



# **CoreNVR 9/16**

## **User's Manual**



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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

### FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



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# 1

## Overview

This user's guide explains how to operate CoreNVR series system. A user should read this manual completely and carefully before you operate the device.



### 1.1 Introduction

The CoreNVR series is a stable and high capacity network video recorder for IP cameras; users are able to see the live streaming and also recording multiple events on internet at the same time. Users may install HDD in the CoreNVR machine for recording so it doesn't need any extra computer for storage. The CoreNVR system provides you convenient and efficient to manage your IP cameras.

## 1.2 Key Features

- ❑ H.264 codec for live view and recording over internet
- ❑ Multi-channel scheduled recording, playback, motion detection
- ❑ Supports 5 Megapixel resolution
- ❑ High Resolution Local Display
- ❑ 2X SATAII HDD up to total 6TB and one external eSATA port.
- ❑ Two-Way Audio
- ❑ PTZ camera control by joystick and mouse
- ❑ Event alarm including by motion detection, camera disconnection, HDD error, DI/DO, Disconnect Alarm, PIR Alarm, Audio Detection Alarm.

# 2

## Package Contents and Installation

### 2.1 Package Content

1. CoreNVR 9ch or CoreNVR 16ch X1
2. 12V / 5A adapter X1
3. SATA data cord X2
4. SATA power cord X2
5. Hard disk holder X4 pcs
6. Quick install guide X1
7. Manual disc X1

Front:



#### 1. Status LED:

**PWR:** LED on when system is ready.

**HDD:** LED on when Hard Disk is reading or writing.

**LAN:** LED on when network is on communication.

**REC:** LED on when Record schedule is on.

**Event:** LED on when alarm monitoring is on.

#### 2. Alarm LED:

**Alarm:** LED on when Hard Disk write error.

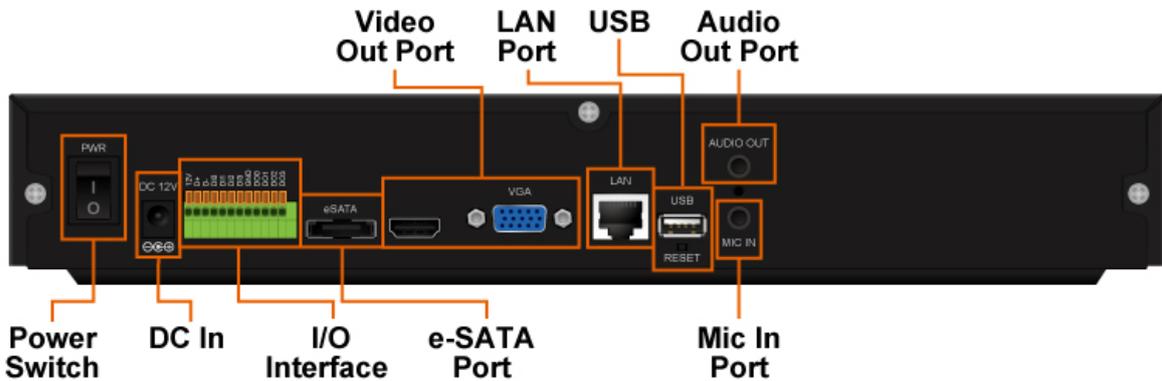
**CAM:** LED on when system have camera disconnected.

#### 3. Digital Input LED: LED on means Digital Input is triggered.

#### 4. Digital Output LED: LED on means Digital output device is reacting.

#### 5. USB: For connect USB stick or mouse.

**Back:**



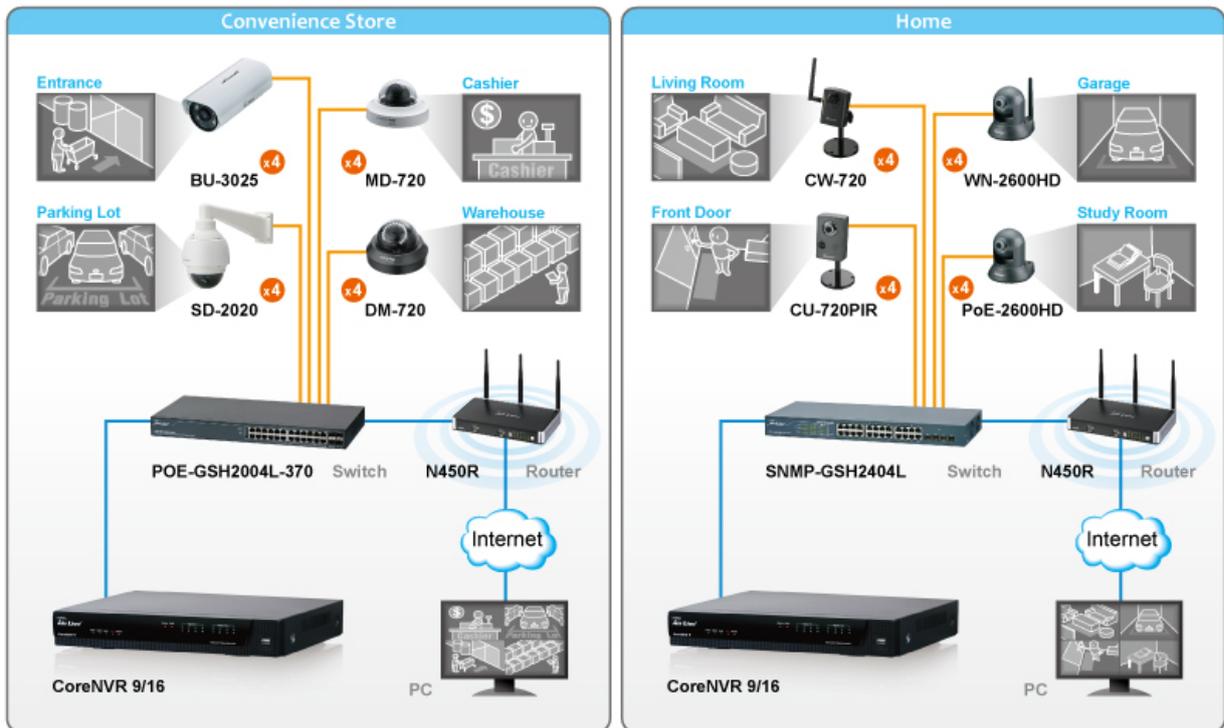
1. **Power Switch:** Switch to “ | ” for Power on.  
Switch to “ O ” for Power off.
2. **DC Adaptor In:** Insert 12VDC / 4A adaptor here.
3. **I/O interface:** Look from back side.

12V out	RS485 D+	RS485 D-	DI0 ~ DI3	Ground	DO0~DO3
---------	----------	----------	-----------	--------	---------

4. **e-SATA port:** Connect to e-SATA storage device.
5. **Video Output:** Insert local display connector here.
7. **LAN port:** Gigabit LAN port.
8. **USB:** For connect USB stick or mouse.
9. **Audio Out port:** Insert speaker connector here.
10. **Mic In port:** Insert Microphone connector here.

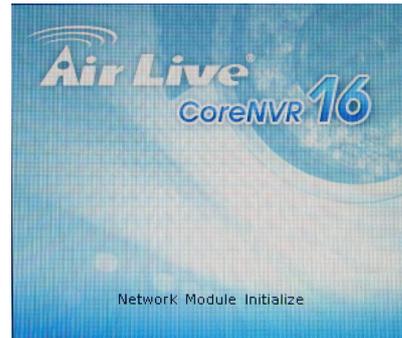
## 2.2 Connections

The CoreNVR was designed for small office, home and convenience stores, you may refer to the picture below to get an idea of connections between IP cameras, router/PoE switch and CoreNVR.

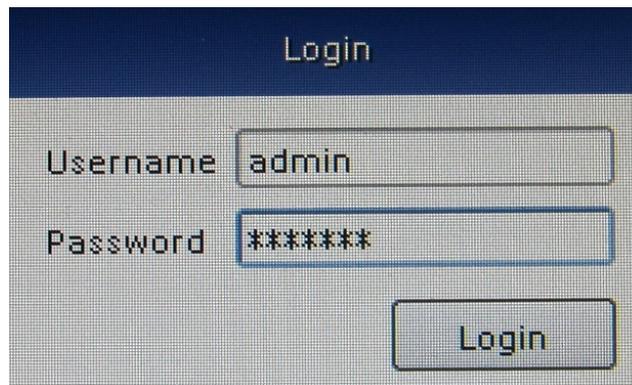


## 2.3 Start to use CoreNVR

1. Please refer to the QIG to install the HDD into the CoreNVR system for video storage.
2. Turn On the NVR Power then you will see the AirLive CoreNVR logo as below.



3. Login NVR system with default username “admin” and password “airlive”.

A screenshot of a web-based login interface. The title is 'Login'. There are two input fields: 'Username' with the value 'admin' and 'Password' with the value '\*\*\*\*\*'. A 'Login' button is located below the password field.

# 3

## CoreNVR Main System

### 3.1 Main Console

This is the main control panel of system, to provide live stream preview, system setup, Two-way audio, playback, volume control, snapshot, start or stop monitor, and PTZ controls.



### 3.2 System Information



### 3.3 Screen Division

Assign the preview screen to expected layout division by clicking these buttons.



Switch to 1 Division.



Switch to 4 Division.



Switch to 9 Division.



Switch to 16 Division.



Switch to Full screen, and click mouse right button to cancel Full Screen.

### 3.4 Sub-screen Functions

#### Digital Zoom:

Sub-screen window supported digital zoom, operation step as follow,

1. Click on preview image for switch current focus channel.
2. Scroll the mouse wheel, forward for digital zoom-in, and backward for zoom-out.
3. Switch division mode will reset digital zoom status to default.

#### Popup Menu:

Click mouse right button, select an option from the popup menu.

1. Change current channel display camera.
2. Change current division mode.
3. Switch current channel display ratio mode.
4. Switch to Full Screen mode / Cancel Full Screen mode.
5. Reset all channels to default camera list.
6. Snapshot current display.
7. Enable / Disable Auto Switch.



**Snapshot:** Click  to take a snapshot to the HDD; you can management snapshots at system management “snapshot” page.



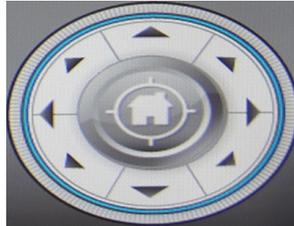
**Audio Volume Control:** Click  to switch between normal and mute.



**Schedule Monitor:** Click  button to enable or disable Schedule monitoring, the recording will be stopped if it is disabled.

**Two Way Audio:** Click  button to start or stop selected channel two-way audio.

**PTZ Control:**



Move PTZ camera direction by click direction buttons.

Click  to make camera return home position.

 Move the thumb to left to make slower, move to right to make move faster.

**Tour:** Select a tour setting from combo box, and click “go” button to start tour, click “Stop” button to stop tour.



**Preset:** Select a preset position from combo box, camera will move to preset position after click.



**IRIS:** Adjust camera’s IRIS  setting, or set it to auto.

**Focus:** Adjust camera’s focus  setting, or set it to auto.

**Zoom:** Zoom-in or zoom-out  focus camera.

**Pan:** Begin camera auto pan  or stop.

# 4

## System Setting

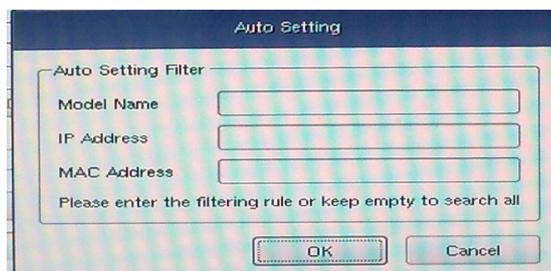
Click setup button and select “System Setting” from pop-up menu to approach System setting dialog.



### 4.1 Camera Setup

#### 4.1.1 Auto Setting

Click the “Auto Setting” button for auto add cameras to system, maximum number of cameras are depend on NVR’s model.



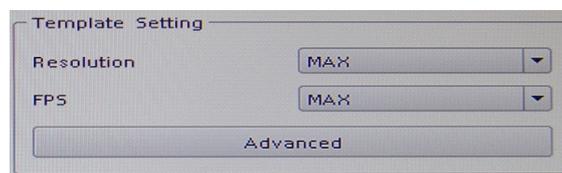
After click the button, system will show the fuzzy search filter dialog, you could input the search filter by model name, IP address or MAC address, or you could keep them empty for search all cameras.

Auto setting could insert intranet's cameras , even them behind of several switch hubs , or you could just direct insert cameras on NVR's switch hub , then click “ Auto Setting “ button to add them into system .

Through “ Auto Setting “ function , you won't need to key-in any network IP or sub-mask parameter , you only need to click “ Auto Setting “ button to finish insert IP camera job.

### 4.1.2 Template Setting

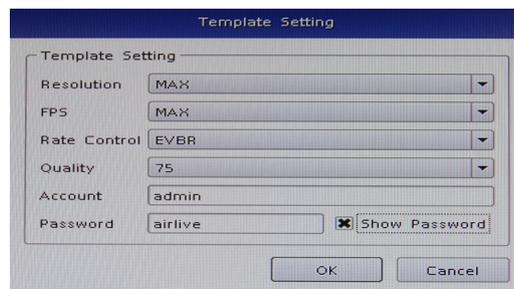
When you use “Auto Setting” or add a new camera, system will read the camera template from “Template Setting” for fill the camera parameter.



After you confirm the template, in most case, you will no longer need to set camera's parameter again.

You could setting the quick template from camera setting page, in most case you only need set the camera's resolution and frames per second.

If you need set more detail template, please click the “Advanced” button to approach the template setting dialog.



#### Resolution

The new camera will try to fit selected resolution, if you select “Max”, camera will use maximum resolution, or you could select another resolution, system will choose a near one resolution of camera.

**FPS:** Set the frames per second of camera, system will try to set a near or equal FPS to camera.

**Rate Control:** Set the rate control algorithm of new camera.

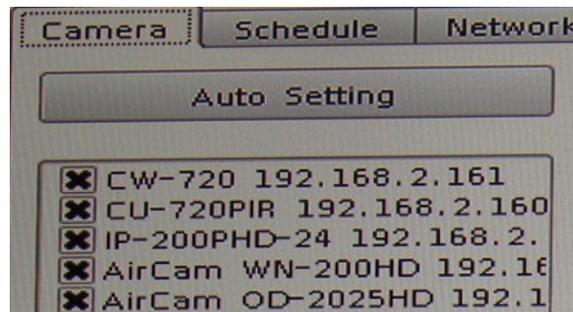
**Quality:** If you select the EVBR for new cameras, you could set then VBR quality here.

**Account:** Setup the default login camera user account.

**Password:** Setup the default login camera password.

### 4.1.3 Camera List

List all inserted IP camera's name, click the row of camera to display detail information and live streaming video.

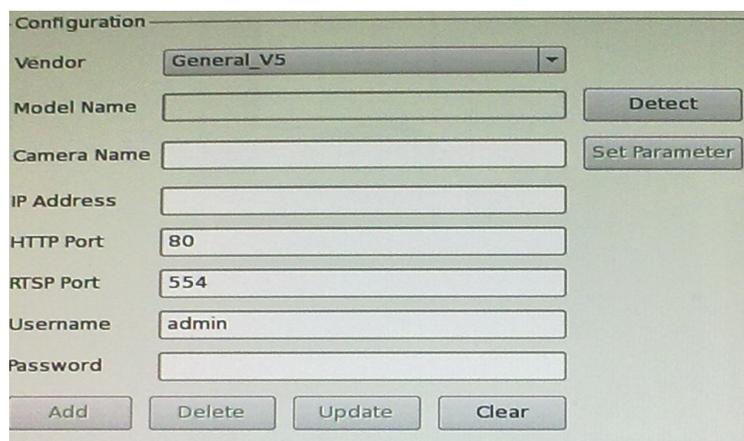


Check the box to make the camera available for video streaming; otherwise the camera will be disabled if the check box is empty.

#### Switch Camera sequential

Click mouse right button on the camera, and select another camera in the popup menu, system will switch these two camera's setting.

### 4.1.4 Camera Setup



**Vendor:** You may select camera vendor or use OnVIF protocol for camera connection.

**Detect:** Check camera available and receive camera model name.

**Camera Name:** Key in camera name at here.

**IP Address:** Key-in camera's IP address.

**HTTP port:** Set camera's HTTP port, default is 80.

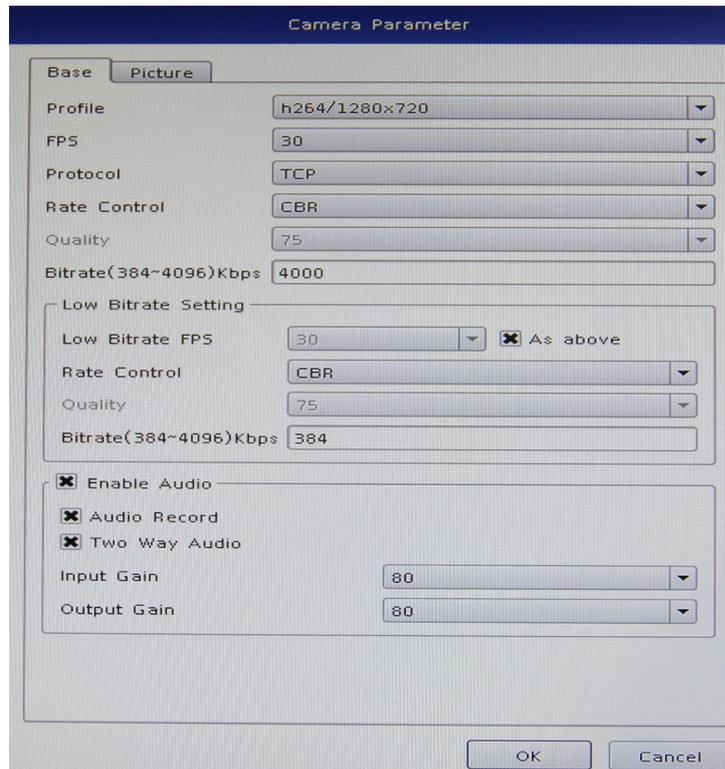
**RTSP port:** Set camera's RTSP port, For TCP streaming, default is 554.

**OnVIF Authentication:** Select connect to camera with WSSE authentication or without authentication.

**User Name:** Set the User name for login camera.

**Password:** Set the Password for login camera.

### 4.1.5 Parameter Setting



**Profile:** Select video codec and resolution for live view and recording.

**FPS:** Select FPS for live view and recording.

**Protocol:** Select protocol HTTP / TCP and UDP.

**Rate Control:** Select EVBR or CBR for better video performance.

**Quality:** Select video quality by numbers.

**Enable Audio:** You have to enable audio for two-way audio function.

**Audio Record:** Enable it for audio recording.

**Two Way Audio:** Enable it for Two-Way Audio function.

**Input Gain:** Adjust the gain to reduce the input audio noise.

**Output Gain:** Adjust the gain to reduce the output audio noise.

**※ Note:** The parameter settings are different from each vendor.

#### Add Camera:

1. Click "Search" button and wait for search job finished.
2. Select a camera on search result list.
3. Preview live streaming video at preview window to confirm current camera.
4. Click "Add" button to add selected camera into system.

**Delete Camera:**

2. Select a camera from installed camera list.
3. Click “Delete” button to remove selected camera from list.

**Update Camera setting:**

1. Select a camera from installed camera list.
2. Modify camera’s setting at each setting fields.
3. Click “Update” button to save modified result.

❌ **Note:** Updated setting will write to disk after click “OK” at bottom of page. If you click “Cancel” button to leave setting page, system will ignore all your modified setting.

**Clear button:** Clear all setting fields.

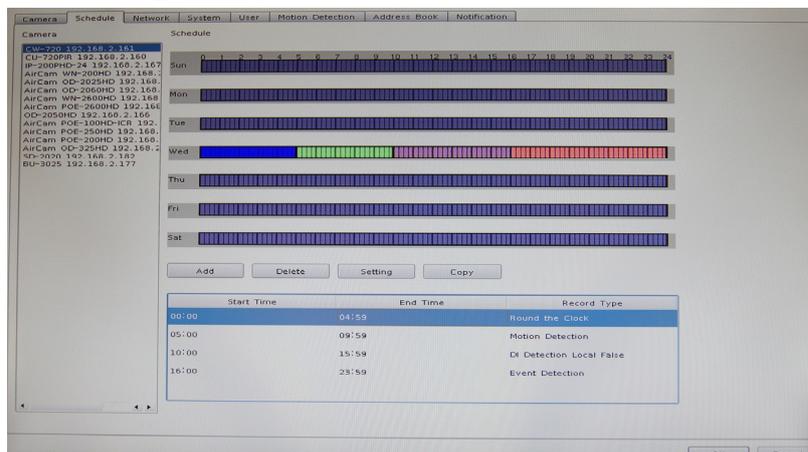
### 4.1.6 Search Camera

Click “Search” button, system will list all camera can be searched in “Search List”, you can click on each row to preview live video streaming.

Vendor	Model Name	IP Address	MAC Address	HTTP Port
General_V6	CW-720	192.168.2.161	00:4F:70:20:9A:66	61000
General_V6	CU-720PIR	192.168.2.160	00:4F:70:20:9C:27	62300
General_V6	IP-200PHD-24	192.168.2.167	00:4F:70:20:9E:49	60001
General_V6	AirCam WN-200HD	192.168.2.172	00:4F:70:20:A8:48	60000
General_V5	AirCam OD-325HD	192.168.2.163	00:4F:70:20:50:C0	80
General_V5	AirCam POE-250HD	192.168.2.165	00:4F:70:20:59:28	80

## 4.2 Schedule Setting

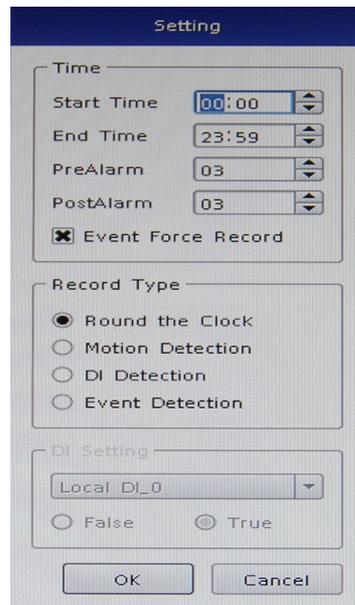
Schedule setting allows you to setup different type of recording, you may define multiple recording type for each day or within 24 hours.



The screenshot shows the 'Schedule' tab in the software interface. On the left, a list of cameras is displayed with their IP addresses. The main area features a grid for setting recording schedules for each day of the week (Sun-Sat). Below the grid, there are buttons for 'Add', 'Delete', 'Setting', and 'Copy'. At the bottom, a table shows the configured recording events:

Start Time	End Time	Record Type
00:00	04:59	Round the Clock
05:00	09:59	Motion Detection
10:00	15:59	Dx Detection Local False
16:00	25:59	Event Detection

1. **Select a camera:** Select a camera for schedule configuration.
2. **Select a weekday:** Select a weekday bar; system will list time periods with this weekday.
3. **Add / Configure:** Select the time period and type of recording.



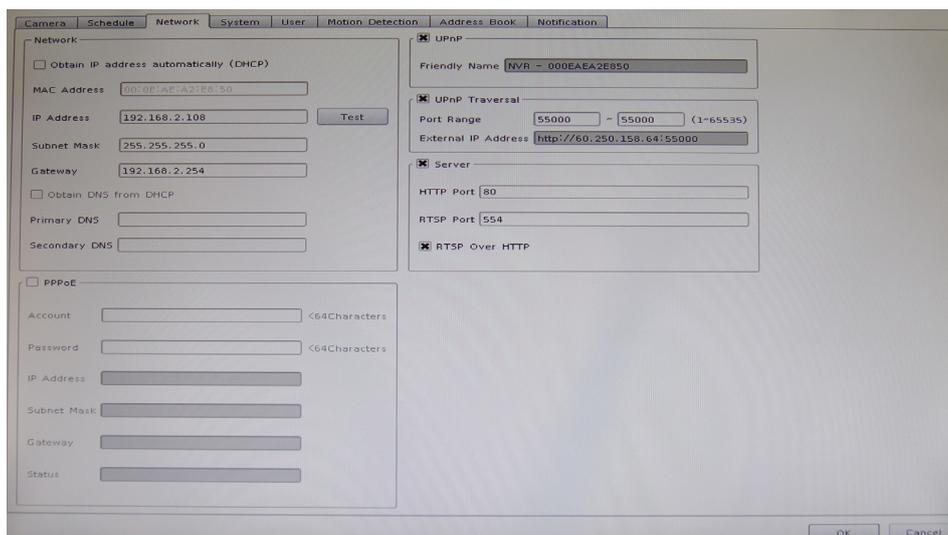
The 'Setting' dialog box contains the following fields and options:

- Time:**
  - Start Time: 00:00
  - End Time: 23:59
  - PreAlarm: 03
  - PostAlarm: 03
  - Event Force Record
- Record Type:**
  - Round the Clock
  - Motion Detection
  - DI Detection
  - Event Detection
- DI Setting:**
  - Local DI\_0
  - False  True

Buttons: OK, Cancel

4. **Delete:** Delete the preset schedule.
5. **Copy:** Copy selected schedule to all weekdays.

## 4.3 Network Setting



The Network Setting page includes the following sections:

- Network:**
  - Obtain IP address automatically (DHCP)
  - MAC Address: 00:0E:JAE1A21E8150
  - IP Address: 192.168.2.108 (with Test button)
  - Subnet Mask: 255.255.255.0
  - Gateway: 192.168.2.254
  - Obtain DNS from DHCP
  - Primary DNS: [Empty]
  - Secondary DNS: [Empty]
- PPPoE:**
  - Account: [Empty] <64Characters
  - Password: [Empty] <64Characters
  - IP Address: [Empty]
  - Subnet Mask: [Empty]
  - Gateway: [Empty]
  - Status: [Empty]
- UPnP:**
  - UPnP
  - Friendly Name: NVR - 000EAE2E850
  - UPnP Traversal
  - Port Range: 55000 ~ 55000 (1-65535)
  - External IP Address: http://60.250.158.64:55000
  - Server
  - HTTP Port: 80
  - RTSP Port: 554
  - RTSP Over HTTP

Buttons: OK, Cancel

### 4.3.1 Network

**DHCP setting:** Checked the “Obtain IP address automatically (DHCP)” to enable auto get IP from DHCP server.

**MAC address:** Display MAC address of this NVR.

**IP Address:** Input the fixed IP address If you disable the DHCP function, then click “Test” button to detect IP conflict.

**Subnet Mask:** User define

**Gateway:** User define

**Obtain DNS from DHCP:** User define

**Primary DNS:** User define

**Secondary DNS:** User define

**DNS setting:** Checked “Obtain DNS from DHCP” to get DNS setting from DHCP server, it only works on DHCP was enabled. If “Obtain DNS from DHCP” was disabled, you could key-in DNS server IP in the text box.

### 4.3.2 PPPOE

**Enable / Disable:** Select from the radio boxes to enable or disable PPPOE function.

**Account:** Key-in user name to login PPPOE server here.

**Password:** Key-in login PPPOE server password here.

**IP address:** Display current IP address get from PPPOE server.

**Subnet Mask:** Display current subnet mask get from PPPOE server.

**Gateway:** Display current gateway get from PPPOE server.

**Status:** Display PPPOE status.

### 4.3.3 UPnP

**Friendly Name:** Display UPnP friend name on network.

### 4.3.4 UPnP Transversal

Enable UPnP Traversal to auto request port mapping with router, and define maximum and minimum port value here.

**Port Range:** User define

**External IP Address:** User define

### 4.3.5 Server

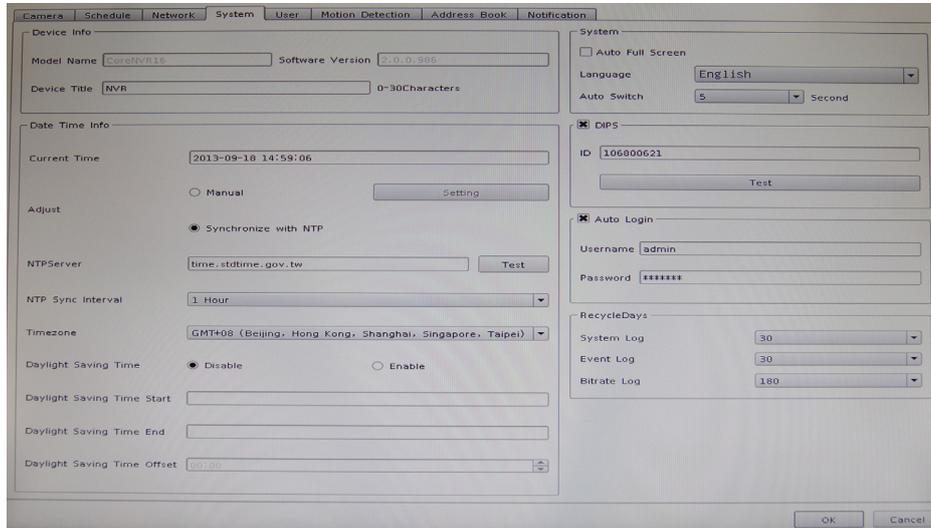
Enable server option for start HTTP and RTSP server, after remote service started, Users could be connecting remote service by IE browser.

**HTTP Port:** Set HTTP service port here. Default 80.

**RTSP Port:** Set RTSP service port here. Default 554.

**RTSP over HTTP:** Enable RTSP over HTTP function, the remote live streaming will use HTTP protocol and HTTP port.

## 4.4 System Setting



### 4.4.1 Device Info

**Model Name:** Display Model Name.

**Device Title:** Key-in device title here.

**Software version:** Display current firmware version.

### 4.4.2 Date Time Info

**Current Time:** Display current time.

**Server Date & Time:** Display current system date-time.

**Adjust:**

**Manual:**

Click setting to approach date-time setting dialog, and select current date and time now, click “OK” to change system time or click “Cancel” button to abort configuration.

**Synchronize with NTP:**

Enable synchronize date-time with NTP service.

**NTP Server:**

Key-in NTP server IP or domain name, if you use the domain name to connect NTP server, the DNS service must be enabled.

**NTP Sync Interval:**

Select time period to synchronization with NTP service.

**Time Zone:** Select the time zone of NVR location.

**Daylight saving:** Enable or disable daylight saving mode.

**Daylight saving Start Time:** Configure daylight saving start time, it works with daylight saving mode enabled.

**Daylight saving End Time:** Configure daylight saving end time, it works with daylight saving mode enabled.

**Daylight saving Offset:** Configure daylight saving offset time with current time, it works with daylight saving mode enabled.

**Auto Login:** Enable auto login mode to login with defined user name and password when system boot up.

**User:** Key-in auto login user name.

**Password:** Key-in auto login password.

**System Setting:** Enable “Auto full screen” to switch to full screen mode when system boot up.

Change display language from language combo box.

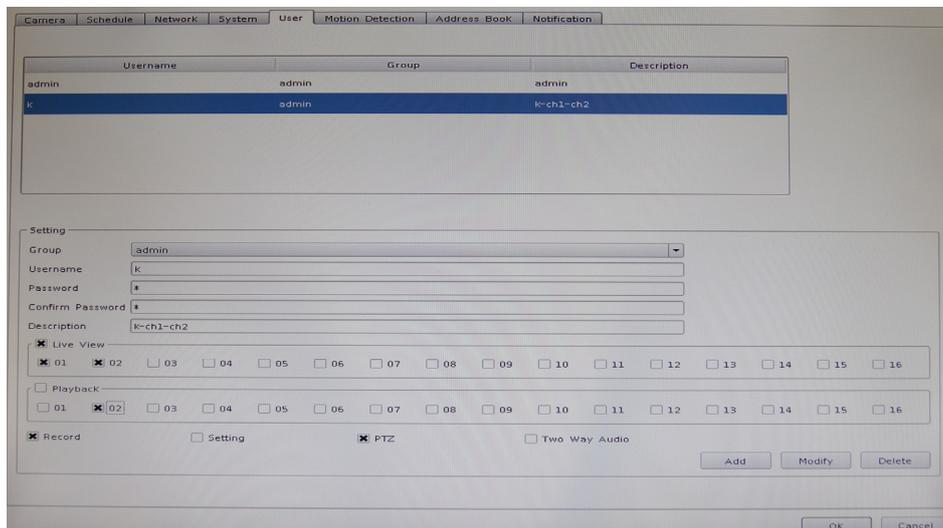
Adjust Auto switch interval seconds.

**DIPS:** Display device DIPS ID.

Click “Test” button for test connection with DIPS server.

## 4.5 User Setting

You may manage all user accounts or groups for different permission of functions or access the cameras.



Username	Group	Description
admin	admin	admin
k	admin	k-ch1-ch2

Setting

Group:

Username:

Password:

Confirm Password:

Description:

Live View

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

Playback

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

Record  Setting  PTZ  Two Way Audio

Add Modify Delete

OK Cancel

### Setting

**Group:** Select user’s login group.

**Username:** Setup username for account.

**Password:** Setup password for account.

**Confirm Password:** Confirm the password is correct.

**Description:** Describe the user or group.

**Live View:** Define the live view camera access permission for each user.

**Playback:** Define the playback camera access permission for each user.

**Record:** Define user permission for recording.

**Setting:** Define user permission for system setting.

**PTZ:** Define user permission for PTZ controls.

**Two Way Audio:** Define user permission for two way audio.

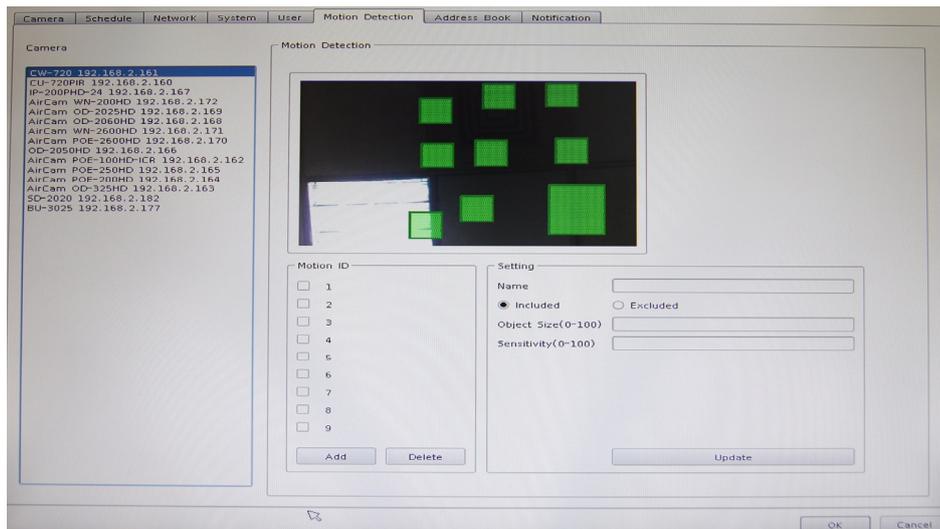
**Add:** Click to add user after key-in the user information.

**Modify:** Modify the user information and permissions.

**Delete:** Delete selected user account.

## 4.6 Motion Detection Setting

You may set up to 10 regions of each camera for motion detection setting.



**Select a camera:** Click on camera list to select a camera to management motion detection setting.

**Add new motion detection:** Click “Add” button to insert new motion window, the new window will inserted at left-up corner.

**Enable motion window:** Check the window name to enable motion detection.

**Modify motion detection**

DefaultWindow

**area:** Move mouse cursor to motion window border, and drag cursor to resize motion window. Drag mouse cursor on motion window to re-position of motion window.

**Remove motion window:** Click on motion window or window’s name to set focus window, then click “Delete” button to remove it.

**Modify motion parameter:** Click on motion window or window’s name to set focus window, then edit it’s motion parameters, you must click “Update” button to save modified values, or the settings will be lost.

**Name:** Key-in motion window’s name.

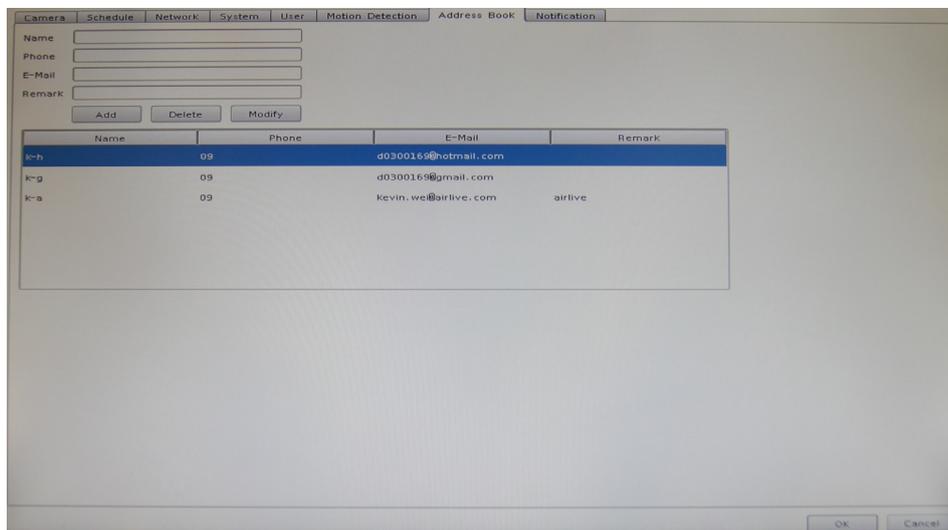
**Include / Exclude:** Include means system will detect motion inside of window area.  
 Exclude means system will detect motion outside of window area.

**Object Size:** Set motion detection object size, value between 0 to 100, greater value means the object is bigger in the defined detection area.

**Sensitivity:** Set motion detection sensitivity value between 0 to 100, greater value means the motion detection is more sensitive.

## 4.7 Address Book Setting

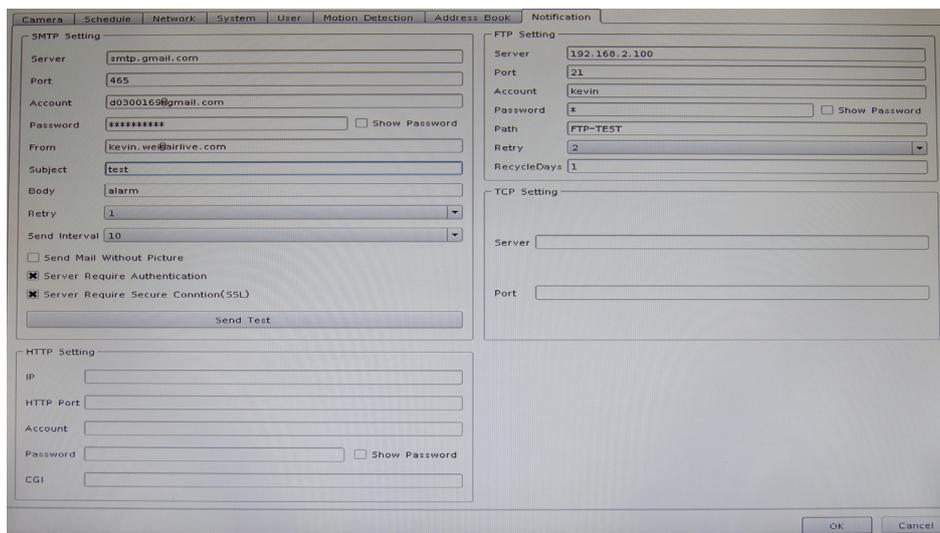
Add E-Mail and other information to address book for send E-Mail alert.



Key-in the personal e-mail account information then click on “Add” to add the information to the address book; you may also click on “Modify” to modify the information or “Delete” to delete the account from the list.

## 4.8 Notification Setting

You may setup the notification to receive e-mails, send file to FTP server or HTTP CGI when the event is triggered.



### SMTP Config

**SMTP Server:** SMTP sever IP or domain name.

**SMTP Port:** SMTP service port number.

**User Name:** Login SMTP server user ID.

**Password:** Login SMTP server Password.

**From:** E-Mail sender's name.

**Subject:** Mail's Subject.

**Body:** Mail's body content.

**Retry:** Retry how many times when send mail fail.

**Send Interval:** Set the interval of each time send mail out.

**Send without Picture:** Do not attach picture with notification mail.

**Server Require Authentication:** The Email server need Authentication.

**Server Require Secure Connection:** The Email server need SSL connection.

**Send Test Button:** Send out a test mail for test Server information is correct.

### HTTP Config

**HTTP IP:** HTTP server's IP or domain name.

**HTTP Port:** HTTP server's service port.

**HTTP User Name:** Login HTTP server's user account.

**HTTP Password:** Login HTTP server's password.

**HTTP CGI:** HTTP server receive notification CGI path

**FTP Config**

**FTP Server:** FTP server IP or domain name.

**FTP Port:** FTP server service port.

**User Name:** Login FTP server account.

**Password:** Login FTP server password.

**Path:** Upload picture or video path.

**Retry:** Retry how many times when upload fail.

**Recycle Days:** Keep upload failed picture or video how many days.

**TCP Config:**

**TCP server:** TCP server IP or domain name.

**TCP port:** TCP service port number.

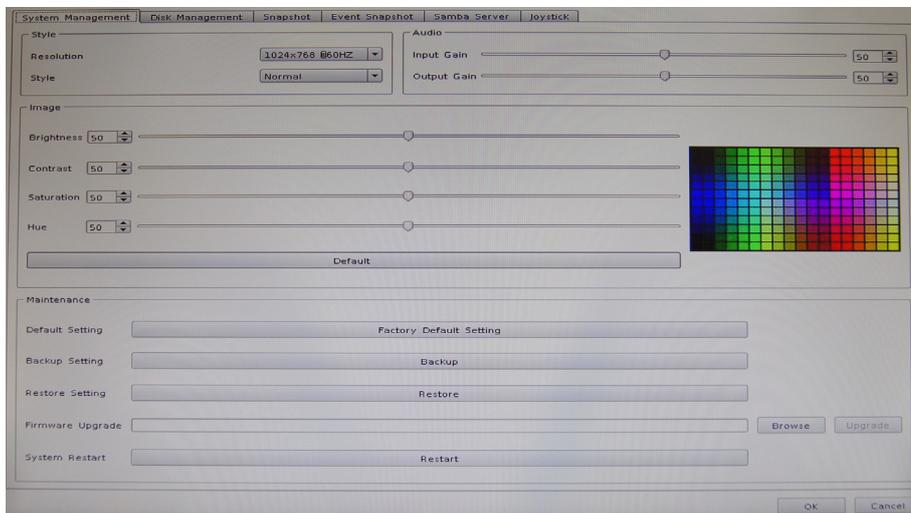
# 5

## System Management

The system management is for you to setup the CoreNVR for video image, return to default, firmware upgrade, event, and storage management. Click setup button and select “System Management” from pop-up menu to approach System setting dialog.



### 5.1 System Management



**Resolution:** Change monitor current display resolution, please confirm change result, or system will recover old resolution after 15 seconds.

**Style:** You may change the interface to **Simple / Normal / Professional / Advance**.

**Image:** Adjust monitor Brightness, Contrast, Saturation, Sharpness, and Hue value.

※ **Note:** Only available on D-sub interface.

**Maintenance:**

**Default Setting:** Reset all setting to factory default value.

**Backup Setting:** Export backup setting file to remove-able storage device.

**Restore Setting:** Restore a backup setting file from remove-able storage device.

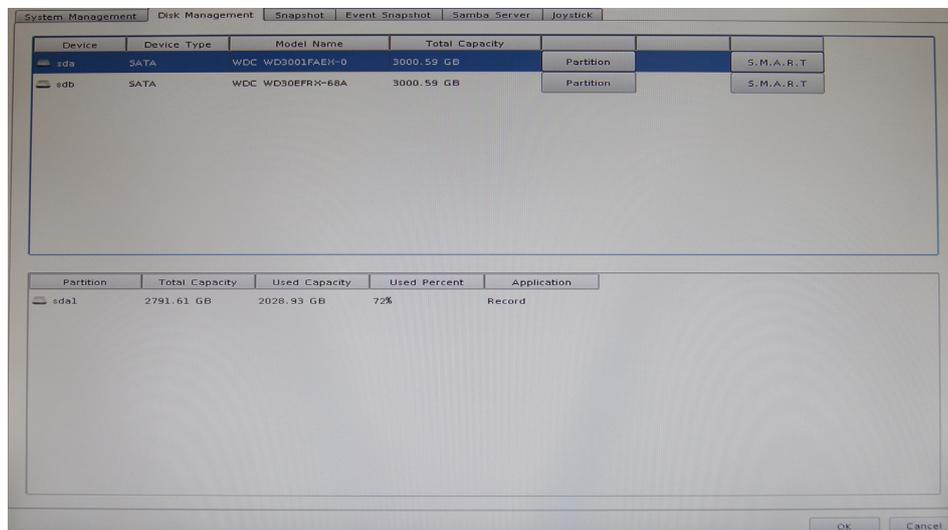
**Firmware Upgrade:** Select a firmware file from remove-able storage device, then click “Firmware Upgrade” button to begin update firmware job.

**System Restart:** Restart CoreNVR system.

**Audio:** Adjust audio input or output gain value for better audio quality.

## 5.2 Disk Management

The CoreNVR supports up to two 3TB HDD install in the system, you may also manage all USB storage devices in this page.



**Device list:** Display all devices were detect on NVR, and their information.

**Partition Button:** Select a storage device, and click “Partition” button, system will remove all data and partitions on selected device, and create a new partition.

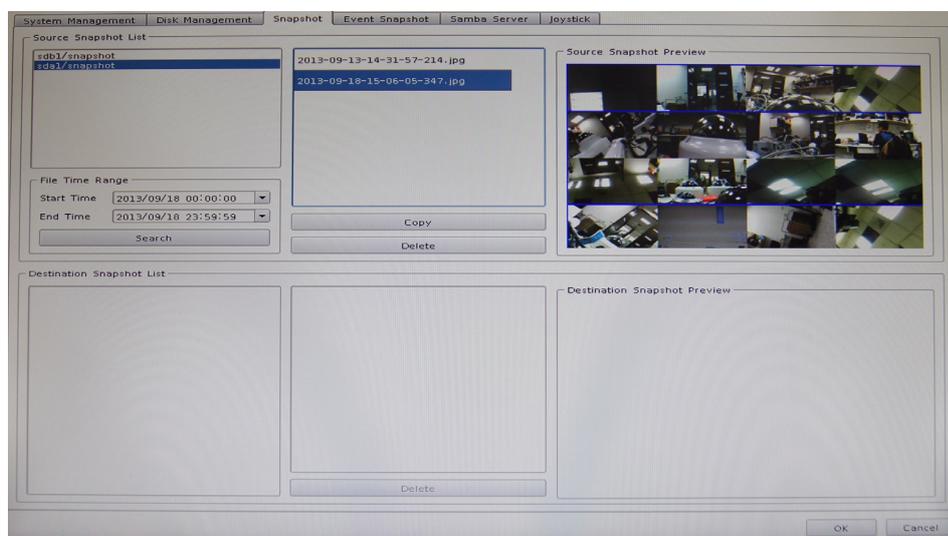
**Mount / Un-Mount button:** Mount or Un-Mount USB stick.

**S.M.A.R.T button:** Display the Hard Disk S.M.A.R.T status.

**Partition list:** Display all partitions of selected device, and their information. Click “Format” button will format selected partition to “ext4” format, all data will be lost.

### 5.3 Snapshot

You may save your video snapshot and save them to the HDD or any removable USB device.



**Source Snapshot List:**

**Search snapshot image:**

1. select a hard disk path
2. select a time period
3. click “search” button
4. The search result will display in the list box.
5. select a snapshot file name, the snapshot image will display on right

**Copy:** Click “Copy” button will copy selected snapshot file to remove-able device.

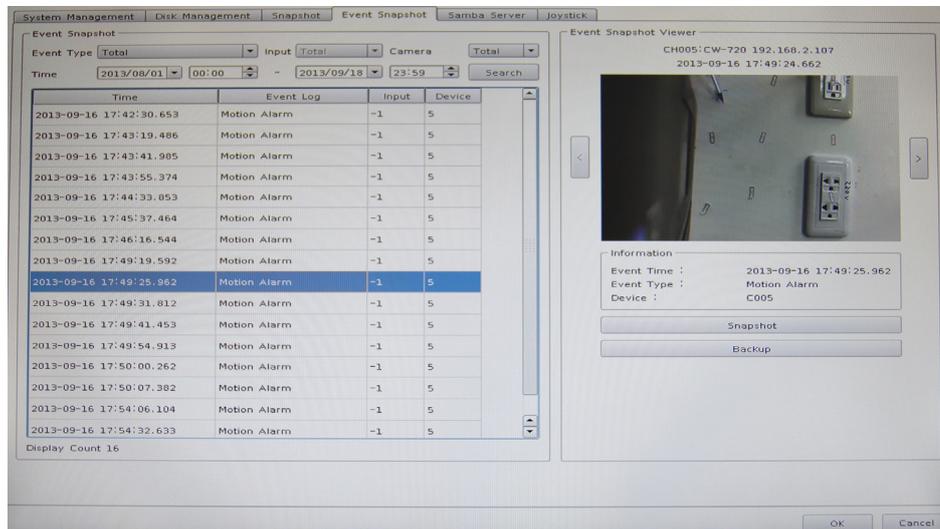
**Delete:** Click “Delete” button will delete selected snapshot file.

**Destination Snapshot List:**

1. Select a remove-able device path
2. system will show snapshot file’s name of selected folder
3. select a snapshot file name, the snapshot image will display on right

**Delete:** Click “Delete” button will delete selected snapshot file.

## 5.4 Event Snapshot



### Event Snapshot:

**Event Type:** Select trigger snapshot event type.

**Input:** Select DI input port number.

**Time:** Select search time period.

**Search:** To search event snapshot based on the condition you set above.

### Result table:

**Time:** Event Time.

**Event Type:** Triggered Event Type.

**Input:** Event DI port number, if not DI event will fill -1.

**Device:** Event triggered device ID.

**Snapshot Viewer:** Select a event from search result table and click the “Play” button, the snapshot video will display on right of window.

**Next frame:** Click “>” button for next frame.

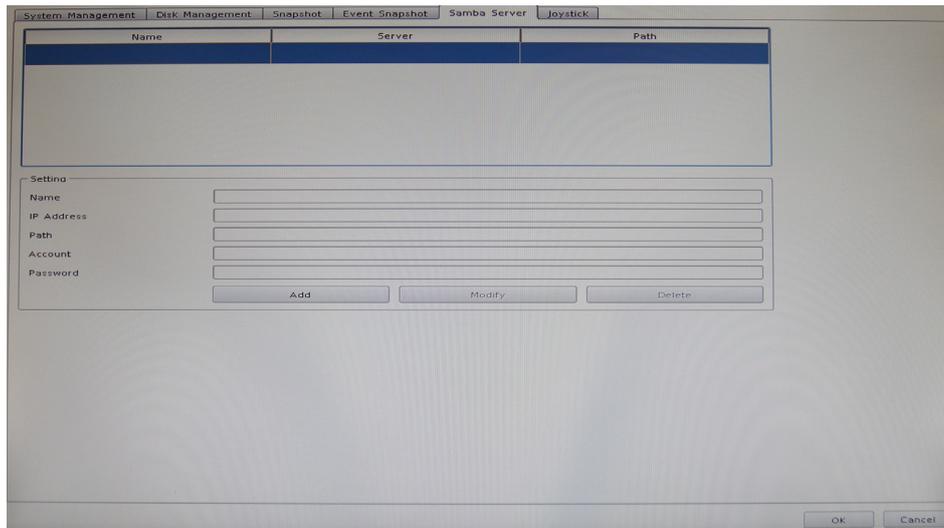
**Pre frame:** Click “<” button for pre-frame.

**Information:** Display snapshot video information.

**Snapshot button:** Click “Snapshot” button will snapshot current image to removable device.

**Backup button:** Click “Backup” button will backup this event video to removable device.

## 5.5 Samba Server



**Samba Name:** Key-in Samba server name for identify server.

**Samba IP Address:** Samba server IP address.

**Samba Path:** Key-in Samba server recording path.

**User Name:** Login Samba server account.

**Password:** Login Samba server password.

**Add button:** Key-in all Samba server information then Click “Add” button to add to samba server list.

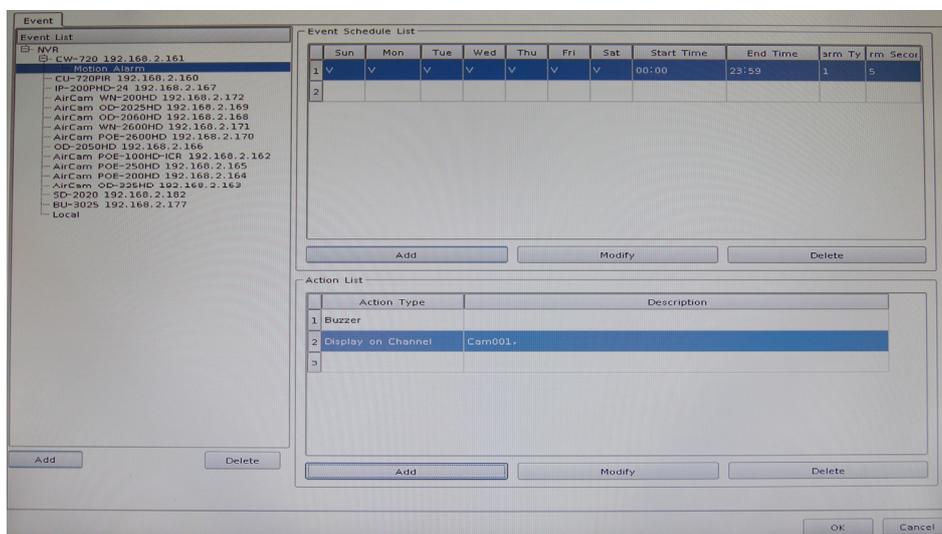
**Update Button:** Select a Samba server from list, then modify server’s information, when finish the modify job, click the “Update” button to save.

**Delete Button:** Select a Samba server for list, then Click “Delete” Button to remove it from list.

# 6

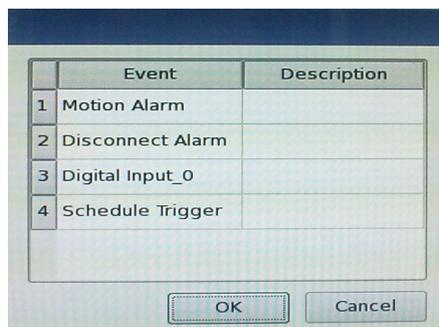
## Event Setting

You may define each event alarm on different day and actions for each camera or CoreNVR system, please refer to the below for the operation instructions.



### 6.1 Add a New Event

1. Select a camera or local from tree list
2. Click "Add" button below device list.
3. Select an event from table.



**Motion Alarm:** Camera's motion detection. Please set the camera motion first.

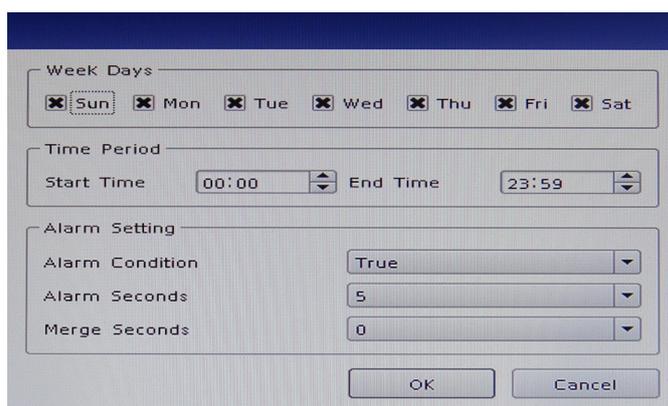
**Disconnect Alarm:** Lost camera connection.

**Digital Input\_0 ~ Digital Input\_4:** Detected input.

**Schedule Trigger:** Trigger by schedule setting.

**HDD Error Alarm:** Record failed or HDD error will send event alarm.

4. Click “Add” button below Event Schedule List table
5. Select event will detected week days and the time periods of each day.
6. Set Alarm detail parameter.



**Week Days:** Select week days for event notification.

**Time Period:** Select time period for event notification.

**Alarm Setting**

**Alarm Condition:**

For Motion event, true means alarm trigger by motion, false means alarm triggered by no motion.

For DI event, true means alarm trigger by DI in open status, false means alarm triggered by DI in close status.

For Schedule trigger, true means alarm is triggered in during schedule period, false for alarm triggered when not in schedule period.

**Alarm seconds:** Define the alarm time period when the event is triggered.

**Merge seconds:** is set for merge two same alarms between setting seconds.

7. Click “Add” button below Action list table.
8. Select an action, when event was triggered system will execute it.



## 6.2 Modify exist Event schedule or Output Action

### Modify Event Schedule:

1. Select an event from event list.
2. select a schedule from Event schedule list
3. Click “Modify” button
4. Modify setting values from schedule setting dialog.
5. Click “OK” button when finished the modification..

### Modify Output Action:

1. Select an event from event list.
2. Select a schedule from Event schedule list
3. Select an action from “Action List”.
4. Click “Modify” button.
5. Modify setting values from each Action setting dialog.
6. Click “OK” button to close dialog

## 6.3 Delete exist Event schedule or Output Action

### Delete Event:

1. Select an Event from “Event List”.
2. Click “Delete” button below the “Event List”

### Delete Event Schedule:

1. Select an event from “Event List”
2. Select an event schedule from “Event Schedule List”.
3. Click “Delete” button below “Event Schedule List”.

### Delete Action:

1. Select an event from “Event List”
2. Select an event schedule from “Event Schedule List”.
3. Select an Action from “Action List”.
4. Click “Delete” button below “Action List”.

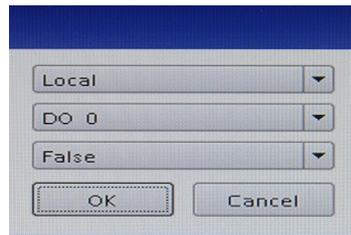
## 6.4 Event Action Type

**Buzzer:** Buzzer work after event was triggered.

**Digital Output:** Select a device to change DO status after event was triggered.

Set output to “True”, DO will change to “Close” status when alarmed.

Set output to “False”, DO will change to “Open” status when alarmed.



**Display on Channel:** When event was triggered, system will display OSD string on selected channels.



**Record:** When event was triggered, system will force selected channels record.

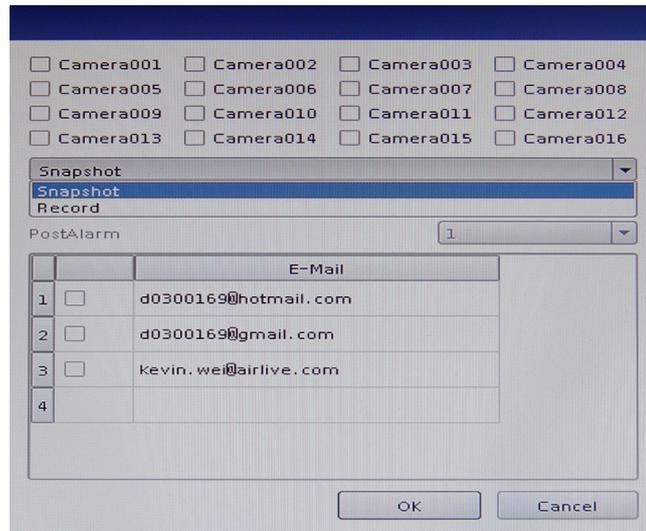
- ※ **Note:** 1. System must switch “Schedule Monitor” On event was triggered.
- 2. The selected channels must has set “Recording schedule” when event was triggered.

### Snapshot:

System will snapshot images with selected channels, and save snapshot to event snapshot folder automatically, you could search them in “Event Snapshot” page in “System Management”.

### E-Mail:

1. Select channels for snapshot or record a file when event is triggered.
2. Select Snapshot or Record a period video file
3. Setup Pre-Alarm seconds and Post-Alarm seconds for record file.
4. Select users to send notification E-Mail when event is triggered.

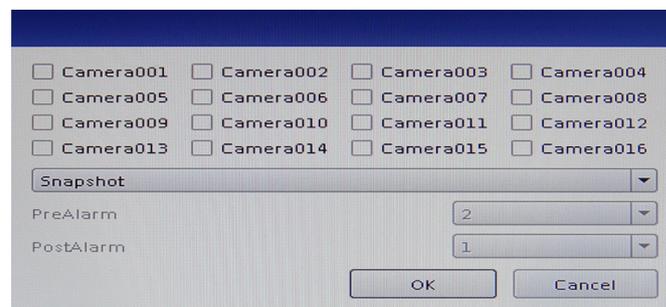


**TCP:** Send notification TCP sockets to TCP server when event is triggered.

**HTTP:** Send notification to HTTP server when event is triggered.

**FTP:**

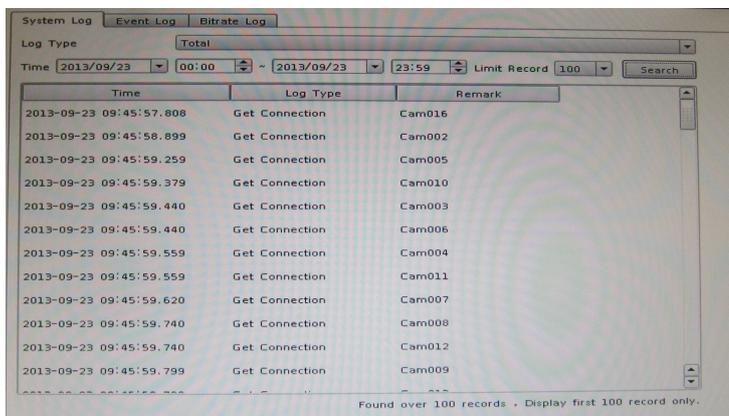
1. Select channels for snapshot or record a file when event is triggered.
2. Select Snapshot or Record a period video file
3. Setup Pre-Alarm seconds and Post-Alarm seconds for record file.
4. System will upload file to FTP server when event is triggered.



# 7

# Log Viewer

## 7.1 System Log



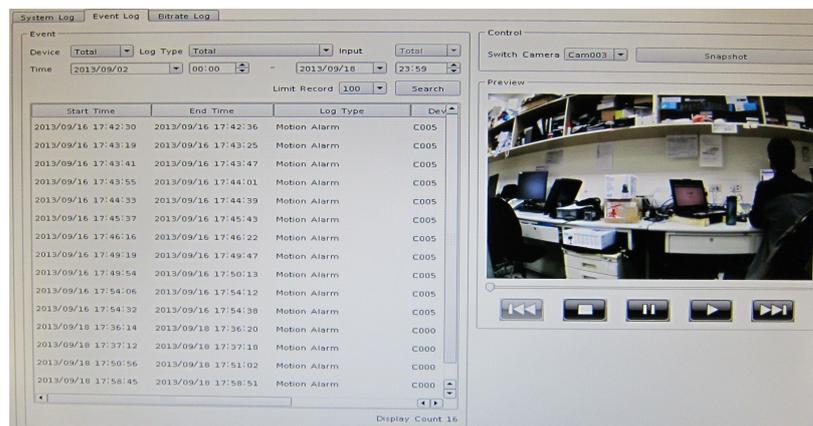
**Log Type:** Select a log type to filter data.

**Time:** Setup search logs in time period.

**Limit Record:** Setup maximum number records of search result.

**Search:** Click “Search” button to start search, the search result will display in the table of below.

## 7.2 Event Log



**Device:** Select a Device for search filter.

**Log Type:** Select a log type to filter data.

**Input:** Setup DI input port search filter, only worked on search DI event.

**Time:** Setup search logs in time periods.

**Limit Record:** Setup maximum number records of search result.

**Search:** Click “Search” button to start search, the search result will display in the table of below.

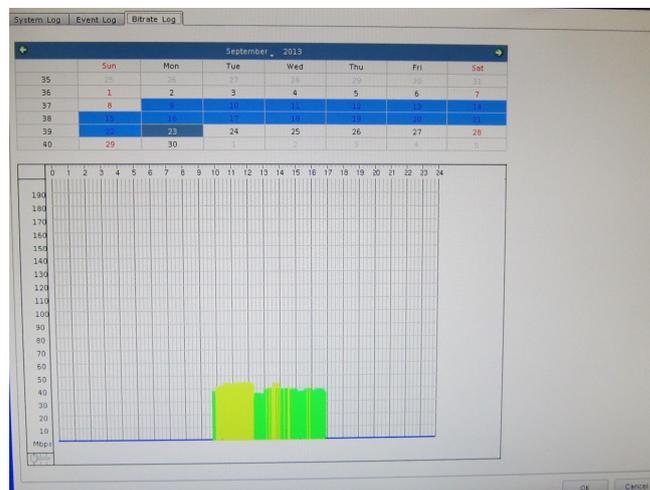
**Preview Event Images:** Select an event log from log table, event image will display in the window, you could click the play control buttons to preview event images.

**Change display Channel:** Select another camera id from combo box, system will display selected channel image in event time.

**Snapshot:** Insert USB dongle to the NVR first, and click the Snapshot button to save it.

## 7.3 Bitrate Log

You may search bitrate for selected time period; it will show different color of bitrate data as below.



**Select a date:** Click on the calendar with blue background days.

**Bit-rate table:** System will display the bit-rate log in the table.

**Blue:** Bit-rate is very low.

**Green:** Bit-rate is fine.

**Yellow:** Bit-rate is a bit high.

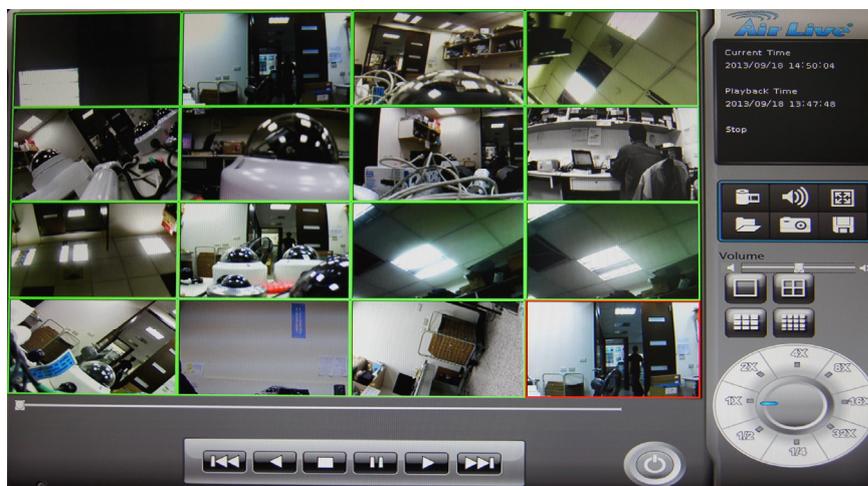
**Orange:** Bit-rate is very high.

**Red:** Bit-rate is over limit.

# 8

# Playback

You may search and playback the recorded video files with selectable time period, also able to convert the video to avi or backup the video files.

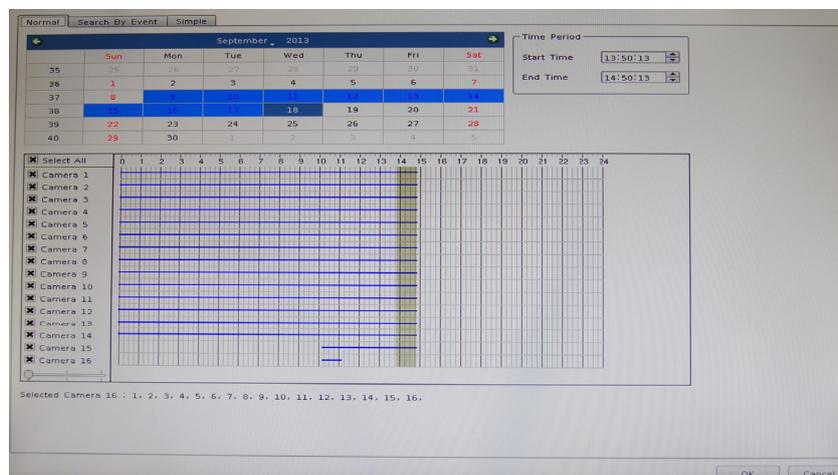


## 8.1 Search Recorded Video Files



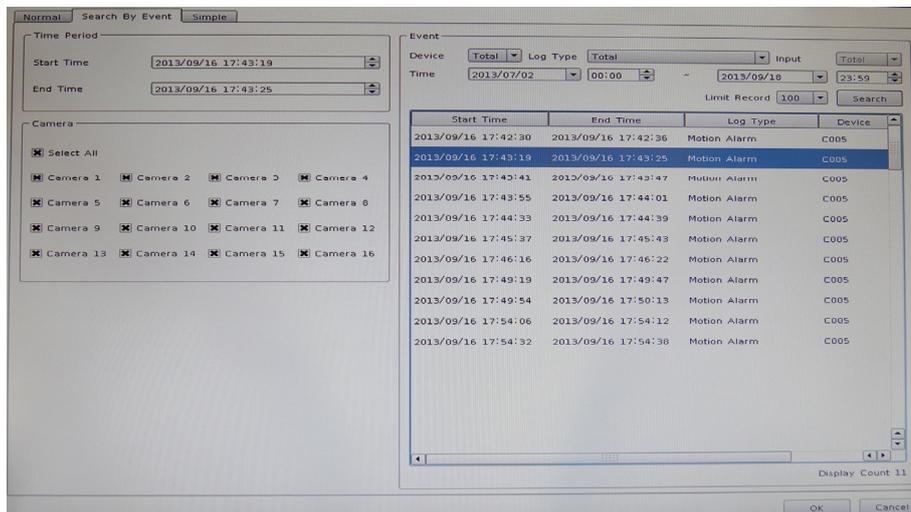
Click to approach search dialog.

**Normal Search:**



1. **Select playback date:** If there is record history data, System will set calendar's day to blue to identify which days has record files.
2. **Begin search:** Click "Search" button to start search record file in selected date, and system will draw search result in the grid.
3. **Select playback camera and time period:** Select cameras from list, and drag on search result or edit start / end time from date-time picker control to define playback period.
4. **Begin playback:** Confirm playback camera and period then click "OK" button to begin playback.

**Search by Event:**

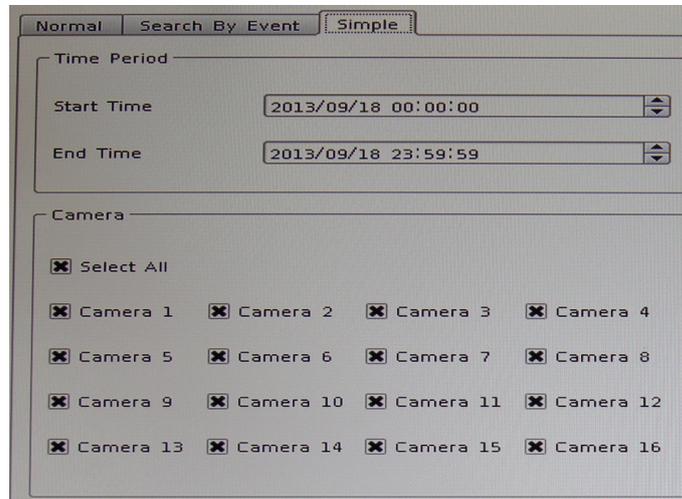


Input search filter first, click the "Search" button, the search result will display on the list as above.

Select a log that you need to playback, system will fill the event period automatically, and select which cameras you need playback together.

Click the "OK" button when you finished the search

### Simple Search:



Select playback period from date controls directly, and select which cameras will be playback.

Click the “OK” button when you finished the search.

## 8.2 Playback Control Buttons



Play video forward.



Pause playing video.



Stop playing video.



Play video backward.



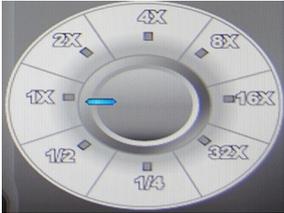
Seek to previous frame when on pause mode.



Seek to next frame when on pause mode.



Close playback and return to live view.



Change of playback speed.



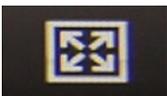
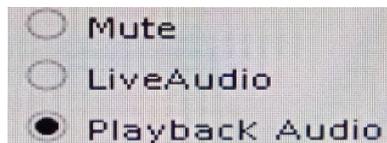
Adjust playback audio volume.

The IP Camera supports up to eight Cruise Paths. Please follow the instructions below for Cruise Path setup.



Select play audio way as below

1. Mute : Mute sound output
2. Live Audio: Play live focus channel sound
3. Playback Audio: Play playback sound.



Switch display mode to full screen, click mouse right to return normal mode.

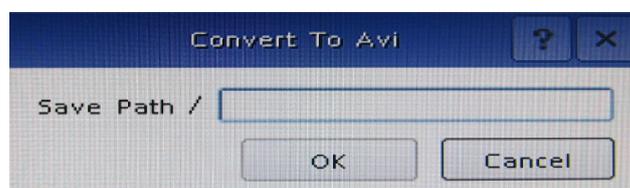


Take a snapshot to hard disk.

## 8.3 Convert to Avi file

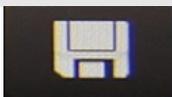


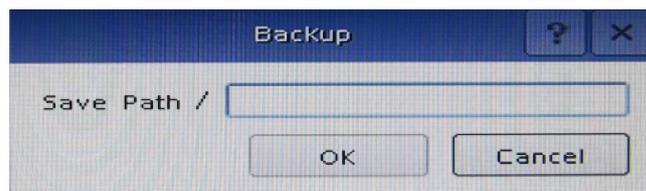
1. Click to open search dialog.
2. Select convert camera(s) and time period for converting
3. Select converted files destination folder then click "OK".



## 8.4 Back up Video Files



1. Click  to open backup dialog.
2. Select backup camera(s) and time period for backup.
3. Select backup files destination folder then click “OK”.



# 9

## Remote Viewing on IE

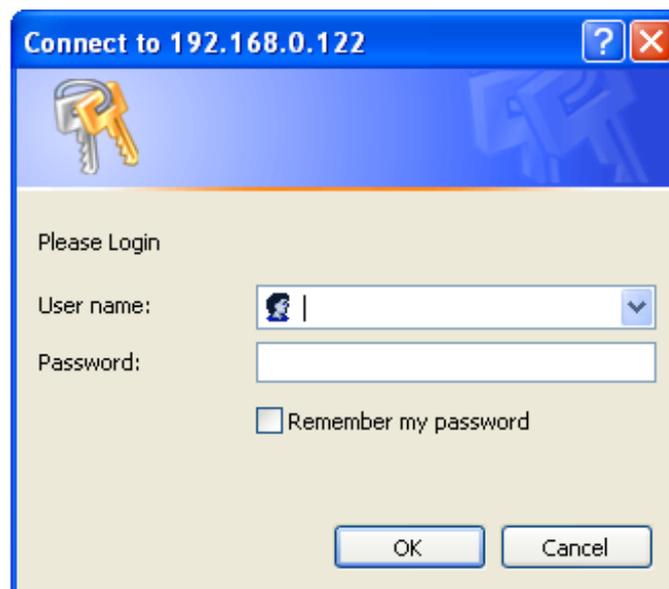
The CoreNVR is able to be viewed from Internet Explorer when the network is available, you can have live view, playback and most of all functions are as same as the CoreNVR system.

### 9.1 Connection to CoreNVR

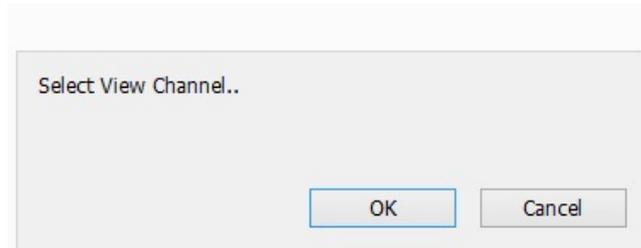
For first time connection, you need to install the ActiveX control if it appears on your web page as below.



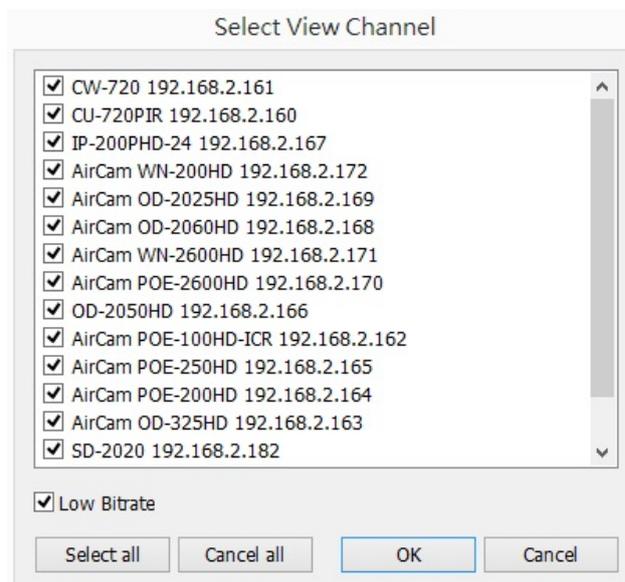
After installed the ActiveX component then please login the system on pop-up window.



Please login your username and password, and then you will see the “Select View Channel” window as below.



You may select channel(s) you would like to view on your computer. Please also check the “Low Bitrate” to reduce the bandwidth consumption on IE.



Click on “OK” to see the live view.

## 9.2 Live View on IE

The picture below is the live view on IE, which exactly the same as CoreNVR system.



## 9.3 System Information



## 9.4 Screen Division

Assign the preview screen to expected layout division by clicking these buttons.



Switch to 1 Division.



Switch to 4 Division.



Switch to 9 Division.



Switch to 16 Division.



Switch to Full screen, and click mouse right button to cancel Full Screen.

## 9.5 Subscreen Functions

**Popup Menu:** Click mouse right button, select an option from the popup menu.



**Show Live Camera:** You may select any connected camera to display on selected channel.

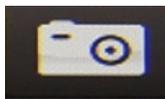
**Remove Camera Display:** You may remove the camera from selected channel.

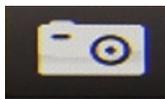
**Digital Zoom:** You must enable this function to zoom the selected camera on the web.

**Snapshot:** Take a snapshot of selected channel.

**Full Screen:** Make full screen of selected channel.

**Restore Division Default:** Restore to default division when you finished full screen view.



**Snapshot:** Click  to take a snapshot to the HDD; you can management snapshots at system management "snapshot" page.



**Playback:** Click  to see Playback page.

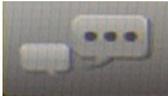


**System Setting:** Click  for **System setting / System Management / Event Setting/ Log Viewer.**

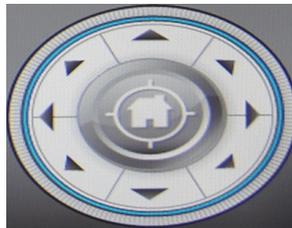
※ **Note:** All settings in IE are as the same as in the CoreNVR system, please refer to the previous chapter 4, 5, 6 and 7 for detail settings.

**Audio Volume Control:** Click  to switch between normal and mute.

**Schedule Monitor:** Click  button to enable or disable Schedule monitoring, the recording will be stopped if it is disabled.

**Two Way Audio:** Click  button to start or stop selected channel two-way audio.

**PTZ Control:**



Move PTZ camera direction by click direction buttons.

Click  to make camera return home position.

Move the thumb to left to make slower, move to right to make move faster.

**Tour:** Select a tour setting from combo box, and click “go” button to start tour, click “Stop” button to stop tour.

**Preset:** Select a preset  position from the box, camera will move to preset position after click.

**IRIS:** Adjust camera’s IRIS  setting, or set it to auto.

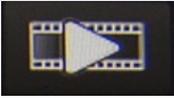
**Focus:** Adjust camera’s focus  setting, or set it to auto.

**Zoom:** Zoom-in or zoom-out  focus camera.

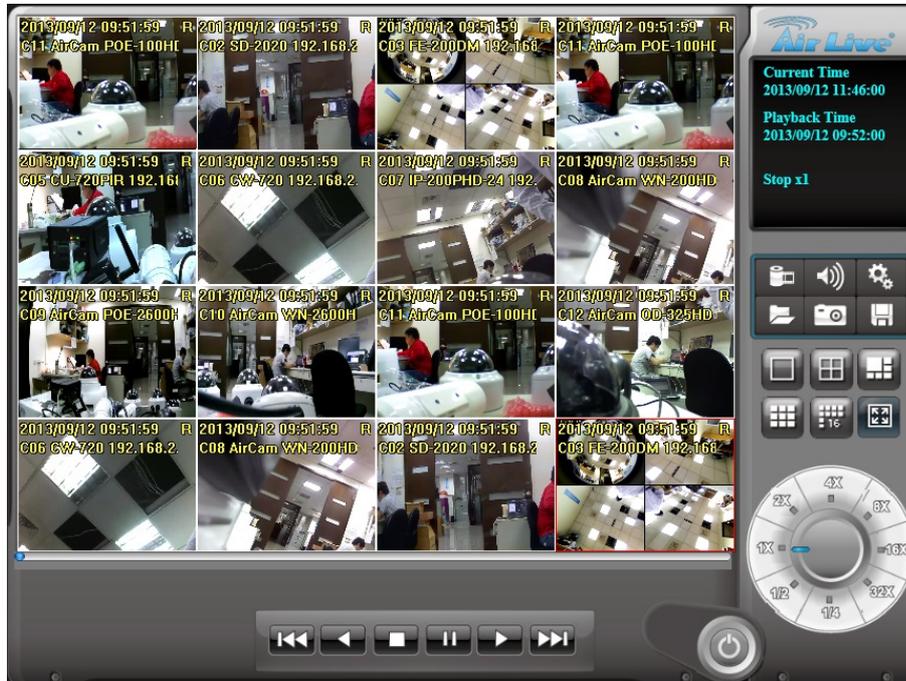
**Pan:** Begin camera auto pan or  stop.



## 9.6 Playback on IE



Click to see Playback page on IE.



Play video forward.



Pause playing video.



Stop playing video.



Play video backward.



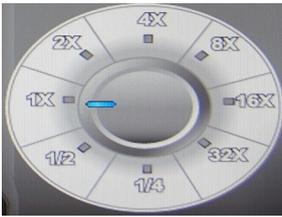
Seek to previous frame when on pause mode.



Seek to next frame when on pause mode.



Close playback and return to live view.



Change of playback speed.

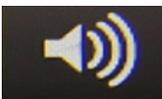


Adjust playback audio volume.

The IP Camera supports up to eight Cruise Paths. Please follow the instructions below for Cruise Path setup.

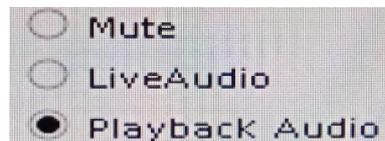


Convert to AVI, please see chapter 8.3 for information.

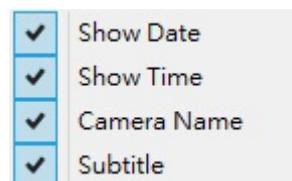


Select play audio way as below

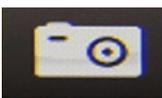
1. Mute : Mute sound output
2. Live Audio: Play live focus channel sound
3. Playback Audio: Play playback sound.



To select which information you would like to show as below.



Search recorded video files, please see chapter 8.1 for information.



Take a snapshot to hard disk.



Backup video files, please see chapter 8.4 for information.

# 10

## Appendix

### A. Product Specification

#### ■ Hardware

Chipset	ARM Cortex A9
LAN Port	Giga RJ-45 Ethernet Port x 1
Video Output	Local Display x 2
Audio Input	MIC x 1 (phone jack 3.5mm)
Audio Output	Phone Jack 3.5mm x 1
HDD	SATAII HDD up to 3TB x 2
e-SATA	e-SATA Port x1
Backup	USB Mass Storage
LED Indicator	PWR x 1, HDD x 1, LAN x 1, REC x 1, Event x 1, Alarm x 1, CAM x 1, DI x 4, DO x 4
USB	Mouse x 1 / Backup x 1
Sensor In / Alarm Out	Digital Input x 4 / Digital Output x 4
Button	Factory Default Reset x 1
Buzzer	Buzzer x 1

#### ■ Software

Video Codec	H.264
Audio Codec	G.711 / G.726
Video Resolution	QVGA / VGA / WXGA / SXGA / Full HD / 3M / 5M
System Setting	<ul style="list-style-type: none"> <li>● Resolution selectable, 1024x768 / 1280x1024 / 1366x768 / 1440x900 / 1920x1080</li> <li>● Display style selectable. Normal / Simple / Professional / Advance</li> <li>● Reset Default</li> <li>● Backup / Restore</li> <li>● Firmware Upgrade</li> <li>● System Restart</li> </ul>
Live View	<ul style="list-style-type: none"> <li>● 1 / 4 / 9 / 16 Division(Max 9ch for CoreNVR 9) / Full Screen</li> </ul>

	<ul style="list-style-type: none"> <li>● Snapshot</li> <li>● Selectable display cameras</li> </ul>
PTZ	<ul style="list-style-type: none"> <li>● Support PTZ cameras</li> <li>● Preset / Tour / Auto pan / Iris / Focus / Speed</li> </ul>
Record	<ul style="list-style-type: none"> <li>● Schedule / RTC / Motion Detection / DI Detection / Event Trigger</li> <li>● Pre-alarm / Post alarm configuration</li> <li>● Auto recycle</li> <li>● Samba path supported</li> </ul>
Playback	<ul style="list-style-type: none"> <li>● 1 /4/ 9/ 16 Division(Max 9ch for CoreNVR 9) / Full Screen</li> <li>● Play / Reverse / Pause / Seek / Pre- I frame / Next Frame</li> <li>● Speeds: 1/4 , 1/2 , 1 , 2 , 4 , 8 , 16 , 32</li> <li>● Convert to AVI</li> <li>● Multi-Cameras Backup</li> </ul>
Languages	English / Traditional Chinese / German / Greece / Russia / Spain / Portugal / Polish / Czech / Korean
Alarm	Buzzer / DO / Display on Screen / Record / Snapshot / E-Mail / TCP / HTTP / FTP
Notification	SMTP / HTTP / FTP / TCP
Schedule Setting	RTC / Motion Detection / DI Detection / Event Detection
Network	Fix IP / DHCP / PPPOE / DIPS Report / UPNP transversal
Snapshot	<ul style="list-style-type: none"> <li>● Preview snapshot in HDD or Removable device</li> <li>● Search Event Snapshot</li> <li>● Backup snapshot to removable device</li> </ul>
Disk Management	<ul style="list-style-type: none"> <li>● Partition management</li> <li>● Format partition</li> <li>● Samba management</li> </ul>
Motion Detection	<ul style="list-style-type: none"> <li>● Up to 10 regions</li> <li>● Adjustable Object Size and Sensitivity</li> </ul>
Remote	<ul style="list-style-type: none"> <li>● Fully function remote live view and playback</li> <li>● Support low bit-rate connection</li> <li>● selectable Camera Connection</li> </ul>

**■ General**

Power	AC100-240V/in, DC12V(4A)
Temperature	Operating: 0°C ~ 40°C
Humidity	Operating: 10%~80%
Dimension	33.3 x 5.7 x 25.2 cm
Certificate	CE, FCC