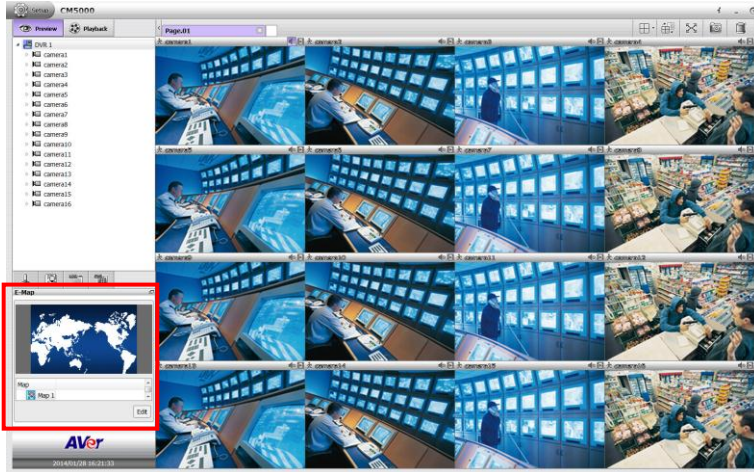
(16) Alarm Click **Alarm Status** button to view the alarm event and search alarm event(see also [Chapter 4.4.1](#))


(17) Snapshot Catch a static recording image and save it as a JPG or PNG file in USB pen drive device(see also [Chapter 4.5](#))

4.1.1 E-map Setting

Holds up to 64 maps in *.jpg and *.PNG format. The map is hierarchy in structure and users can add a map on another map. User also may add the DVR icons on the map.

1. Click  (**E-map**) icon in preview mode.
2. The E-map dialog box will appear in the left corner of preview screen.





3. Click  icon on E-map dialog box to expand the E-map dialog box on the preview screen.
4. Click **Edit** button to switch to E-map setup mode.



5. Then, click the Map number (1 to 8) that user want to setup.







6. Next, click  icon to setup name of E-map and load a map figure. When the E-map Setting dialog box appears, click the open file icon  to locate and select the map. Enter a name for this E-map in **Name** column. Click **OK** to save the setting.




7. When the inserted map appears on the E-map screen, user may now drag the NVR icons to its place on the map. Icons on the map can be relocated anywhere. If user is going to locate the icon on the map to other area, click **Edit** button and right-click on the NVR icon on the E-map and click **remove** to put the NVR icon back to the Resource list.




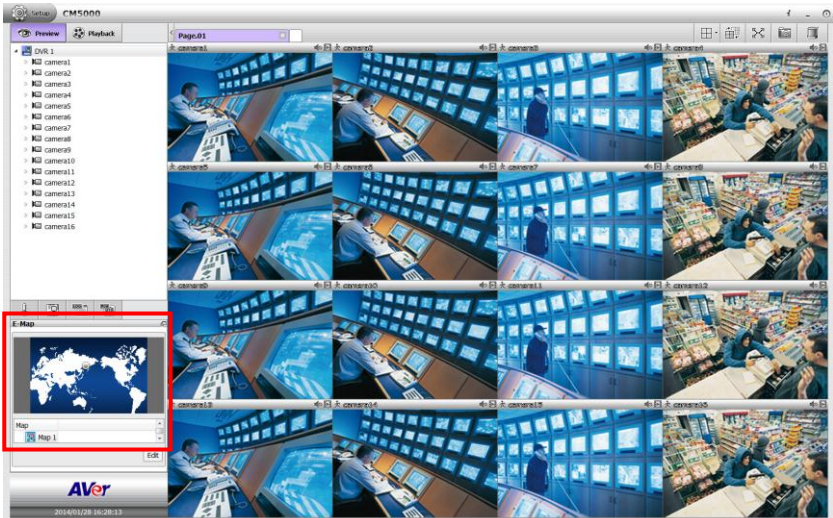
8. Also, user can add a map layer under the map (map 1~8). Select the map (map 1~8) and click  icon to add a map layer under the selected map. Enter a name for the new map layer. In E-map Setting dialog box, select **Remote** to add a map save in CMS site and select **DVR** to put the map of remote site on map. Then, click  to locate the map image file to insert it. Click **OK** to save the setting. User should see the map icon () located on map. To modify the map layer, select the map layer and click  icon.



- When the inserted map appears on the map list, user can relocate the map icon anywhere on the map. Double-click on map icon; it will switch to the map layer. To delete the map layer, select the map layer and click  button to delete the map layer. When setup is done, click **OK** to save the setting.




- To exit E-map mode, click  icon.
- When alarm occurred, the icons on the map will turn to flash status.



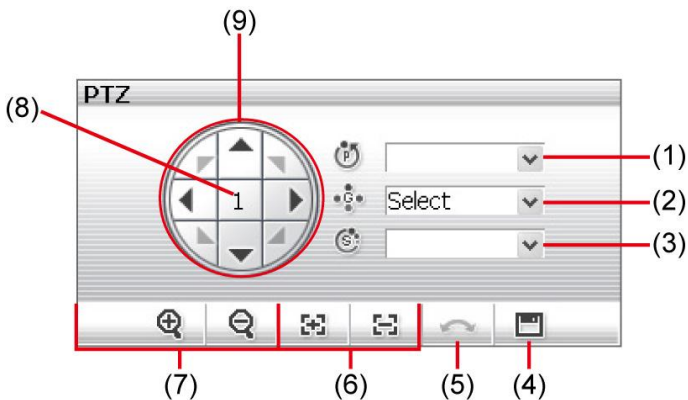
4.1.2 Using the PTZ Control Panel

User can control PTZ camera through PTZ control panel in preview mode. Enable and set up the PTZ camera; refer to chapter of **Setup PTZ Camera Function**.

1. Select the camera has PTZ function enabled.
2. Next, click  (PTZ) icon to call out PTZ control Panel in preview mode.



3. The functions' description of PTZ control panel is as following.

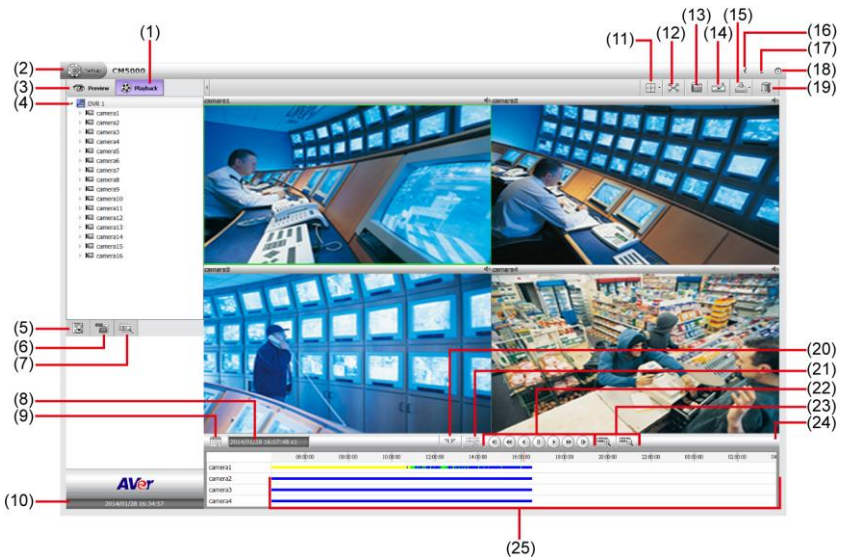


| Name | Function |
|-----------------------------------|--|
| (1) Camera preset position number | Move the PTZ camera to the preset point. |
| (2) Group AutoPan | Select to automatically operate PTZ camera in group. |

| Name | Function |
|-------------------------------------|--|
| (3) Direction buttons' moving speed | Adjust the moving speed of the PTZ camera lens. This speed will apply to the (11) Direction buttons' moving speed only. |
| (4) Save Camera preset position | Save the PTZ camera preset position number. Select the camera and click the preset position number and save it. |
| (5) AutoPan | Operate the PTZ cameras automatically based on the selected camera group preset position number. User needs to select the (4) Group AutoPan , then, click (5) Auto Pan button. |
| (6) Zoom +/- | Zoom in and out the image. |
| (7) Focus +/- | Adjust the focus manually to produce clear image. |
| (8) Camera ID | Display the PTZ camera number that is being operated. |
| (9) Direction buttons | Move and position the focal point of the PTZ camera. The support of direction button depends on the PTZ camera. |

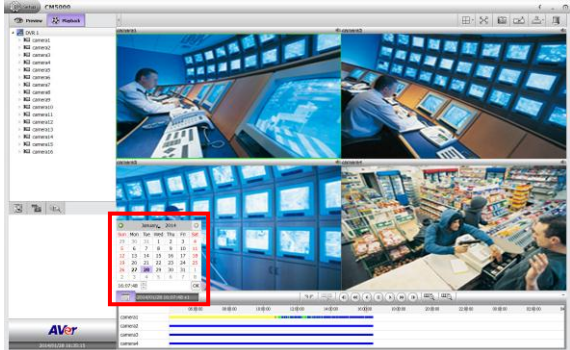
4.2 Familiarizing Functions of Playback Mode

Click **playback** tab to switch to playback mode.




| Name | Function |
|-----------------|---|
| (1) Playback | Switch to Playback mode. This allows you to view the recorded video of monitored cameras. |
| (2) Setup | Click Setup button to configure settings for cameras, recording, network, scheduler, backup, sensors, relays, alarms and user authentication(see also Chapter 6) |
| (3) Preview | Switch to Preview mode. This allows you to view live camera display. |
| (4) Camera list | Lists all cameras of NVR. Click + to expand the list. |
| (5) E-map | To load up to 8 desired E-maps in *.JPG and *.PNG image format, and locate cameras, sensors, and relays to desired positions (see also Chapter 4.1.1). |
| (6) Searching | CMS supports 2 types of searching in playback mode: <ul style="list-style-type: none"> - Event Search: Search from the recorded activities that were recorded in event log such as Sensor, Motion, Video Loss (see also Chapter 4.2.1). - Visual Search: Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second (see also Chapter 4.2.2). |

| Name | Function |
|--------------------|---|
| (7) POS Log Viewer | Search and display POS event logs (see also Chapter 4.4.3). |
| (8) Status bar | Display the recorded date, time and play speed. |
| (9) Date | Select the date on the calendar and the time to where to start playing the recorded video file. |



- **Date:** click the date on calendar to select. The date in bold text indicates there has recorded file. Click ← and → icon to switch the date or click ▼ icon next to month to select the month. To switch the year, click on the text of year and click spin button to select.
- **Time:** In Time box, select the hour, minute, and second to setup the playback start up time.



| | |
|------------------------|---|
| (10) Date and Time | It shows the current date and time. |
| (11) Split Screen Mode | Select from 7 kinds of split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. To reset all monitored cameras, select  and all camera channels will be cleared. |



To only display one of the video in the multiple-screen mode, **double click** on the video screen you only want to display.

| Name | Function |
|------|----------|
|------|----------|

(12) Full screen

Use the entire area of the screen to only display the video. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon.



When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

(13) Snapshot

Catch a static recording image and save it as a *.JPEG or *.PNG file in pen drive device or local hard disk drive (see also [Chapter 4.5](#)).

(14) Bookmark

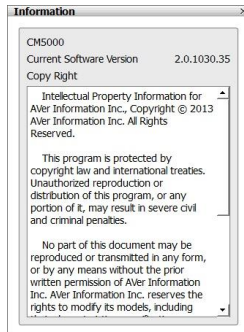
Mark a reference point when reviewing the recorded video file to which you may return for later reference (see also [Chapter 4.2.3](#)).

(15) Backup

Save the playback file to USB pen drive or local hard disk (see also [Chapter 4.2.4](#)).

(16) System Information

Click it to view CMS system's version and copyright.



(17) Minimize

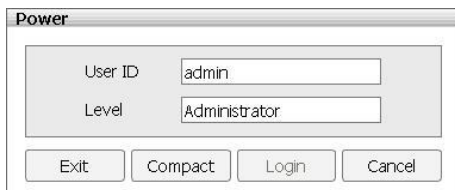
Minimizing the CMS system in system tray.

| Name | Function |
|------|----------|
|------|----------|

(18) Power button


Call up the Power dialog box.


In the Power dialog box, user may do the following:




- **Exit:** To shutdown the CMS system.
- **Compact:** Switch to compact mode (see also [Chapter 4.3](#)).
- **Login:** To login in different account. Default user ID is **admin** and password is **admin**.
- **Cancel:** To exit Logout dialog box.

(19) Alarm Log Viewer

Click  button to view and search the alarm event logs (see also [Chapter 4.4.2](#)).

(20)  (Segment)

Keep a portion of the recorded video to repeat playback; also can output the segment video to the pen drive device.








Click the  button to set the segment video. User can drag the triangle mark to set the video segment (see also [Chapter 4.2.6](#)).

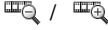


(21) 

Save the segmented video file in *.avi format (see also [Chapter 4.2.6](#)).

(22) Playback Control Buttons



From left to right order:

-  **Previous:** Go back to the previous frame.
-  **Slower:** Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x. The playback speed will show on the screen.
-  **Rewind:** Wind back the recorded video file.
-  **Pause:** Briefly stop playing the recorded video file.
-  **Play:** Play the recorded video file.
-  **Faster:** Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x, or 64x. The playback speed will show on the screen.
-  **Next:** Go to the next frame.

| Name | Function |
|--|---|
| (23)  (Zoom in/Zoom out) | To expand the playback time bar from an hour to minute. |
| (24) Hide the progress bar | Click to close up the progress bar. Click again to open up. |
| (25) Progress bar | <p>Show the progress of the file being played. You may move the bar to seek at any location of the track.</p> <p>Using the Zoom In/Out button () to expand the playback time from an hour to minute.</p> |
| | <div data-bbox="387 432 997 501" data-label="Image">  </div> <p>Meaning of color in progress bar:</p> <ul style="list-style-type: none"> - Red: Sensor record - Green: Motion record - Blue: Always record(normal record) - Yellow: Video loss - White: No record data |

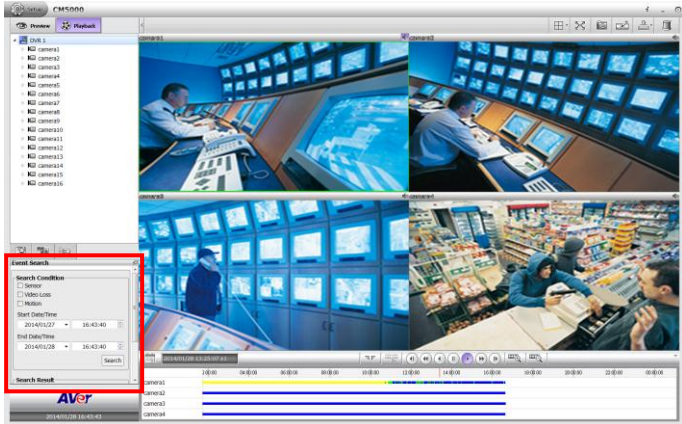
4.2.1 Using the Event Search


In playback mode, user can use Event Search to find the specific event to playback.

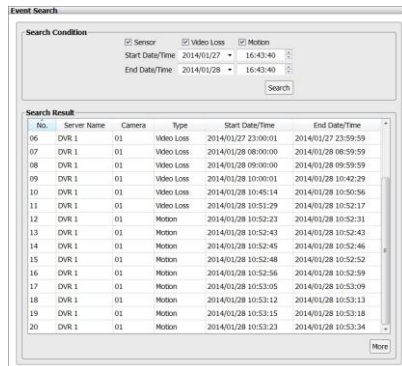
1. Select the channel that user wants to search.
2. Click  (**Search**) icon, then select  (**Event Search**) icon. The Event Search dialog box would appear at side area.



User can click  icon to expand the Event Log Viewer dialog box on the screen.








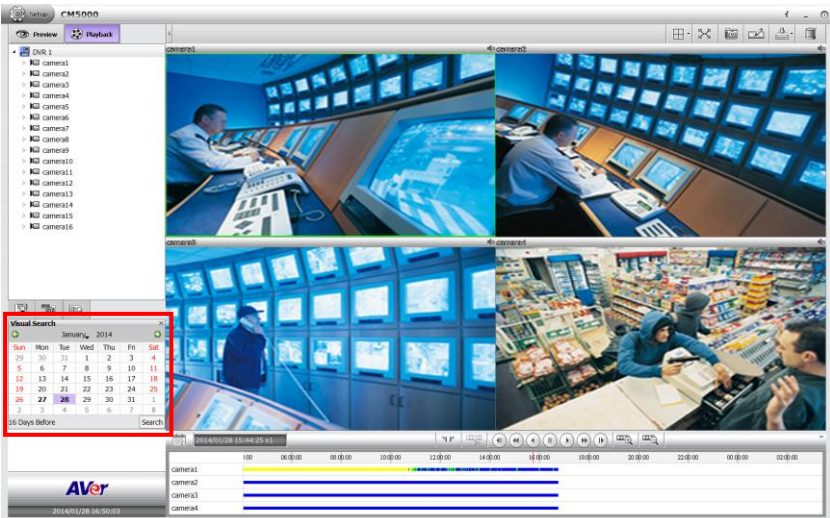
3. In the Event Search dialog box, check the type of condition user wants to search. Then, set the **Start Date/Time** and **End Date/Time**.
4. Next, click **OK** to start searching.
5. When the Event list appears, click and select the item user wants to view; but not all the events can be playback such as Sensor.
6. To close the Event Search dialog, click  icon.






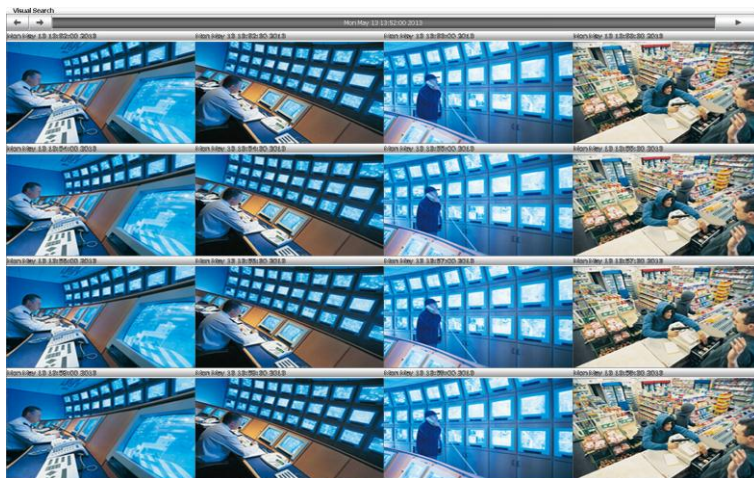
4.2.2 Using the Visual Search

In playback mode, user can use Visual Search to find the specific time to playback.

1. Click  (**Search**) icon, then select  (**Visual Search**) icon. The Visual Search dialog box would appear under the area.
2. In the Visual Search dialog, select the date. Click  and  icon to switch the month or click  icon next to month to select the month. To switch the year, click on the text of year and click spin button to select.
3. Next, setup the search time period by clicking spin buttons to setup the hour, minute, and second.
4. Then, click **Search** to start searching.



5. When a series of frames appear by date, click on the frame to display another series of frames and search by every 2 Hours of that date, every 8 minutes of that hour, and every 30 seconds of that minute. Using  and  to go to hour, minute, and second page.
6. To playback the selected video, click  button or double-click on selected video screen.



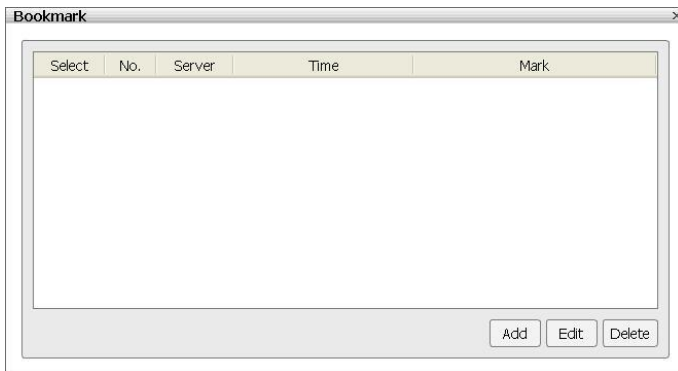
4.2.3 To Bookmark a Section of the Video

User can bookmark a specific time of video section.

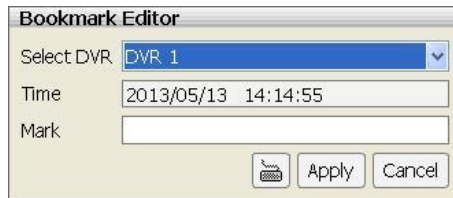
1. Using the mouse to move the playback time progress bar to the time that user wants to bookmark.



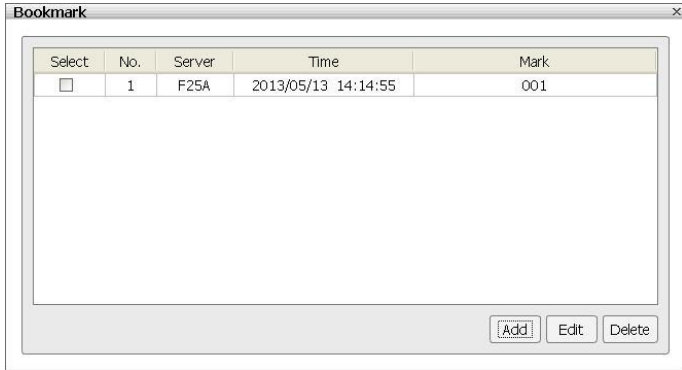
2. Then, click  icon. The Bookmark dialog box is appeared on the screen.



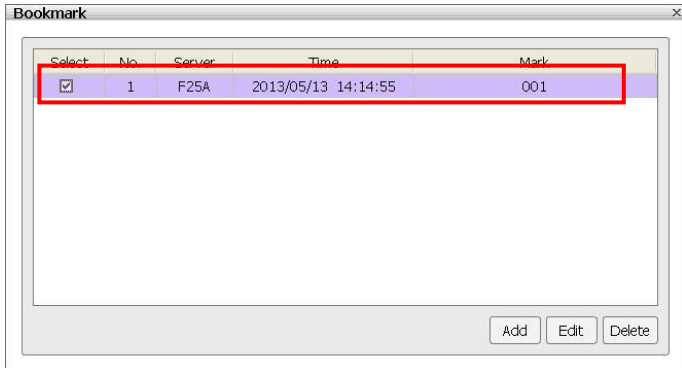
3. Click **Add** button to create the new reference mark in the bookmark list. Enter a short description or name for the mark and click **Apply** button to save the bookmark. To exit bookmark Editor dialog box, click **Cancel** button.



4. Select and click one in the bookmark list to review the file.



5. To modify the bookmark, select the bookmark and click **Edit** button.
6. To delete the bookmark, select the bookmark and click **Delete** button.





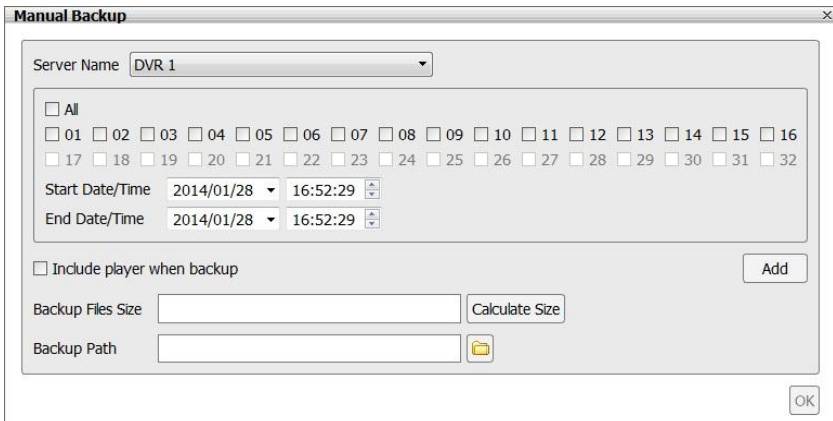
To close the Bookmark dialog box, click icon.

4.2.4 Backup the Playback Video

4.2.4.1 Manual Backup

Backup the recorded files to external USB pen drive or local hard disk drive. In Manual Backup dialog box, user can select different channels or time period to backup at the same time. The backup files can be playback on PC by Qplayer application which is included when user select to include player while backup. Play backup file on PC refer to [Chapter 4.2.5](#).

1. Click **Playback** tab to switch to playback mode.
2. Click **Backup** () button and select **Manual backup** (). Then, the Manual Backup dialog box is appeared.
3. In Manual Backup dialog box, select the following settings:
 - **Channel:** Select the channels that user wants to backup. Mark **All** to select all channels.
 - **Select date and time:** Select the date and time period that user wants to backup.
 - **Include Player when backup:** Including the player for playback the backup file on PC.
 - **Backup File Size:** Display the total size of the backup file. If there are more one backup file, there will be total size of all backup files. Click **Calculate Size** button to calculate.
 - **Backup Path:** Selecting a save path for backup file.
4. After selecting the backup file conditions, click **OK** to start backup.



Manual Backup


Server Name: DVR 1

All
 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16
 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Start Date/Time: 2014/01/28 16:52:29
End Date/Time: 2014/01/28 16:52:29

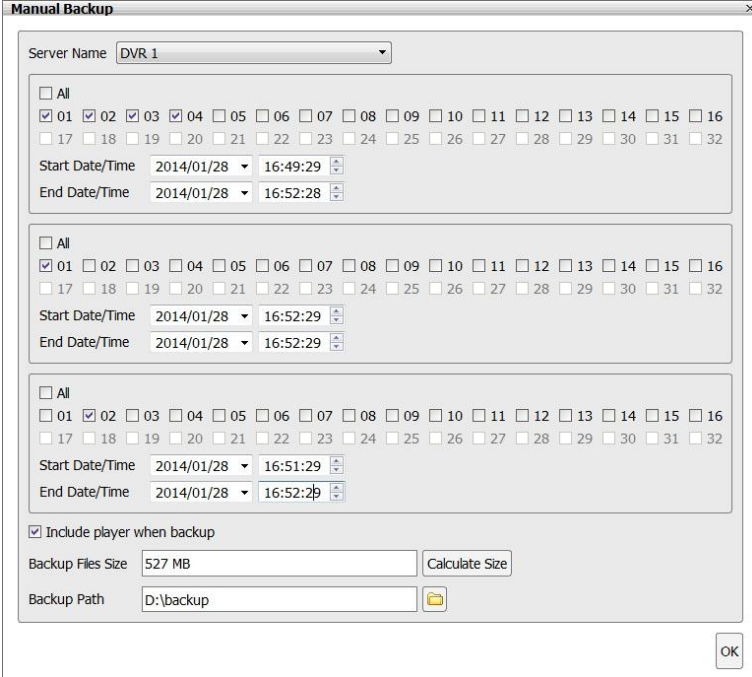
Include player when backup Add

Backup Files Size: Calculate Size

Backup Path: 

OK

5. User can backup multiple recorded file (different channels and different time period) at the same time. Repeat the above steps to create the backup file and click **Add** button. The multiple backup files limit is **3** files at the same time.



The image shows a 'Manual Backup' dialog box with the following fields and options:

- Server Name: DVR 1
- Three backup selection sections, each with a grid of channel checkboxes (01-32) and date/time pickers:
 - Section 1: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32. Start Date/Time: 2014/01/28 16:49:29. End Date/Time: 2014/01/28 16:52:28.
 - Section 2: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32. Start Date/Time: 2014/01/28 16:52:29. End Date/Time: 2014/01/28 16:52:29.
 - Section 3: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32. Start Date/Time: 2014/01/28 16:51:29. End Date/Time: 2014/01/28 16:52:29.
- Include player when backup
- Backup Files Size: 527 MB (with Calculate Size button)
- Backup Path: D:\backup (with folder icon)
- OK button



6. When all backup files have created, click **OK** button to start archiving the selected file to USB pen drive or local hard disk drive.

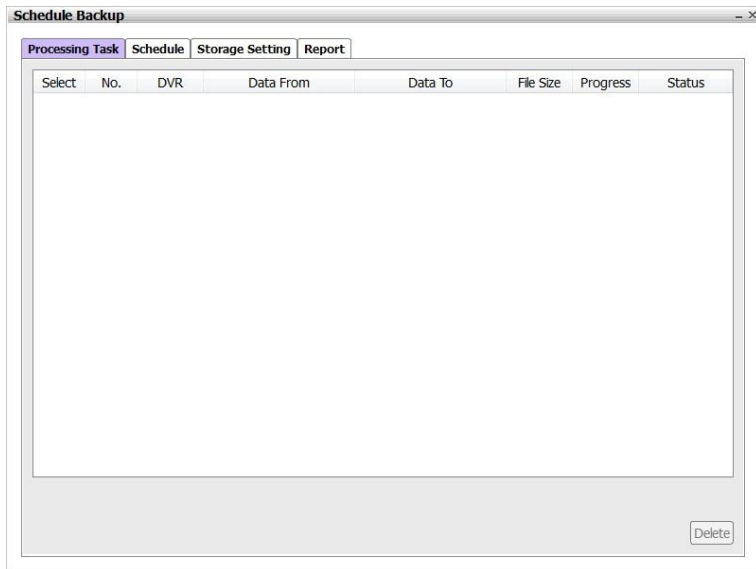
4.2.4.2 Schedule Backup

Set a backup schedule on selected NVR/DVR server, channel, and time; the backup action will be executed on schedule time everyday.

Schedule backup is operated as following rules:

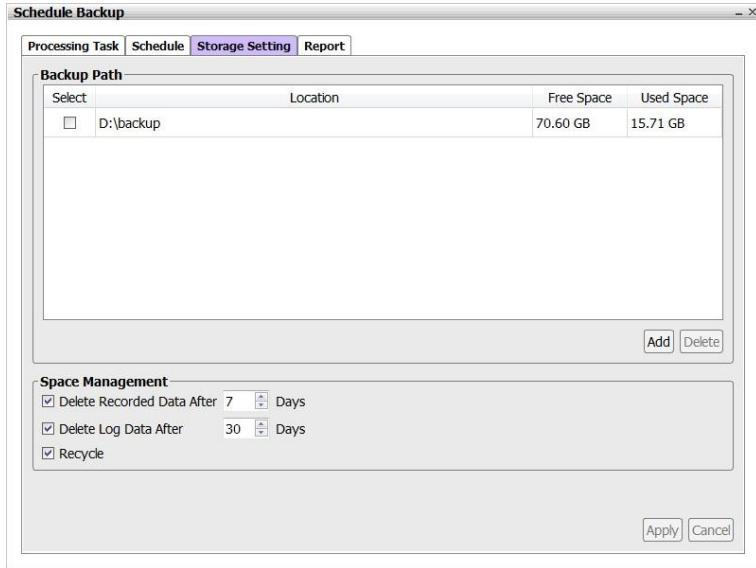
- Each NVR/DVR server only can be backup one schedule task at a time.
- CMS system can perform 3 backup schedule tasks (different NVR/DVR server) at a time.
When one schedule task is completed, the following schedule task will start.
- When backup schedule is completed, the schedule task will be removed from Processing Task list.
- All completed schedule tasks are shown on Report page.
- Schedule task will be removed when:
 - There is no recorded data to backup.
 - The network connection is loss.
 - User has deleted the backup schedule.

1. Click **Playback** tab to switch to playback mode.
2. Click **Backup** () button and select **Schedule backup** (). Then, the Schedule Backup dialog box is appeared.



3. **Set the storage path.** Before starting to set the backup schedule, user needs to set a storage path.

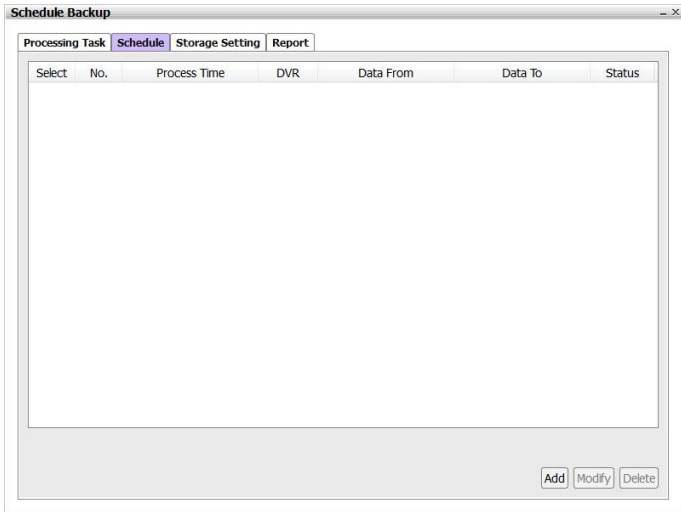
Select **Storage Setting** tab. In Storage Setting page, click **Add** button and browse the storage path location to add a storage path. The storage path can have more than one but at least one storage path is required for backup.



In Storage Setting page, user can setup logs data and hard disk space recycle. Click **Apply** to save the settings.

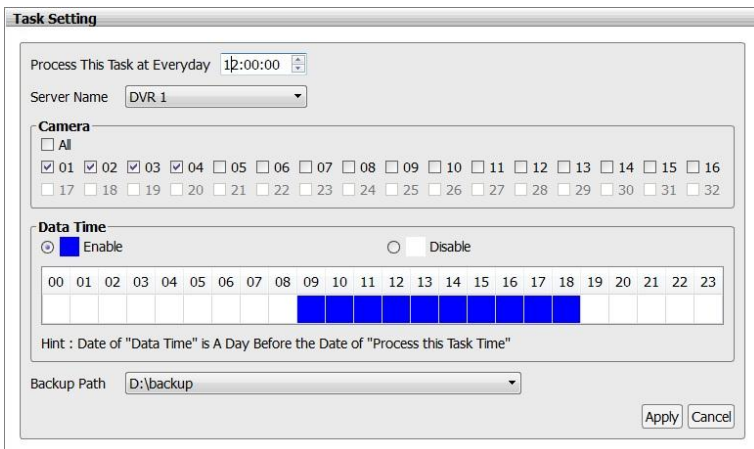
- **Delete Recorded Data After Days:** If user wants the system to automatically erase the data after a certain days, enable the **Delete Recorded Data After** check box and enter the numbers of days in **Days** text box.
- **Delete Log Data After Days:** If you want the system to automatically erase the event and alarm log after a certain days, enable the **Delete Log Data After** check box and enter the numbers of days in **Days** text box.
- **Recycle:** Mark to over write hard disk from older data when hard disk space is full.

4. **Set the backup schedule.** Click **Schedule** tab. In Schedule page, click **Add** button to set a backup schedule.



In Task Setting dialog box, select the time, NVR/DVR server, camera, data time and backup path. Click **Apply** to save the backup schedule. Click **Cancel** to back to the Schedule page.

- **Process This Task at Everyday:** Select the backup time to process on every day. The time period is based on 24 hours.
- **Server Name:** Select the NVR/DVR server that user wants to backup.



- **Camera:** Select the camera channel of NVR/DVR server that user wants to backup.
- **Backup Path:** Select the storage path for saving backup data. The storage path must

be set before setting up the backup schedule.

User should see the all backup schedules at Schedule page. To modify the backup schedule, select the schedule and click **Modify** button. Click **Delete** button to remove the selected schedule from schedule list.



When schedule status is disable, the backup schedule won't be able to execute; click the drop-down list and select **Enable**.

The screenshot shows a window titled "Schedule Backup" with a tabbed interface. The "Schedule" tab is active. It contains a table with the following data:

| Select | No. | Process Time | DVR | Data From | Data To | Status |
|--------------------------|-----|---------------------|-------|---------------------|---------------------|----------|
| <input type="checkbox"/> | 1 | 2014/02/05 12:00:00 | DVR 1 | 2014/02/04 11:00:00 | 2014/02/04 13:00:00 | Enable ▾ |
| <input type="checkbox"/> | 2 | 2014/02/05 12:00:00 | DVR 1 | 2014/02/04 11:00:00 | 2014/02/04 13:00:00 | Enable ▾ |
| <input type="checkbox"/> | 3 | 2014/02/05 12:00:00 | DVR 1 | 2014/02/04 11:00:00 | 2014/02/04 14:00:00 | Enable ▾ |

At the bottom right of the window, there are three buttons: "Add", "Modify", and "Delete".

- In **Processing Task** page, user can view all the processing backup schedule tasks. When schedule task is completed, this schedule task will be removed from processing task list. Double-click on processing schedule task, user can view the schedule detail information, but user cannot modify the schedule.

Backup Information

Processing Task | Schedule | Storage Setting | Report

| Select | No. | NVR | Data From | Data To | File Size | Percentage | Status |
|--------------------------|-----|-------|---------------------|---------------------|-----------|------------|-----------------------|
| <input type="checkbox"/> | 1 | DVR 1 | 2013/12/23 00:00:00 | 2013/12/23 12:00:00 | 0.33 GB | 0 | BACKUP_STATUS_WAITING |
| <input type="checkbox"/> | 2 | DVR 1 | 2013/12/23 12:00:00 | 2013/12/24 00:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 3 | DVR 1 | 2013/12/23 17:00:00 | 2013/12/23 18:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 4 | DVR 1 | 2013/12/23 17:00:00 | 2013/12/23 18:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 5 | DVR 1 | 2013/12/24 12:00:00 | 2013/12/24 13:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 6 | DVR 1 | 2013/12/24 13:00:00 | 2013/12/24 14:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 7 | DVR 1 | 2013/12/24 14:00:00 | 2013/12/24 15:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 8 | DVR 1 | 2013/12/24 15:00:00 | 2013/12/24 16:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 9 | DVR 1 | 2013/12/24 16:00:00 | 2013/12/24 17:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |
| <input type="checkbox"/> | 10 | DVR 1 | 2013/12/24 00:00:00 | 2013/12/24 12:00:00 | 0.00 GB | 0 | BACKUP_STATUS_PENDING |

Delete

- In **Report** page, user can view all completed backup schedule tasks.

Schedule Backup

Processing Task | Schedule | Storage Setting | Report

Search Condition

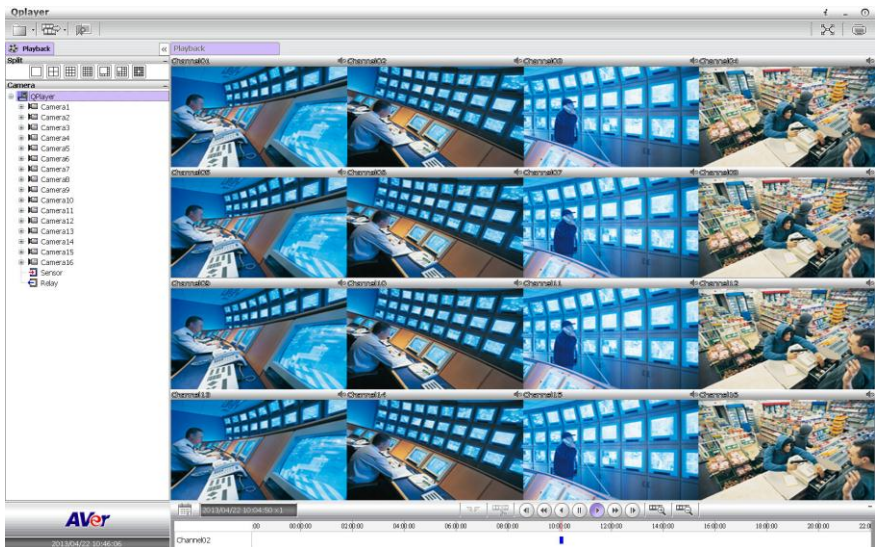
Start Date: 2/5/2014 [Search]

| No. | DVR | Task Begin | Task End | Data From | Data To | File Size | Result |
|-----|-------|---------------------|---------------------|---------------------|---------------------|-----------|----------------|
| 1 | DVR 1 | 2014/02/05 12:00:03 | 2014/02/05 12:00:03 | 2014/02/04 11:00:00 | 2014/02/04 13:00:00 | 0.00 GB | No video recor |
| 2 | DVR 1 | 2014/02/05 12:00:08 | 2014/02/05 12:00:08 | 2014/02/04 11:00:00 | 2014/02/04 13:00:00 | 0.00 GB | No video recor |
| 3 | DVR 1 | 2014/02/05 12:00:13 | 2014/02/05 12:00:13 | 2014/02/04 11:00:00 | 2014/02/04 14:00:00 | 0.00 GB | No video recor |

4.2.5 Using the QPlayer to Playback Backup File

You can playback the backup files by using QPlayer applications on the PC. When you back up the recorded file, QPlayer applications are automatically included in the backup folder if user has enabled the selection of **Includ e player when backup** when backup recorded file. With QPlayer, it is similar in Playback mode and supports different split screen types to view all the video at the same time.

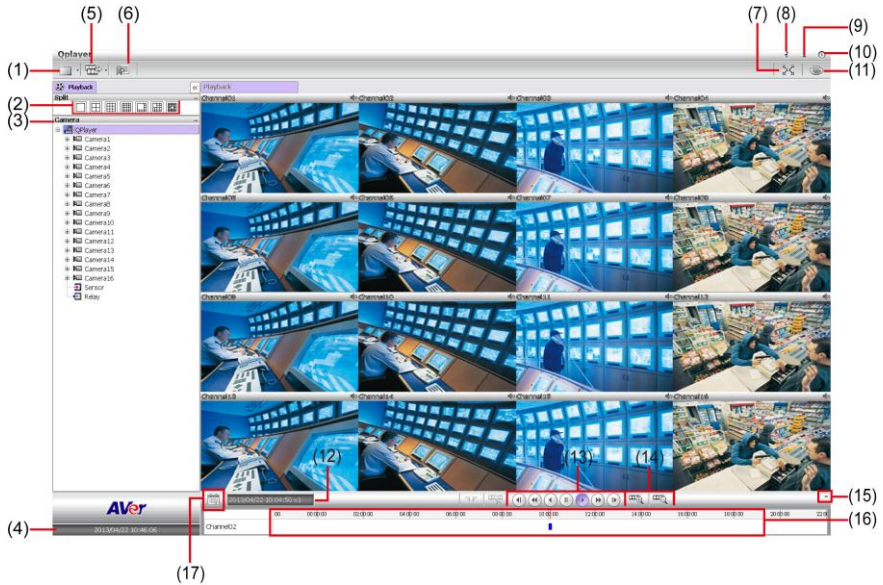
To run the application, go to backup folder and select Qplayer folder, then, double-click **Qplayer.exe**.



Familiarizing Functions of Qplayer

In Qplayer main UI, click **File** (📁) > **Open File** to located the backup file folder.

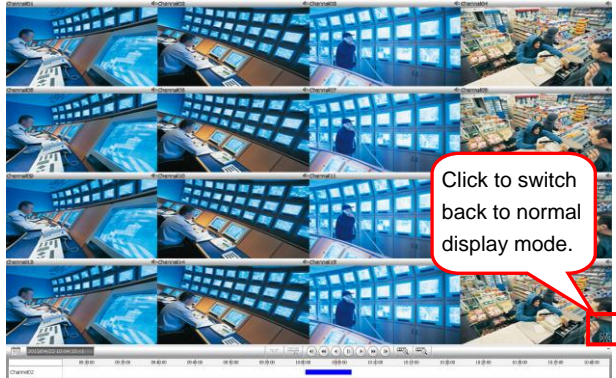
The functions of Qplayer will be described in following:



| Name | Function |
|-----------------------|--|
| (1) File | Click it to open the backup file. |
| (2) Split Screen Mode | Select from 7 kinds of split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen. |
| (3) Camera list | Lists all cameras. Click + to expand the list. User can select and drag the camera to desire channel location. |
| (4) Date and Time | It shows the current date and time. |
| (5) Export | Export function includes 2 functions – Snapshot and Print. <ul style="list-style-type: none"> - Snapshot: Catch a static current screen image and save it as a *.JPEG or *.PNG file on local hard disk. - Print: Print out the current Qplayer screen. |

| Name | Function |
|--------------|--|
| (6) Bookmark | Mark a reference point when reviewing the recorded video file to which you may return for later reference (see also Chapter 5.1.1). |

| | |
|-----------------|--|
| (7) Full screen | Use the entire area of the screen to only display the video. To return, press the right button of the mouse or ESC on the keyboard or click the arrow icon. |
|-----------------|--|

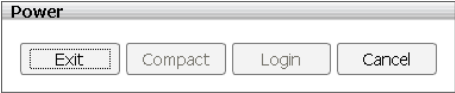












When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

| | |
|------------------------|--|
| (8) System Information | Click it to view CMS system's version and copyright. |
|------------------------|--|



| | |
|--------------|---|
| (9) Minimize | To minimize the Qplayer on the task tray. |
|--------------|---|

| Name | Function |
|--|--|
| (10) Power button | <p>Call up the Power dialog box.</p> <p>In the Power dialog box, user may do the following:</p>  <ul style="list-style-type: none"> - Exit: To shutdown the CMS system. - Cancel: To exit Logout dialog box. |
| (11) On Screen Keyboard | <p>If the keyboard is not available, you may use the Virtual Keyboard.</p>  |
| (12) Status bar | <p>Display the recorded date, time and play speed.</p> |
| (13) Playback Control Buttons | <p>From left to right order:</p> <ul style="list-style-type: none">  Previous: Go back to the previous frame.  Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x. The playback speed will show on the screen.  Rewind: Wind back the recorded video file.  Pause: Briefly stop playing the recorded video file.  Play: Play the recorded video file.  Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x, or 64x. The playback speed will show on the screen.  Next: Go to the next frame. |
| (14)  /  (Zoom in/Zoom out) | <p>To expand the playback time bar from an hour to minute.</p> |
| (15) Close up progress bar | <p>Click to close up the progress bar. Click again to open up.</p> |

Name**Function**

(16) Progress bar

Show the progress of the file being played. You may move the bar to seek at any location of the track.
Using the Zoom In/Out button to expand the playback time from an hour to minute.

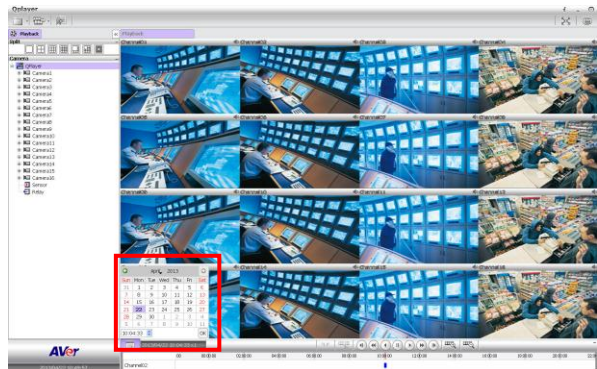





Meaning of color in progress bar:

- **Red:** Sensor record
- **Green:** Motion record
- **Blue:** Always record(normal record)
- **Yellow:** Video loss
- **White:** No record date

(17) Calendar






Select the date on the calendar and the time to where to start playing the recorded video file. Click **OK** to start playback.




- **Date:** click the date on calendar to select. The date in bold text indicates there has recorded file. Click  and  to switch the date or click  icon next to month to select the month. To switch the year, click on the text of year and click spin button to select.
- **Time:** In Time box, select the hour, minute, and second to setup the playback start up time.



4.2.6 Output a Video Clip

1. Switch the playback screen to 1 single screen display mode.
2. Using  and  button to expand the time bar for easy to set the segment period.
3. Click  (**Segment**) button to set the mark.
4. Then, drag the  mark (**segment**) to set video period portion. To cancel segmentation, click  button (**Segment**) again.



5. Click **Output Video Clip** button () and the Output Video Clip dialog box is appeared.

Output Video Clip


Server:

Start Date/Time:





End Date/Time:

Export Key Frame Only

Export with Text (Including Camera Name, Date, POS Information)

Save path: 

Require Space: MB

- **Start Date/Time:** Displays the begin time and date of segment video file.
- **End Date/Time:** Displays the end time and date of segment video file.
- **Export Key frame only:** Only save the key frame of video segment; this can reduce the size of export video .
- **Export with text(including camera name, date, POS information):** Mark to export the camera name, date, and POS information and display on screen while playback.
- **Save path:** Where to save the segment video file. Click **Rescan Device** to detect the external USB pen drive if NVR system didn't detect it.
- **Require Space:** Displays the file size of segment video file. The information will display after select the channels in Advanced dialog box.

- **Advanced:** To select the specific channels. Click **OK** to save the setting.

Advanced

Server: DVR 1

Start Date/Time: 2014/01/28 16:01:49

End Date/Time: 2014/01/28 16:05:58

Export to Separated Files

All

1 2 3 4 5 6 7 8

9 10 11 12 13 14 15 16

17 18 19 20 21 22 23 24

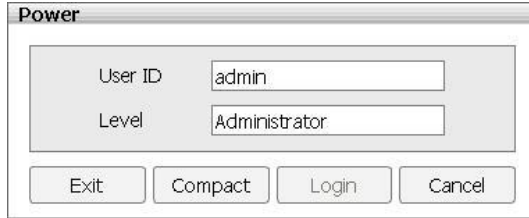
25 26 27 28 29 30 31 32

OK Cancel

6. Click **Export** button to save wanted segment portion.
7. To playback the output video clip, double-click the output video file (*.avi).

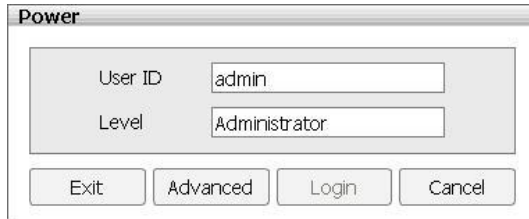
4.3 Compact Mode

The preview and playback are both supported compact mode. To switch to Compact mode, click power button (located at upper right corner) and select **Compact** button in Power dialog box.



The image shows a dialog box titled "Power". It contains two input fields: "User ID" with the value "admin" and "Level" with the value "Administrator". Below the input fields are four buttons: "Exit", "Compact", "Login", and "Cancel".

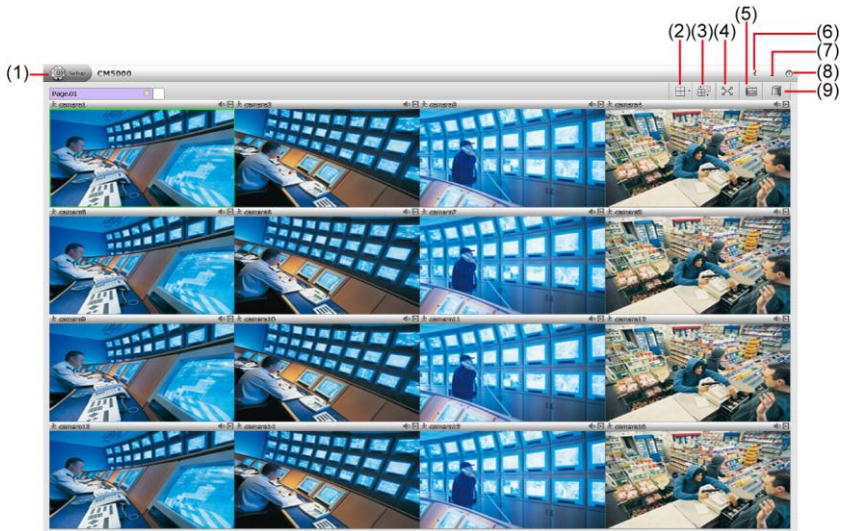
To switch back to Advance mode, click power button and select **Advanced** button.





The image shows a dialog box titled "Power". It contains two input fields: "User ID" with the value "admin" and "Level" with the value "Administrator". Below the input fields are four buttons: "Exit", "Advanced", "Login", and "Cancel".

The following chapters will describe the function buttons on preview and playback compact mode.

4.3.1 Familiarizing Function in Preview Compact Mode

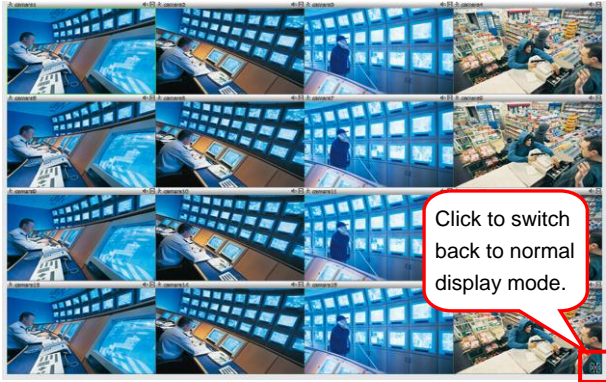


| Name | Function |
|---|---|
| (1) Setup | Click Setup button to configure settings for cameras, recording, network, scheduler, backup, sensors, relays, alarms and user authentication(see also Chapter 6). |
| (2) Split Screen Mode | It provides 6 kinds of split display modes for your selection. User can select the split display modes by clicking the split mode icon. To reset all monitored cameras, select  and all camera channels will be cleared. |
|  | <ul style="list-style-type: none"> - When the NVR system is in multiple-screen mode, user can click the video screen of the camera and Drag on where user wants to relocate it. - To only display one of the video in the multiple-screen mode, double click on the video screen user only wants to display. |
| (3) AutoScan | Click it to start auto cycle display each channel. |

Name**Function**

(4) Full screen

Use the entire area of the screen to only display the video. To return, click the arrow icon at bottom of right.



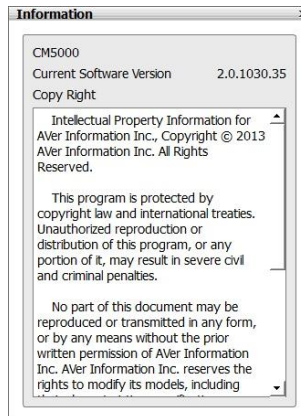
When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

(5) Snapshot

Catch a static recording image and save it as a *.JPG and *.PNG file in USB pen drive device or local hard disk drive (see also [Chapter 4.2.7](#)).

(6) System Information

Click it to view system's version and copyright.



(7) Minimize

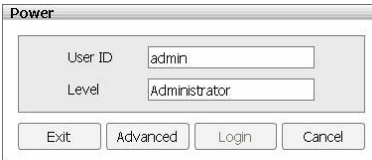
Minimizing the CMS system in system tray.

Name**Function**

(8) Power button

Call up the Power dialog box.


In the Power dialog box, user may do the following:



The screenshot shows a dialog box titled "Power". It contains two text input fields. The first field is labeled "User ID" and contains the text "admin". The second field is labeled "Level" and contains the text "Administrator". Below these fields are four buttons: "Exit", "Advanced", "Login", and "Cancel".



- **Exit:** To shutdown the CMS system.
- **Advanced:** Switch to preview mode (advanced mode).
- **Login:** To login in different account. Default user ID is **admin** and password is **admin**.
- **Cancel:** To exit Power dialog box.

(9) Alarm Log Viewer

Click  button to view and search the alarm event logs (see also [Chapter 4.4.2](#)).

4.3.2 Familiarizing Function in Playback Compact Mode



| Name | Function |
|---|---|
| (1) Setup | Click Setup button to configure settings for cameras, recording, network, scheduler, backup, sensors, relays, alarms and user authentication(see also Chapter 6). |
| (2) Split Screen Mode | It provides 7 kinds of split display modes for your selection. User can select the split display modes by clicking the split mode icon. To reset all monitored cameras, select  and all camera channels will be cleared. |
|  <ul style="list-style-type: none"> <li data-bbox="196 1029 1005 1093">- When the NVR system is in multiple-screen mode, user can click the video screen of the camera and Drag on where user wants to relocate it. <li data-bbox="196 1093 1005 1161">- To only display one of the video in the multiple-screen mode, double click on the video screen user only wants to display. | |

Name**Function**

(3) Full screen

Use the entire area of the screen to only display the video. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon.



When you switch to full screen in multiple-screen mode, Left click to toggle to only display one of the video in the multiple-screen mode or all.

(4) Snapshot

Catch a static recording image and save it as a *.JPG and *.PNG file in USB pen drive device or local hard disk drive.

(5) Bookmark

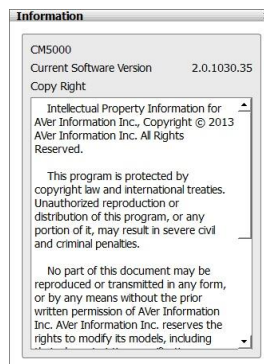
Mark a reference point when reviewing the recorded video file to which you may return for later reference (see also [Chapter 4.2.3](#)).










(6) Backup

Save the playback file to USB pen drive or local hard disk (see also [Chapter 4.2.4](#)).

(7) System Information

Click it to view NVR system's version and copyright.






| Name | Function |
|--|---|
| (8) Minimize | Minimizing the CMS system in system tray. |
| (9) Power button | <p>Call up the Power dialog box.</p> <p>In the Power dialog box, user may do the following:</p> <div data-bbox="385 272 763 432" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Power</p> <p>User ID: <input type="text" value="admin"/></p> <p>Level: <input type="text" value="Administrator"/></p> <p>Exit Advanced Login Cancel</p> </div> <ul style="list-style-type: none"> - Exit: To shutdown the CMS system. - Advance: Switch to preview mode (advance mode). - Cancel: To exit Power dialog box. |
| (10) Alarm Log Viewer | Click  button to view and search the alarm event logs (see also Chapter 4.4.2). |
| (11) Playback Control Buttons | <p>From left to right order:</p> <ul style="list-style-type: none">  Previous: Go back to the previous frame.  Slower: Play the recorded video file at the speed of 1/2x, 1/4x, or 1/8x. The play speed will show on the screen.  Rewind: Wind back the recorded video file.  Pause: Briefly stop playing the recorded video file.  Play: Play the recorded video file.  Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x, or 64x. The play speed will show on the screen.  Next: Go to the next frame. |
| (12)  (Zoom in/Zoom out) | To expand the playback time bar from an hour to minute. |
| (13) Progress bar | <p>Show the progress of the file being played. You may move the bar to seek at any location of the track.</p> <p>Using the Zoom In/Out button to expand the playback time from an hour to minute.</p> |
| (14) Status bar | Display the recorded date, time and play speed. |

Name**Function**

(15) Date

Select the date on the calendar and the time to where to start playing the recorded video file.

- **Date:** click the date on calendar to select. The date in bold text indicates there has recorded file. Click  and  icon to switch the date or click  icon next to month to select the month. To switch the year, click on the text of year and click spin button to select.
- **Time:** In Time box, select the hour, minute, and second to setup the playback start up time.

| January 2014 | | | | | | |
|--------------|-----------|-----------|-----|-----|-----|-----|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |


16:07:48  

4.4 Log Viewer

Show the record of activities (alarm, event, iPOS) that take place in the system. User can view and search for specific log. The following descriptions and figures are based on preview mode.

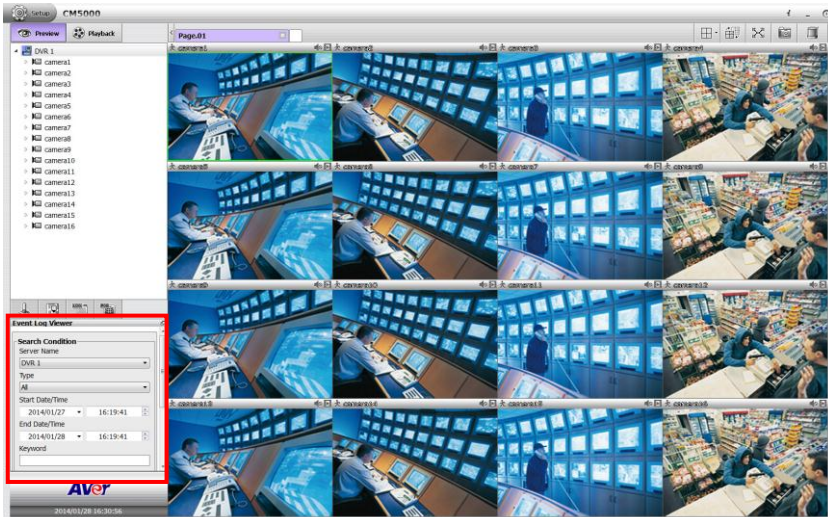
4.4.1 Using the Event Log Viewer

The event log viewer is supported in preview mode only.

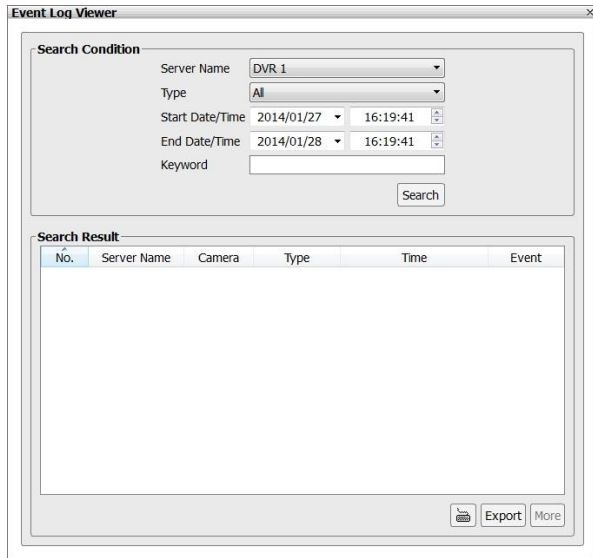
1. Click the Event Log Viewer () button in preview mode.
2. The Event Log Viewer dialog box is appeared and located at bottom of left side screen.



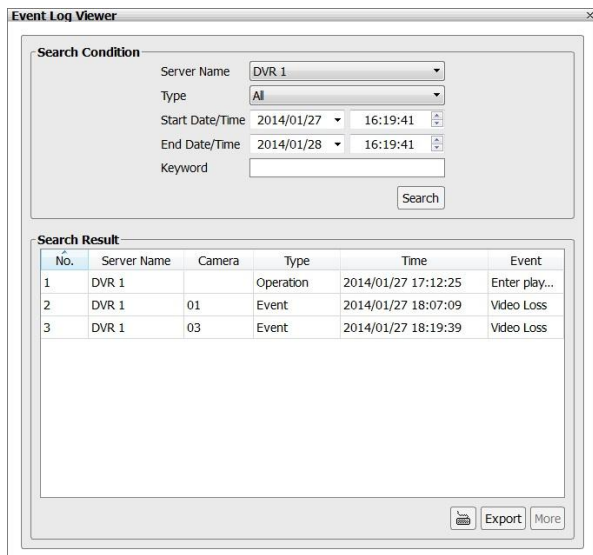
User can click  icon to expand the Event Log Viewer dialog box on the screen.



- To filter the logs, select and click the select **Type -- System, Network, Operation, Event, or All**.



- Set the **Start Date/Time** and **End Date/Time** period to search the logs.
- User also can search specific logs by specific **Keyword**.
- Click **Search** button to start searching. The search results are displayed in the below column. Click **More** button to display more event logs.



- Click on the event log can view the log video. The screen will switch to Event log playback screen.




- Click **Export** button can output the log result list to local hard disk drive or external USB pen drive in *.csv file format.

4.4.2 Using the Alarm Log Viewer

The alarm log viewer is both supported in preview and playback mode.

Viewing the Alarm Event

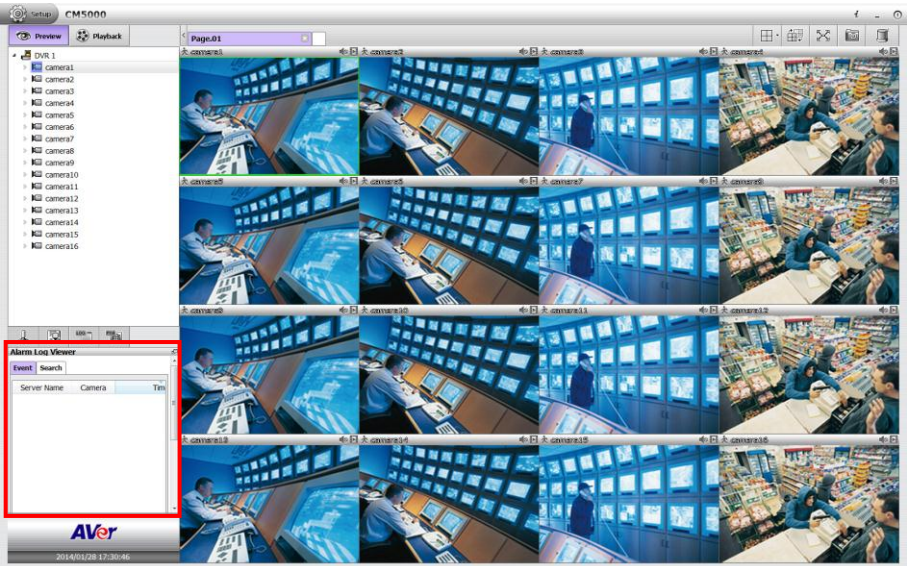
Alert and display warning information.

1. Click Alarm () button on preview or playback mode.
2. The Alarm Log Viewer dialog box is appeared and located at bottom of left side screen.



User can click  icon to expand the Alarm Log Viewer dialog box on the screen.

3. Then, click **Event** tab to view all alarm events.



4. Clicking **Alarm reset** button to reset all alarm event status.
5. Clicking **Refresh** button to refresh the alarm events list.

Alarm Log Viewer

Event Search

| No. | Camera | Time | Event |
|-----|--------|---------------------|----------------------------|
| 01 | | 2013/04/08 10:23:13 | Alarm reset. |
| 02 | | 2013/04/08 10:15:30 | Alarm reset. |
| 03 | | 2013/04/03 18:00:00 | Alarm reset. |
| 04 | | 2013/04/03 17:00:00 | Alarm reset. |
| 05 | | 2013/04/03 16:00:01 | Alarm reset. |
| 06 | | 2013/04/03 15:00:00 | Alarm reset. |
| 07 | | 2013/04/03 14:00:00 | Alarm reset. |
| 08 | | 2013/04/03 13:00:00 | Alarm reset. |
| 09 | | 2013/04/03 12:00:00 | Alarm reset. |
| 10 | | 2013/04/03 11:00:00 | Alarm reset. |
| 11 | | 2013/04/03 10:00:00 | Alarm reset. |
| 12 | | 2013/04/03 09:00:02 | Alarm reset. |
| 13 | 04 | 2013/04/03 09:00:01 | Camera <04> video loss !!! |
| 14 | 03 | 2013/04/03 09:00:01 | Camera <03> video loss !!! |
| 15 | 02 | 2013/04/03 09:00:01 | Camera <02> video loss !!! |
| 16 | 01 | 2013/04/03 09:00:01 | Camera <01> video loss !!! |
| 17 | 04 | 2013/04/03 09:00:00 | Camera <04> video loss !!! |


Alarm Reset Refresh

6. Double-click on alarm event can playback the event video.



Searching the Alarm Event Logs

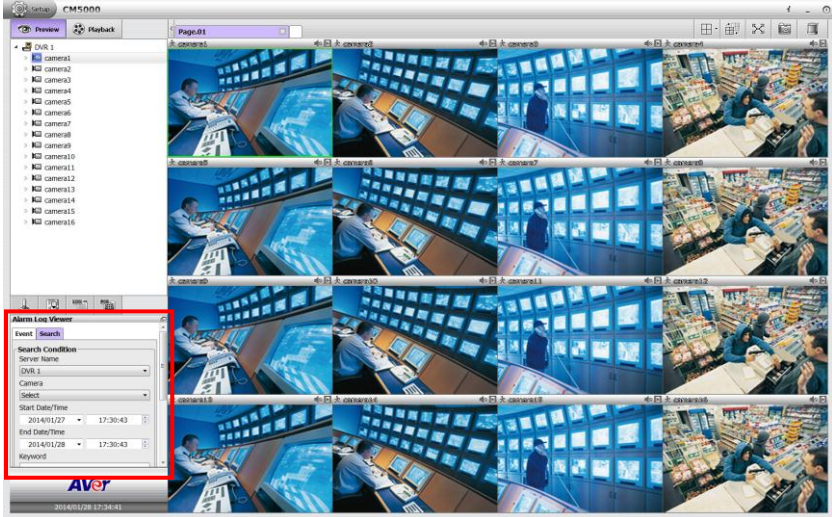
Searching the specific alarm event.

1. Click Alarm () button on preview or playback mode.
2. The Alarm Log Viewer dialog box is appeared and located at bottom of left side screen.

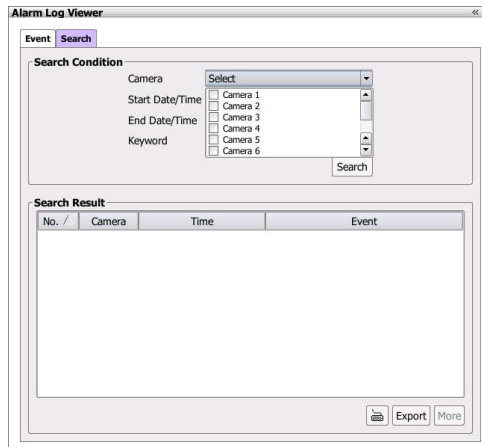


User can click  icon to expand the Alarm Log Viewer dialog box on the screen.

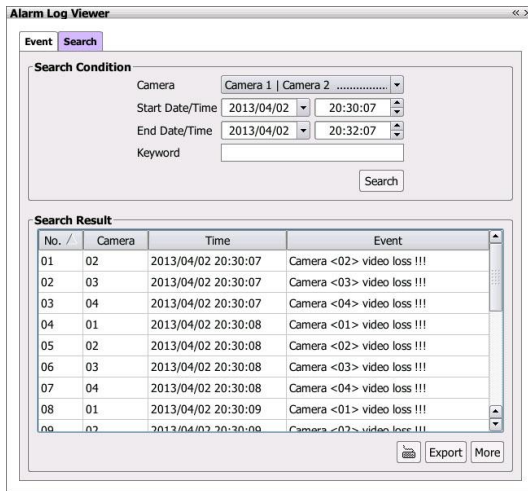
3. Then, click **Search** tab in Alarm Log Viewer dialog box.



4. In Alarm Log Viewer dialog box, select the **Camera** that user wants to search. Multiple cameras selection is allowed.



5. Set the searching period at **Start Date/Time** and **End Date/Time** column.
6. Searching by specific keyword, enter the keyword in **Keyword** column.
7. Click **Search** button to start searching.
8. The search result will list in below column. Click **More** button to display more event logs.




9. Click **Export** button can save the search result list to external USB pen drive.
10. Double-click on alarm event can playback the event video.



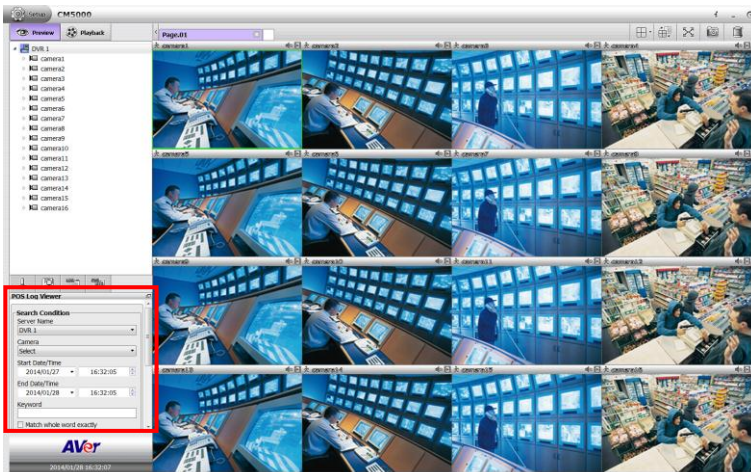
4.4.3 Using the POS Log Viewer

Search the iPOS event.

1. Click POS Log Viewer () button on preview or playback mode.
2. The POS Viewer dialog box is appeared and located at bottom of left side screen.



User can click  icon to expand the POS Log Viewer dialog box on the screen.




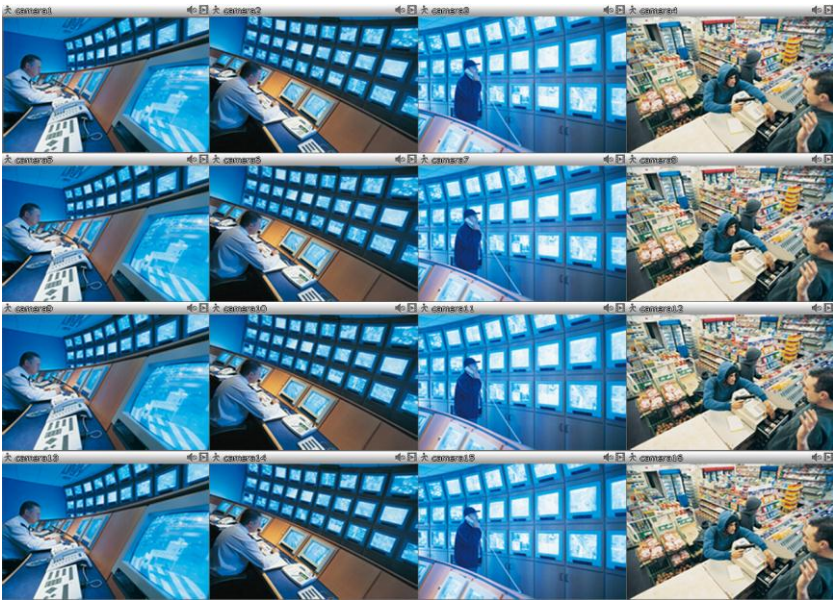
3. In POSViewer dialog box, select the **Camera** that user wants to search.
4. Set the searching period at **Start Date/Time** and **End Date/Time** column.
5. Searching by specific keyword, enter the keyword in **Keyword** column. Mark **Match whole words exactly** option to 100% match the keyword that user has entered.
6. Click **Search** button to start searching. The search result will list in below column. Click **More** button to display more event logs.
7. Click **Export** button can save the search result to external USB pen drive.



4.5 Snapshot the Screen

Taking a quick capture of current display screen and save in *.jpg and *.PNG format to local hard disk.

1. In preview or playback mode, Click the snapshot icon () and the save as dialog box is appeared.
2. User can rename the **File name**. Default file name is "snapshot.jpg".
3. Select the save location.
4. Click **Save** button to save the captured image file to selected location.
5. The captured screen is looks like the figure below.

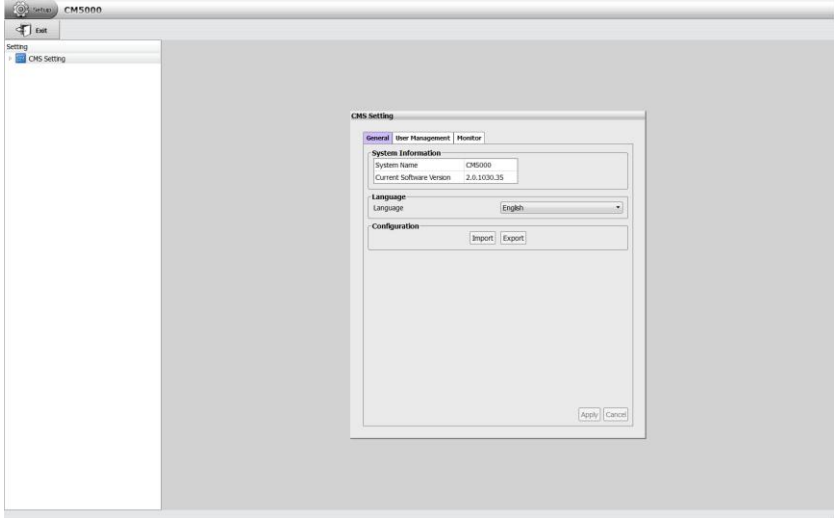


Preview mode

Chapter 5 Customizing the CMS System

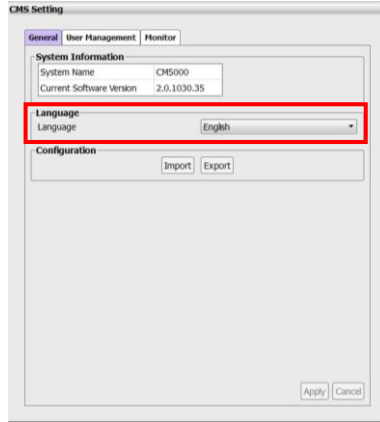
User can setup language of CMS system, export/import configuration file, manage user accounts, and monitor setting.

Click **Setup** tab to call out Setup window. Click **Exit** button will close the Setup window and back to preview window.



5.1 Setup the Language of CMS System

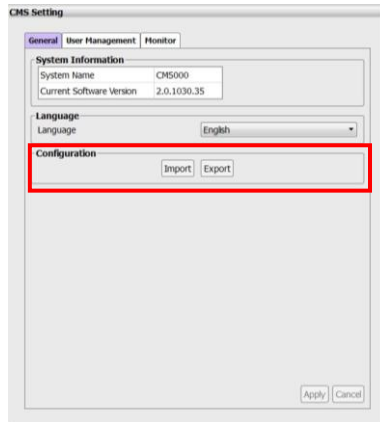
1. Click **Setup** tab to call out setup mode of CMS system.
2. In CMS Setting dialog box, select the system language from **Language** drop-down list.
3. Click **Apply** to save the setting.



5.2 Import/Export the System Configuration

Click **Setup** tab to call out setup mode of CMS system.

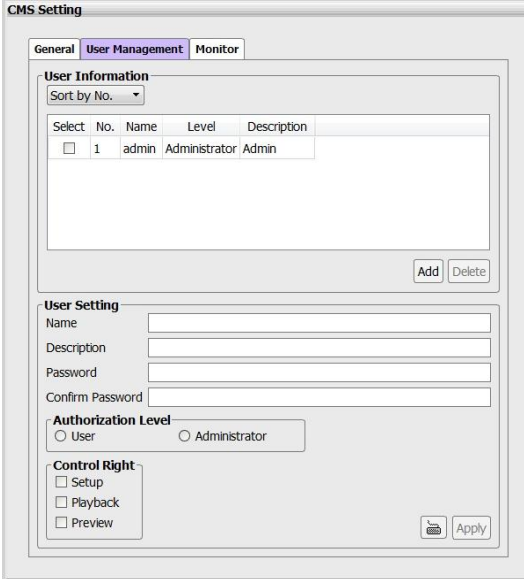
- **Import:** To regain the same settings back from previously backup configuration file.
- **Export:** Backup a copy of all the settings and allows user to regain the same settings back.



5.3 User Account Management

User can create the user accounts for logging to CMS system.

1. Click **Setup** tab to call out setup mode of CMS system.
2. In CMS Setting page, click **User Management** tab.



The screenshot shows the 'CMS Setting' window with the 'User Management' tab selected. It contains three main sections: 'User Information', 'User Setting', and 'Authorization Level'. The 'User Information' section has a table with one row for an 'admin' user. The 'User Setting' section has input fields for Name, Description, Password, and Confirm Password. The 'Authorization Level' section has radio buttons for 'User' and 'Administrator'. The 'Control Right' section has checkboxes for 'Setup', 'Playback', and 'Preview'. Buttons for 'Add', 'Delete', and 'Apply' are also visible.

| Select | No. | Name | Level | Description |
|--------------------------|-----|-------|---------------|-------------|
| <input type="checkbox"/> | 1 | admin | Administrator | Admin |

3. Enter the **Name**, **Description**, **Password**, and **Confirm Password** for the new user account.
4. Select the **Authorization Level** – **User** or **Administrator**.
5. Select the **Control Right** – **Setup**, **Playback** or **Preview**. The user level authority is preview in default.
6. Click **Apply** to create the account.
7. The user accounts are listed in User Information section.

CMS Setting

General **User Management** Monitor

User Information

Sort by No. ▾

| Select | No. | Name | Level | Description |
|--------------------------|-----|-------|---------------|-------------|
| <input type="checkbox"/> | 1 | admin | Administrator | Admin |
| <input type="checkbox"/> | 2 | Guest | User | |

Add Delete

User Setting

Name

Description

Password

Confirm Password

Authorization Level

User Administrator

Control Right

Setup

Playback

Preview

Apply

8. To create another user account, click Add to clear previous enter information and repeat above steps.
9. To delete the user account, select the user account and click **Delete** button.

5.4 Setup Monitor

The CMS system supports up to 4 monitors. User can setup each monitor for different display. Click **Setup** tab to call out setup mode of CMS system. In CMS Setting page, click **Monitor** tab. The CMS system will detect the monitors automatically. User can set each monitor to display different function of UI – Preview, Playback, Emap, Alarm, POS, Event Log. Only preview UI can be set in multiple monitors. Emap, Alarm, Event log, POS button only show in main monitor (Monitor 1).



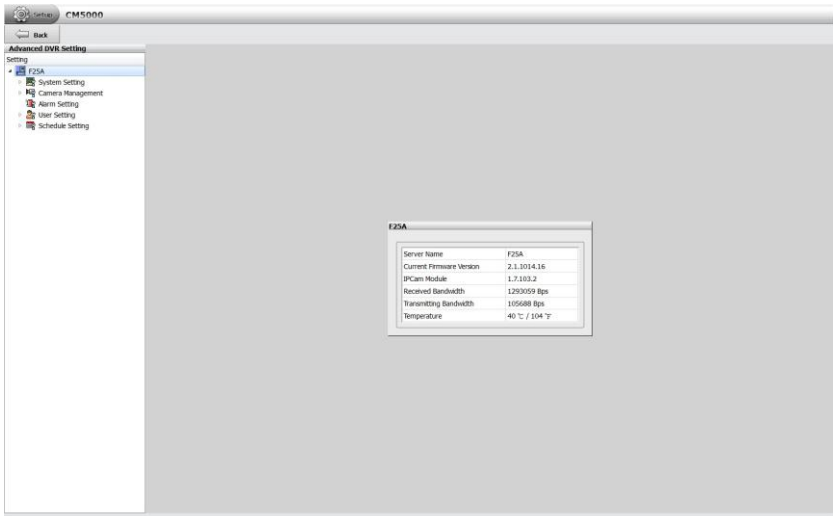
The image shows a screenshot of the 'CMS Setting' dialog box, specifically the 'Monitor' tab. The dialog has three tabs: 'General', 'User Management', and 'Monitor'. The 'Monitor' tab is active. It contains three sections for 'Monitor 2', 'Monitor 3', and 'Monitor 4'. Each section has a 'Display' label and a dropdown menu currently set to 'Disable'. At the bottom right of the dialog, there are 'Apply' and 'Cancel' buttons.

| Monitor | Display |
|-----------|---------|
| Monitor 2 | Disable |
| Monitor 3 | Disable |
| Monitor 4 | Disable |

Chapter 6 Customizing the Remote NVR/DVR Server

CMS system allows user to setup and modify settings of monitored NVR/DVR servers.

1. Click **Setup** tab to call out setup mode of CMS system.
2. Click ▷ of CMS Setting and click ▷ of NVR Management to expand the NVR/DVR server list.
3. Select the NVR/DVR server that user wants to configure and switch to the NVR/DVR server setup window.
4. To backup CMS setup window, click **Back** button.



6.1 Configuring the Remote NVR/DVR Server

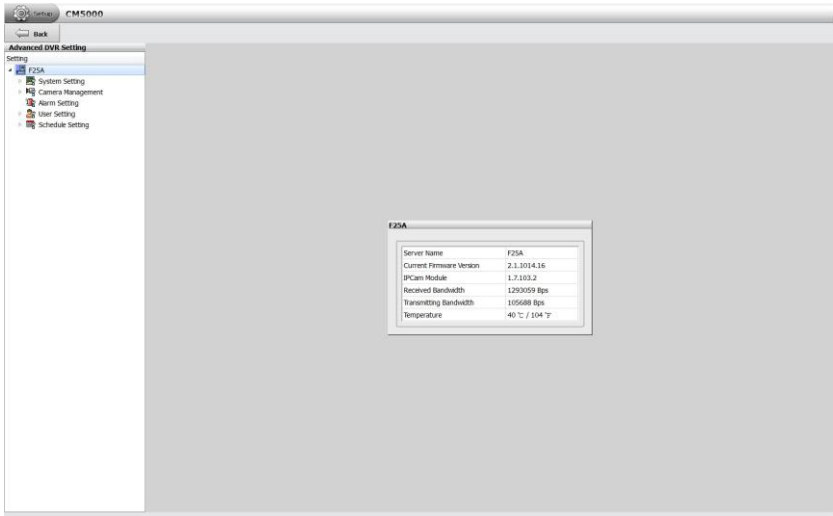
6.1.1 System Setup

1. Click **Setup** tab to call out setup mode of CMS system.
2. Click ▷ of CMS Setting and click ▷ of NVR Management to expand the NVR/DVR server list.
3. Select the NVR/DVR server that user wants to configure and switch to the NVR/DVR server setup window.

In Setup mode, user should see the **System Information** dialog box is displayed at the first place. In System Information dialog box, it displays the information of *Server name*, *Current Firmware Version*, *IPCam Module*, *Received Bandwidth*, *Transmitting Bandwidth*, and *Temperature*.

The setup sections are divided into **System Setting**, **Camera Management**, **Alarm Setting**, **User Setting**, and **Schedule Setting**.

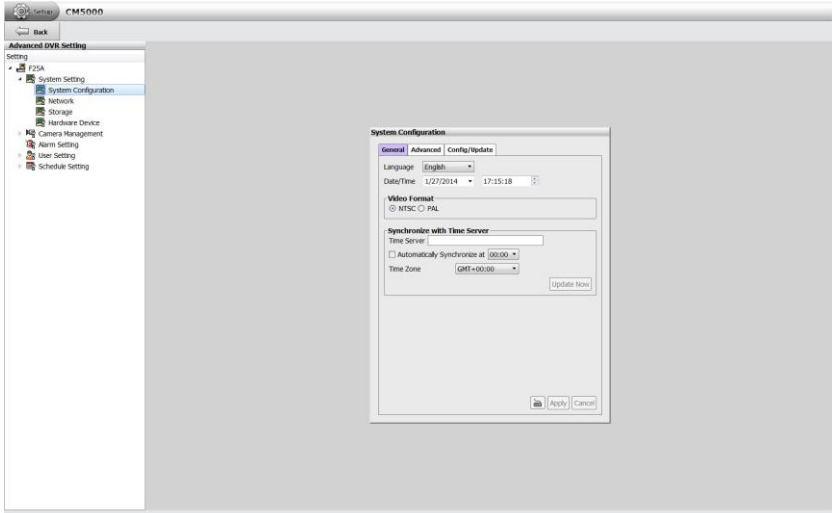
In the following chapters will describe all.






General System Setting

Setup the language of NVR system, video type, system date and time, synchronize the system time.

In System Configuration dialog box, click **General** tab. After changing the settings, click **Apply** button to save the settings. To un-save the new settings, click **Cancel** button.



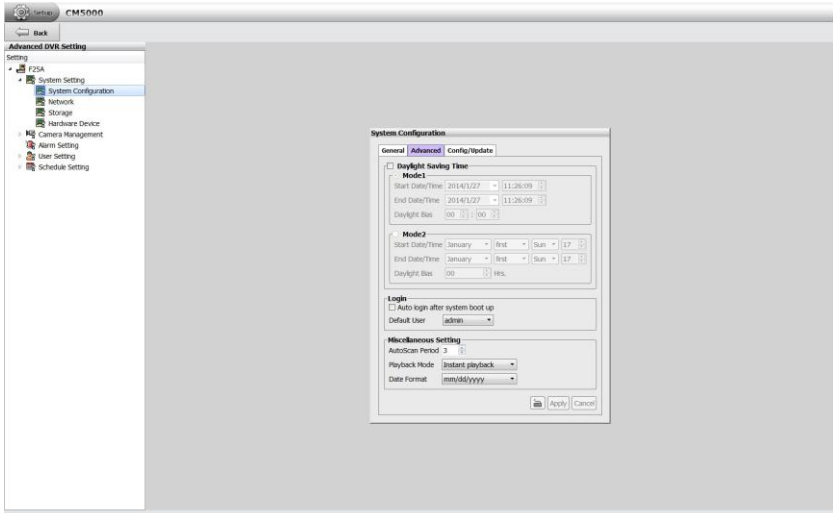
- **Language:** Customize the system to display the tool tips and dialogs based on the selected language. By default the language is in English.
- **Date/Time:** Select the date and time where NVR is located. Click  and  icon to switch the month or click  icon next to month to select the month. To switch the year, click on the text of year and click spin button to select.
- **Video Format:** Change and select the proper video system according to your camera video system. If the video system setting is wrong, the video would appear abnormal.
- **Synchronize with Time Server:** Adjust the NVR system time same as network time server.
 - **Time Server:** Fill in the Time Server IP address or domain name.
 - **Automatic synchronize at:** Select Automatic Synchronize time to set automatic synchronize time on a daily basis.
- **Update Now:** User can click **Update Now** button to adjust time right away.

System Advanced Setting

In Advanced of System Configuration, user can setup the daylight saving time, system login setting, and some other system related setting.

In System Configuration dialog box, click **Advanced** tab.

After changing the settings, click **Apply** button to save the settings. To un-save the new settings, click **Cancel** button.



Daylight Saving Time Setting

User can setup daylight saving mode as user is desired.

1. Select the mode of Daylight saving.
 - **Mode 1:** Mode 1 is setting up specific start date/time and end date/time.
 - **Mode 2:** Mode 2 is setting up fixed day of month in every year for start and end date/time.
2. Setup the **Star Date/Time** and **End Date/Time** for Daylight saving period.
3. **Daylight Bias:** Assign a time that it is for daylight saving time offset in your time zone. For example: if the time zone is in U.S. Eastern, the time offset is 1 hour.
4. Click **Apply** to save the setting.

The screenshot shows a 'System Configuration' dialog box with three tabs: 'General', 'Advanced', and 'Config/Update'. The 'Advanced' tab is selected. A red rectangle highlights the 'Daylight Saving Time' section. This section contains a checkbox for 'Daylight Saving Time' (which is checked), followed by two radio buttons for 'Mode1' and 'Mode2'. Under 'Mode1', there are fields for 'Start Date/Time' (2014/1/27), 'End Date/Time' (2014/1/27), and 'Daylight Bias' (00 : 00). Under 'Mode2', there are fields for 'Start Date/Time' (January, first, Sun, 17), 'End Date/Time' (January, first, Sun, 17), and 'Daylight Bias' (00 Hrs.). Below the highlighted section are sections for 'Login' (with 'Auto login after system boot up' unchecked and 'Default User' set to 'admin') and 'Miscellaneous Setting' (with 'AutoScan Period' set to 3, 'Playback Mode' set to 'Instant playback', and 'Date Format' set to 'mm/dd/yyyy'). At the bottom right are 'Apply' and 'Cancel' buttons.

Customizing System Login Setting

Enable the conditions in Login section you want the system to automatically carry out. Click **Apply** to save the setting.

- **Auto Login after system boot up:** Execute the NVR when the operating system is started.
- **Default user:** Automatically log in to the selected default user when the NVR system is executed.

The screenshot shows the 'System Configuration' dialog box with the 'Advanced' tab selected. The 'Login' section is highlighted with a red border. It contains the following settings:

- Daylight Saving Time
 - Mode1
 - Start Date/Time: 2014/1/27 11:26:09
 - End Date/Time: 2014/1/27 11:26:09
 - Daylight Bias: 00 : 00
 - Mode2
 - Start Date/Time: January first Sun 17
 - End Date/Time: January first Sun 17
 - Daylight Bias: 00 Hrs.
- Login**
 - Auto login after system boot up
 - Default User: admin
- Miscellaneous Setting**
 - AutoScan Period: 3
 - Playback Mode: Instant playback
 - Date Format: mm/dd/yyyy

Buttons: [Printer icon] [Apply] [Cancel]

Customizing System Miscellaneous Setting

Enable the conditions in **Miscellaneous** section you want the system to perform. Click **Apply** to save the setting.

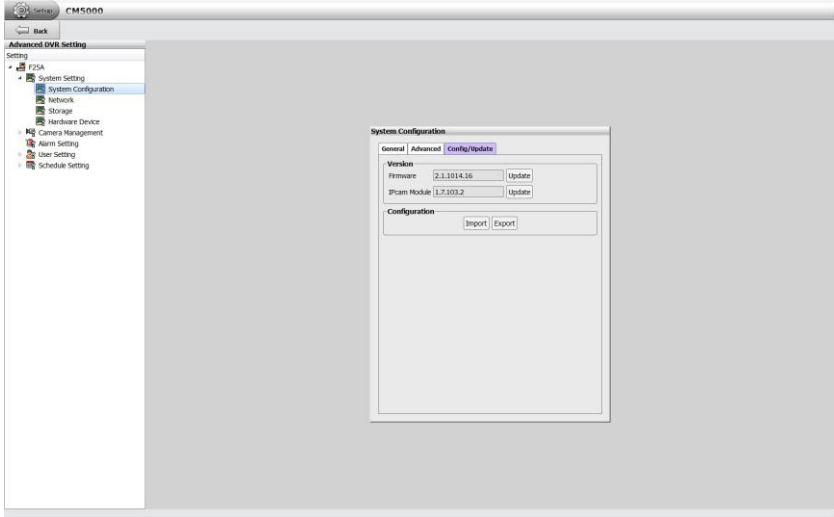
- **Auto Scan Period:** Set the time gap of the Auto Scan function from 3 to 10 seconds. This automatically switches to the next video in cycle depending on the set time gap.
- **Playback Mode:**
Select the mode of playback the video.
 - ✓ **Select date and time:** Select the date and time which user wants to playback.
 - ✓ **Play the last file:** Automatically playback the video from the last hour
 - ✓ **Instant Playback:** Automatically playback the video which has just recorded.
- **Date Format:** Select the date format which wants to display in **Select date and time** playback mode

The screenshot shows the 'System Configuration' dialog box with the 'Advanced' tab selected. The 'Daylight Saving Time' section is expanded, showing 'Mode1' selected with start and end dates of 2014/1/27 and a bias of 00:00. 'Mode2' is also visible with start and end dates of January, first, Sun, 17, and a bias of 00 Hrs. The 'Login' section has 'Auto login after system boot up' unchecked and 'Default User' set to 'admin'. The 'Miscellaneous Setting' section is highlighted with a red box and contains: 'AutoScan Period' set to 3, 'Playback Mode' set to 'Instant playback', and 'Date Format' set to 'mm/dd/yyyy'. 'Apply' and 'Cancel' buttons are at the bottom right.

Configuration Update

In Configure Update, user can import the backup configure file to NVR system and export the configure file. Also, user can update the NVR system's firmware and IP camera patch file.

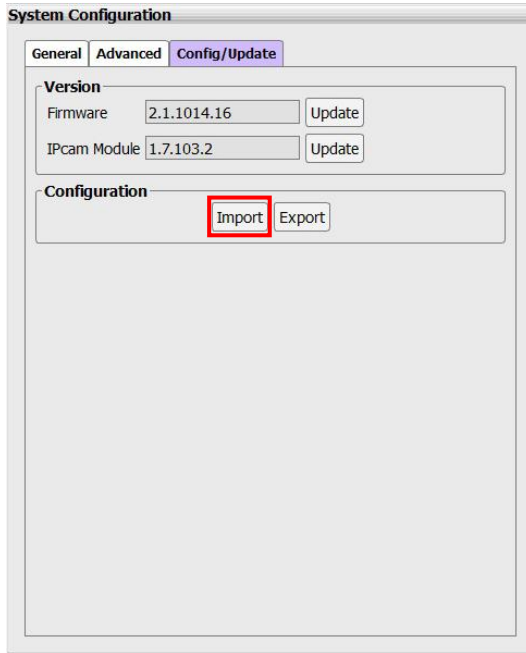
In System Configuration dialog box, click **Configure/Update** tab.



Import the NVR System Configuration

To regain the same settings back from previously backup configuration file.

1. Copy the backup configuration file that user has exported previously to PC.

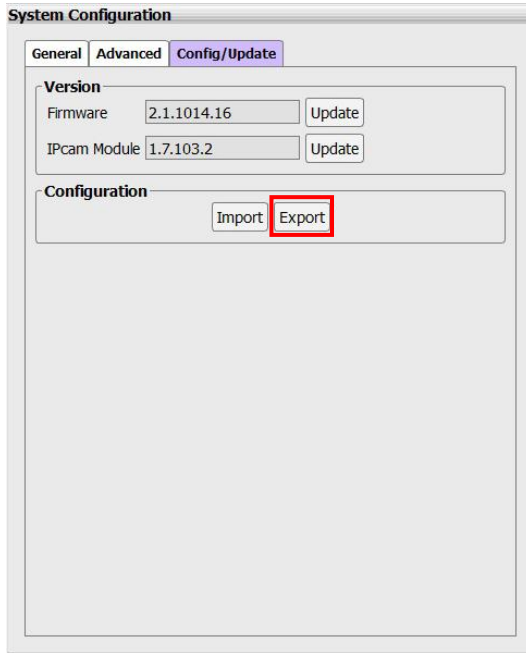


2. In Configure/Update page, click **Import** button in Configuration section.
3. In Import dialog box, select the backup configuration file path.
4. Then, click **Import** button to import the configuration file.

Export the NVR System Configuration

Backup a copy of all the settings and allows you to regain the same settings back.

1. In Configure/Update page, click **Export** button in Configuration section.

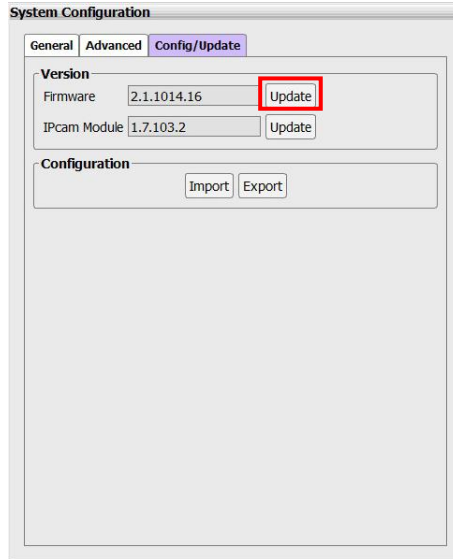


2. In Export dialog box, select the save path for saving the backup configuration file.
3. Next, click **Export** button.
4. To restore the backup configuration file to NVR system, refer to chapter of **Import the NVR System Configuration**.

Upgrading the NVR Firmware

To update the firmware of NVR system.

1. Plug the USB pen drive that contains the NVR firmware file or copy the firmware file to local hard disk drive. To get the newest NVR firmware, go to website <http://www.aver.com> > **Support > Download center**.
2. In Configure/Update page, click **Update** button of Firmware.

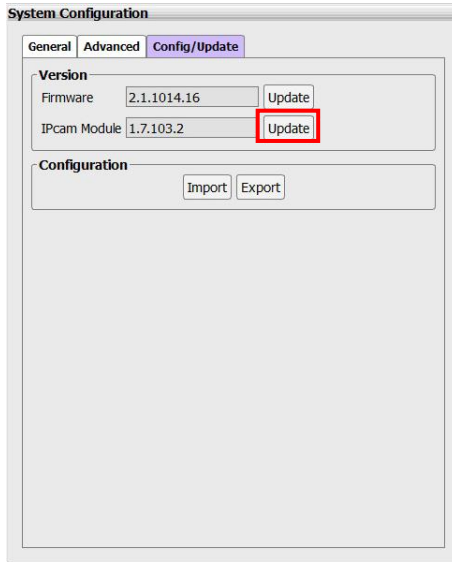


3. In upgrade dialog box, locate the firmware file. The system will check the firmware file and shows the firmware file name and version information.
4. Click **Upgrade** button to process.

Upgrading the IP Camera Module Patch

To update the firmware of NVR/DVR system.

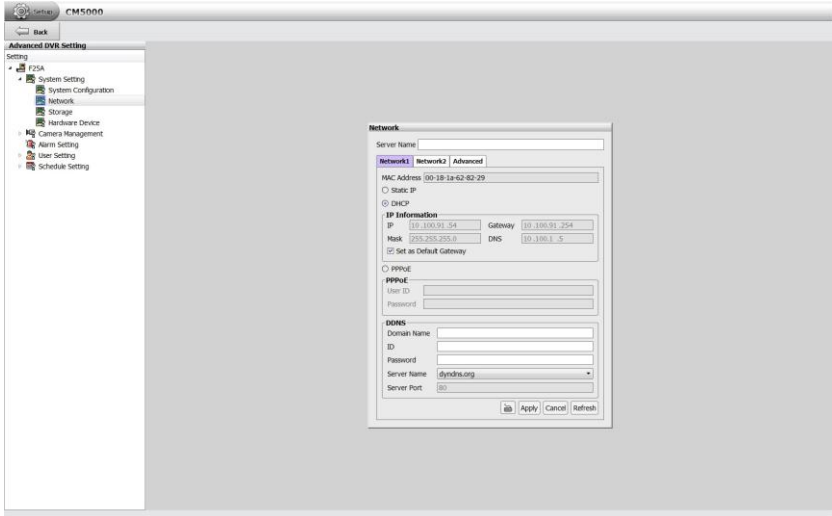
1. Plug the USB pen drive that contains the IP camera patch file or copy the firmware file to local hard disk drive..
2. In Configure/Update page, click **Update** button of IPCam Module.



3. In upgrade dialog box, locate the IP camera patch file. The NVR system will check the patch file and show the patch file name, and version information.
4. Click **Upgrade** button to process.

6.2.2 Network Setting

Select type of IP mode, setup the IP address of NVR/DVR, and configure the DDNS.



1. In Network dialog box, click **Networking 1** tab.
2. **MAC Address:** Displays the MAC address of Ethernet port on LAN card.
3. Select the IP mode – **Static IP, DHCP, PPPOE.**
 - **Static IP:** Assign a fixed IP address for NVR server
 - **IP ADDRESS:** Assign a constant IP address which a real IP addresses given from ISP.



Do Not assign the NVR server to 1.0.0.0 network segment. It will be caused the NVR cannot access to Internet due to the un-recognize to 1.0.0.0 IP segment.

- **Mask:** It is a bitmask used to identify the sub network and how many bits provide room for host addresses. Enter the subnet mask of the IP address which user has assigned to NVR system.
 - **Gateway:** A network device act as a passageway to internet. Enter the network gateway IP address
 - **DNS:** Domain Name Server translates domain names (such as www.abb.com.tw) to IP addresses. Enter the IP address of DNS if it is available.
- **DHCP:** Uses DHCP server assigning NVR server an IP address.

- **PPPoE:** Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames in Ethernet frames. It is used mainly with ADSL services. If your network is using ADSL service connecting to internet, and then, select PPPOE mode. Enter **User ID** and **Password** that is given by your ISP for PPPOE connecting authority.
4. **Set as default gateway:** The NVR system supports dual LANs, but only one LAN port can be set as default gateway.
 5. Setup the DDNS. To use this feature, go to **http://dyndns.org** register. **Only the LAN port is set as default gateway can be set DDNS function.**
 - **Domain Name:** The user has applied on DDNS website.
 - **ID:** The account ID that user has created on DDNS website.
 - **Password:** The password that user has setup on DDNS website.
 - **Server Name:** The domain name server that user has applied the domain name.
 - **Server Port:** The port is use to connect the domain name server.
 6. After enter all necessary information, click **Apply** button to save the settings.
 7. To setup the **Network 2**, click **Network 2** tab and follow above steps.

The screenshot shows a 'Network' configuration window with three tabs: 'Network1', 'Network2' (selected), and 'Advanced'. The 'Network2' tab contains the following fields and options:

- Server Name: [Empty text box]
- MAC Address: 00-18-1a-62-82-a9
- Static IP (selected) / DHCP (unselected)
- IP Information** section:
 - IP: 192.168.222.111
 - Mask: 255.255.255.0
 - Gateway: 192.168.222.254
 - DNS: . . .
 - Set as Default Gateway
- PPPoE (unselected)
- PPPoE** section:
 - User ID: [Empty text box]
 - Password: [Empty text box]
- DDNS** section:
 - Domain Name: [Empty text box]
 - ID: [Empty text box]
 - Password: [Empty text box]
 - Server Name: dyndns.org (dropdown menu)
 - Server Port: 80

At the bottom right, there are buttons for 'Apply', 'Cancel', and 'Refresh'.

Setup the NVR Server Name

Assign a name for the NVR system. Alphabet letters and numbers only.

1. In Network dialog box, enter the desire name in **Server Name** column.
2. Click **Apply** button to save the settings.

Network

Server Name

Network1 | **Network2** | **Advanced**

MAC Address

Static IP

DHCP

IP Information

IP Gateway

Mask DNS

Set as Default Gateway

PPPoE

PPPoE

User ID

Password

DDNS

Domain Name

ID

Password

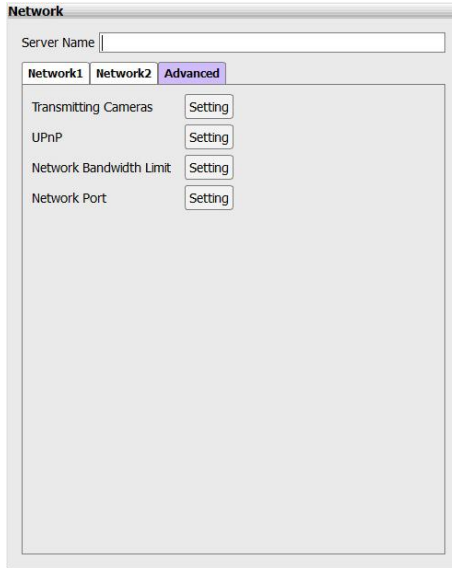
Server Name

Server Port

Network Advanced Setting

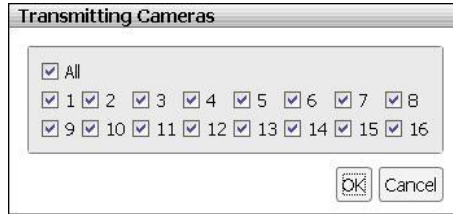
User can setup camera transmitting, UPnP function, bandwidth limit setting, and network port setting.

1. In Network dialog box, click **Advanced** tab.
2. Click **Setting** to configure.



Setup the Transmitting Camera

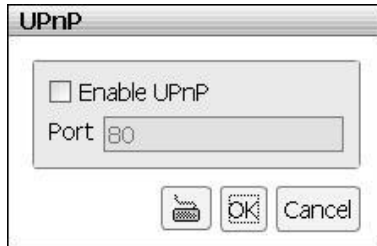
Select and click on the camera number in the Transmitting Camera section you want to make it accessible via internet using Remote site control and iPhone/Andorid Viewer. To select all the cameras, enable the **ALL** check box.



Setup the UPnP

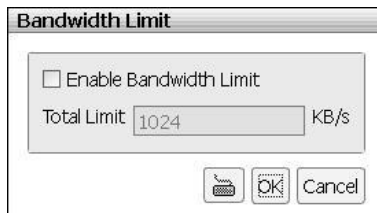
Assign a port number of NVR for UPnP service. Click **OK** to save the setting.

This function is working when the router had enabled the UPNP function and had opened the port, which had assigned for UPNP setting, for the DVR system.



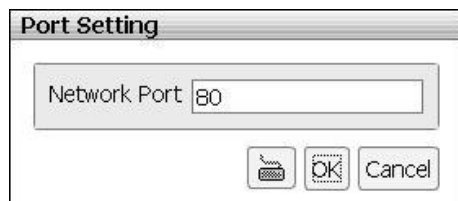
Setup the Bandwidth Limit

Set the network bandwidth consumption limit for remote accessing. Click **OK** to save the setting.



Setup the Network Port

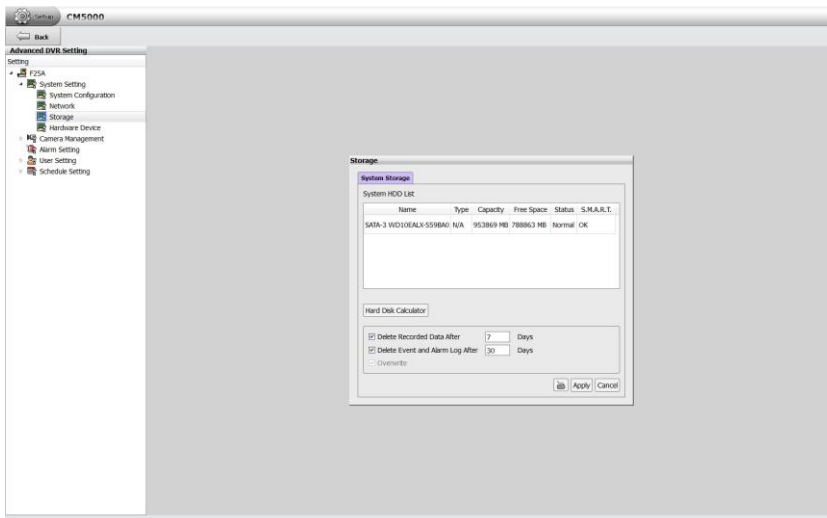
Assign a **Network Port** for remote accessing connection.



6.2.3 Storage Setting

In storage setting, user can add the storage path, remove the storage path, format hard disk, and set the hard disk recycle time.

In setup mode, select the DVR/NVR server and click **Storage** selection.



Setup Hard Disk and Event Log Recycle Time

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

Storage

System Storage

System HDD List


| Name | Type | Capacity | Free Space | Status | S.M.A.R.T. |
|------------------------|------|-----------|------------|--------|------------|
| SATA-3 WD10EALX-559BA0 | N/A | 953869 MB | 788863 MB | Normal | OK |

Hard Disk Calculator

Delete Recorded Data After Days

Delete Event and Alarm Log After Days

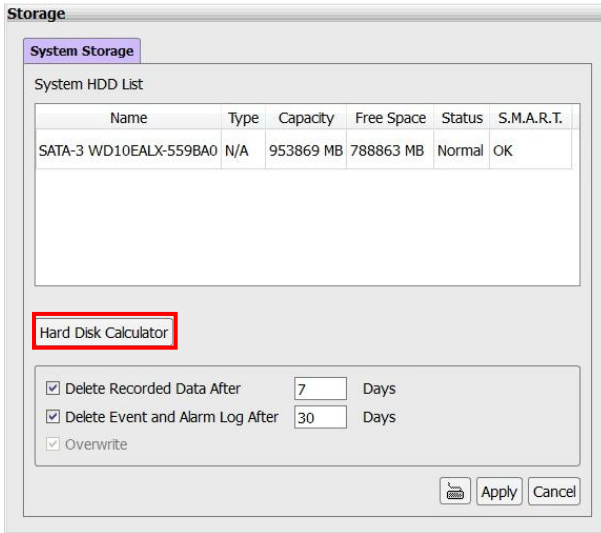
Overwrite



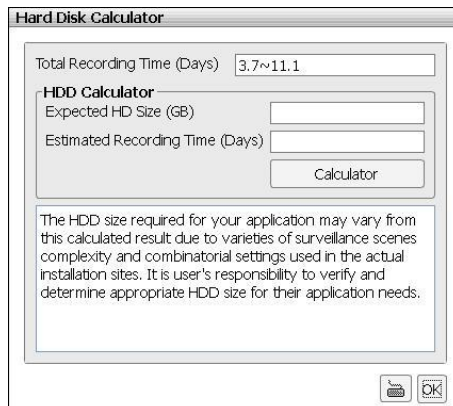
Hard Disk Calculator

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

1. In Storage Setting dialog box, click **Hard disk calculator** button.



2. In Hard Disk Calculator dialog box, enter the expect hard disk size in **Expected HD Size(GB)** or expect recording time in **Expected Record Time(Days)**, and then click **Calculate** button. The **Total Recording time(Days)** column is displayed the current hard disk recording capacity. Click **OK** to exit the hard disk calculator window. The hard disk calculation is based on the recording setup and current hard disk capability.



6.2.4 Camera Setting

To connect and configure the IP camera.

In setup mode, select the DVR/NVR server and click **Camera Setting**.

The screenshot displays the CMS5000 web interface for camera management. On the left, a navigation tree includes 'Advanced DVR Setting' and 'Camera Management' (1-16). The main area is titled 'Camera Management' and features a 'Camera List' table with columns for No., Type, IP Address, Protocol, Model, Status, FPS, BRate, and Detail. Below the table are sections for 'Capacity' (Used/Available), 'Camera Information' (Name, IP Address, Port, Protocol, Model, Video Channel, User Name, Password, Add to Camera), and a 'Search List' table with columns for No., IP Address, Port, and Model.

| No. | Type | IP Address | Protocol | Model | Status | FPS | BRate | Detail |
|-----|------|--------------|----------|----------|-----------|-----|---------|--------|
| 1 | IP | 10.100.91.29 | Alter | FX3000-R | Connected | 25 | 2557147 | Detail |
| 2 | IP | 10.100.91.48 | Alter | FB3027 | Connected | 23 | 2687894 | Detail |
| 3 | IP | 10.100.91.45 | Alter | FB3027 | Connected | 11 | 1233878 | Detail |
| 4 | IP | | | | Fail | 0 | 0 | Detail |
| 5 | IP | | | | Fail | 0 | 0 | Detail |
| 6 | IP | | | | Fail | 0 | 0 | Detail |
| 7 | IP | | | | Fail | 0 | 0 | Detail |
| 8 | IP | | | | Fail | 0 | 0 | Detail |
| 9 | IP | | | | Fail | 0 | 0 | Detail |
| 10 | IP | | | | Fail | 0 | 0 | Detail |
| 11 | IP | | | | Fail | 0 | 0 | Detail |

Capacity
All Chs: Used(NP) 0.79 / Available(NP) 52.39

Camera Information
Name:
IP Address:
Port: 80
Protocol: Alter
Model: FB3027-1
Video Channel: 1
User Name:
Password:
Add to Camera:

Search List
Search: Active:
Table with columns: No., IP Address, Port, Model

Connecting an IP Camera

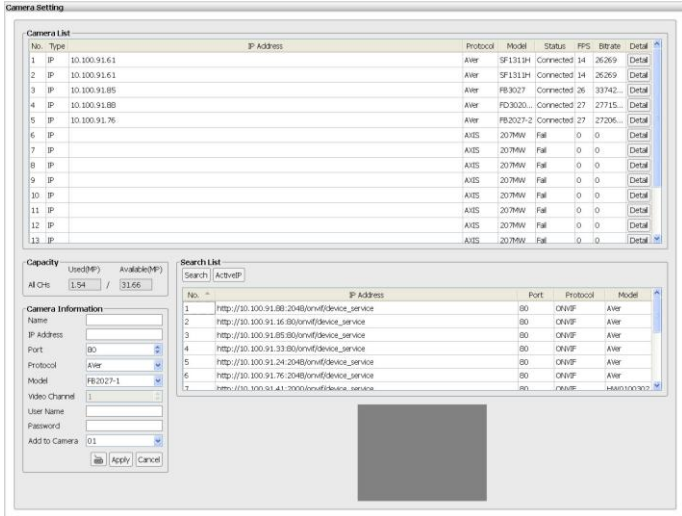
1. In setup mode, select the NVR/DVR server and click the **Camera Setting**.
2. In Camera Information page is divided into 4 areas –, **Camera List**, **Search List**, and **Capacity**, and **Camera Information**
 - **Camera List:** List all camera channels. When the channel has connected IP camera, it displays the IP Address, Protocol, Model, connection Status, FPS, Bitrate, and configure detail button of the connected IP camera.
 - **Search List:** To perform the auto search IP camera on your LAN network and list search result.
 - **Capacity:** Display all connected IP cameras' resolution in Used (MP) column and the how many resolutions are available in Available (MP) column.
 - **Camera Information:** For entering the IP camera's parameters when connects the IP camera.

The screenshot displays the 'Camera Setting' interface with the following sections:

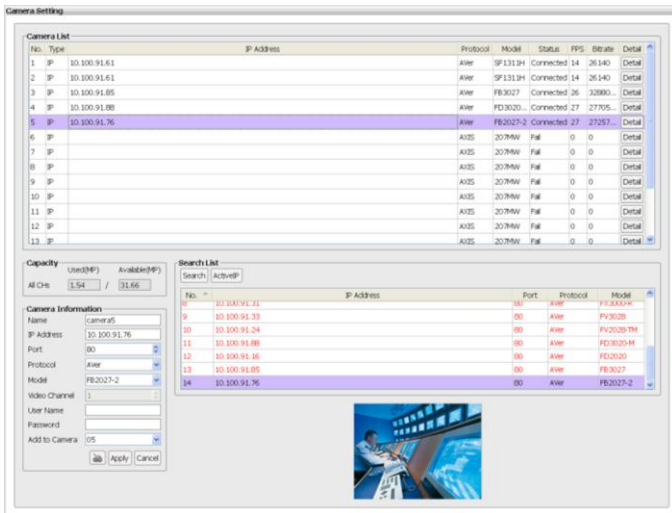
- Camera List:** A table listing camera channels with columns for No., Type, IP Address, Protocol, Model, Status, FPS, Bitrate, and Detail.
- Capacity:** Shows 'Used(MP)' as 1.54 and 'Available(MP)' as 31.66.
- Search List:** A table with columns for No., IP Address, Port, Protocol, and Model, currently empty.
- Camera Information:** A form with fields for Name, IP Address, Port (80), Protocol (Aver), Model (FB2027-1), Video Channel (1), User Name, Password, and Add to Camera (01), with Apply and Cancel buttons.

| No. | Type | IP Address | Protocol | Model | Status | FPS | Bitrate | Detail |
|-----|------|--------------|----------|-----------|-----------|-----|----------|--------|
| 1 | IP | 10.100.91.61 | Aver | SF1311H | Connected | 14 | 26960 | Detail |
| 2 | IP | 10.100.91.61 | Aver | SF1311H | Connected | 14 | 26960 | Detail |
| 3 | IP | 10.100.91.85 | Aver | FB3027 | Connected | 26 | 33861... | Detail |
| 4 | IP | 10.100.91.88 | Aver | FB3020... | Connected | 27 | 27208... | Detail |
| 5 | IP | 10.100.91.76 | Aver | FB2027-2 | Connected | 27 | 27237... | Detail |
| 6 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 7 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 8 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 9 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 10 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 11 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 12 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |
| 13 | IP | | AXIS | 207MW | Fail | 0 | 0 | Detail |

- Click **Search** button to find IP cameras on LAN network.
- In Search list, select the IP camera that user wants to connect. Then, select the IP camera channel that user wants to connect the selected IP camera. Enter the **User name** and **Password** of IP camera if the connection authentication is required.
- Click **Apply** button to make a connection.



- After connection is successful, user should see the live video is displayed.



- Also, user can enter the following data in Camera Information section and click **Apply** button to make a connection of the IP camera.

- **Name:** Give a name for the IP camera.
 - **IP Address:** Enter the IP camera's IP address.
 - **Port:** Enter the port of connecting IP camera.
 - **Protocol:** Enter the brand name of the IP camera. For example: AVer, AXIS...etc.
 - **Model:** Enter the model type of the IP camera. For example: FD2000
 - **User Name:** The user name of IP camera for authentication when connect to the IP camera.
 - **Password:** The password of IP camera for authentication when connect to the IP camera.
 - **Add to Camera:** The channel that is going to connect the IP camera.
8. To configure the IP camera's detail setting, please refer to the chapter of ***Configuring the IP camera.***
 9. To connect another IP camera, repeat the above steps.

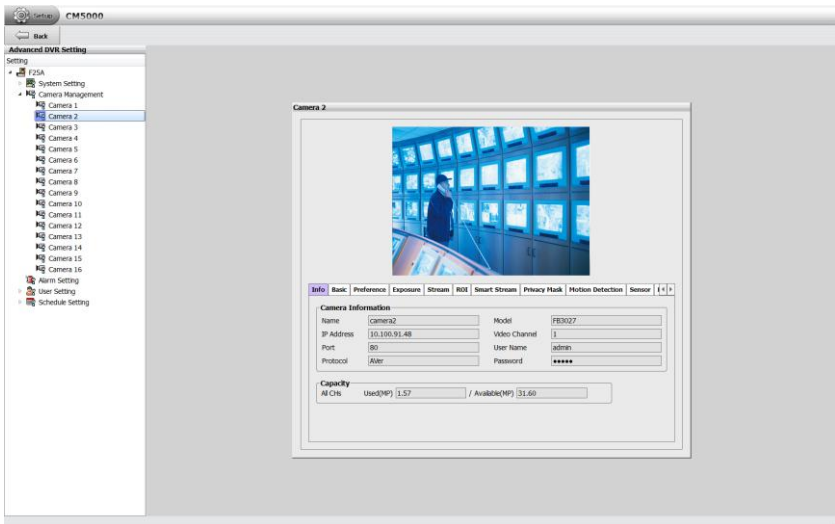
Configuring the IP camera

User can configure the IP camera's stream settings and related parameters.

In setup mode, select the NVR/DVR server and click ▷ of **Camera setting** to expand the camera list. Then, select the **camera #** that user wants to configure it.




Some of functions are depended on IP camera has supported. If function tab is gray-out, the function is not supported for the IP camera.



■ Info

Display the name, IP, port, protocol, model, channel, Login ID, password, and resolution of IP camera.

Camera 2



Info Basic Preference Exposure Stream ROI Smart Stream Privacy Mask Motion Detection Sensor

Camera Information

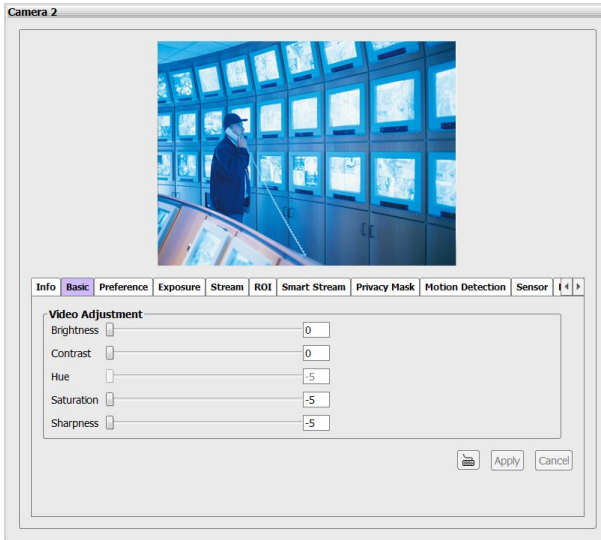
| | | | |
|------------|--------------|---------------|--------|
| Name | camera2 | Model | FB3027 |
| IP Address | 10.100.91.48 | Video Channel | 1 |
| Port | 80 | User Name | admin |
| Protocol | AVer | Password | ***** |

Capacity

| | | | | |
|---------|----------|------|-----------------|-------|
| All CHs | Used(MP) | 1.57 | / Available(MP) | 31.60 |
|---------|----------|------|-----------------|-------|

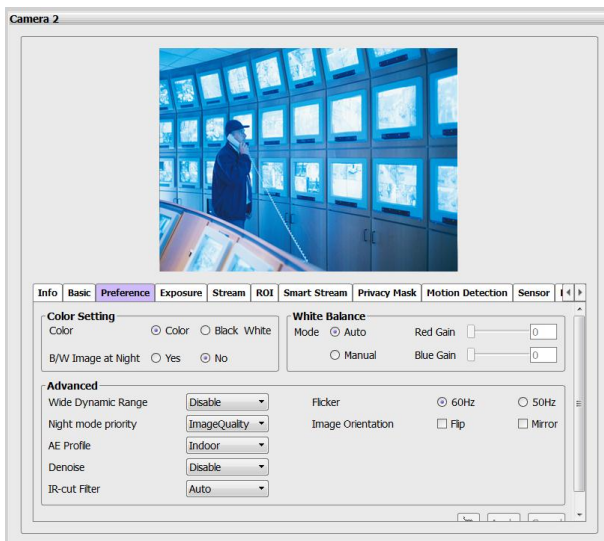
■ Basic

Configure the Brightness, Contrast, Hue, Saturation, and Sharpness of IP camera.



■ Preference

In Preference page, user can tune the IP camera white balance, select display color or black & white, set the flicker frequency, change the video orientation, and adjust the some advance settings. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



➤ Color Setting

- **Color:** Select the **Color** or **Black&White** mode.
- **B/W Image at Night:** Enable/disable to switch to B/W during night mode.

➤ White Balance: Adjust white balance in auto or manual mode.

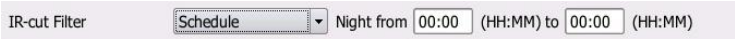
➤ Advanced

- **Wide Dynamic Range:** WDR effectively balances the video image on the screen in both bright and dark areas to make it possible to see clear details. There are 3 levels for your choice or disable WDR.
- **Night mode priority:** Select the one you want to prioritize during night mode image quality or frame rate.

- **Denoise:** Select Disable/2D/Auto to reduce the excessive noise on the video image. Select **Auto** and set the **Sensitivity** level.



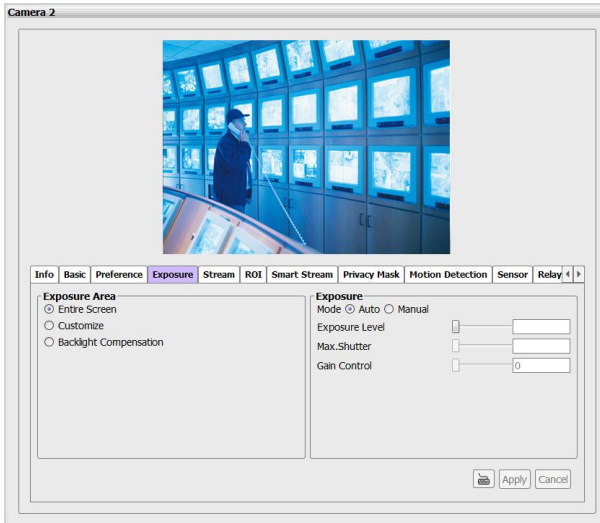
- **AE Profile (Auto Exposure Profile):** Select the auto exposure scenes – Indoor, Outdoor, or ManualIRIS.
- **IR-cut Filter:** The IR cut filter is a mechanism that prevents the infrared light from hitting the sensor. During day time the IR light has an interfering effect on the image quality of the camera, which leads to corruption of color and contrast as well as blurring. At night time, the infrared light is used to achieve more detailed images in the dark or with low ambient light.
 - ✧ **Auto:** automatically switch on/off the IR cut filter. It uses the light sensor in front of the camera to determine the level of ambient light.
 - ✧ **Day Mode:** switch on the IR cut filter at all time to prevent the IR light from hitting the sensor so that the color will not be corrupted.
 - ✧ **Night Mode:** switch off the IR cut filter at all time to let the sensor receives the IR light which could help improve low light sensitivity.
 - ✧ **Schedule:** specify the time on when to switch off the IR cut filter to night mode. The time format is hh:mm and in 24-hour clock time.



- **Flicker:** Select the flicker frequency.
- **Image Orientation:** To **Flip** or **Mirror** the video on screen.

■ Exposure

In Exposure page, user can set the exposure area, exposure mode, and calibrate the DC Iris. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



- **Exposure Area:** Select the exposure area to define the light distribution and bring out more details.
 - **Entire screen:** measure the entire screen to adjust the exposure.
 - **Customize:** measure the exposure to where the adjustable and movable frame on the screen is located. Move the spot to dark zone to adjust the light condition.
 - **Backlight compensation:** measure the exposure at the center of the screen.
- **Exposure List:** Select to **Auto** or **Manual** adjust the exposure.
 - **Auto:** adjust exposure level from -2.0 to +2.0.
 - **Manual:** adjust max shutter and gain control.


■ Stream

User can setup **Codec**, **Resolution**, **FPS**, **Bitrate Mode**, and **Quality** of **Stream 1**, and **Stream 2** on the IP camera channel. The Stream 1 is enabled in default. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



The stream settings are depended on the IP camera has supported.

Camera 2



The camera preview shows a person in a dark jacket and cap standing in a control room with multiple computer monitors displaying various data.

Info Basic Preference Exposure **Stream** ROI Smart Stream Privacy Mask Motion Detection Sensor Relay

Stream Setting

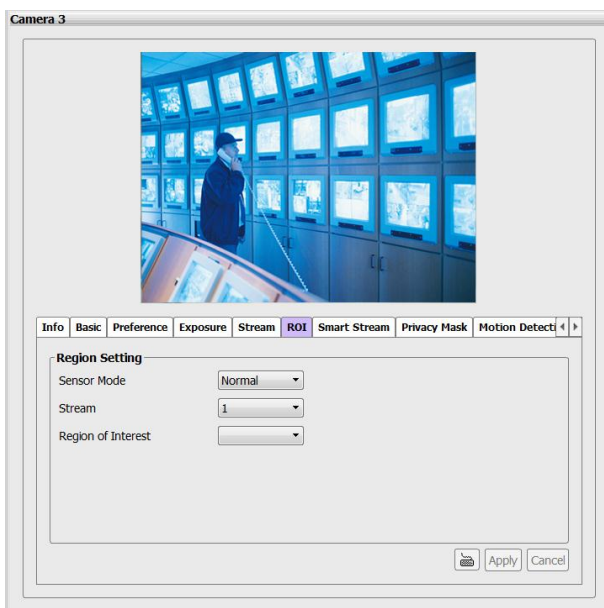
| | Codec | Resolution | FPS | Bitrate Mode | Quality Bitrate |
|--|-------|-------------|-----|--------------|-----------------|
| <input checked="" type="checkbox"/> Stream 1 | H264 | 1920X1080 | 30 | VBR | Good |
| <input checked="" type="checkbox"/> Stream 2 | H264 | 640X480(TV) | 15 | VBR | Good |

Apply Cancel

■ ROI

ROI stands for Region on Interest. It helps users to optimize bandwidth and storage. Users can select 1 or 2 key area(s) to transmit as separate streams for targeted preview and recording.

1. Select the **Sensor Mode** and **Stream**.
2. Then, select the **Region of Interest** from drop-down list and a gray frame will show up. The gray frame size is depended on the **Region of Interest** that user has selected. Click on the frame and move it to the region that user wants to select.
3. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



■ Smart Stream

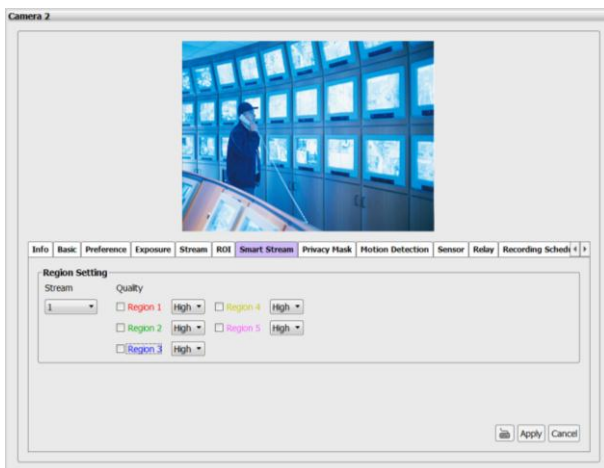
Smart Stream optimizes bandwidth and storage space by increasing or decreasing quality for selected areas based upon criticality. Users can define up to 5 areas per stream to ensure sharp images for crucial areas, while saving bandwidth on non-essential areas. Typical applications include entrances, access gates, production lines, art galleries and museums.

After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



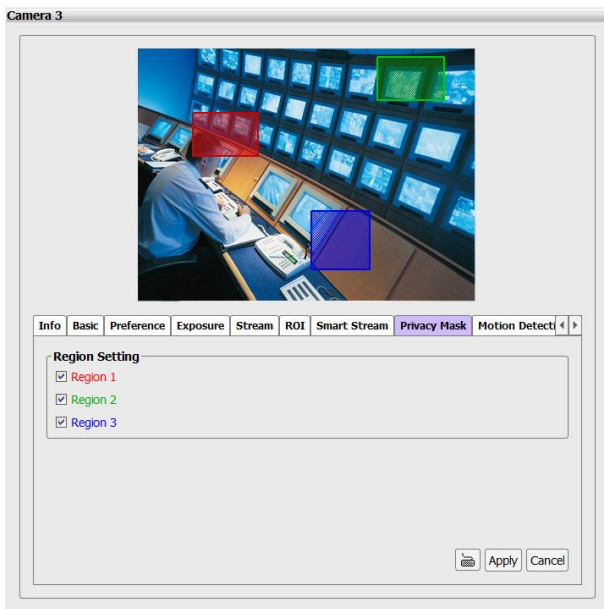
The Smart Stream function supports AVer IP camera series only.

- **Stream:** Select the streaming source. This option is only applied to H.264.
- **Quality:** Select the Region 1/2/3/4/5 and set the high/low. Each region frame is corresponded to the color of text, ex: **Region 1** is red frame. Drag the frame to select the area on screen.
 - **High:** video quality of selected area is better than that of un-selected area.
 - **Low:** video quality of selected area is worse than that of un-selected area



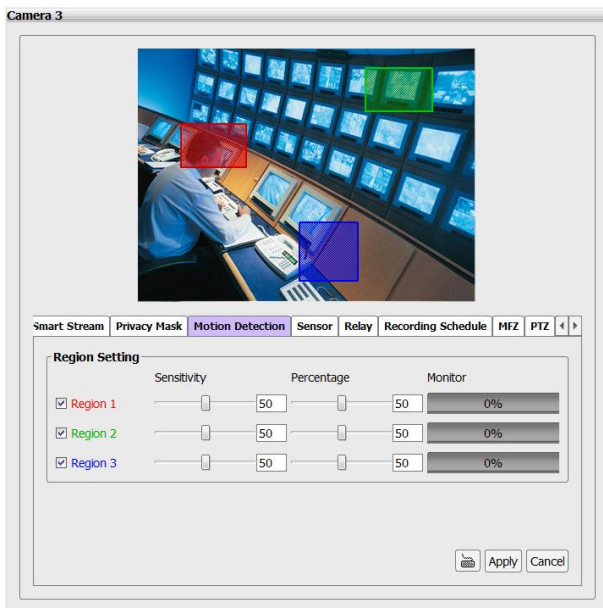
■ Privacy Mask

In Privacy Mask page, user can enable 3 privacy masks. Simply adjust the size and position the mask on the area user wants to conceal. The viewer will not be able to see the masked area. It will cover the video screen with black frame. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.



■ Motion Detection

In the motion detection page, the frame will blink when the motion detected has reached the percentage threshold setting. This feature can be utilized to trigger a response in Event setting.



1. Enable the region check box (Region 1, Region 2, Region 3) to create a motion detection frame.
2. Move and adjust the frame to the area you want to detect the motion.
3. Adjust the sensitivity and percentage. Sensitivity detects the motion on the screen and assesses the changes in pixel thru percentage. The motion detection will activate when the Monitor level reaches the defined percentage.
4. After completing the setting, click **Apply** to save the setting and **Cancel** to keep the old setting.

■ Sensor

Setup the sensor of IP camera.

1. In Camera Management dialog box, click **Sensor** tab.
2. Click the drop-down list and select the sensor ID number.
3. Enter sensor name in **Name** column
4. In the Content section, display the NVR system automatically detects the camera and input relates information. Enter a short comment for this sensor in **Description** column.
5. In the test section, click **Test** to check the sensor status. **Red** is high and **Green** is low.
6. Click **Apply** to exit and accept the setting and **Cancel** to exit without saving the setting.

Camera 2

Smart Stream Privacy Mask Motion Detection **Sensor** Relay Recording Schedule MFZ PTZ

Sensor 01 Name Test

Content

Camera camera2

Protocol AVer

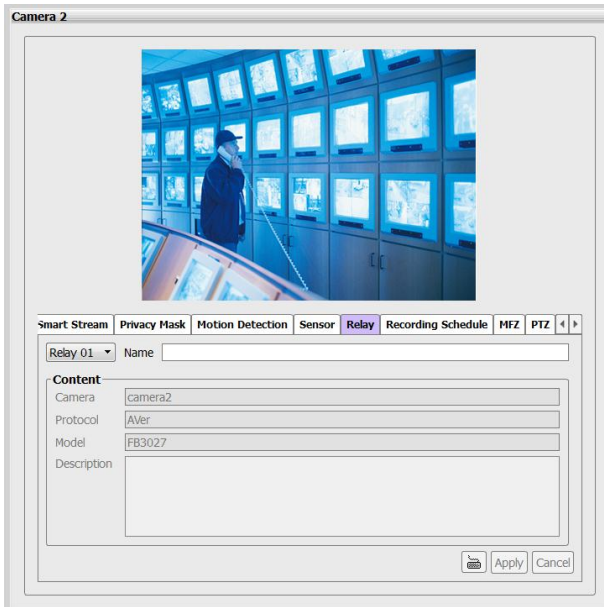
Model FB3027

Description

■ Relay

Setup the relay of IP camera.

- In Camera Management dialog box, click **Relay** tab.
- Click the drop-down list and select the relay ID number.
- Enter relay name in **Name** column
- In the Content section, display the system automatically detects the camera and input relates information. Enter a short comment for this relay in **Description** column.
- Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.

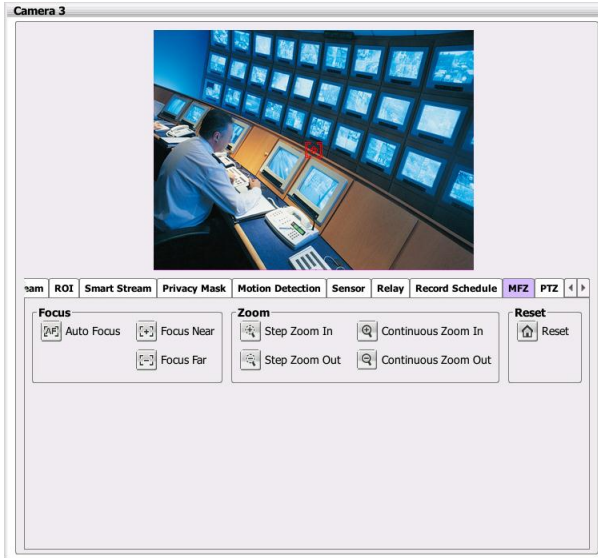


■ MFZ



The IP camera has motorized lens can perform MFZ function(motorized focus and zoom).

To adjust the focus or zoom in/out the view of IP camera.



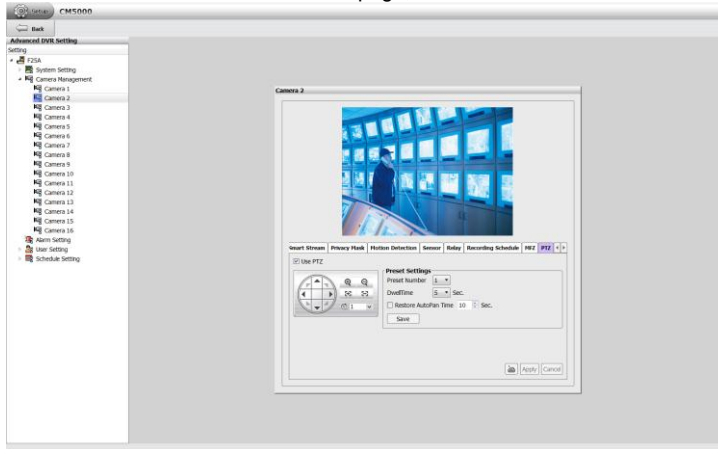
| Name | Function |
|---------------------|--|
| Auto focus | Automatically focus on where focus cursor () has pointed. |
| Focus near | To adjust the near side of focus. |
| Focus far | To adjust the far side of focus. |
| Step zoom in | To zoom in one step by step for fine focus adjusting. |
| Step zoom out | To zoom out one step by step for fine focus adjusting. |
| Continuous zoom in | Press to zoom in continuous. |
| Continuous zoom out | Press to zoom out continuous. |
| Reset | To reset the zoom back to the center of screen view in default value (1x). |

Setup Camera PTZ function

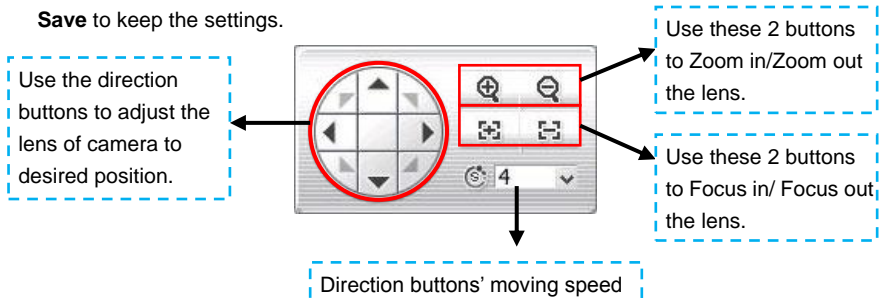
■ Setup IP PTZ

User can enable PTZ function if the IP camera has supported.

1. In setup mode, select the NVR/DVR server. Then, click ▷ of **Camera setting** to expand the camera list.
2. Then, select **Camera # > PTZ** tab. In PTZ page, click **Use PTZ** to enable PTZ function.



3. Mark **User PTZ** check box to enable PTZ function.
4. **Preset Setting:** use the control panel to adjust the position of the camera and select the **Preset Number** to assign a number for the camera current position. After is done, click **Save** to keep the settings.

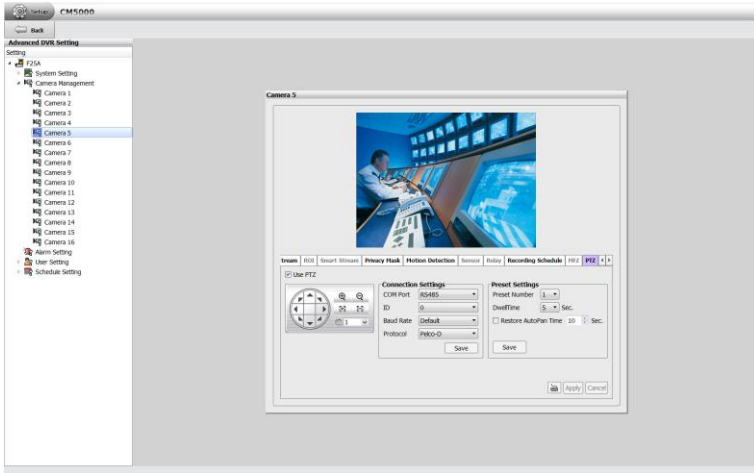


5. **DwellTime:** for how long the camera stays in that position before it moves to the next one (the setup time period is 1–60 seconds). After is done, click **Save** to keep the settings.
6. **Restore AutoPan Time:** set a time period for restoring auto path function after the PTZ camera has been moved. Mark the check box and set the time period in second.
7. Click **Apply** to save the settings.
8. After completing the PTZ setting, user can operate the PTZ function through PTZ control panel in preview mode (see also [Chapter 4.1.2](#)).

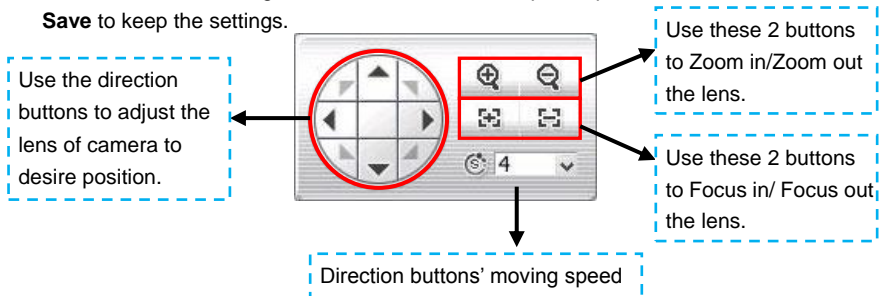
■ Setup Analog PTZ

User can enable PTZ function if the analog camera has supported.

1. In setup mode, select the NVR/DVR server. Then, click ▷ of **Camera setting** to expand the camera list.
2. Then, select **Camera # > PTZ** tab. In PTZ setup page, click **Use PTZ** to enable PTZ
3. In PTZ page, mark **Use PTZ** to enable PTZ function.



4. **Connection Settings:** select the following selections and click **Save** to apply the settings.
 - ✓ **COMPort:** The connecting port is fixed and can't be changed. The default is RS485 port.
 - ✓ **ID:** Assign an ID number for the PTZ camera.
 - ✓ **Baud Rate:** Please refer to the user's manual of the PTZ camera to make sure the baud rate.
 - ✓ **Protocol:** Please refer to the user's manual of the PTZ camera to make sure what protocol is using.
5. **Preset Setting:** use the control panel to adjust the position of the camera and select the **Preset Number** to assign a number for the camera preset position. After is done, click **Save** to keep the settings.



6. **DwellTime:** For how long the camera stays in that position before it moves to the next one (the setup time period is 1~60 seconds). After is done, click **Save** to keep the settings.

Preset Settings

Preset Number

DwellTime Sec.

Restore AutoPan Time Sec.

7. **Restore AutoPan Time:** set a time period for restoring auto path function after the PTZ camera has been moved. Mark the check box and set the time period in second.
8. Click **Apply** to save the settings.
9. After completing the PTZ setting, user can operate the PTZ function through PTZ control panel in preview mode (see also [Chapter 4.1.2](#)).

6.2.5 Schedule Setting

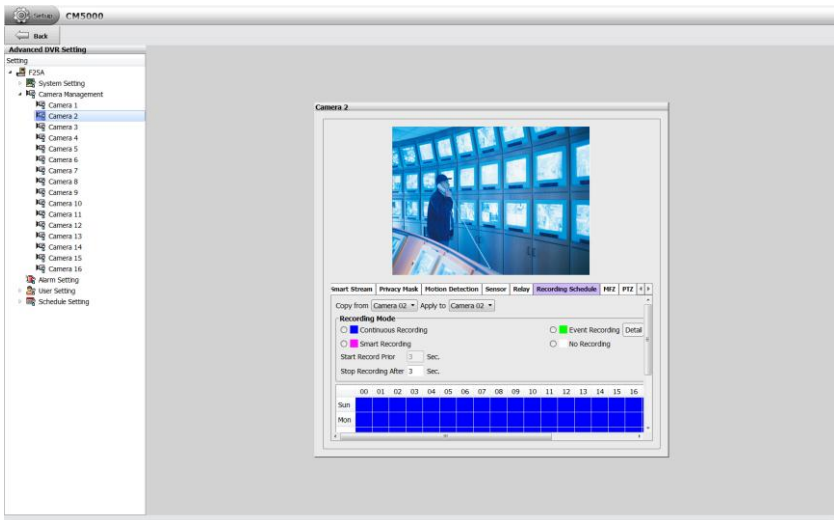
In this chapter, it describes how to setup the recording and alarm schedule.

Setup Recording Schedule

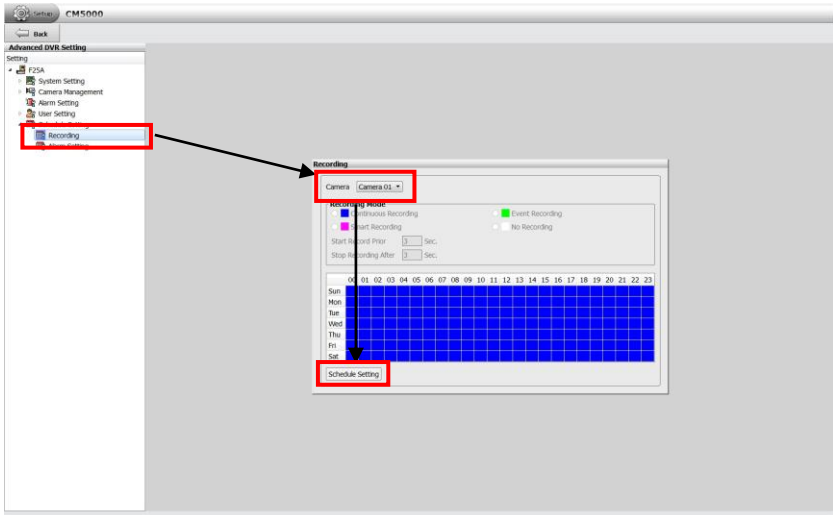


- The recording schedule default is “always record”.
- If the storage path is not set, the NVR system couldn't record.

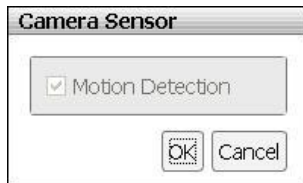
1. In setup mode, select the NVR/DVR server. Then, click ► of **Camera setting** to expand the camera list.
2. Then, select **Camera # > Record Schedule** tab in Camera Setting.



- User also can select **Schedule Setting**; click ▷ to expand list of Schedule Setting and select **Recording**. Then, select the **Camera** and click **Schedule Setting** button to enter Record Schedule page.

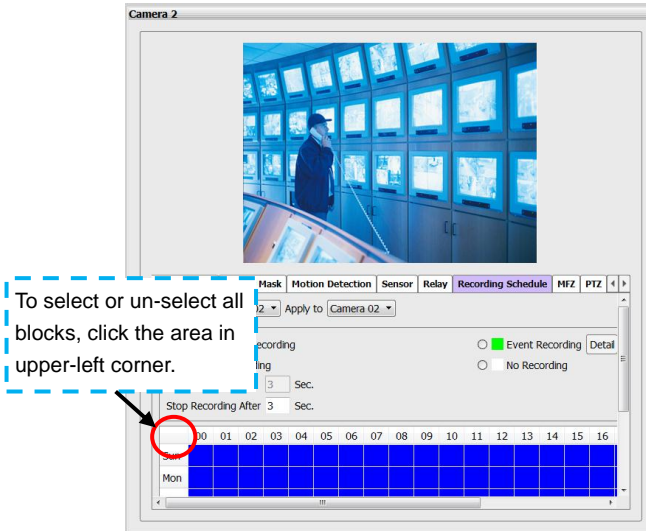


- Next, select the **Recording Mode** first. The recording modes are listed in following:
 - **Always Recording**
Record the video from the selected camera and save it to the designated storage path.
 - **Event Recording**
Start recording the video from the selected camera only when the system detects movement. Click **Detail** button to view event recording items. Now, only support motion recording on Event recording mode.

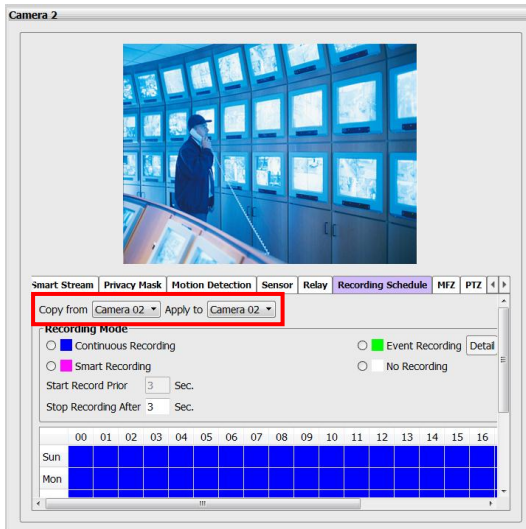


- **Smart Recording**
Automatically switch to recorded once a motion is detected and if there is no motion, it records at key frame only.
- **No Recording**
The system won't do any recording.

- After selecting the recording mode, select date and time on date time table.



- If user wants to apply this record schedule to other or all camera channels, uses **Copy from** and **Apply to** function to apply to other camera channel.

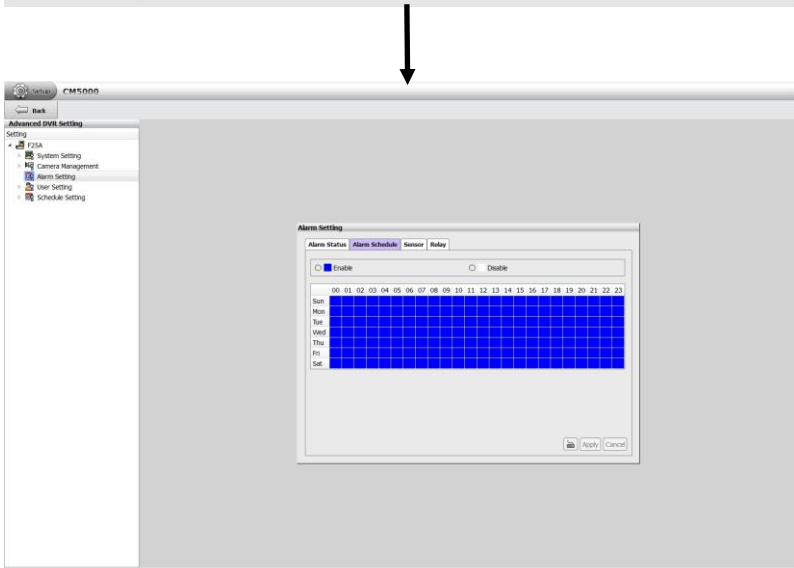
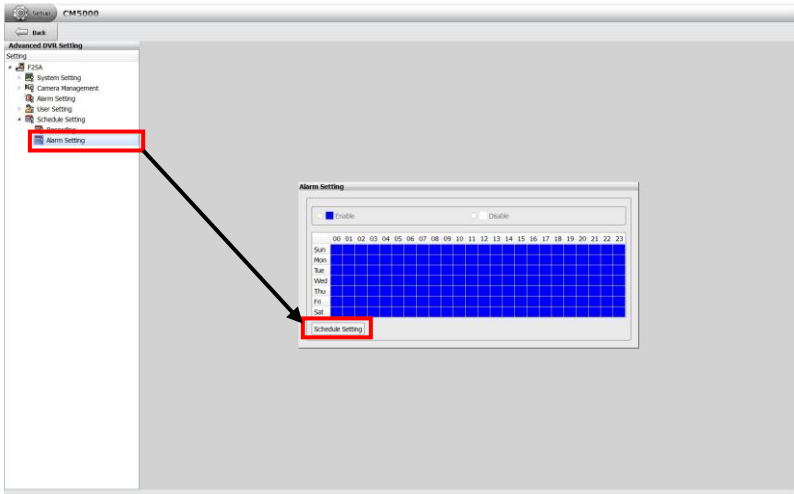


- Click **Apply** to save the recording schedule.
- To stop recording, selecting **No Recording** and click on the date and week to disable the recording; then, click **Apply** to save the changes.

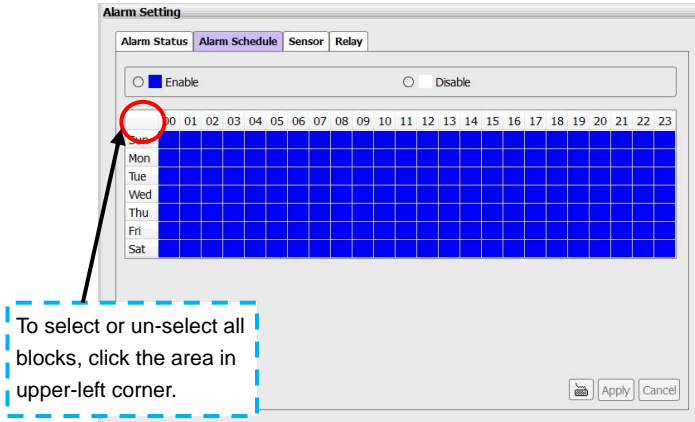
Setting up the Alarm Schedule

Setting up the schedule for alarm action that user has setup in Alarm setting (see also [Chapter 5.2.6](#)). According to the alarm schedule, the alarm actions will be active and alarm will be issued when action has matched the conditions.

1. In setup mode, select the NVR/DVR server. Then, double-click the **Schedule setting** and select **Alarm Setting**.



2. Also, user can click **Alarm Setting > Alarm Schedule** tab to enter Alarm schedule page.
3. Select the **Enable** and click on the date and time to setup the schedule.



4. Next, click **Apply** to save the setting.
5. To disable the alarm schedule, select "**Disable**" and click on the date and time table and click **Apply** to save the changes.

6.2.6 Alarm Setting

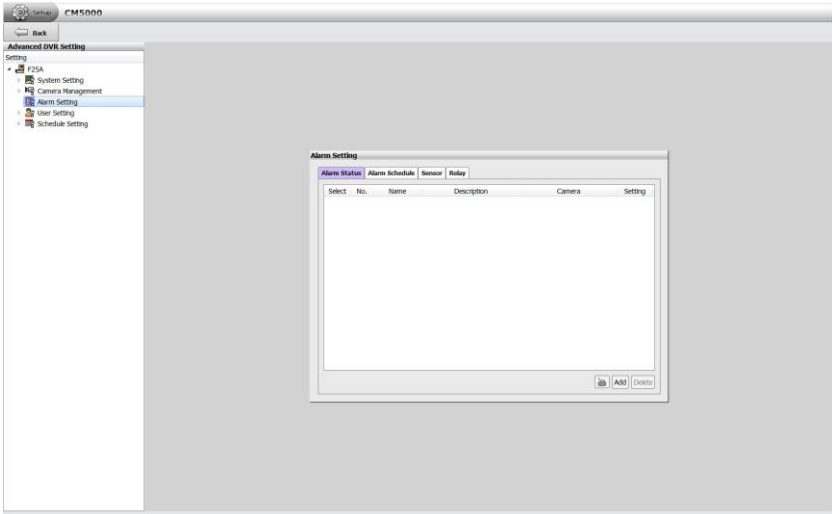
To setup an alarm setting, user needs to complete following steps:

1. Setting up the alarm conditions
2. Setting up the alarm actions
3. Setting up the alarm schedule(see also [Chapter 5.2.5](#))

In the following chapter, it describes how to setup the alarm condition and action.

Setup the Alarm Condition

1. In setup mode, select the NVR/DVR server. Then, select **Alarm Setting**.
2. User should see the Alarm Setting dialog box is displayed.



3. Next, click **Add** to create a new alarm condition setting.

- In **No.** column displays the alarm setting number. The number of alarm is assigned by NVR system in default.
- Enter alarm name and description for this alarm setting in **Name** and **Description** column.

- Next, select **“Trigger if any”** to activate alarm if system falls to one of the conditions or **“Trigger if all”** to activate alarm if system falls to all conditions.

- In **Camera** section, select and click on the camera number in **Motion** and **Video Loss** to set the condition for the system to alarm.

- **Motion:** select and click on the camera number (01 to 16) to set the condition for the system to alarm. Click the **Setting** button to setup the system to send out the alarm when motion is detected and last the time that user has entered in **Continuous trigger duration**. The time range is 0~ 300 seconds.

- **Video Loss:** click the camera number (01 to 16) to set the alarm condition when video is lost. Click the **Setting** button to setup the system to send out the alarm when video is lost and status last the time that user has entered in **Continuous trigger duration**. The time range is 0~ 300 seconds.

- In **Sensor** section, select and click on the sensor number to set the condition for the system to alarm. If the sensor normal status is high, set the sensor condition to low.

Alarm 1

Condition Action

No. Name Description

0 alarm 1

Trigger Type Trigger if Any Trigger if All

Camera

Motion

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Setting

Video Loss

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Setting

Sensor

High

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Low

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

IP Camera Sensor

Continuous Trigger Duration 0 Sec.

System

Reboot

Abnormal Reboot

Hard Disk Failed

Apply Cancel

- **IP Camera Sensor:** To adjust sensor high/low that is connected on the IP camera.

IP Camera Sensor

Camera List

Camera: 1 (AVer - SF2121H-R IP: 10.100)

Camera: 5 (AVer - FX3000-R IP: 10.100)

Conditions

| No. | Name | High | Low |
|-----|------|-----------------------|-----------------------|
| 1 | | <input type="radio"/> | <input type="radio"/> |

OK Cancel

- **Continue trigger duration:** Set a time period that when sensor has been trigger and stay in the same status for that period, then the alarm will be sent out.

9. In System section, mark the check box to set the conditions that are caused by system.

- **Reboot:** when the NVR system reboot without abnormal condition, the system will send out the alarm message.
- **Abnormal Reboot:** when the NVR system reboot in irregular condition, the system will send out the alarm message.
- **Hard Disk failed:** when the hard disk doesn't work normally, the system will send out the alarm message.

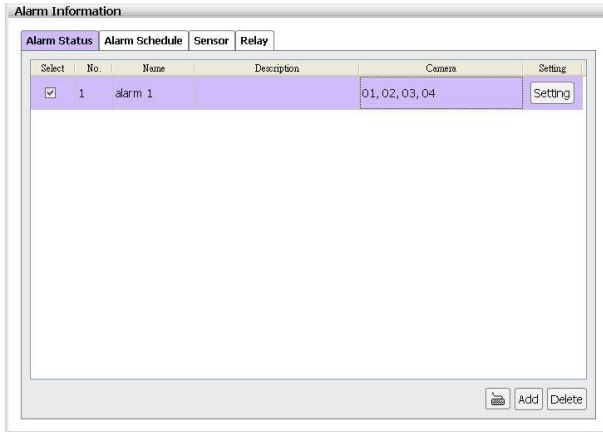
10. After setting all alarm conditions, click **Apply** to save the settings.

11. Next, user needs to set the alarm action when alarm has triggered. Please refer to chapter of **Setup the Alarm Action**.

12. To modify the alarm condition setting, click **Setting** button of Alarm # that user has created. Remember to click **Apply** to save the changes after modification.

| Select | No. | Name | Description | Camera | Setting |
|--------------------------|-----|---------|-------------|----------------|---------|
| <input type="checkbox"/> | 1 | alarm 1 | | 01, 02, 03, 04 | Setting |

13. To delete the alarm #, select the alarm # that user wants to delete and click **Delete** button.

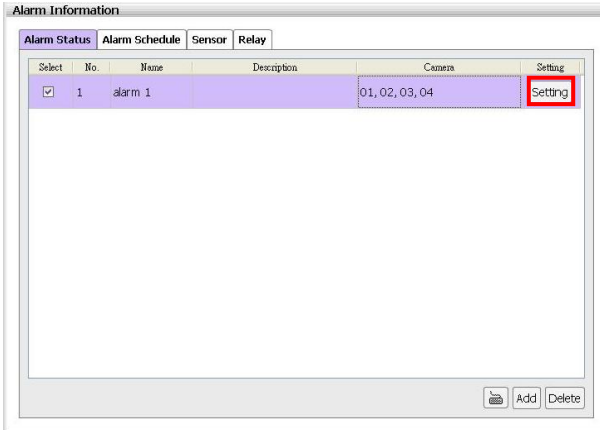


Setup the Alarm Action

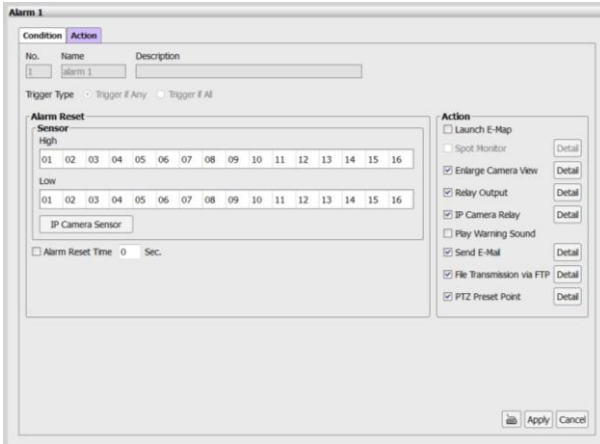
Setup the alarm action for system to perform when the alarm condition has been triggered.

1. In setup mode, select the NVR/DVR server. Then, select **Alarm Setting**.
2. Then, click **Setting** button of Alarm # that user has created in Alarm Information dialog box.

Also, user can select the **Alarm#** from the list under Alarm Setting.

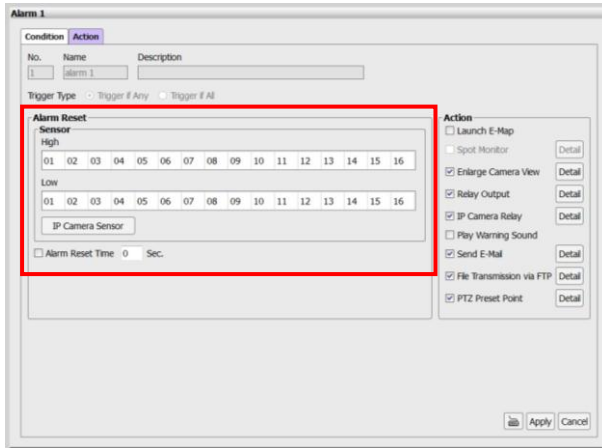


3. In Alarm Setting page, select the **Action** tab to switch to alarm action page.

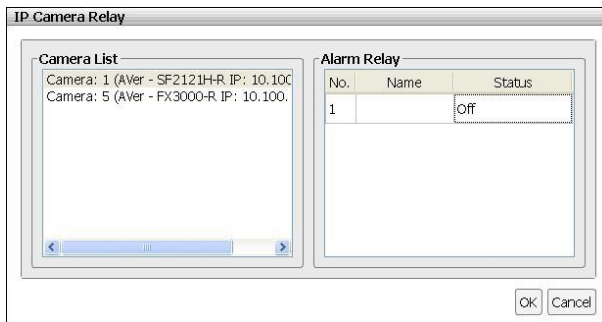


4. The **No.**, **Name**, **Description**, and **Priority** column display the current alarm's information. The **Trigger Type** displays the current alarm's trigger condition.

- In **Alarm Reset** section, click the camera number to set the reset condition of alarm. Once alarm is reset, all alarm action will stop at the moment. If the sensor normal status is high, set the alarm reset condition to low.



- **IP Camera Sensor:** To adjust sensor high/low that is connected on the IP camera.

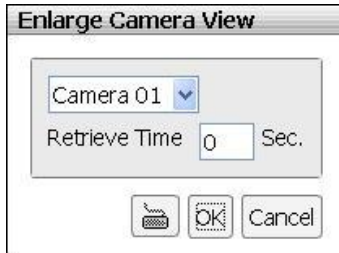


- **Alarm Reset Time:** Set a time for the alarm auto reset. When an alarm happen such as motion detected and video loss, the alarm will reset at the alarm reset time.
- In **Action** section, user may now set the alarm action for the system to perform when the alarm condition is activated.
 - **Launch E-Map:** Display mini E-map on the screen.

- **Enlarge Camera View**

Switch to only display video in Preview mode from where the alarm is activated.

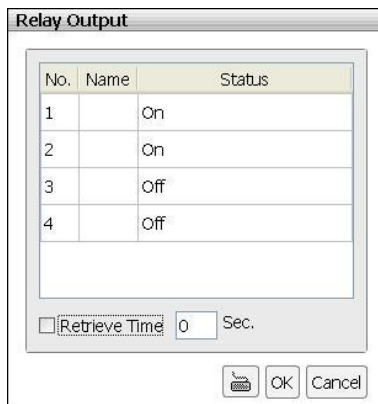
- a. Select the camera from drop down list to specify which camera video to be enlarged on screen when the alarm is triggered.
- b. **Retrieve time:** set the waiting duration before system switching back to original Preview mode. If the retrieve time is un-set, the alarm video will keep enlarging until user switch back to Preview mode manually. The retrieve time range is 0~ 300 seconds.



- **Relay Output**

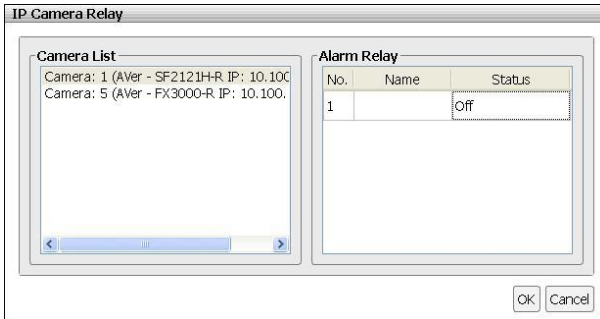
Set to enable/disable the relay operation when the alarm is activated and to extend additional time in second before it stops the relay operation.

- a. Beside the Relay Output check box, click **Detail**.
- b. In the Relay Output dialog, select from the available relay list and in the **Status** column, set to **on/off** the relay operation when the alarm is activated.
- c. In the Retrieve time check box, you may enable/disable to extend the relay operation time and set the duration in second (0 ~ 300 seconds).
- d. Click **OK** to exit and accept the setting and **Cancel** to exit without saving the setting.



- **IP Camera Relay**

Set to enable/disable the relay operation when the alarm is activated.

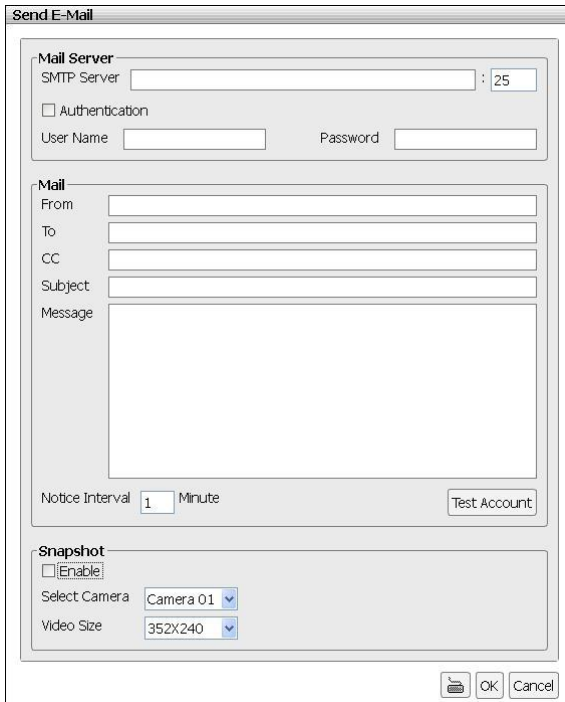


- **Play Warning Sound:** Play alarm sound.

- **Send E-mail**

Send an electronic text message. Beside the Send Email check box, click **Detail**.

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



■ Mail Server

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

■ Mail

Fill the mailing information. Click **Test Account** button can exam the mail is workable or not.

- ✓ **From:** Enter the sender e-mail address.
- ✓ **To and CC:** Enter the recipient email address and separate it with comma or a semicolon (;).
- ✓ **Subject:** Enter the message title.
- ✓ **Message:** Type the message.
- ✓ **Notice Interval:** Set a time gap for mail re-sending when mail has failed to send.

■ Snapshot

When send out the email, the NVR system will snapshot image of the selected camera channel.

- ✓ **Select Camera:** Select the channel that will be snapshot when alarm email is sending out.
- ✓ **Video Size:** Select the size of vide that will be taken when snapshot. Auto means default size that chosen by NVR system.

- File Transmission via FTP

Upload file to remote computer thru FTP (File Transfer Protocol).

✓ FTP Setting

- **IP:** Enter FTP server's IP address
- **Port:** Enter the port number of FTP connection.
- **ID& Password:** Enter the ID and Password that use to login FTP server.

✓ Upload Video Clip

- **Select Camera:** Select the camera that the images will be captured and send when the any alarm is triggered.
- **Before alarm (sec.)/After Alarm:**
To send the recorded image before and after alarm occurs, enter the time that before alarm occurs in **Before alarm(sec.)** and **After alarm**.

The screenshot shows a window titled "File Transmission via FTP". It contains two main sections: "FTP Setting" and "Upload Video Clip".

FTP Setting:

- IP: [Empty text box]
- Port: [21] [Spin box]
- User Name: [Empty text box]
- Password: [Empty text box]

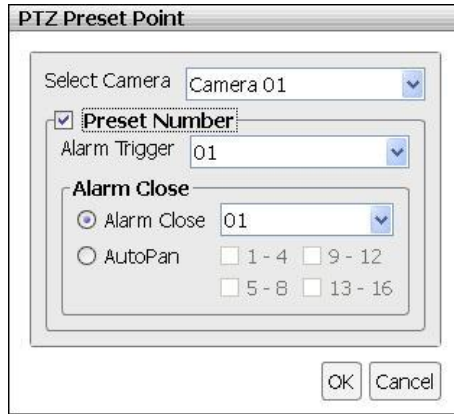
Upload Video Clip:

- Select Camera: [Camera 01] [Dropdown menu]
- Before Alarm: [1] [Spin box] Sec.
- After Alarm: [1] [Spin box] Sec.

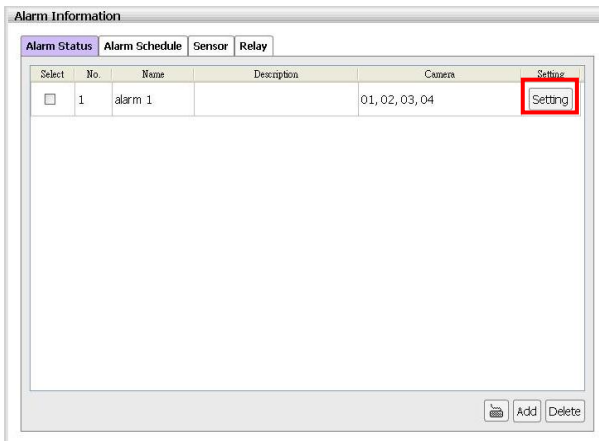
At the bottom right, there are three buttons: "Save" (with a floppy disk icon), "OK" (with a checkmark icon), and "Cancel".

- **PTZ preset point**

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



7. After setup all alarm actions, click **Apply** to save the settings.
8. To modify the alarm condition setting, click **Setting** button of Alarm # that user has created. Remember to click **Apply** to save the changes after modification.



6.2.7 User Account Setting

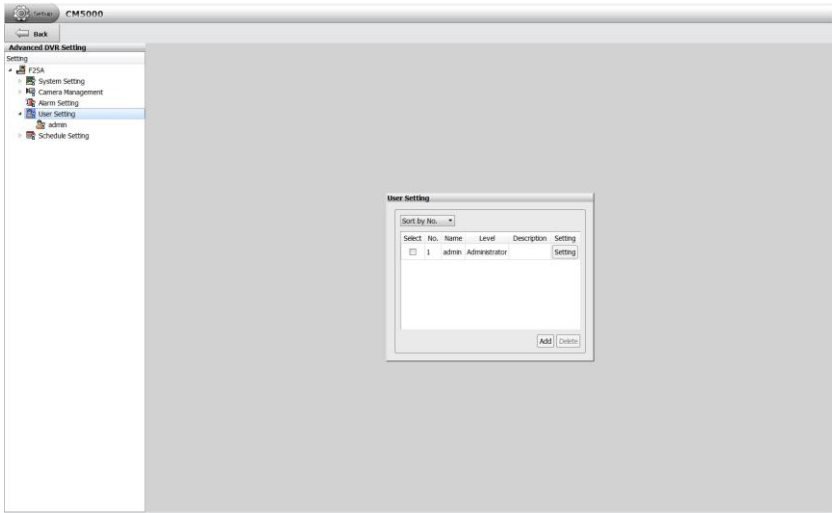
Only administrator level authority can access User Setting. The maximum user accounts are 32.

Create an User Account

1. In setup mode, select the NVR/DVR server. Then, select **User setting** and the User Information dialog box is displayed.



- The Admin is default user and cannot be deleted.
 - Any modification of account will be applied in next time login.
-
-



2. In User Information dialog, click **Add** to add a new user account.

3. In User Setting dialog, Select and fill in the following information.

User 2

Name:

Description:

Password:

Confirm Password:

Authorization Level

User Administrator

Visible Camera

All

| | | | | | | | |
|---------------------------------------|--|--|--|--|--|--|--|
| <input checked="" type="checkbox"/> 1 | <input checked="" type="checkbox"/> 2 | <input checked="" type="checkbox"/> 3 | <input checked="" type="checkbox"/> 4 | <input checked="" type="checkbox"/> 5 | <input checked="" type="checkbox"/> 6 | <input checked="" type="checkbox"/> 7 | <input checked="" type="checkbox"/> 8 |
| <input checked="" type="checkbox"/> 9 | <input checked="" type="checkbox"/> 10 | <input checked="" type="checkbox"/> 11 | <input checked="" type="checkbox"/> 12 | <input checked="" type="checkbox"/> 13 | <input checked="" type="checkbox"/> 14 | <input checked="" type="checkbox"/> 15 | <input checked="" type="checkbox"/> 16 |

Time Span

Enable

Activation Date: 2014/2/7 Expiry Date: 2014/2/7

Remote Access Time

Infinite

30 Minute

Control Right

System

Camera

Alarm

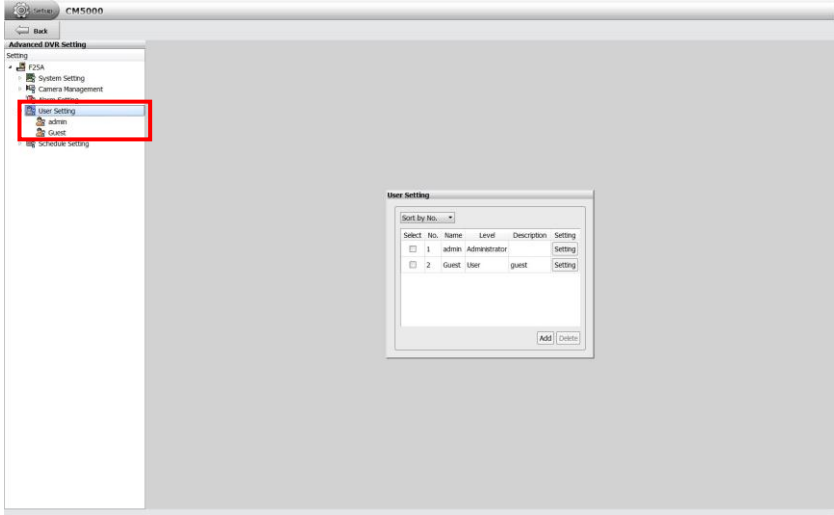
Playback

E-Map

Power OFF

- **Name:** Enter the user name.
- **Description:** Enter the user description.
- **Password:** Enter the user password.
- **Confirm Password:** Enter the same user password for confirmation.
- **Authorization level:** Select the status of the user. Administrator has full authority of control rights.
- **Visible Camera:** Select the camera number that would allow the user to access or view. To select all the cameras, enable the **ALL** check box.
- **Remote Access Time:** Enable **Infinite** check box to access DVR without time limit. If you want to set time limit, un-mark and enter the number of minutes in **Minute** text box.
- **Control Right:** Enable the items that would allow the user to access.
- **Time Span:** Set the user account a specific time period that user only can use given account to login DVR program in that specific period. Mark **Enable** check box and select the **Activation Date** and **Expiry Date**.

4. Click **Apply** to save the account setting. The user account is list in User Setting list.

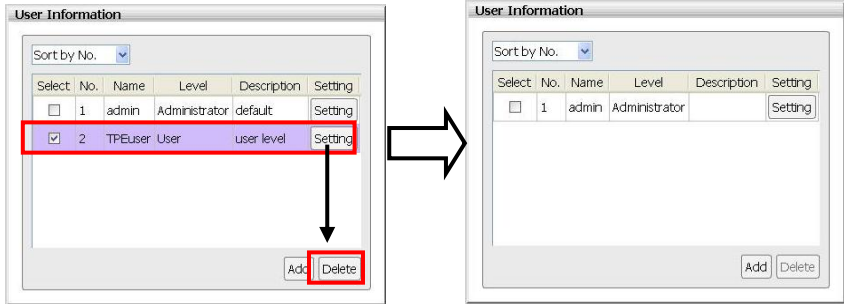


5. Adding another user account, repeat above steps.
6. Modifying the user account; click **Setting** of user account in User Information dialog.

Delete an User Account

User can remove un-wanted or expired user account.

1. Click **Setup** tab in Preview mode.
2. Then, click **User Setting** in Advanced NVR Setting section and the User Information dialog is displayed.
3. Mark the user account in User Information dialog; then, click **Delete** button.

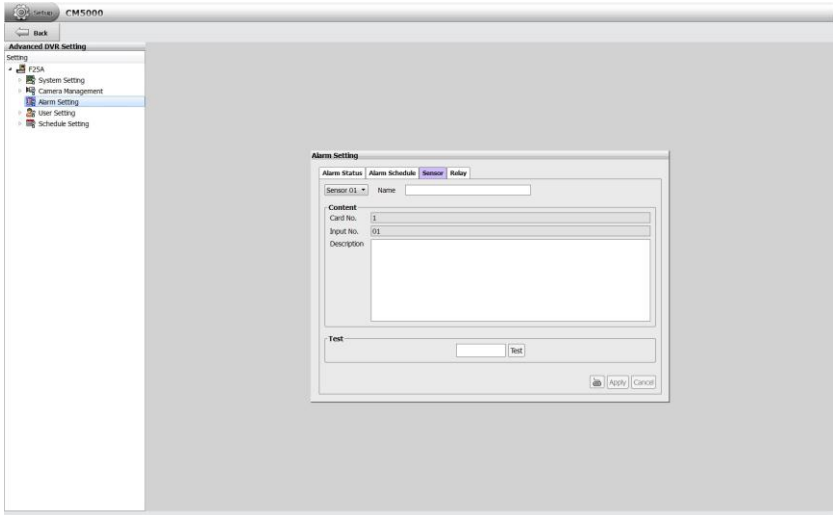


6.2.8 I/O Setting

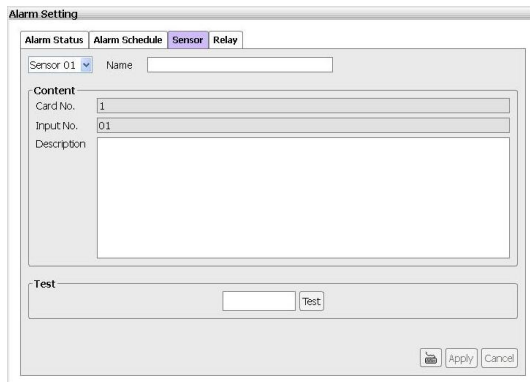
Setup I/O device status.

Sensor Setting

1. Click **Setup** tab > **Alarm Setting** > **Sensor** tab.



2. Click the drop-down list and select the **Sensor #**.

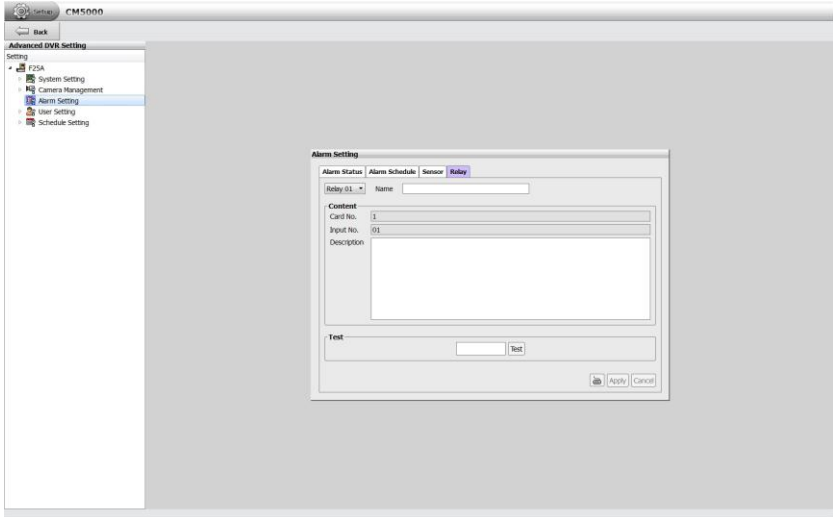


3. Enter sensor name in **Name** column.
4. The system automatically detects the card and input number. In the **Content** section, user can enter a short description of sensor in **Description** column.
5. In the test section, click **Test** to check the sensor status. **Red** is high and **Green** is low.

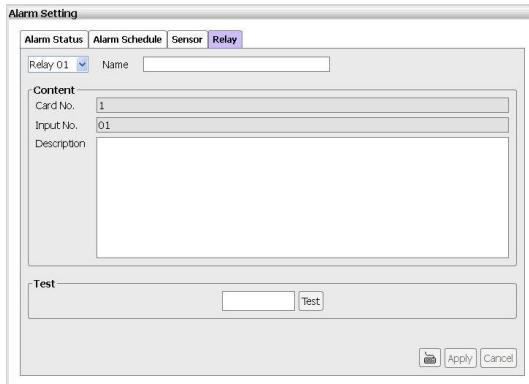
6. Click **Apply** to save the setting. To exit without saving the setting, click **Cancel** button.

Relay Setting

1. Click **Setup** tab > **Alarm Setting** > **Relay** tab.



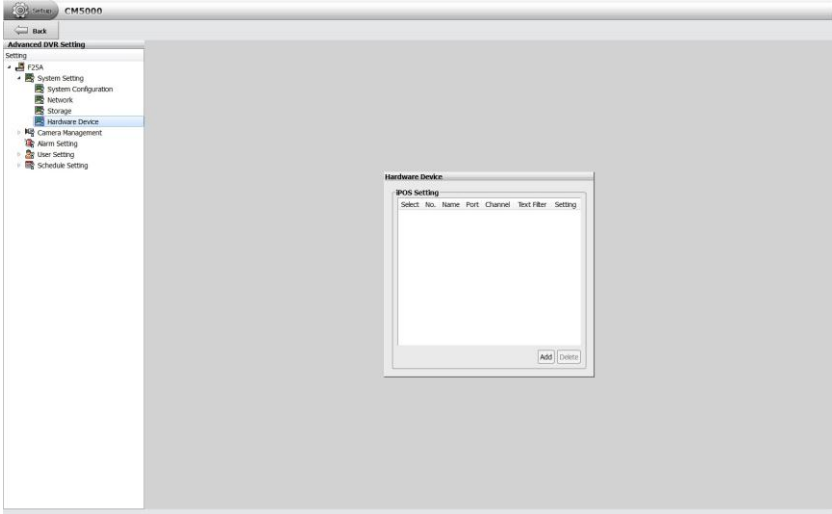
2. Click the drop-down list and select the **Relay #**.
3. Enter relay name in **Name** column.
4. The system automatically detects the card and input number. In the **Content** section, user can enter a short description of relay in **Description** column.
5. In the test section, click **Test** to trigger relay. **Red** is high and **Green** is low.
6. Click **Apply** to save the setting. To exit without saving the setting, click **Cancel** button.



6.2.9 Setup the iPOS

Set from which camera screen to display the data from the POS equipment. Click **Setting**, to set the POS Console Setting.

1. Click **Setup** tab. Click **+** to expand the System Setting list and select **Hardware Device**.
2. User should see the Hardware Device Setting dialog box is displayed.



3. In the Hardware Device Setting dialog box, click **Add** to set a new POS setting.



4. In the POS Mapping dialog box, fill and select the following settings. Click **OK** to save the settings and **Cancel** to exit without saving the new setting.

- **Name:** Enter a name to identify the POS.
- **Protocol:** Select the protocol.
- **Skip First:** Set the number of lines you want to be removed.
- **Font Color:** Select the text color of the POS data.
- **Port Setting:** Select the **Local**(Com port) where it is connected and **Baud Rate**.
- **Map to Channel:** Select to which camera number to display the transaction text.
- **Text Filter:** Enter the word you want to be removed.

iPOS Setting

POS
 Name:
 Protocol:
 Skip First: Line(s)
 Font Color:

Port Setting
 Local:
 Baud Rate: bps

Map to Channel
 Max 4 Channels
 1 2 3 4 5 6 7 8
 9 10 11 12 13 14 15 16

Text Filter
 1. 5.
 2. 6.
 3. 7.
 4. 8.

5. To setup another iPOS setting, repeat the above steps.
6. To modify the iPOS setting, click the **Setting** button of iPOS.

Hardware Device Setting

iPOS Setting

| Select | No. | Name | Port | Channel | Text Filter | Setting |
|--------------------------|-----|------|------|-------------------------|-------------|--|
| <input type="checkbox"/> | 1 | POS1 | COM1 | ch 1, ch 2, ch 3, ch 4, | | <input type="button" value="Setting"/> |