

**Dual Streaming**  
**H.264 Multiplex 4CH/8CH Network DVR**  
**Support 3G/3.5G mobile phone/PDA**  
(Symbian/Windows Mobile/iPhone/Blackberry)  
**Support Mouse**

**User Manual**

V1.1



**CAUTION**

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER.  
NO USER SERVICEABLE PARTS INSIDE.  
PLEASE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

**WARNING**

**TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS  
APPLIANCE TO RAIN OR MOISTURE.**

**NOTE: This equipment has been tested and found to comply with the limits for a Class “A” digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the users will be required to correct the interference at their own expense.**

**FCC Caution: To assure continued compliance, use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.**

**This Class A digital apparatus meets all the requirements of the Canadian Interference Causing Equipment Regulations.**

## **LIMITATION OF LIABILITY**

- THIS PUBLICATION IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THE THIRD PARTY’S RIGHT.
- THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE ADDED TO THE INFORMATION HEREIN, AT ANY TIME, FOR THE IMPROVEMENTS OF THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT(S).

## **DISCLAIMER OF WARRANTY**

IN NO EVENT SHALL THE SUPPLIER BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO THE FOLLOWINGS:

- ANY DAMAGE OR LOSS, INCLUDING BUT WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;
- PERSONAL INJURY OR ANY DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;
- UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER;
- ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED WITH THE DEVICES OF THE THIRD PARTY;
- ANY CLAIM OR ACTION FOR DAMAGES, BROUGHT BY ANY PERSON OR ORGANIZATION BEING A PHOTOGENIC SUBJECT, DUE TO VIOLATION OF PRIVACY WITH THE RESULT OF THAT SURVEILLANCE-CAMERA’S PICTURE, INCLUDING SAVED DATA, FOR SOME REASON, BECOMES PUBLIC OR IS USED FOR THE PURPOSE OTHER THAN SURVEILLANCE.

# PRECAUTIONS

- Please refer all work related to the installation of this product to qualified service personnel or system installers.

- Do not operate the appliance beyond its specified temperature, humidity or power source ratings.

Use the appliance at temperatures between 0°C ~ +45°C (32°F ~ 113°F) and humidity below 85%.

The input power source for this appliance is between 90 ~ 264 VAC, 47 ~ 63 Hz.

Performance and lifetime of hard disk drives are easily affected by heat (used at high temperature). It is recommended to use this appliance at temperature between +20°C ~ +30°C (68°F ~ 86°F)

- Handle the hard disk drives with care.

It is possible to damage them if they are moved while their motors are still running. Do not move them just after turning the power on or off (for around 30 seconds).

Protect the hard disk drives from static electricity.

Do not stack them or keep them upright.

Do not use an electric screwdriver to fix them.

- Clean only with dry cloth.
- Do not block any ventilation openings.
- Do not use the appliance near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
- Protect the power cord from being stepped on or pinched particularly at plugs, convenient receptacles and the points where they exit from the apparatus.
- Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.
- Handle the appliance with care. Do not strike or shake, as this may damage the appliance.
- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also cause electric shock.
- Do not use strong or abrasive detergents when cleaning the appliance body. When the dirt is hard to remove, use a mild detergent and wipe gently.
- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
- Please make a note of your settings and save them. This will help when you are required to change the system configuration, or when unexpected failure or trouble occurs.
- Distributing, copying, disassembling, reverse compiling, reverse engineering, and also exporting in violation of export laws of the software provided with this product, is expressly prohibited.

# Table of Content

|                                                           |    |
|-----------------------------------------------------------|----|
| <b>0.Quick Reference to Start this DVR</b>                | 6  |
| <b>1.Product Overview</b>                                 | 8  |
| 1.1Features                                               | 8  |
| <b>2. Panels And Remote Controller</b>                    | 9  |
| 2.1 Front Panel                                           | 9  |
| 2.2 Back Panel                                            | 10 |
| 2.3 Remote Controller                                     | 11 |
| <b>3. Hardware Installations</b>                          | 12 |
| 3.1 Basic Connections                                     | 12 |
| 3.2 Hard Disk Installation                                | 13 |
| 3.3 PTZ Control Connections                               | 13 |
| <b>4. Power-on DVR and Quck Start</b>                     | 14 |
| 4.1 Live View Screen                                      | 15 |
| 4.2 Main Menu(Tools Bar)                                  | 15 |
| 4.3 Format HDD                                            | 16 |
| 4.4 Video Record                                          | 18 |
| 4.5 Video Playback                                        | 20 |
| 4.6 Video Backup                                          | 22 |
| 4.7 Play Backup Video on PC                               | 23 |
| 4.8 PTZ Control                                           | 23 |
| <b>5. DVR Setting</b>                                     | 26 |
| 5.1 Menu Tree & Operate                                   | 26 |
| 5.2 System Setting                                        | 28 |
| 5.2.1 Language                                            | 28 |
| 5.2.2 Video Standard                                      | 28 |
| 5.2.3 Record Resolution                                   | 28 |
| 5.2.4 VGA Setting                                         | 28 |
| 5.2.5 Time Format                                         | 28 |
| 5.2.6 Time Setting                                        | 29 |
| 5.2.7 Password Setting and what if forgotten              | 29 |
| 5.2.8 User Authority(System-Advanced Setting)             | 29 |
| 5.3 Record Setting                                        | 30 |
| 5.3.1 Video Channel                                       | 30 |
| 5.3.2 Record Schedule                                     | 30 |
| 5.3.3 Video Qaulity                                       | 31 |
| 5.3.4 Record Fram Rate                                    | 31 |
| 5.3.5 Record Source                                       | 31 |
| 5.3.6 OSD Setting                                         | 31 |
| 5.3.7 Dual streaming for network(Record-Advanced Setting) | 31 |
| 5.4 Camera Setting                                        | 32 |
| 5.4.1 Camera Channel                                      | 33 |
| 5.4.2 PTZ Protocol                                        | 33 |
| 5.4.3 PTZ Buad Rate                                       | 33 |
| 5.4.4 PTZ ID                                              | 33 |

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| 5.4.5 Color Setting                                                   | 33 |
| 5.4.6 Motion Detection & Region                                       | 33 |
| 5.4.7 Privacy Mask(Mosaic)                                            | 34 |
| 5.4.8 Motion and Video Lost(Camera-Advanced Settin)                   | 34 |
| 5.5 Net Setting                                                       | 35 |
| 5.5.1 Network(Static IP/DHCP)                                         | 35 |
| 5.5.2 Http Port                                                       | 36 |
| 5.5.3 Command Port                                                    | 36 |
| 5.5.4 Media Port                                                      | 36 |
| 5.5.5 PPPoE/DDNS(Net-Second Page)                                     | 36 |
| 5.5.6 E-Mail Server (Net-Third Page)                                  | 38 |
| 5.6 Alarm Input/Output Setting                                        | 39 |
| 5.6.1 Alarm Input Channel                                             | 39 |
| 5.6.2 Alarm Input Type                                                | 39 |
| 5.6.3 Event Handling                                                  | 40 |
| 5.6.4 Alarm Schedule(Alarm-Advanced)                                  | 40 |
| 5.7 Maintenance                                                       | 41 |
| 5.7.1 Log View                                                        | 41 |
| 5.7.2 Software Upgrade                                                | 42 |
| 5.7.3 HDD Manage                                                      | 42 |
| 5.7.4 HDD Capacity                                                    | 43 |
| 5.7.5 Hardware Version                                                | 43 |
| 5.7.6 Software Version                                                | 43 |
| 5.7.7 Software Release Date                                           | 43 |
| 5.8 Save & Exit                                                       | 44 |
| <b>6. Web Browser Operation(IE Browser Only)</b>                      | 45 |
| 6.1 Enable Download Un-Signed ActiveX control                         | 45 |
| 6.2 Web Browser Main Screen                                           | 45 |
| 6.3 Alarm Notification                                                | 47 |
| 6.4 Device Parameters Setting                                         | 48 |
| 6.5 Video Files Playback & Download                                   | 52 |
| 6.5.1 Video Files Playback                                            | 52 |
| 6.5.2 Download Video Files                                            | 53 |
| 6.5.3 Device Log                                                      | 53 |
| <b>7. 3G/3.5G Mobile Phone/PDA Support</b>                            | 54 |
| 7.1 Windows Mobile PDA                                                | 54 |
| 7.2 <a href="#">Nokia/Samsung/LG Symbian S60 3<sup>rd</sup> Phone</a> | 55 |
| 7.3 <a href="#">3G/3.5G iPhone Series</a>                             | 57 |
| <b>8.Appendix</b>                                                     | 58 |
| Appendix A – HDD Capacity Estimator                                   | 58 |
| Appendix B – Compatible HDD List                                      | 59 |
| Appendix C – Compatible USB portable DVD Burner List                  | 59 |

## 0. Quick Reference to Start this DVR

Please Refer to the Manual inside the CD for details, the hard copy is only for reference

### Before Turning On The System

- Please install **SATA HDD** in the Hard Disk Tray. ([Chapter 3.2](#) and [Appendix B](#))
- Please refer to Chapter 3 for all connections.
- To use the remote controller ([Chapter 2.3](#))

### After Turning On The System

- Please wait for about 40 seconds for the system to start up.
- Please login the system ([Chapter 4](#)), and then physically format the HDDs ([Chapter 4.3](#)). (Please note that the HDDs cannot be used for recording if they are not formatted yet.)
- Please refer to [Chapter 4](#) for all basic operations.
- Please refer to [Chapter 5.2](#) to setup the system correctly, esp. for NTSC/PAL, Record Resolution, Time & Language.
- Please refer to [Chapter 4.4](#) and [Chapter 5.3](#) for recording setting.
- Please refer to [Chapter 4.5](#), [Chapter 4.6](#), [Chapter 4.7](#) to search, playback, and archive the recorded video/audio.
- Please refer to [Chapter 5.4.6/5.4.8](#) for motion Detection, [Chapter 5.4.7](#) for Privacy Mask(Mosaic), and [Chapter 5.6](#) for Alarm setting
- Please refer to [Chapter 3.3](#) for PTZ camera connection, [Chapter 4.8](#) and [Chapter 5.4](#) to set up and control the PTZ cameras correctly.
- Please refer to [Chapter 5.5](#) for Network Setting including DHCP/Static IP/PPPoE, ports no., DDNS and E-mail Server
- Please refer to [Chapter 6](#) for remote access via internet or intranet from PC/Laptop
- Please refer to [Chapter 7](#) for remote access via internet or intranet from mobile phone
- Please refer to [Appendix A](#) for the estimated recording time.
- Please refer to [Appendix B](#) and [Appendix C](#) for the compatible HDD/USB portable DVD Burner List

### Login/Logout The System

- Logout : **MENU(Setting)** →SAVE→Logout
- Login: Power on or after Logout

### Setup The System

- Format HDD : **MENU(Setting)** → <Maintenance> → <HDD Manage>→Click **[[>]]** → **【Formatting】** to start HDD format..
- Change Language, Time, NTSC/PAL, Record Resolution, Password, User Authority : **MENU(Setting)** →<System>
- Setup PTZ: **MENU(Setting)** →<Camera>
- Setup Network: **MENU(Setting)** →<Net> →<Network> Static IP/DHCP, or **MENU(Setting)** →<Net> →<Next Page> for PPPoE/DDNS
- Change Network Port: **MENU(Setting)** →<Net> →<Network> for Http/Command/Media Ports, **MENU(Setting)** →<Net> →<Next Page> for Mobile Port

- Set up E-mail Server: **MENU(Setting)** →<Net> →<Network> →<Next Page>→<Next Page>

## Basic Operations

- Change Split Window : CH1 ~ Ch4 / , or 1 ~ 8/  in the remote control
- Move Focus : ▲, ▼, ◀, ▶
- **Search/Playback/Backup** : ▶/|| for faceplate/remote control, and  for OSD, please refer to [Chapter 4.5](#) Video playback and [Chapter 4.6](#) Video Backup

## Remote Access -> Before Logging On

- User's computer need download ActiveX components for web access at the first time connect to DVR. If user's Internet explorer prohibits the download action then please manually enable the download of un-signed ActiveX in IE.
- Download unsigned ActiveX controls→ Enable or Prompt  
Initialized and script ActiveX controls not marked as safe → Enable or Prompt
- If the PC has used I.E. to access earlier software version of DVR, please go to Tools->Options->General in your I.E. to **delete "Temporary Internet files" and all offline contents**.

## Remote Access -> IE Operations

- Please note that the PC user must have system administrator password for the PC; otherwise, the process will fail, and an error dialog will be shown.  
For the Windows Vista, please turn off the UAC function, source info:  
<http://technet.microsoft.com/en-us/library/cc709691.aspx>
- Please refer to [Chapter 6](#) for details

## Remote Access -> Mobile Player

- These DVRs have mobile player software for 3G/3.5G mobile phone/PDA(Windows Mobile/iPhone/Nokia/Blackberry), please refer to [7. 3G/3.5G Mobile Phone/PDA Support](#) for more details.
- For limited upload bandwidth of internet that DVRs connect, or limited streaming capability of some mobile phone/PDA, you have to adjust bandwidth of DVR to internet, please refer to [5.3.7 Dual Streaming for Network\(Record- Advanced Setting\)](#) or [6.4 Device Parameters Settings - Channel→ Camera setting, Sub Bitstream, Subcode](#) (from IE) for more details

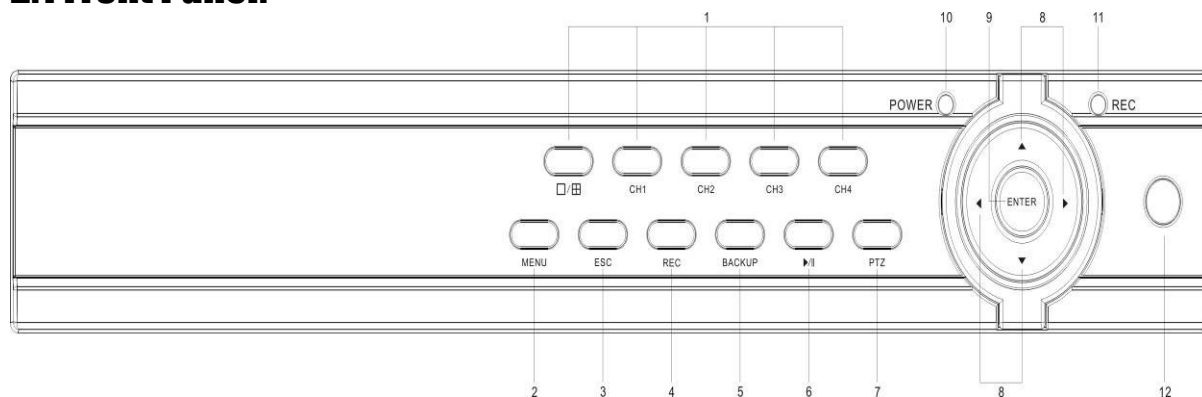
# 1. Product Overview

## 1.1 Features

| Model                     | 4 Channel                                                                                                                  | 8 Channel              |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------|
| Video Format              | PAL/NSTC                                                                                                                   |                        |
| Video Format              | H.264 Baseline Compression                                                                                                 |                        |
| Video Input               | BNC 4 Input / 1 Output                                                                                                     | BNC 8 Input / 1 Output |
| Audio Format              | G.726 8Kx16bit ADPCM Mono                                                                                                  |                        |
| Audio Input               | RCA 4 Input / 1 Output                                                                                                     | RCA 8 Input / 1 Output |
| Alarm Type                | Motion detection, Sensor Input, Relay Output , Video Lost                                                                  |                        |
| Sensor In/Out             | 4CH Input / 1CH Output                                                                                                     | 4CH Input / 1CH Output |
| Display Frame Rate        | Each Channel PAL : 25 FPS, NTSC : 30 FPS                                                                                   |                        |
| Playback Resolution       | PAL : CIF (352×288)                                                                                                        | PAL : CIF(352×288)     |
|                           | NTSC : CIF(352×240)                                                                                                        | NTSC : CIF(352×240)    |
| Record Frame Rate         | PAL : 100 FPS @ CIF                                                                                                        | PAL : 200 FPS @ CIF    |
|                           | NTSC : 120 FPS @ CIF                                                                                                       | NTSC : 240 FPS @ CIF   |
| Record method             | Power-on Auto Record, Schedule Record<br>(Manual Record, Motion Detection, Sensor Trigger)<br>Support Privacy Mask(Mosaic) |                        |
| HDD Interface             | SATA Interface support 2000GB                                                                                              |                        |
| Network Protocol          | TCP/IP/ DHCP/DNNS/PPPoE/E-Mail                                                                                             |                        |
| Network Function          | IE Browser Live Monitor, Configuration, Download Video, Playback, and Mobile Phone Surveillance                            |                        |
| USB 2.0 Interface         | Mouse / Potable Mobile HDD/ Flash Drive/ DVD Burner/ Firmware Upgrade                                                      |                        |
| Playback method           | Normal Play, Fast Forward, Backward, Single Step                                                                           |                        |
| Network Interface         | RJ45 10M/ 100M Ethernet Auto Detect                                                                                        |                        |
| PTZ Protocol              | PELCO-P ,PELCO-D, Samsung, Panasonic                                                                                       |                        |
| Video Backup              | AVI, MPEG4 or H.264 Raw                                                                                                    |                        |
| Power Adapter consumption | DC 12V Adapter/3A<br>10~15W                                                                                                |                        |
| Temperature               | 10°C~+40°C                                                                                                                 |                        |
| Humidity                  | 10%~90%                                                                                                                    |                        |
| Dimension                 | 315(W) x 224 (D) x 52 (H) mm                                                                                               |                        |

## 2. Panels and Remote Controller

### 2.1 Front Panel:



Other similar panels would have same buttons and functions as below:

**1. CH1 ~ Ch4 / **

Direct switch to single camera window or 4/9 camera windows

**2. MENU**

Press this button to display the main menu.

**3. ESC**

Exit window or switch the tool bar(main menu) and status bar

**4. REC**

Start or Stop manual record function.

**5. Backup**

Open video search and backup menu

**6. Play/Pause (/||)**

Open video search and playback menu. press to pause playback.

**7. PTZ**

Open camera selected with PTZ operation menu.

**8. , , , **

Arrow Buttons. Press ,  to move to selection box, press ,  to select submenu parameters.

**9. Enter**

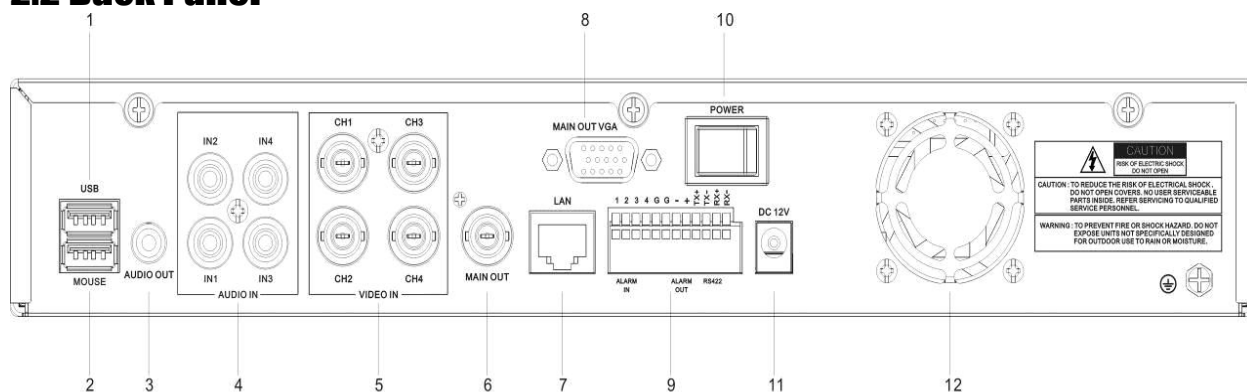
Confirm operation.

**10. Power LED**

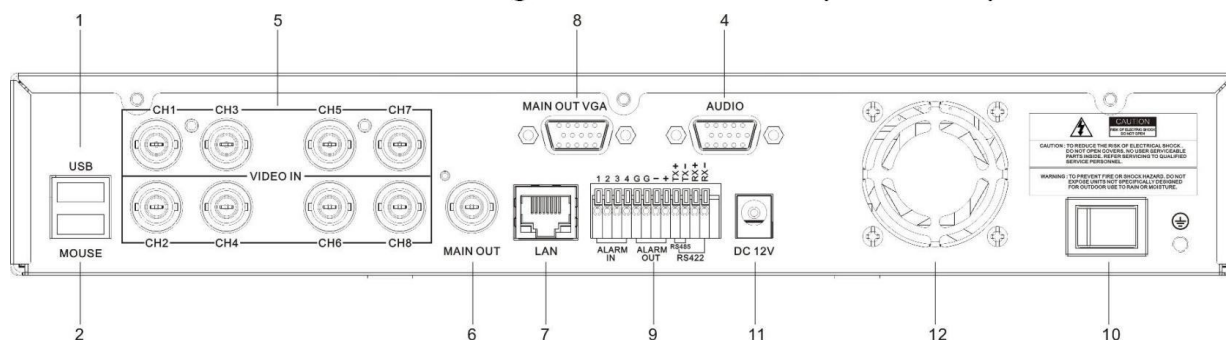
**11. REC LED**

**12. IR Window**

## 2.2 Back Panel



Back Panel diagram for 4CH H264 DVR(1x fixed HDD)



Back Panel diagram for 8CH H264 DVR(1x fixed HDD)

### 1. USB connector

Connect backup devices like flash drive, portable HDD or DVD burner

### 2. Mouse Connector

Connect USB mouse.

### 3. Audio Output Connectors

1 channel audio output, RCA (2Vp-p,600Ω) for 4CH DVR

### 4. Audio Input Connectors (AUDIO IN 1-4/1-8)

4 channel audio input, RCA (2Vp-p,600Ω) for 4CH H264 DVR; or connector for 8CH H264 DVR to connect Audio cable(8CH Audio Input+ 1CH Audio Output)

### 5. Video Input Connectors (1-4/1-8)

4 or 8 channel video input, BNC (1Vp-p,75Ω)

### 6. Video Main Output Connector

DVR system screen output, BNC (1Vp-p,75Ω)

### 7. Ethernet Connector

RJ-45 10/100 Base-T Ethernet network.

### 8. VGA Connector (optional for 4CH)

Connect VGA/LCD monitor

### 9. Alarm Input Connectors (ALARM IN 1-4, 5-6 Ground)

Connect to external sensor device

### Alarm Output Connectors (ALARM OUT 7-8)

Connect to external sensor device

## RS-422 Connector (9-12)

Support PTZ camera control

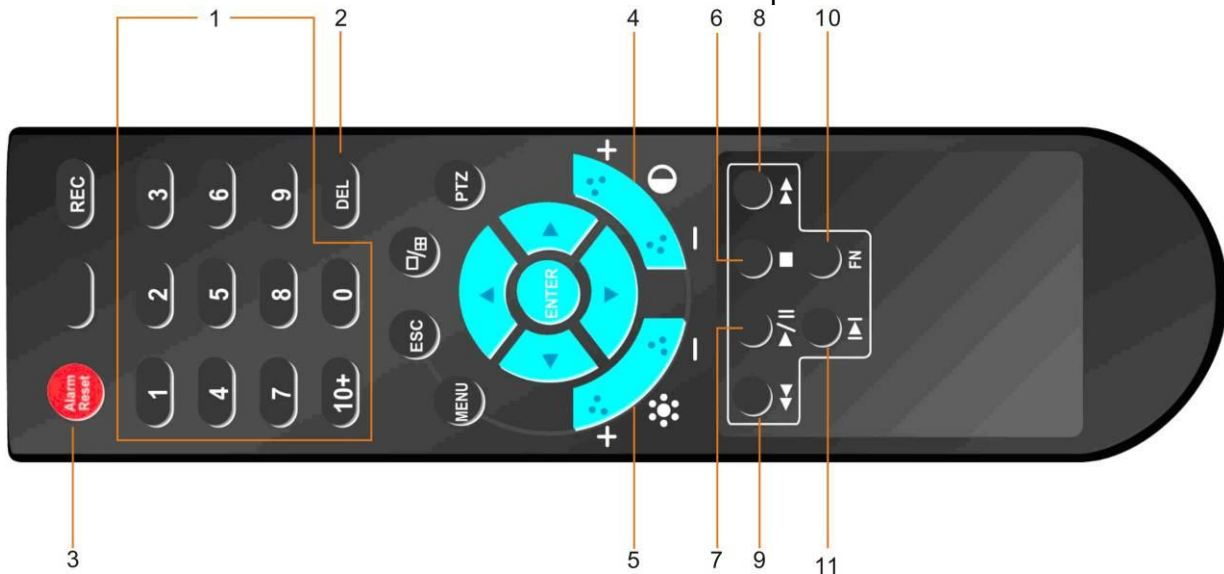
### 10. Power Switch

### 11. Power Input Socket (12V DC)

### 12. Fan

## 2.3 Remote Controller

The remote controller is an accessory to ease the user's operations. You can do all the operations by the remote controller instead of the buttons on the front panel.



#### 1. Alpha-numeric Buttons (1-9, 0, 10+)

Press these buttons for camera selection in most circumstances. These buttons can also be used to enter text and number

#### 2. DEL Button (DEL)

In text editing mode, this button is used as “del” key.

#### 3. Alarm Reset Button

Press this button to cancel alarm activation; click this button will pop a message to show the present alarm information.

#### 4. Contrast Button

Adjust image contrast up(+)/down(-).

#### 5. Brightness Button

Adjust image brightness up(+)/down(-).

#### 6. Stop Button (■)

Press this button to stop the playback.

#### 7. Play/Pause Button (▶/||)

Press this button to search and play the recorded images, or pause the playback.

#### 8. Fast Forward Button (▶▶)

Press this button for fast forward playback.

#### 9. Fast Backward Button (◀◀)

Press this button for fast backward playback.

#### 10. Function Key(FN)

Reserved

## 11. Single Step Button (▶)

Press this button to play the recorded images frame by frame.

### The Other Buttons

Each of the other buttons corresponds to one of those buttons on the front panel. Please refer to the descriptions in [Section 2.1](#). Front Panel

## 3. Hardware Installation

### 3.1 Basic Connections

#### ■ Cameras

Connect the camera output to video input connector in real panel of the DVR.  
The video input interface is standard BNC connector, 1Vp-p, 75  $\Omega$ .

#### ■ Audio Connector

The audio input interface is standard RCA socket, 2Vp-p, 600  $\Omega$ .

The **audio input resistance is a little bit high; please use active sound collection device or active microphone**. And the audio signal cable should keep away from the interference of strong electromagnetism and electric field.

#### ■ Monitor

Connect the main output connector to a monitor. Use BNC-to-RCA connector to work with Audio/Video RCA cable.

#### ■ Power

Use adapter come along with DVR, plug 12V<sub>DC</sub> output connector into the power socket.

#### ■ Alarm Input/output

Please refer to [Chapter 5.6.2](#).

#### ■ Ethernet

Connect the Ethernet connector to a standard twisted-pair Ethernet cable for remote access via LAN or internet

#### ■ USB 2.0

Support Mouse, USB Flash Drive, USB portable HDD, USB portable DVD Burner.  
**Only support FAT32 file system.**

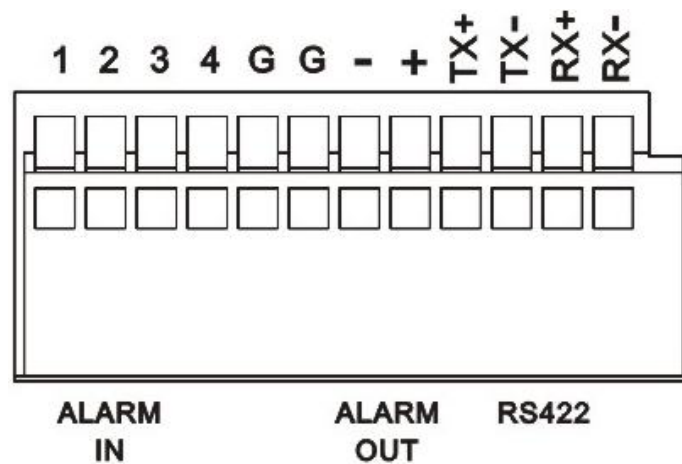
## 3.2 Hard Disk Install

**HDD must be formatted by DVR system before it can be used to record.  
PS. Do not format HDD by PC.  
Please refer to Section 4.3 Format HDD to format the HDD.**



## 3.3 PTZ Control Connections

Connect the PTZ control interface to RS422 T<sub>X</sub><sup>+</sup> and T<sub>X</sub><sup>-</sup> interfaces of rear panel.



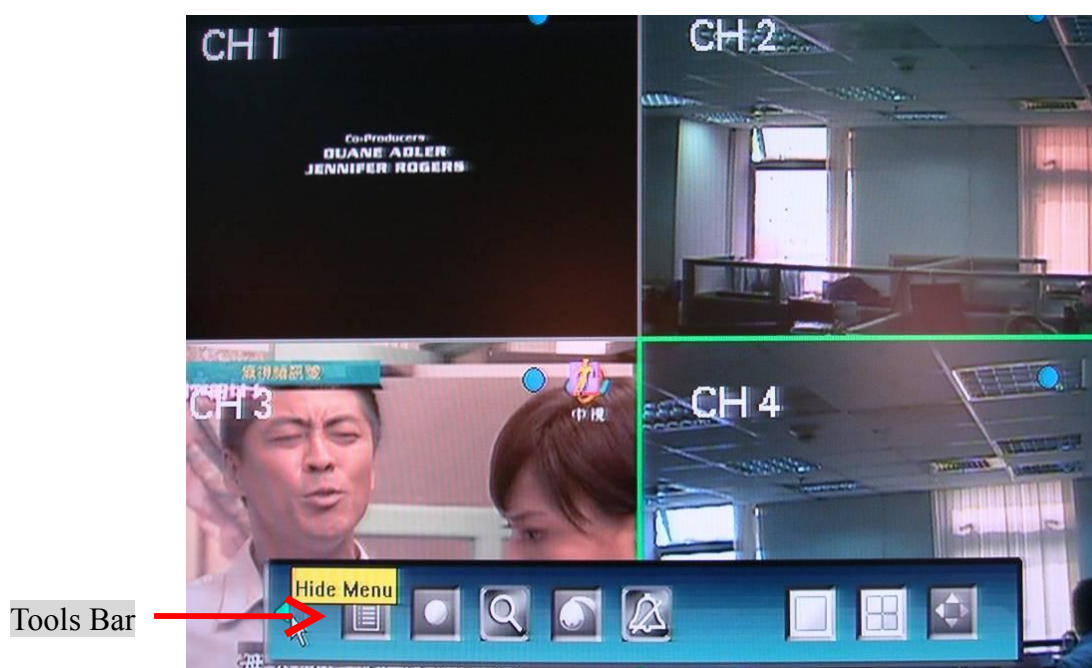
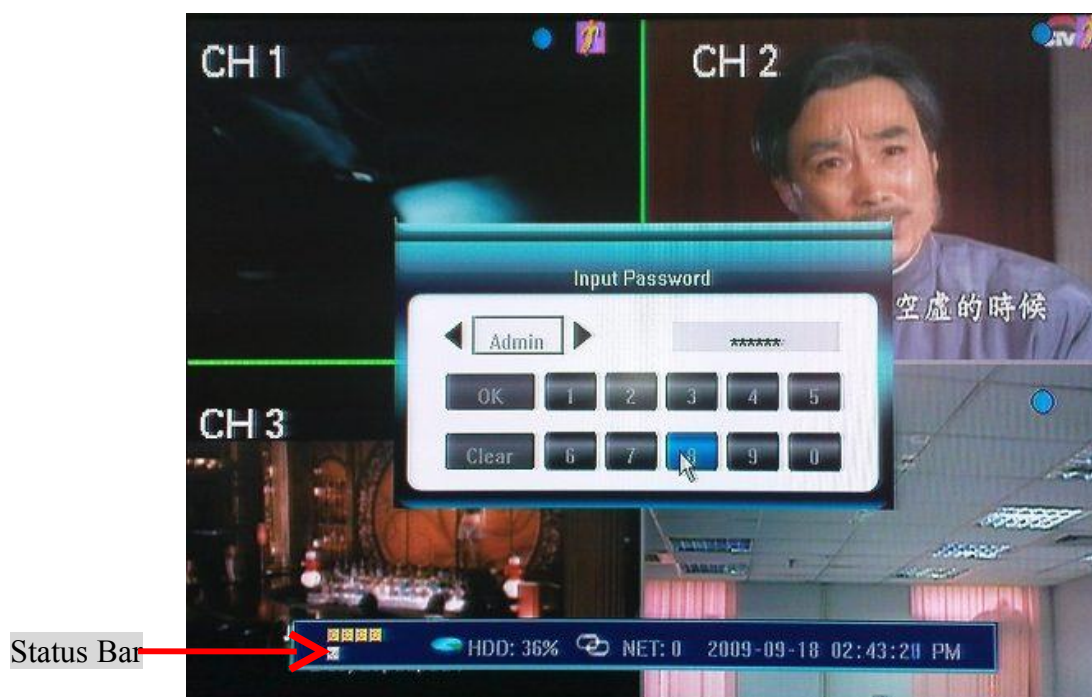
[and IDs](#)

## 4. Power-on DVR and Quick Start

Power-on the DVR and wait for system program loading. The DVR will buzz and “NO Hard Disk” appears when no hard disk installed in DVR.

First window will request to select user account and password to operate DVR system.

**Default password of Admin is [888888] User is [666666]**



DVR system status bar at the bottom of the screen. Right-click mouse key or press **【Enter】** at front panel will open **【Tools Bar】** for system setting and operating.

## 4.1 Live view screen

### ◆ Single Channel display

When in 4/9 splits view mode, the window with highlight **green border** is the current selected one. User can use mouse or press **【Direction】** buttons to switch to another channel. If the audio output device is connected, the audio can also be monitor together with video. User can select to display a single particular channel by pressing the corresponding **【Numbers】** buttons 1~8.

When in single split view mode, user can enter into 4/9 splits view mode by pressing / button directly, or reverse.

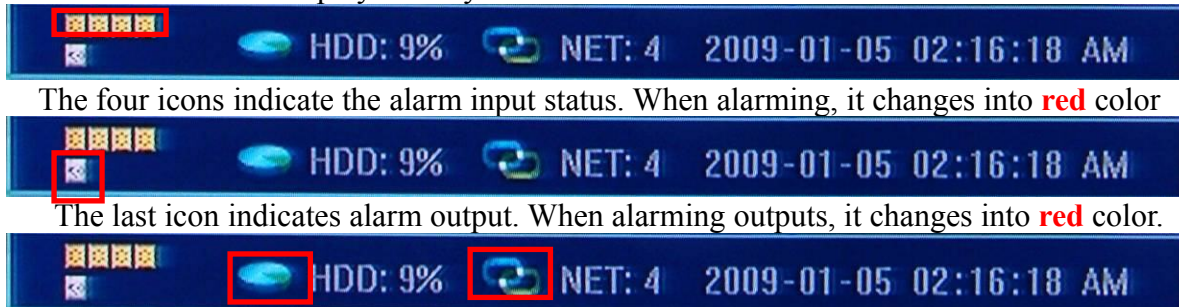
### ◆ Channel Status Display

Indication of “motion detection” / “common recording” / “alarm recording” and etc. will be displayed on the right upper corner of each split screen. The details are as follows:

-  Indicates “motion detection”.
-  Blue indicates “common recording”
-  Green indicates “motion detection triggered recording”
-  Red indicates “alarm triggered recording”
-  Grey indicates “manual recording”

### ◆ Peripheral alarm input / alarm output/HDD/Network display

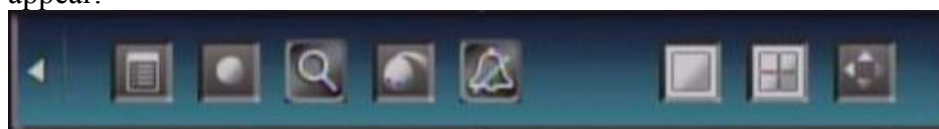
Indication will be displayed on system status bar:



 HDD normal  HDD Failure  Network connected  Network disconnected

## 4.2 Main Menu(Tools Bar)

Right click mouse or press **【Enter】** button in preview mode, the Tool Bar shown as below will appear:



: Hide the tool bar.



: System configuration



: Manual record



: Search, playback and backup record files



: PTZ operation



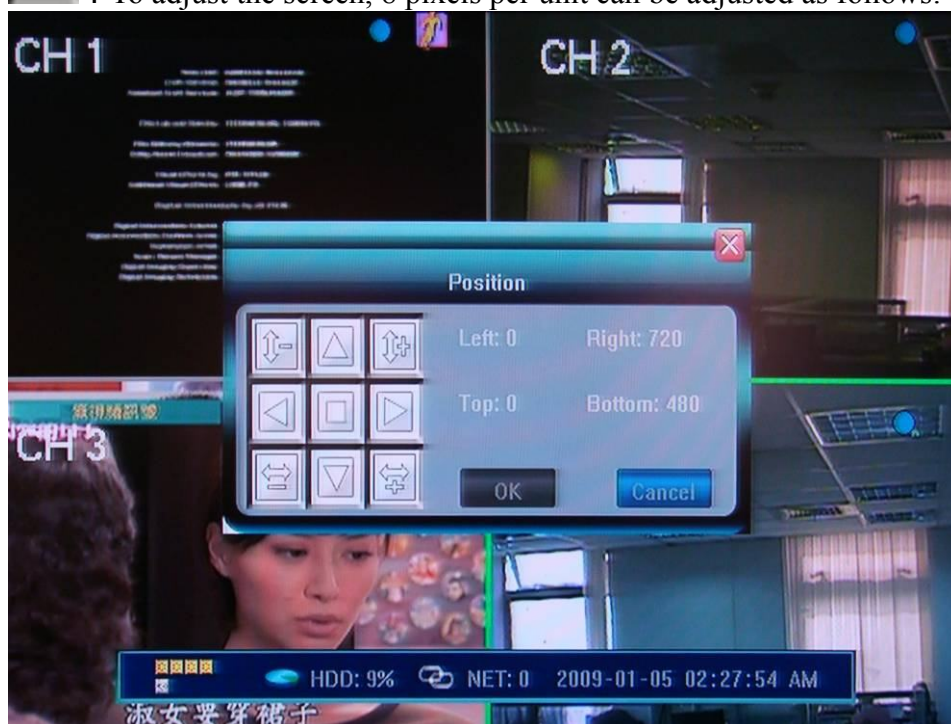
: Cancel alarm notification. Click this button will pop a message to show the present alarm information.



: To switch screen display mode - “Single camera” → “Quad 4 camera” → “9 camera”



: To adjust the screen, 8 pixels per unit can be adjusted as follows:



: To reduce or increase screen in vertical direction.



: To reduce or increase screen in horizontal direction.



: To move the screen up, down, left, right



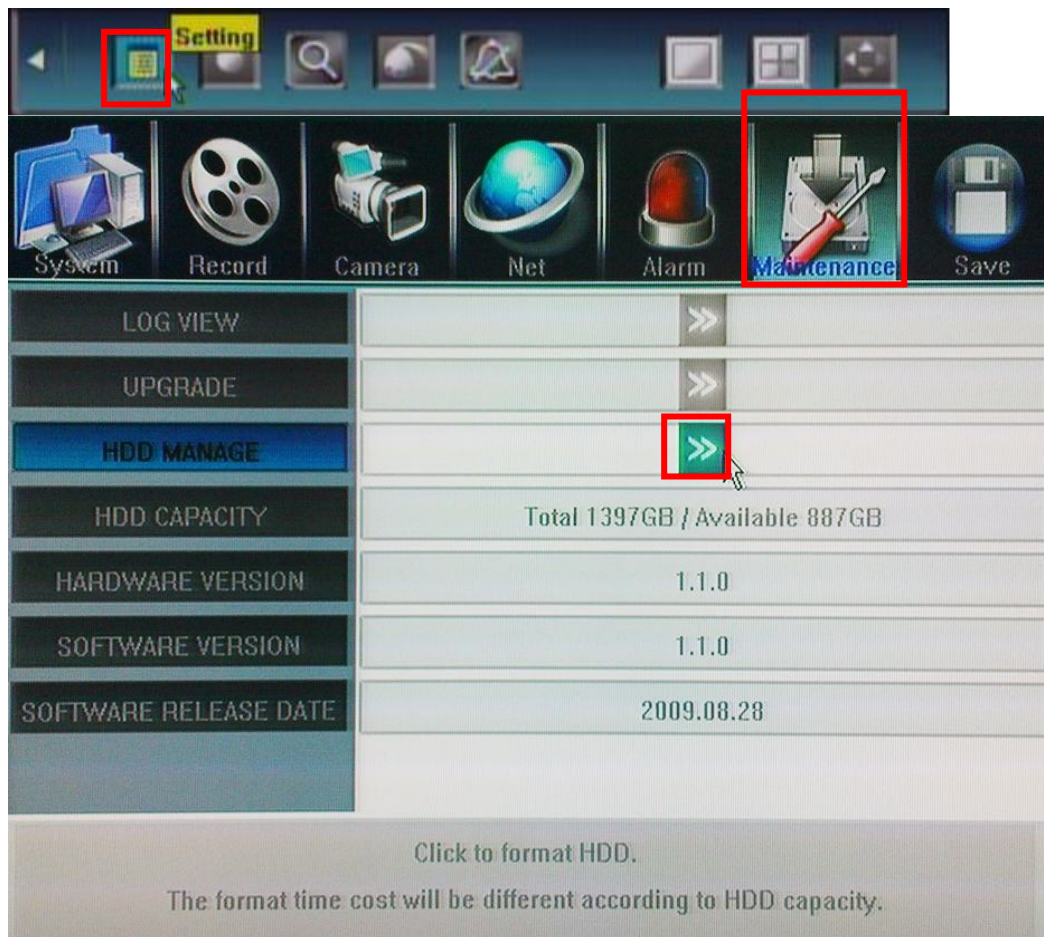
: To zoom out the screen to largest and show in central.

## 4.3 Format HDD

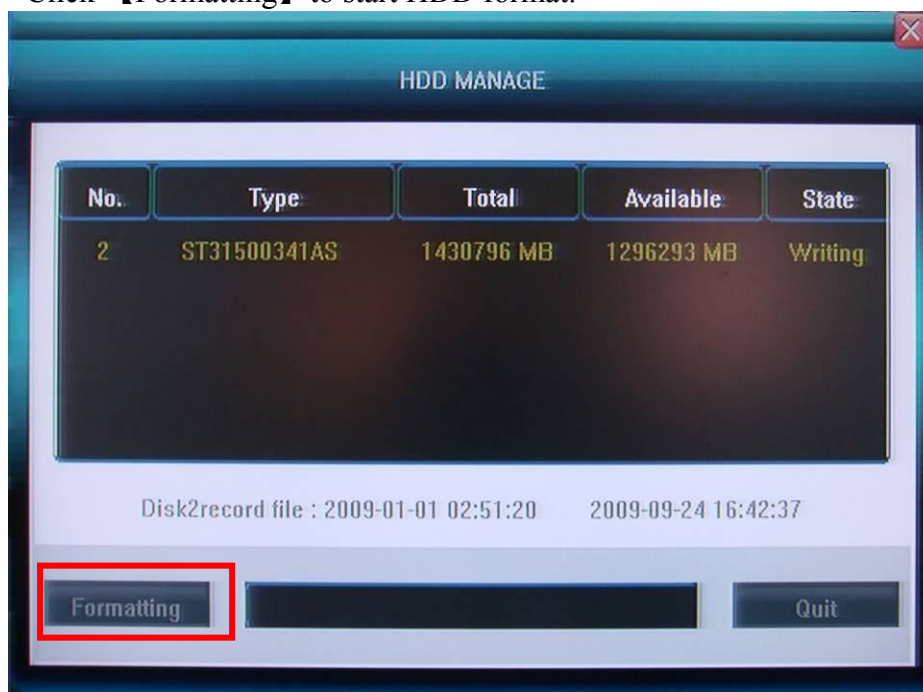
**Login DVR system as [Admin] account.**

Select <Tool Bar> → <Setting> → <Maintenance> → <HDD Manage> item.

Click [ ] to open HDD Manage window.



HDD information will display on the windows if DVR detection HDD correctly.  
Click **【Formatting】** to start HDD format.



## 4.4 Video Record

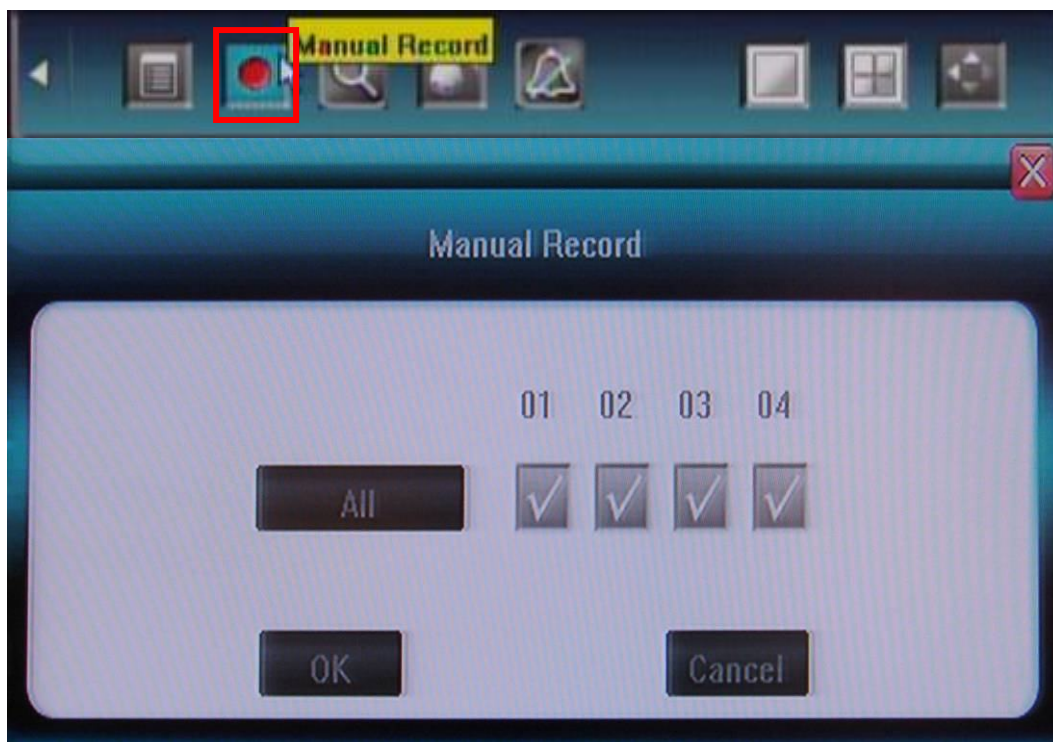
There are two methods to precede record in DVR, manual record and schedule record. **The priority of manual record is higher than schedule.** If the record schedule is conflict with manual record, the manual record will be processed firstly until the manual record being canceled. Record types include “common recording” / “alarm triggered recording” / “motion detection triggered recording” / “alarm & motion detection triggered recording”.

- Blue indicates “common recording”
- Green indicates “motion detection triggered recording”
- Red indicates “alarm triggered recording”
- Grey indicates “manual recording”

### ◆ Manual Record

Please select <Tool Bar>→<Manual Record> to let the specific channel record or not.

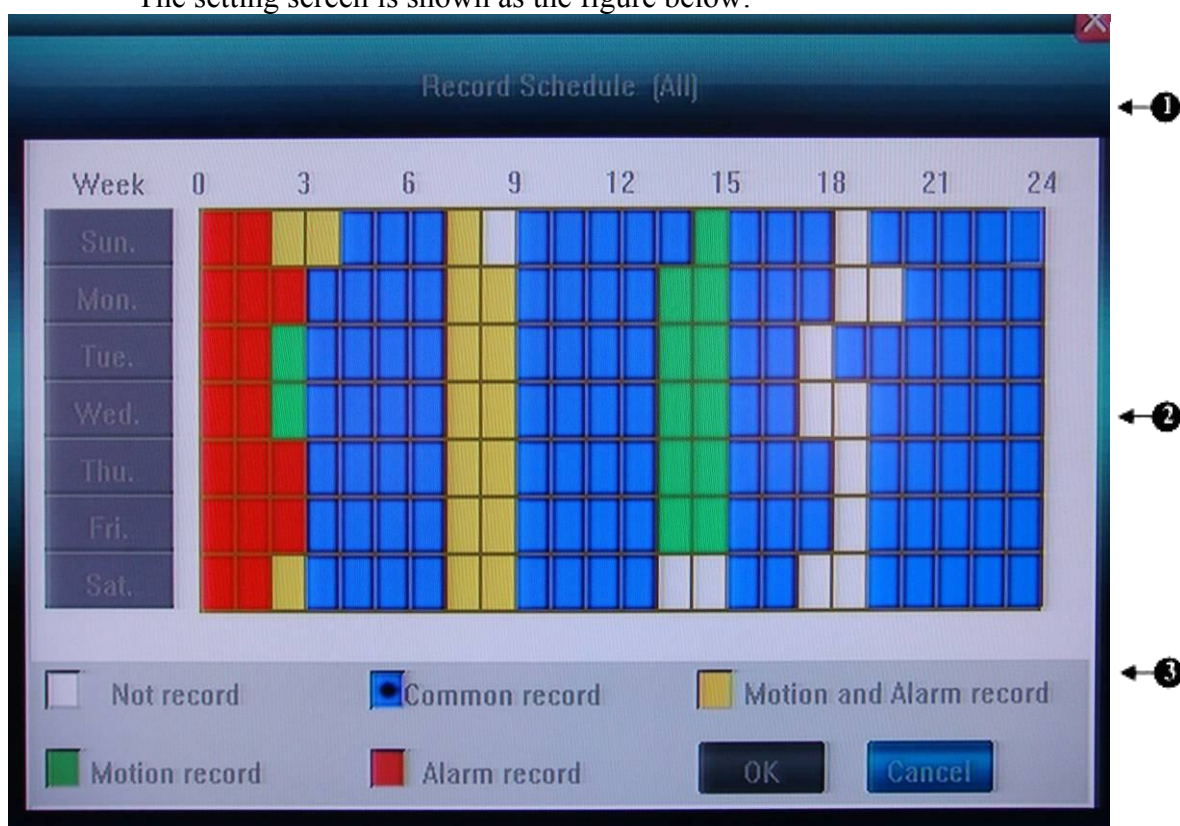
Press **【●】** button to start/stop recording manually.



**The video recorded manually is named “common recording”**

### ◆ Schedule Record

Please select <Tool Bar> → <Setting> → <Record> → <Record Schedule> to set.  
The setting screen is shown as the figure below:



- 1 . The current recording channel number
- 2 . The record schedule
- 3 . Description of record type

System provides a recording option for 24 hours every day and Sunday through Saturday every week. Unit is hour. One grid indicates one hour.

Move highlight icon to a time grid using 【Direction】 buttons.

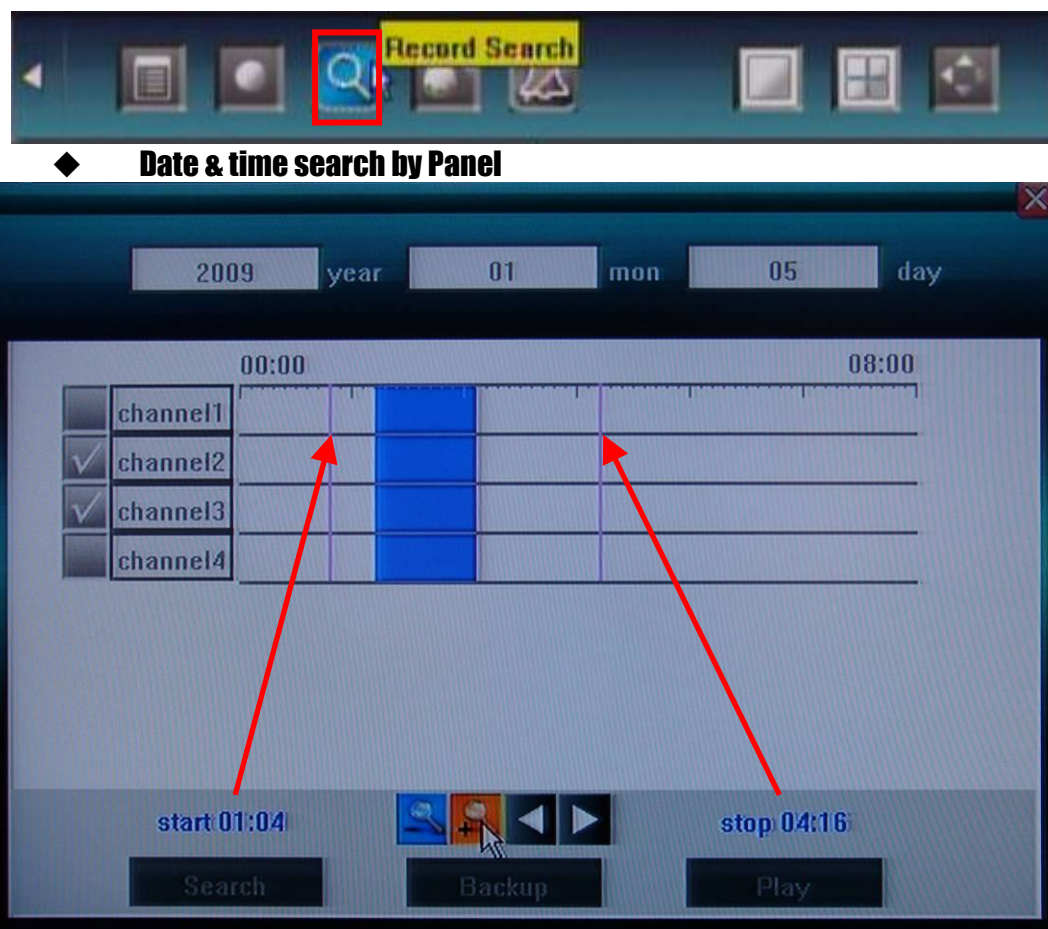
Specify the recording type by repeat pressing 【Enter】 button or double left clicking mouse, (the color of the grid will change relevantly).

Select OK to confirm settings. **The settings will take effect after being saved.**

**When motion detection & alarm recording is selected, the motion detection sensitivity and area should be set ahead. Please refer to [5.4.6 Motion Detection Settings](#) for details.**  
**When alarm recording is selected, the alarm triggering settings should be set ahead. Please refer to [5.4.7 Event Handling](#) for details.**

## 4.5 Video Playback

Specify the date/time and channel number by selecting <Tool Bar>→<Record Search>. The searching results will be list on the screen in responding different colors so as to distinguish different record types.



Move highlight icon to relevant selection box using 【◀】 , 【▶】 buttons.

Move highlight icon to date/time selection box, modify time using 【▲】 , 【▼】 buttons. Move highlight icon to channel selection box, press 【Enter】 button to select it or cancel selection.

After setting time, channel number , move highlight icon to Search using 【◀】 , 【▶】 buttons, and press 【Enter】 button to start searching recorded video.

Move highlight icon to , press 【Enter】 button to zoom in/zoom out timeline.

If the timeline is out of screen, please move highlight icon to  and press 【Enter】 button to display the part out of screen.

After searching over, press 【CH1~CH4】 button will move to timeline for selecting start time and stop time . Press 【◀】 , 【▶】 buttons to move timeline, press 【Enter】 to confirm selection.

After all settings, move highlight icon to Play using 【◀】 , 【▶】 buttons, and press 【Enter】 button to start playing.

### ◆ Date & time search by Mouse

User can mouse click to specify time. First left-click on timeline will mark 【start time】 and there will have a vertical line show up , second left-click will mark 【stop time】. Mouse right-click will clear all marked time.

### ◆ Playback Control



 : Back backwards, the available speeds are 8X, 16X

 : Fast forward, the available speeds are 1X, 8X, 16X, 1/2X and 1/4X.

 : Pause

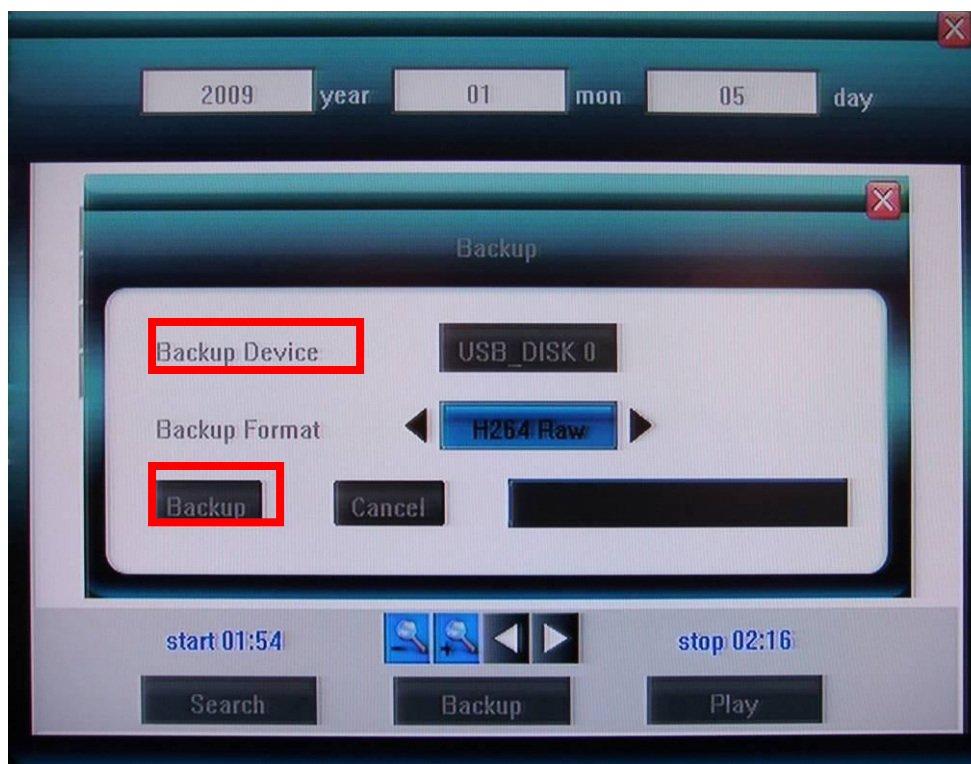
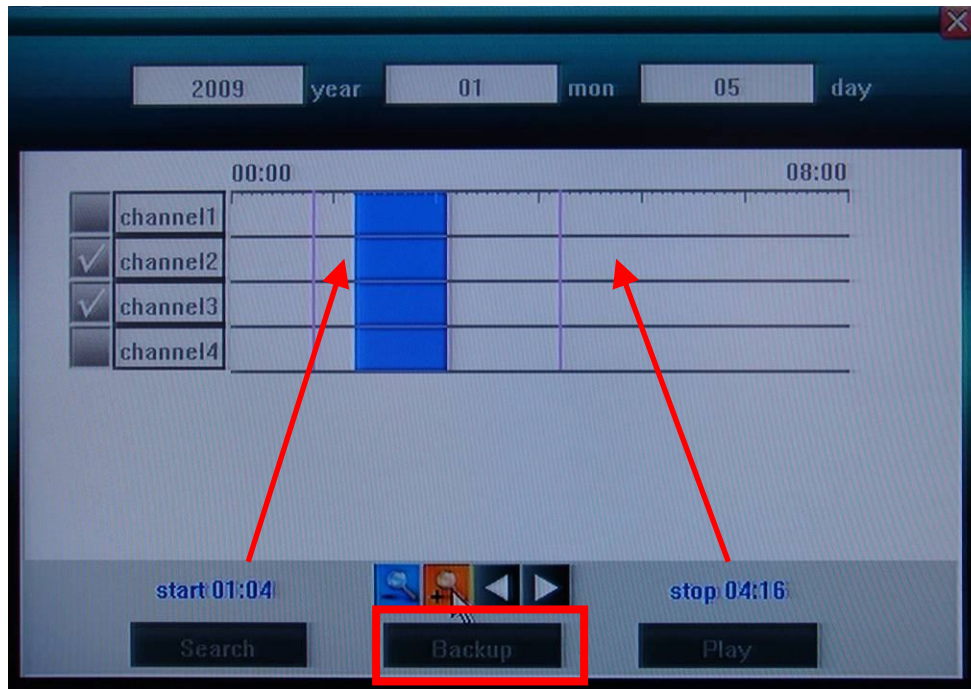
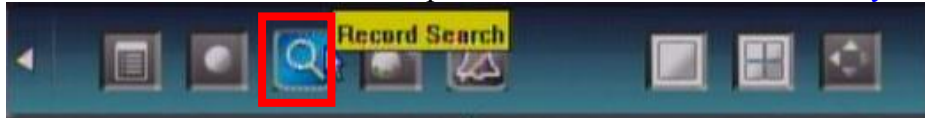
 : Stop playing.

 : Go to next frame.

 : Click to switch from single camera to 4/9 camera.

## 4.6 Video Backup

Select <Tool Bar>→<Record Search> to search, backup and playback the specific record files you needs. Set the start time and stop time as describe in [4.5 Video Playback](#)



Click [Backup] to enter into the backup screen. System will detect all the backup devices available

and display them. **Backup device can use USB flash drive, USB portable HDD and USB DVD Burner.**

**Only support FAT32 file system for USB flash and HDD**

Please select the suitable device and record type according to requirement first, and click [Backup] to start save audio/video. If there is no backup device found, a prompt tip will appear to remind users of connecting USB device well.

The types of record video include **H.264 Raw, MPEG4 and AVI**

**When backup in MPEG4 types, the special video decoder components will also be backed up into USB & DVD Disc together automatically.** After player plug is installed, the stored video files can be played only by **Windows Media Player**.

## 4.7 Play Backup Video on PC

**Before playback the backup video files, user must install decoder components for windows media player.** User can find the compressed files “**WMP\_MediaFilter.rar**” inside USB flash disk or CD/DVD. Uncompressed the WMP\_MediaFilter.rar and execute “**InstallFilter.bat**” to install the decoder components.

After install the decoder components, user can use Windows Media Player to playback the video; please note you don't have to install this component for playback every time, it is one time installation.

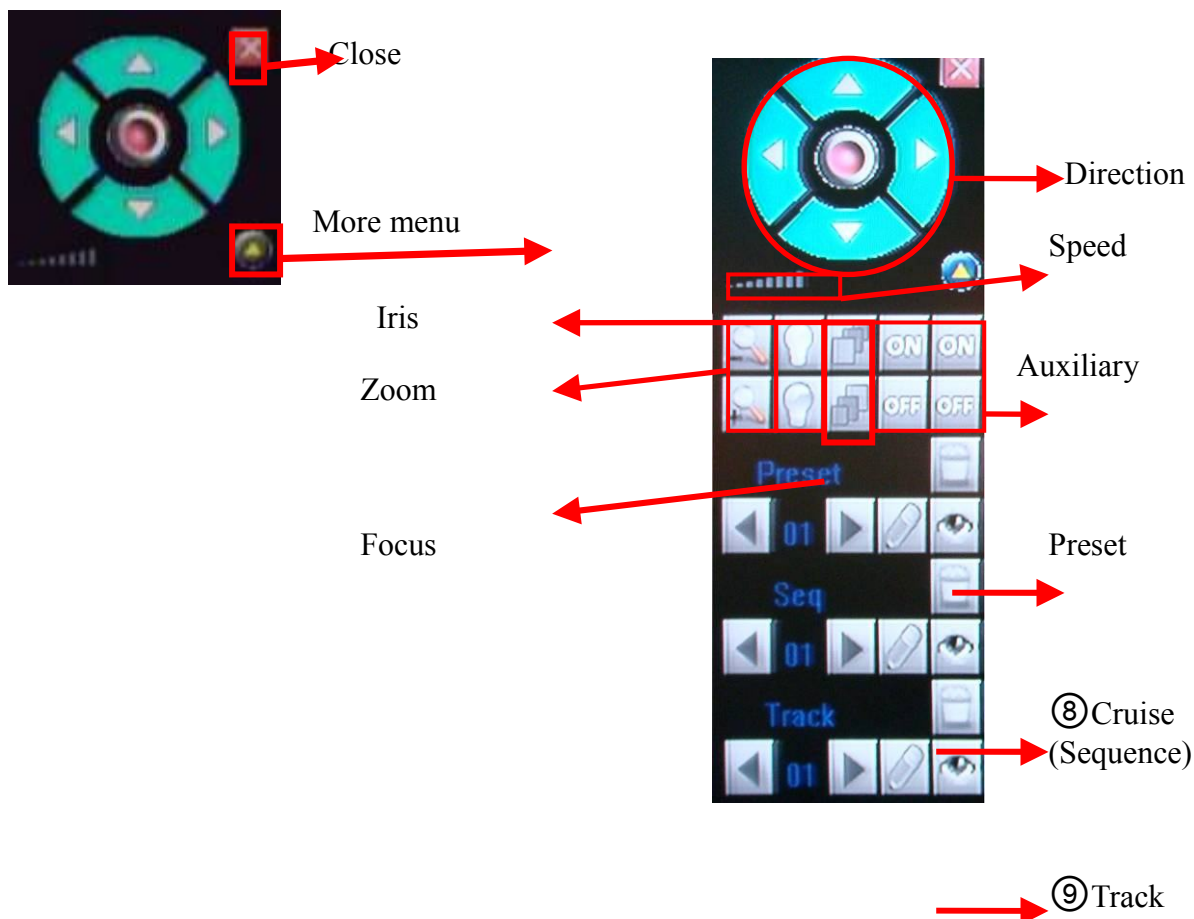
For **H264 format** playback, you may go to [www.videolan.org/vlc](http://www.videolan.org/vlc) to download vlc binaries player according to your operation system

## 4.8 PTZ Control

### ◆ Local Operate

Select single camera view and press <PTZ> button in front panel. Press direction key to move highlight and press <Enter> to set the action. Press  icon to open more menu, and please refer to next page for functions descriptions





## Internet explorer web browser Operate

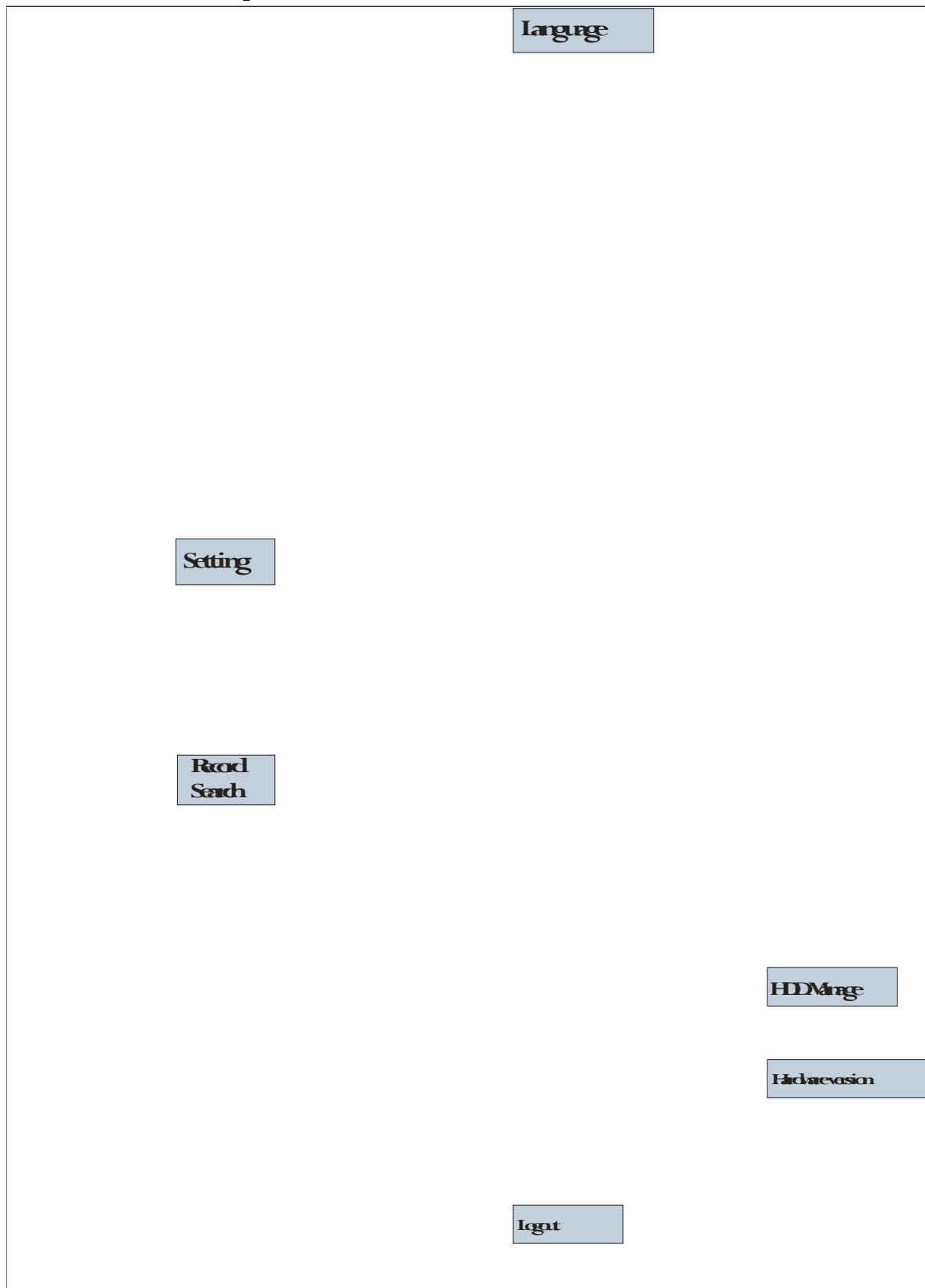


| NO. | Name      | Description                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | Direction | Click the arrow icons to control direction of PTZ. Click the center icon  to call sequence or run scanning. Please refer to the PTZ manual for details of PTZ scanning mode.                                                                                                                              |
|     | Speed     | Set the turning speed of PTZ camera.                                                                                                                                                                                                                                                                                                                                                         |
|     | Zoom      | Click to zoom in/zoom out (it is disabled for cameras with automatic focus).                                                                                                                                                                                                                                                                                                                 |
|     | Iris      | Click to make the image brighter or darker (it is disabled for cameras with automatic iris adjustment).                                                                                                                                                                                                                                                                                      |
|     | Focus     | Click to focus-in and focus-out (it is disabled for cameras with automatic focus).                                                                                                                                                                                                                                                                                                           |
|     | Auxiliary | Open/close auxiliaries.<br>Click  to open and click  to close. Different functions respond to different protocols. The auxiliaries include light, rain brush, and power etc. please refer to PTZ manual for details. |

|   |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | Preset            | <p><b>Preset</b> is to set camera position, focus, zooming, and iris position, and then mark them in numbers for later calling.</p> <ol style="list-style-type: none"> <li>1. Select the preset number you want to name as.</li> <li>2. Position the camera as desired position including direction, focus, iris and zoom value.</li> <li>3. Click on the set button .</li> </ol> <p><b>call preset:</b></p> <ol style="list-style-type: none"> <li>1. Select the preset number you want to call.</li> <li>2. Click on the go-to button .</li> </ol> <p><b>Clear/reset preset:</b><br/>Select the preset number you want to clear/reset. Click on the clear button .</p> |
| ⑧ | Cruise (Sequence) | <p>Cruise is a running route of camera that passes through multiple presets.</p> <p><b>Set sequence:</b></p> <ol style="list-style-type: none"> <li>1. Select preset number you want to call.</li> <li>2. Click on set button .</li> <li>3. Repeat step 1 and 2 to add the other presets till finishing.</li> <li>4. Click on run button .</li> </ol> <p><b>Clear sequence:</b><br/>Click on  button to clear sequence.</p>                                                                                                                                                                                                                                            |
| ⑨ | Track             | <p>Track is a continuous running route of camera.</p> <p><b>Set track:</b></p> <ol style="list-style-type: none"> <li>1. Click on  to start setting.</li> <li>2. Move camera as the track and pattern you want it to run.</li> <li>3. Click on  again to finish setting.</li> <li>4. Click on  to run track and click again to stop running.</li> </ol> <p>NOTE: Whether Track is supported or not is depending on the type of PTZ.</p>                                                                                                                                                                                                                            |

## 5. DVR Setting

### 5.1 Menu Tree & Operate



## ◆ General Operations

Press **【MENU】** button to enter into system setting screen.

Press **【●】** button to start/stop recording manually.

Press **【▶||】** button to play record file.

Press **【PTZ】** button to enter into PTZ control screen.

## ◆ Menu Selection

The highlight menu is the current active one. User can move highlight icon to the menu needed using **◀**, **▶** button, and press **【Enter】** button to confirm selection, or press **【ESC】** to return to upper menu.

## ◆ Menu Operation

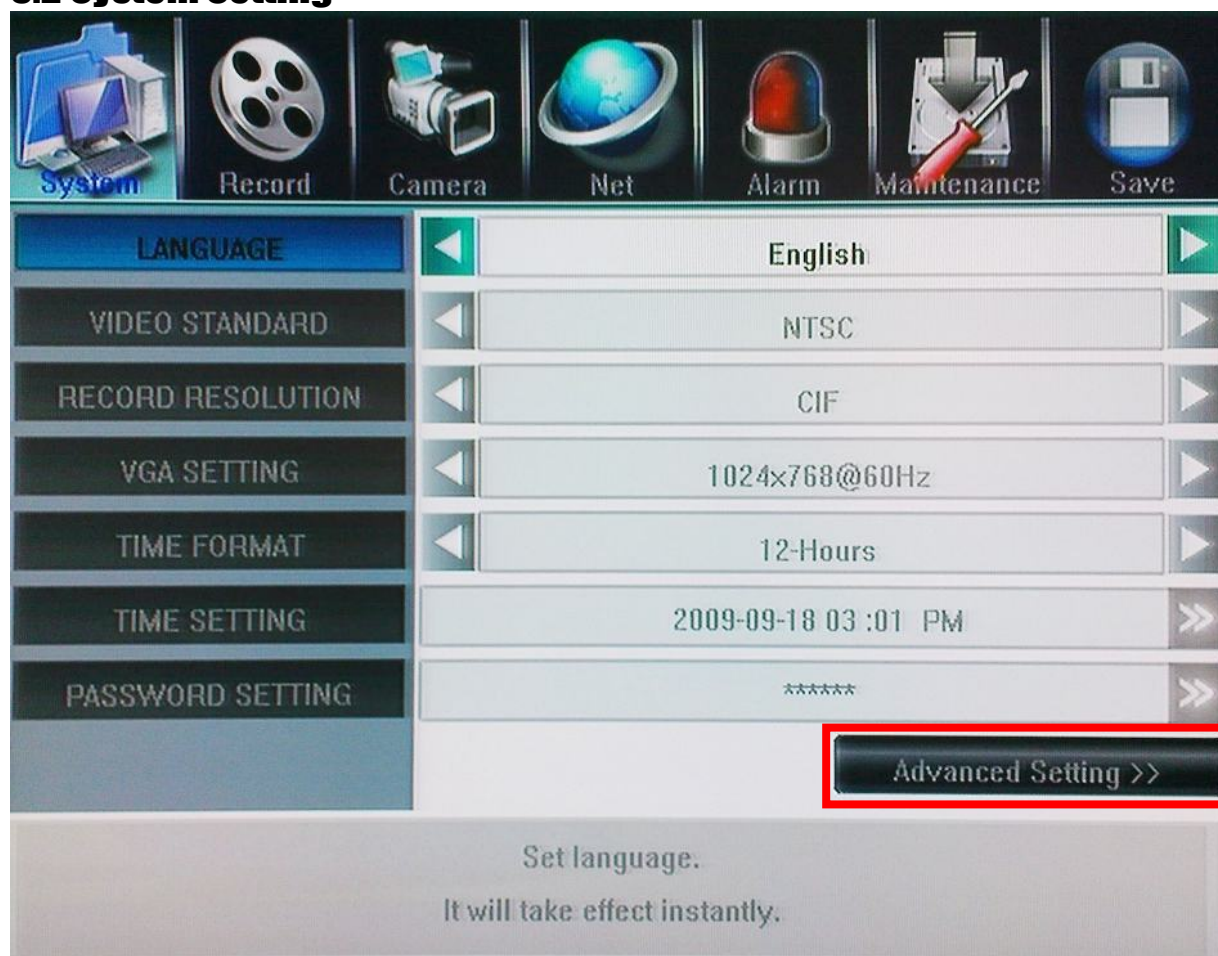
Use **【▲】**, **【▼】** to move highlight for configure items. Press **◀**, **▶** button to change parameter. Use mouse to input via on-screen keyboard or input value from remote controller.

Press **【>>】** open sub menu, and **【ESC】** return upper menu.

## ◆ Save/Exit

User can click × button on the right upper corner, or single right click mouse, or press **【ESC】** button to enter into the Save & Exit screen. You can select exit directly or exit after being saved.

## 5.2 System Setting



### 5.2.1 Language

Change DVR menu text and OSD language, there are Traditional Chinese, Simplified Chinese, English, Germany, Hungarian, Italian, Japanese, Portuguese, Russian, Spanish, and etc.....

**\*\*Take effect immediately \*\***

### 5.2.2 Video Standard

Change DVR and camera video system, NTSC or PAL system.

**\*\*Take effect after being saved. \*\***

### 5.2.3 Record Resolution

Only CIF Resolution Supported. NTSC : CIF(352×240) PAL : CIF (352×288)

### 5.2.4 VGA Setting

Switch different VGA output resolution.

### 5.2.5 Time Format

Switch time format between 12-Hours or 24-Hours.

**\*\*Take effect immediately \*\***

## 5.2.6 Time Setting

Adjust date and time of DVR.

**\*\*Take effect immediately \*\***

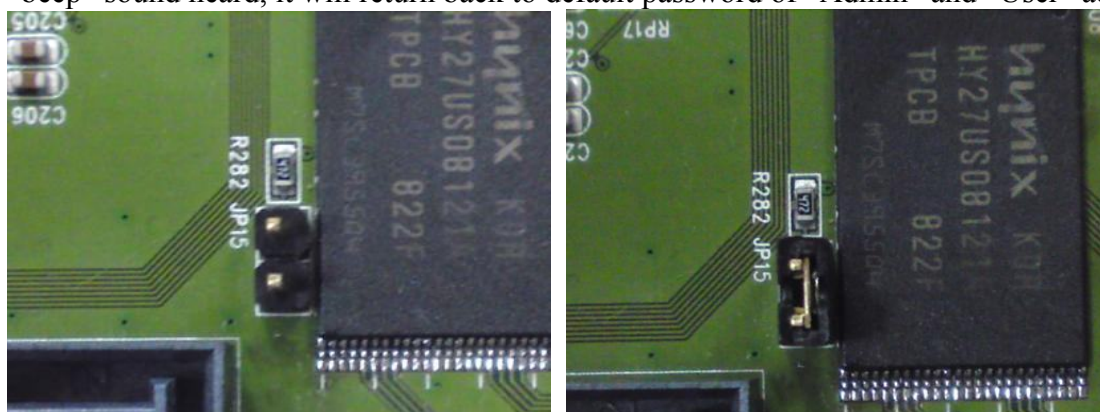
**In order to avoid record files' time confusion, you'd better stop recording before modifying system time**

## 5.2.7 Password Setting and what if forgotten

Change password of “Admin” and “User” account.

**Default password of Admin is [888888] User is [666666]**

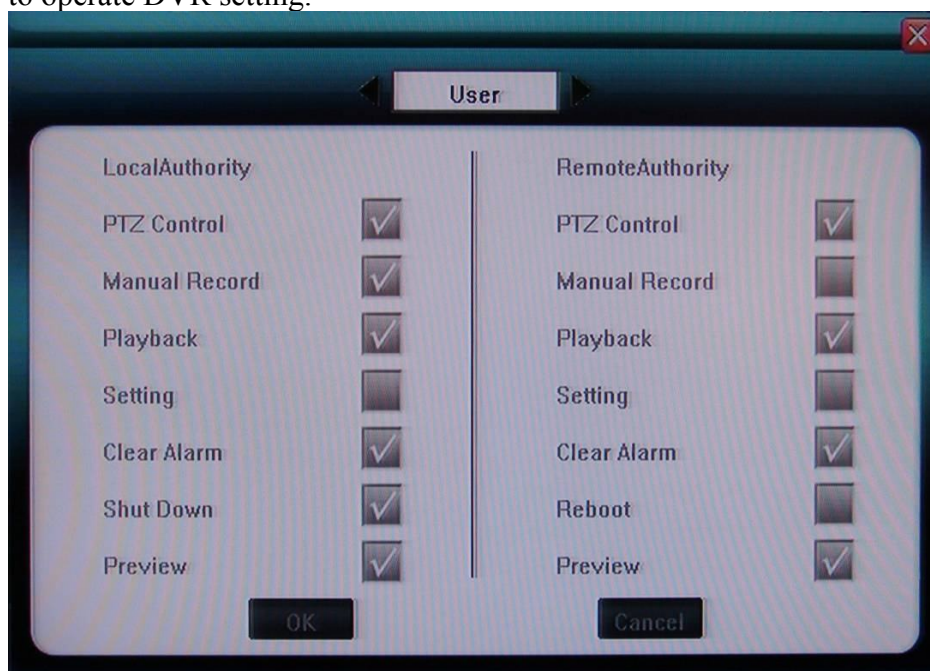
If password forgotten, turn off the machine, open this DVR case, find the JP15 jumper, it is near the faceplate; power on the machine, find some jumper cap to make it closed(short) and hold it until “beep” sound heard, it will return back to default password of “Admin” and “User” account.



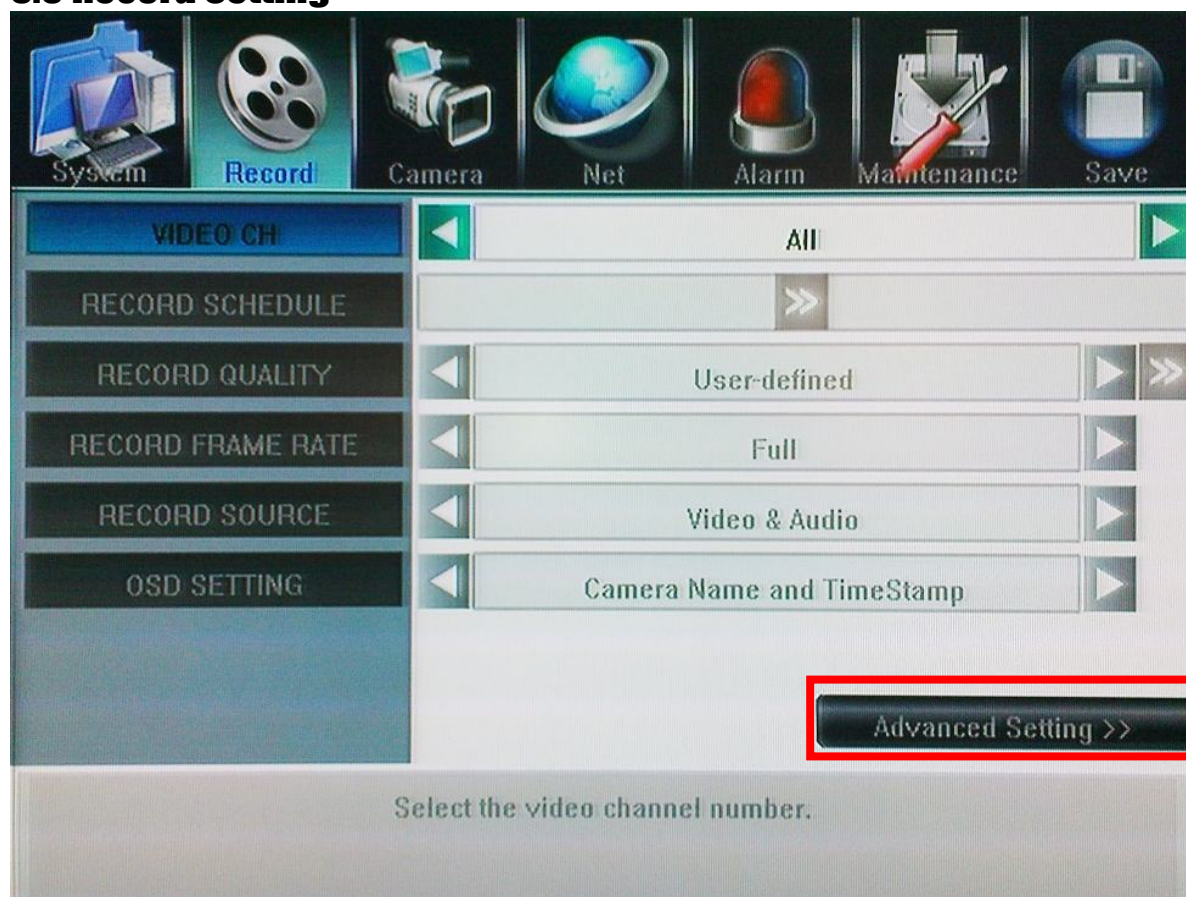
## 5.2.8 User Authority(System- Advanced Setting)

### ◆ Authority Manage

Operation of DVR for “User” account can be defined by system. There are two conditions to apply restriction, **local operation** and **remote access**. By default the user account is not allow to operate DVR setting.



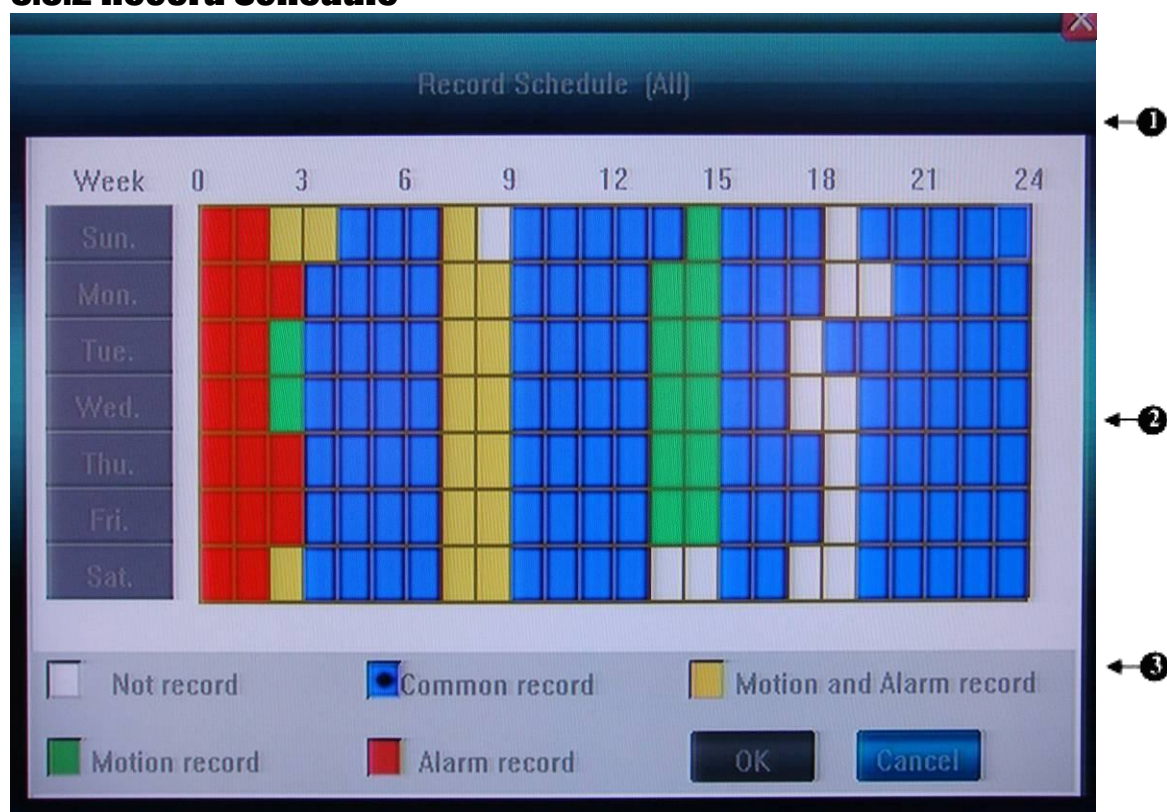
## 5.3 Record Setting



### 5.3.1 Video Channel

Select channel number for apply record setting. Select [ALL] for apply to all channels.

### 5.3.2 Record Schedule



- 1 . The current recording channel number
- 2 . The record schedule
- 3 . Description of record type

System provides a recording option for 24 hours every day and Sunday through Saturday every week. Unit is hour. One grid indicates one hour.

Move highlight icon to a time grid using 【Direction】 buttons.

Specify the recording type by repeat pressing 【Enter】 button or double left clicking mouse, (the color of the grid will change relevantly).

Select OK to confirm settings. **The settings will take effect after being saved.**

**When motion detection & alarm recording is selected, the motion detection sensitivity and area should be set ahead. Please refer to [5.4.6 Motion Detection Settings](#) for details. When alarm recording is selected, the alarm triggering settings should be set ahead. Please refer to [5.4.7 Event Handling](#) for details; the recording time would be 30 sec. when motion detect or alarm**

### 5.3.3 Video Quality

Select quality level for record audio/video. The pre-define selection from Best 768kbps → High 640kbps → Mid 512kbps → Low 384kbps or user define. User can manually input bit rate for recording. (Kbit/s)

### 5.3.4 Record Frame Rate

Select recording frame rate per second. The pre-define selection from Full (30/25fps) → 15 fps → 7fps → 3fps → 1 fps or user define.

### 5.3.5 Record Source

Two type selection of recording, Video with audio or Video only.

### 5.3.6 OSD Setting

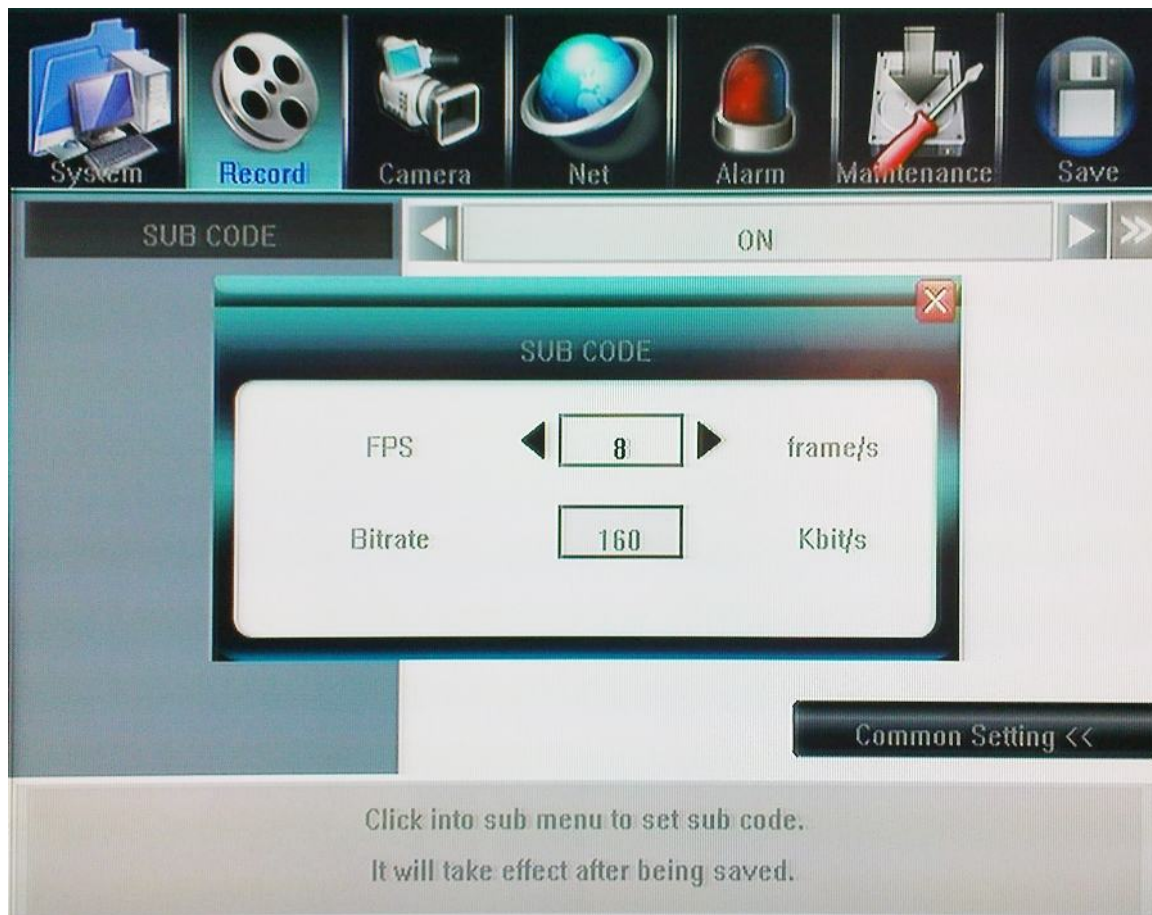
Define OSD (On Screen Display) string. The options have as following

- 1) Camera's Name and Time Stamp
- 2) Camera Name
- 3) Time Stamp
- 4) None

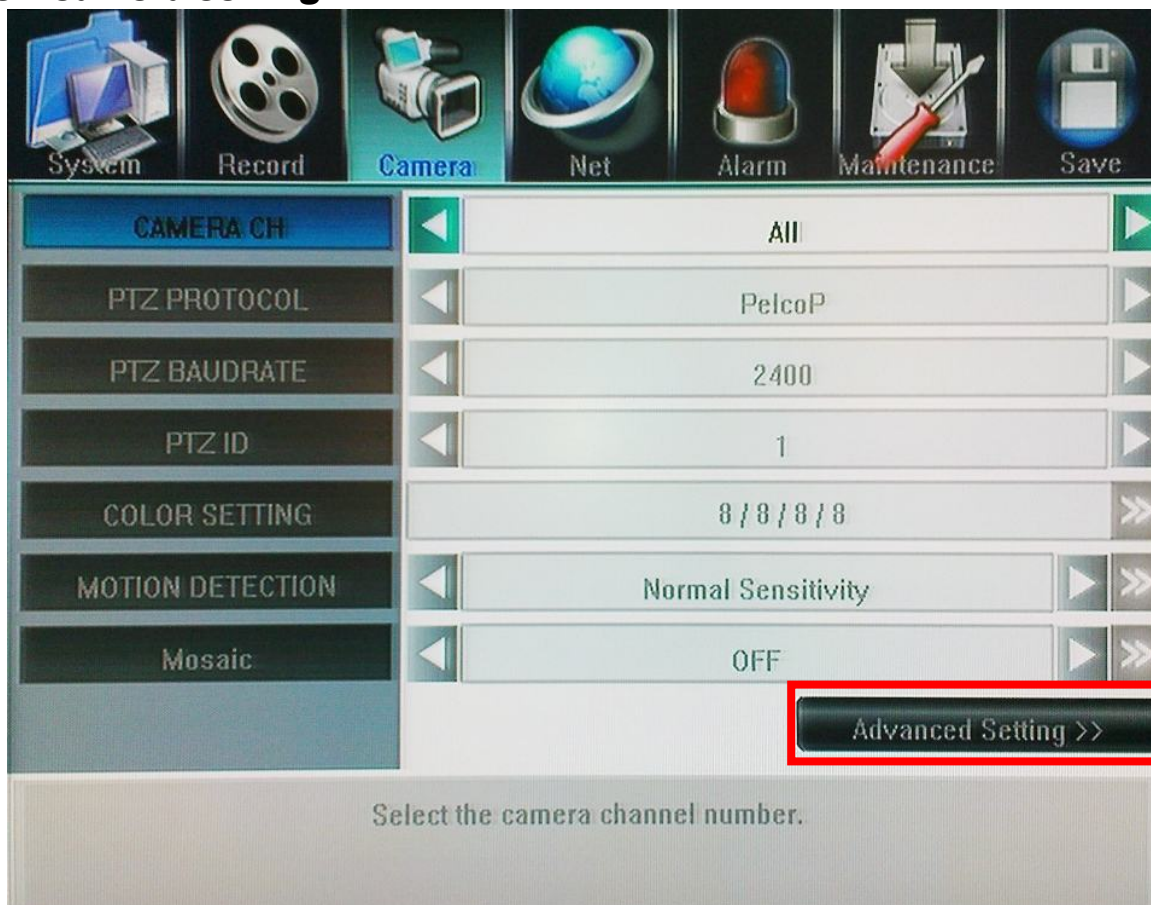
### 5.3.7 Dual Streaming for Network(Record- Advanced Setting)

#### ◆ SUB CODE

By default, DVR use recording streaming for IE Browser viewer and mobile streaming. Enable sub code can customize the frame rate and bitrate for IE client viewer and mobile streaming in case of limited upload bandwidth, and they can be setup independently for every channel.



## 5.4 Camera Setting



### 5.4.1 Camera Channel

Select camera channel for apply camera setting. Select [ALL] for apply to all channels.

### 5.4.2 PTZ Protocol

Select PTZ device protocol. Support Pelco-D, Pelco-P, Panasonic, Samsung.

### 5.4.3 PTZ Baud Rate

Select PTZ device baud rate. Support 1200, 2400, 4800, 9600.

### 5.4.4 PTZ ID

Select PTZ device ID. From 1~100.

### 5.4.5 Color Setting

Adjust camera color attribute, by default the value is 8.

- Brightness: 1 ~ 16
- Contrast: 1 ~ 16
- Hue: 1 ~ 16
- Saturation: 1 ~ 16

### 5.4.6 Motion Detection & Region

#### ◆ Sensitivity of motion detection

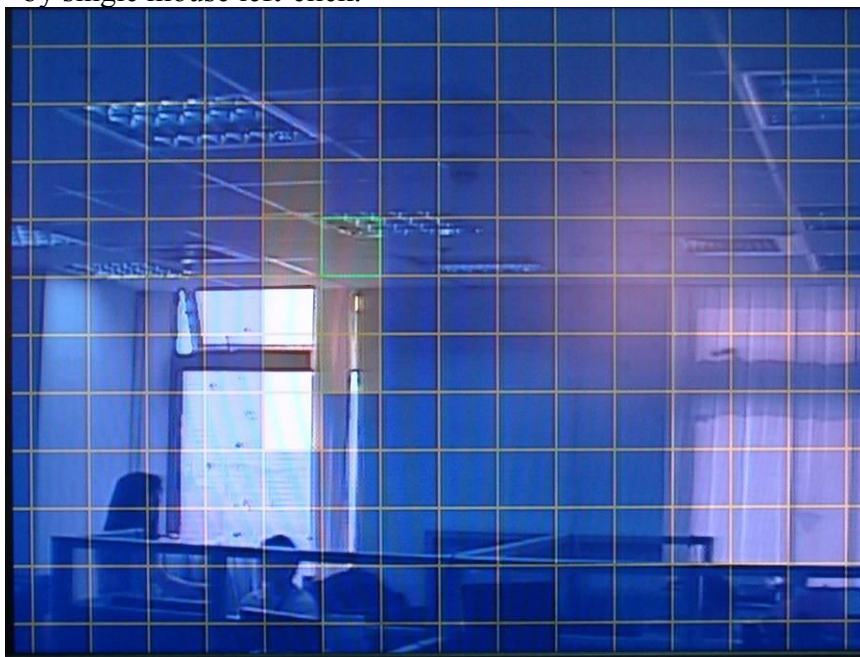
There are three level sensitivity of motion detection.

Highest → Normal → Low or Disable

#### ◆ Configure motion detection by region.

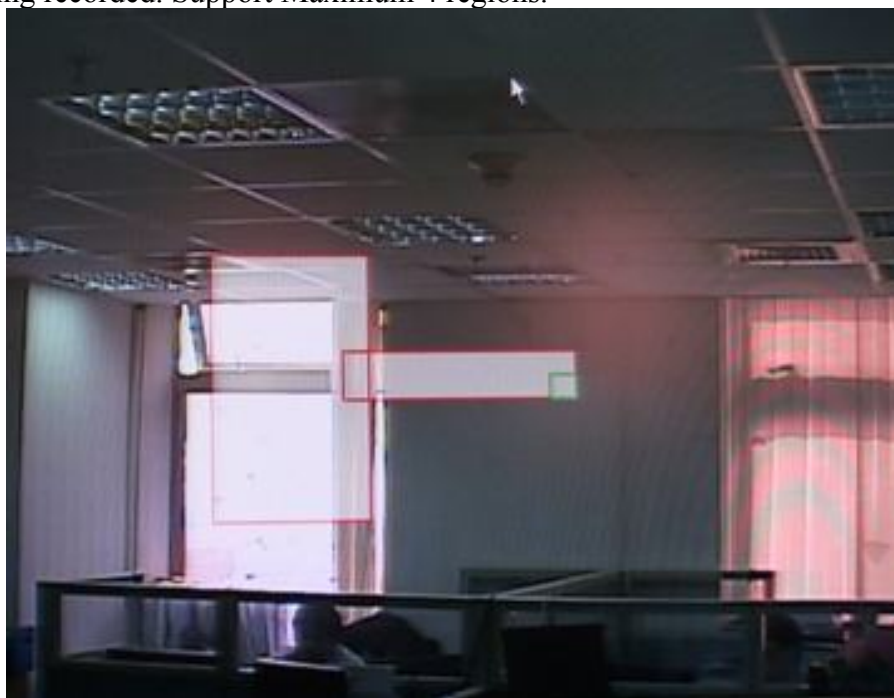
Press 【>>】 on screen to pop up sub windows for region setting.

There are totally 16 x 12 individual blocks for a camera view. Each block can be turn on or off by single mouse left-click.



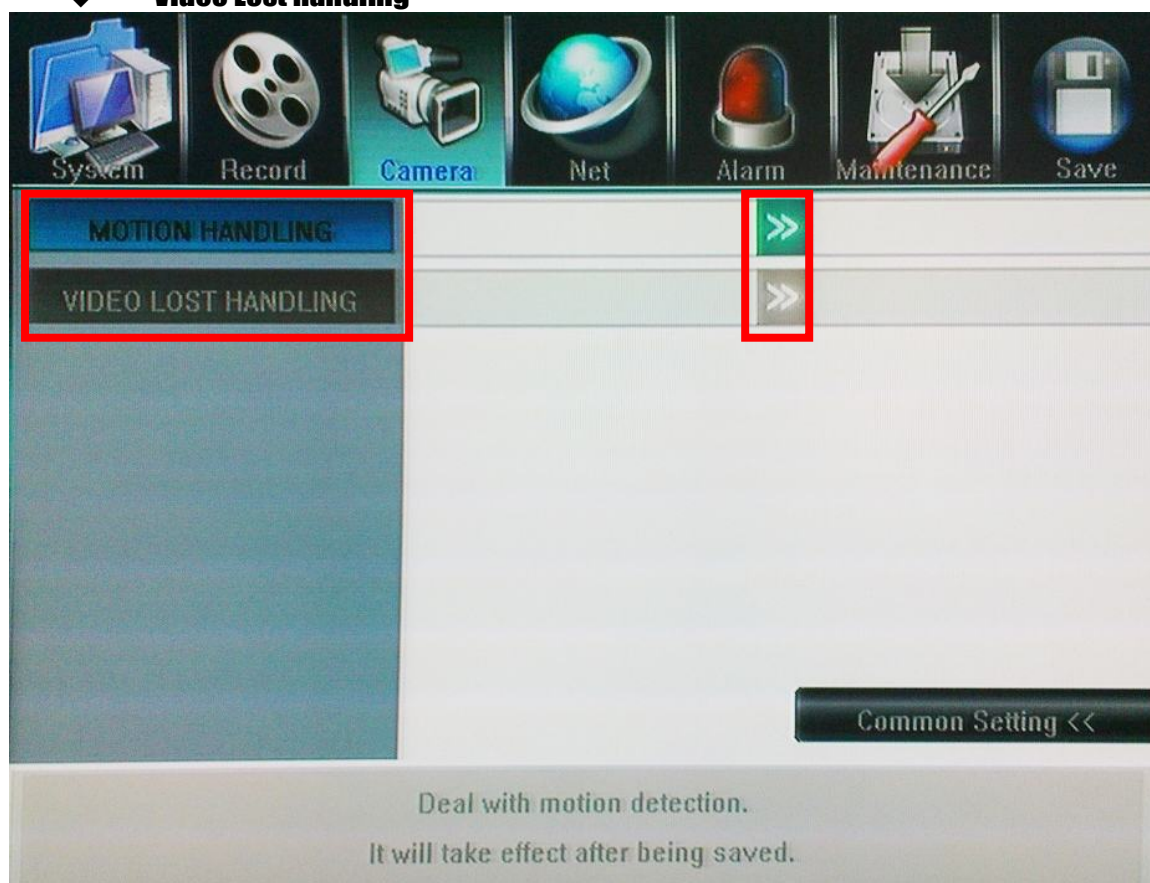
### 5.4.7 Privacy Mask(Mosaic)

Each camera can define multiple regions for privacy protection. Click 【>>】 open sub windows and use mouse define the privacy regions. Each privacy region will show only gray color in live view windows and being recorded. Support Maximum 4 regions.



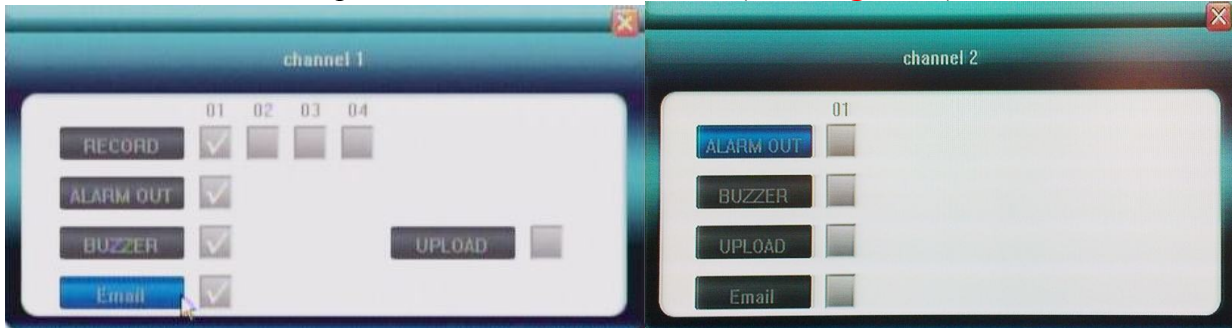
### 5.4.8 Motion and Video Lost(Camera- Advanced Setting)

- ◆ Motion Handling
- ◆ Video Lost handling



User can pre-define correspond action while DVR handling the event such as motion detection, video list, alarm input trigger. Following is the action list,

- Record: Start record immediately
- Alarm Out: Set the Alarm output enable
- Buzzer: Set the Buzzer enable
- E-mail: Send E-mail with Snapshot picture
- UPLOAD: upload these events to PC server(**Future growth**)



**Motion Detect**

**Video Loss**

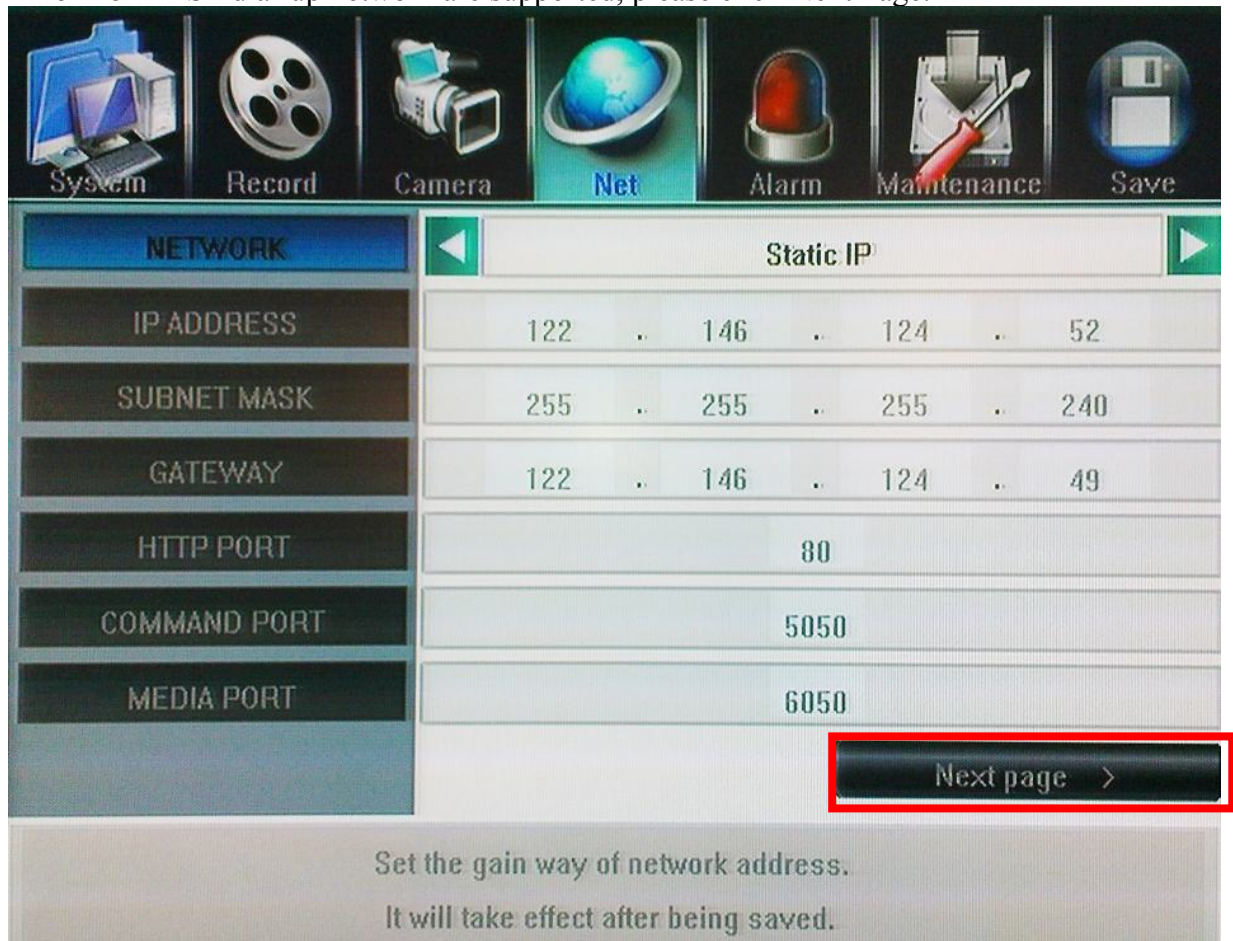
## 5.5 Net Setting

### 5.5.1 Network(Static IP/DHCP)

DVR support two methods to acquire IP address,

- Automatic acquire IP address by DHCP client model.
- Manual assign IP address by Static IP model.

PPPoE for ADSL dial-up network are supported, please click Next Page.



## 5.5.2 Http Port

By default is port:80, user can specify different port number.

## 5.5.3 Command Port

By default is port:5050, user can specify different port number.

## 5.5.4 Media Port

By default is port:6050, user can specify different port number.

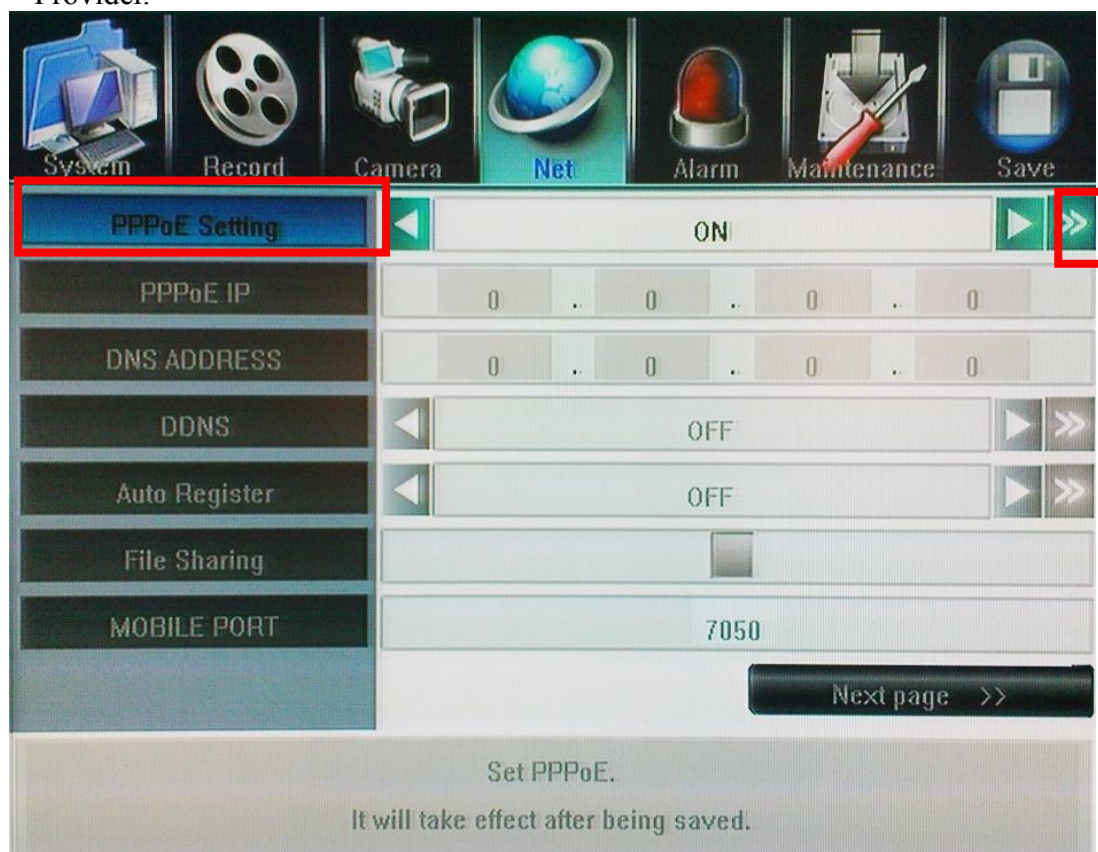
**If DVR installed behind a Router to share a single public IP address. Be sure to configure the “Port Forwarding” or “Virtual Server” for those three network port and Mobile surveillance Port:7050; you may surf <http://portforward.com> for more information.**

**surveillance port:7050 must open/allow to upload to WAN interface if DVR installed behind a Firewall server; for port no., please refer to <http://www.iana.org/assignments/port-numbers> for more information**

## 5.5.5 PPPoE/DDNS(Net- Second Page)

### ◆ PPPoE Setting

Click [ >> ] to open sub window and input ADSL account and password from Internet Service Provider.



PPPoE Setting

User name:

Password:

Virtual keyboard buttons: a, b, c, d, e, f, g, h, Clear, i, j, k, l, m, n, o, Caps, p, q, r, s, t, u, v, OK, w, x, y, z, 1, 2, 3, Cancel, 4, 5, 6, 7, 8, 9, 0.

#### ◆ DDNS

Click [ ] to open sub window and input DDNS account and password from DDNS Service Provider. User must apply DDNS service account at first.

DDNS

DDNS Server:

DDNS:

User name:

Password:

Virtual keyboard buttons: a, b, c, d, e, f, g, h, Clear, i, j, k, l, m, n, o, Caps, p, q, r, s, t, u, v, OK, w, x, y, z, 1, 2, 3, Cancel, 4, 5, 6, 7, 8, 9, 0.

[www.sedvr.com](http://www.sedvr.com)

[www.justlinux.com](http://www.justlinux.com)

[www.hn.org](http://www.hn.org)

[members.3322.org](http://members.3322.org)

[www.EZ-IP.net](http://www.EZ-IP.net)

[members.dhs.org](http://members.dhs.org)

[www.easydns.com](http://www.easydns.com)

[www.dyns.cx](http://www.dyns.cx)

[www.zoneedit.com](http://www.zoneedit.com)

[members.dyndns.org](http://members.dyndns.org)

[www.penguinpowered.com](http://www.penguinpowered.com)

#### ◆ Auto Register

Select to activate Auto Register function, click to Auto Register interface, management host IP address, host port, register interval time is required to input; they are for DNS server that this DVR connected(not necessary setup)

Auto Register

Server IP: 192 . 168 . 0 . 1

Server Port: 3031

Interval: 10

### ◆ File Sharing

Check to activate files sharing function, then able to visit video files in DVR HDD via network neighborhood.

#### How to visit shared files:

Double click network neighborhood, input \\ IP address, such as [\\192.168.10.220](http://192.168.10.220) , to enter the login page, type in the super authority “Admin” and password, the shared files can be accessible now, click into folder of “videoout” to check video files.

### ◆ MOBILE PORT

By default is port: 7050, user can specify different port number, please refer to [7. Mobile Phone Support](#) for details.

## 5.5.6 E-Mail Server(Net- Third Page)

User can add multiple e-mail address of recipients for alarm notification. Input standard SMTP mail server IP address. Please make sure you have user account and password in advance.

EmailSetting

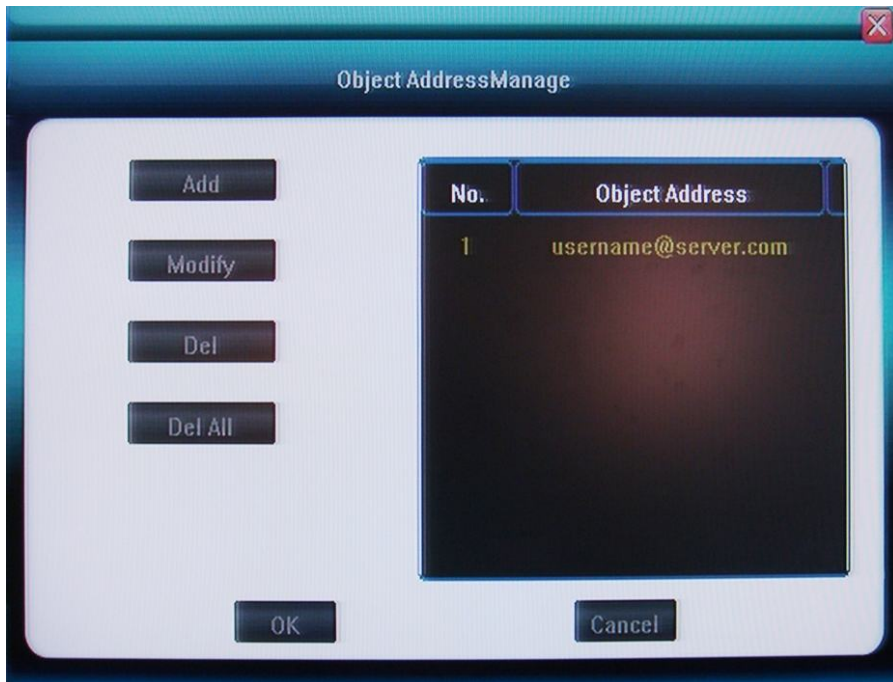
User name: username Password: \*\*\*\*\*

Server: 172.1.10.2 Port: 25

Object Address: username@server.com Add Manage

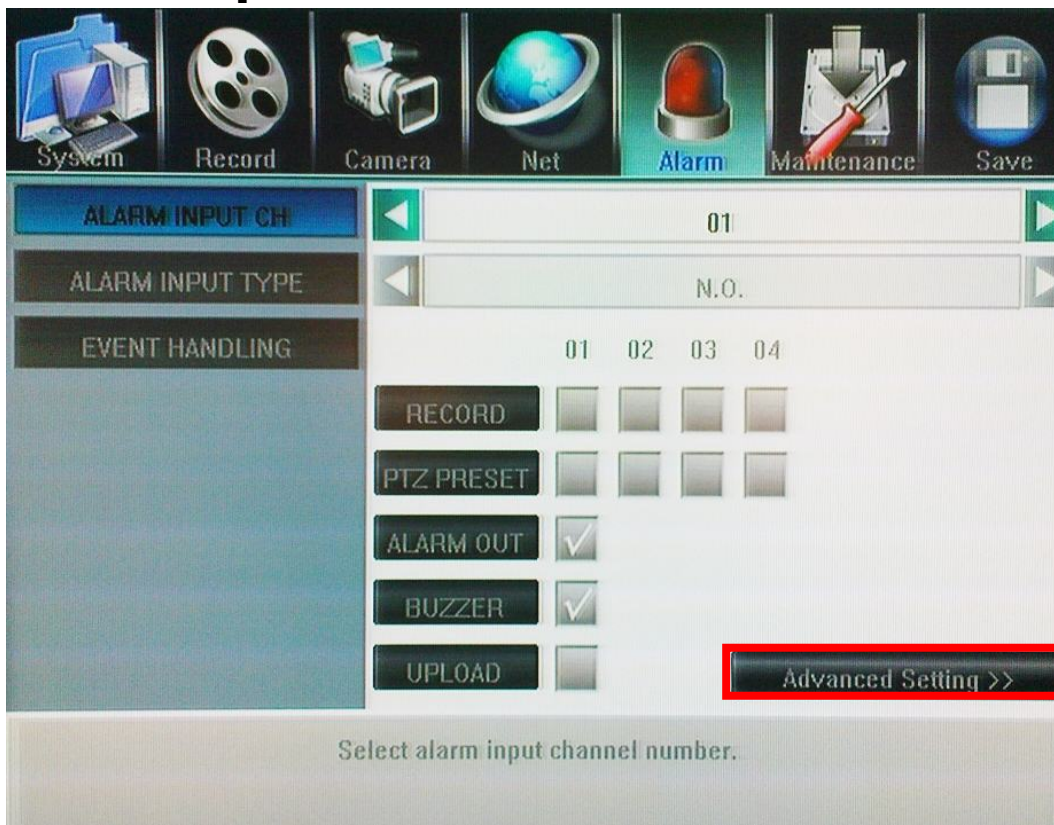
Revert Address: username@server.com

a b c d e f g h  
 Clear i j k l m n o  
 Caps p q r s t u v  
 OK w x y z 1 2 3  
 Cancel 4 5 6 7 8 9 0



## 5.6 Alarm Input/output Setting

### 5.6.1 Alarm Input Channel



Select alarm input channel for apply record setting. Select [ALL] for apply to all channels.

### 5.6.2 Alarm Input Type

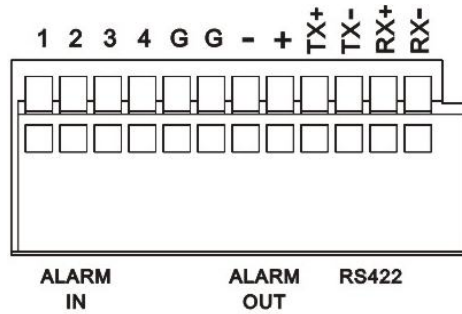
The alarm input attribution includes N/O. and N/C.

Each camera has one input pin on Terminal Block at the real panel.

**User must use voltage output type sensor to connect alarm input interface.**

Sensor device output **POSITIVE (+)** pin connect to DVR's input pin (1~4 pin)

Sensor device output **GROUND (-)** pin connect to DVR's G pin (5~6) pin



**N/O.: Normally open.** Sensor must constant output low level voltage. If output voltage change from Low level to High level then DVR will be triggered.

**N/C.: Normally connected.** Sensor must constant output High level voltage. If output voltage change from High level to Low level then DVR will be triggered.

**Maximum high level voltage is 5V<sub>DC</sub>**

### 5.6.3 Event Handling

The alarm triggered event handling include: record/alarm output/PTZ preset /Buzzer sound output.

Note1: if user wants to set alarm triggered record, please set the record schedule first at "Record Schedule".

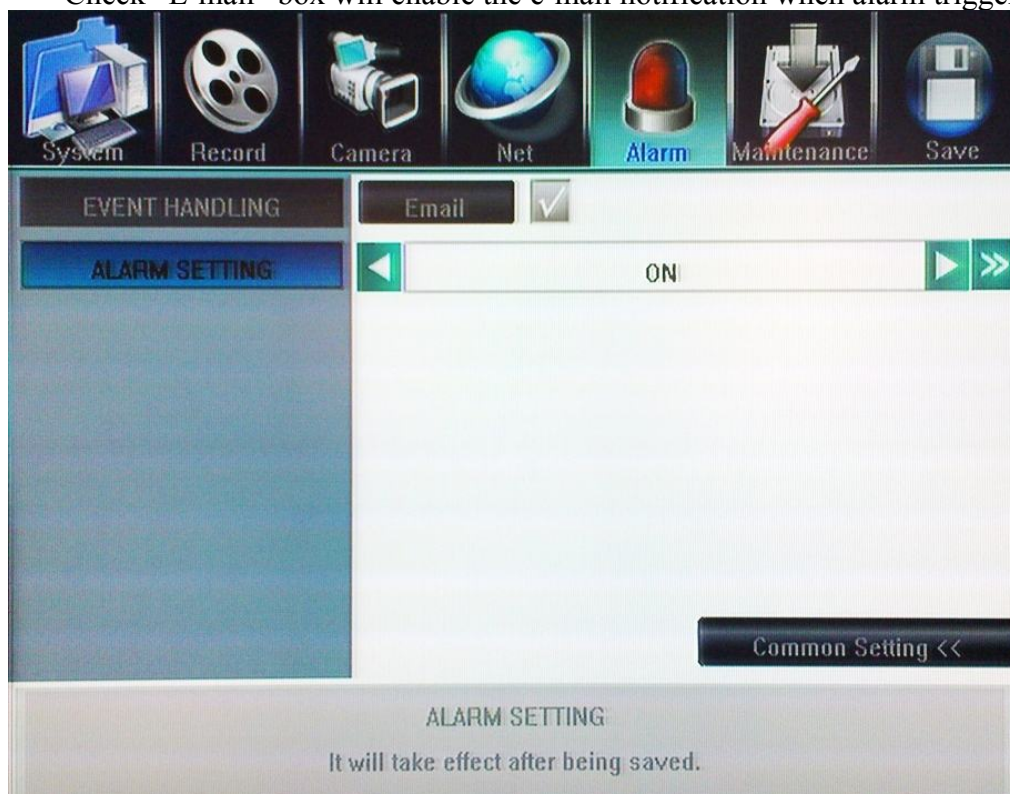
Note2: if user wants to set alarm triggered PTZ, please select the channel number first, and then to set (only preset 1 can be selected)

Note3: Event handling sound / report to alarm center need to be set in IE explorer. Please refer to Chapter 6.3

### 5.6.4 Alarm Schedule(Alarm-Advanced)

#### ◆ Alarm E-mail

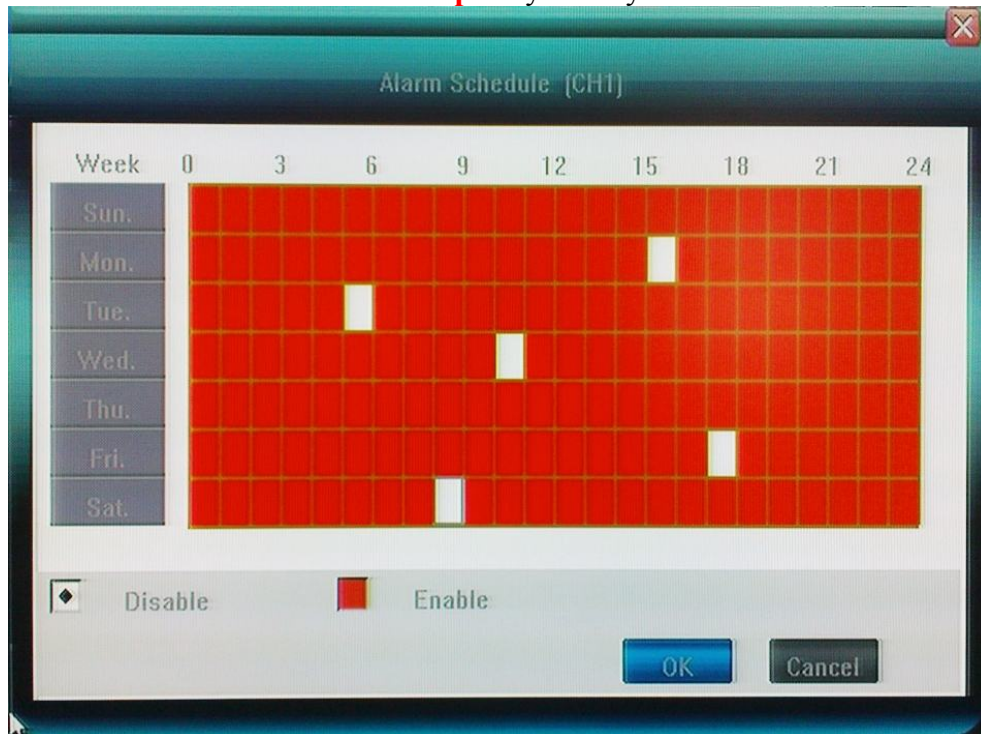
Check "E-mail" box will enable the e-mail notification when alarm triggered.



## ◆ Alarm Schedule

Click [ ] to open sub window for alarm schedule setting.

User can enable/disable **alarm output** by weekly schedule.

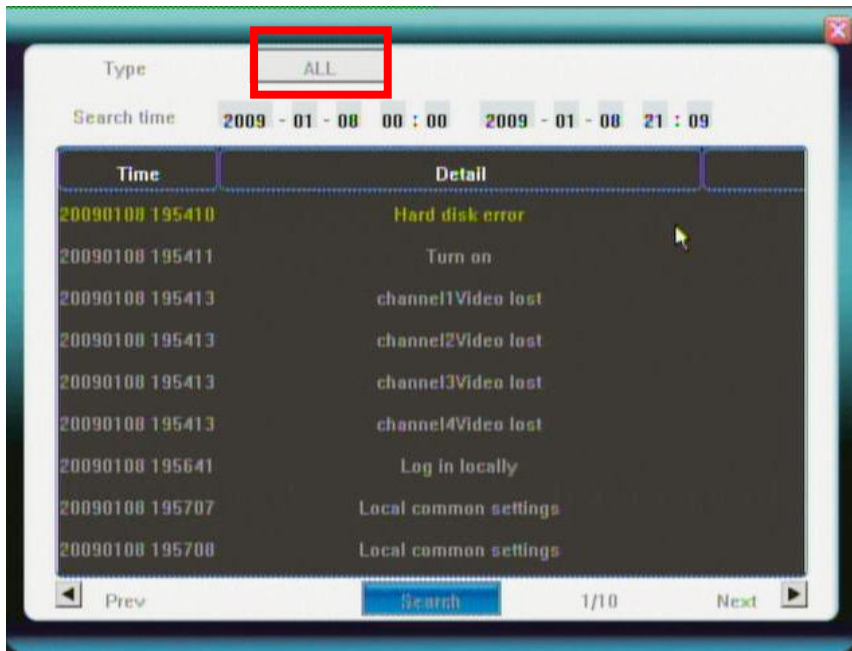


## 5.7 Maintenance



### 5.7.1 Log View

1. Select the type of log to be searched: All/ Operation/ Exception/ Alarm.
2. Select the time scope to be searched.
3. Click Search to display the detail information of log.



Note: The maximum number of logs supported currently is 3000. The storage mode adopts overwrite mode: continuously overwrite the oldest data when the database is full.

## 5.7.2 Software Upgrade

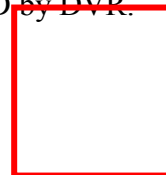
The upgrade modes supported now are USB & IE Remote Software:

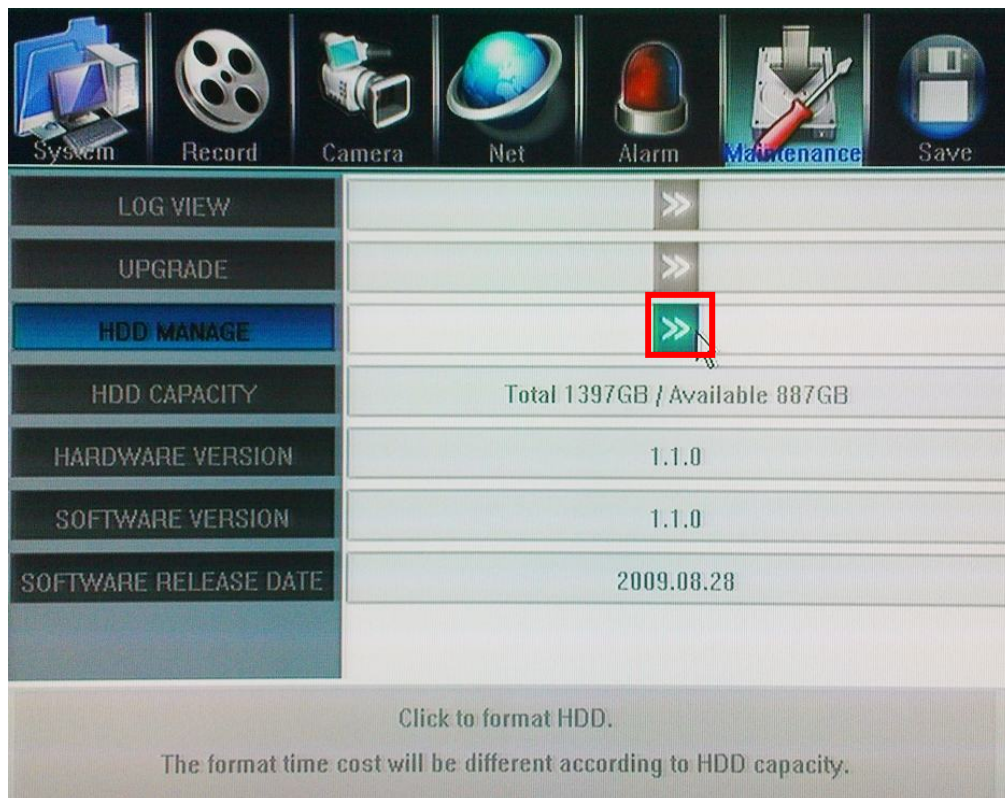
USB : Please make sure the USB device is connected correctly and the upgrade applications have already being copied into USB root directory. Please follow the prompts to operate. After accomplishing upgrade, press confirm button to restart.

## 5.7.3 HDD Manage

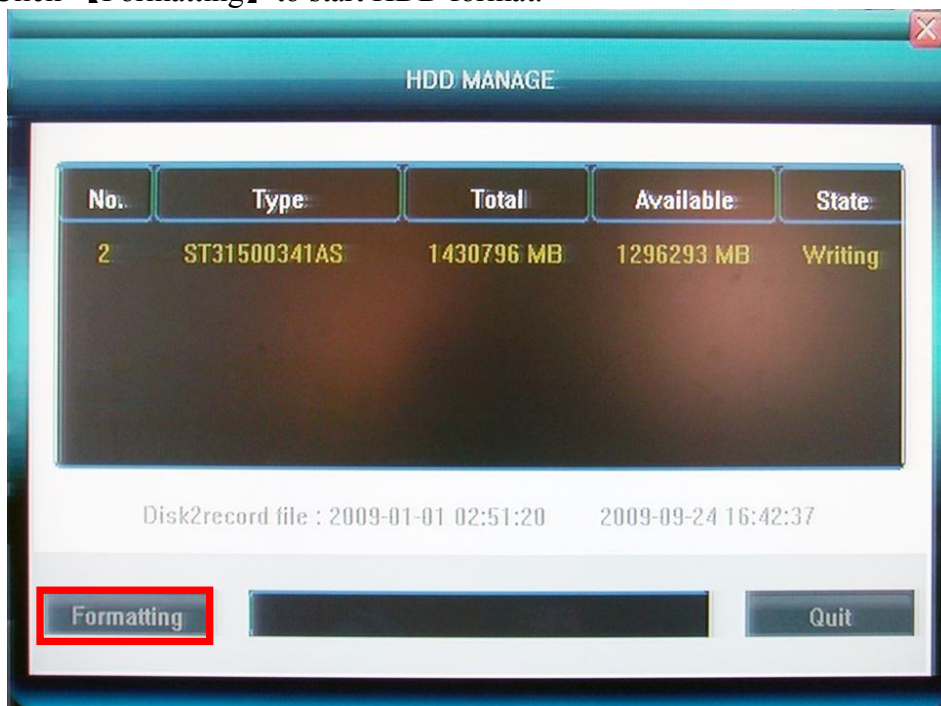
**HDD must be formatted by DVR before start recording audio/video.**

Click 【>>】 to open sub window and format the HDD by DVR.





HDD information will display on the windows if DVR detection HDD correctly.  
Click **【Formatting】** to start HDD format.



HDD information will display on the windows if DVR detection HDD correctly.  
Click **【Formatting】** to start HDD format

## 5.7.4 HDD Capacity

Show DVR current HDD capacity status.

## 5.7.5 Hardware Version

Show DVR current hardware version.

### **5.7.6 Software Version**

Show DVR current software version.

### **5.7.7 Software Release Date**

Show DVR current software release date.

## 5.8 Save Setting



### 5.8.1 Save & Exit

Save all setting and exit menu.

### 5.8.2 Exit

Exit menu without save setting.

### 5.8.3 Restore defaults

Reset all configuration to factory default

**The system language, time, camera PAL/NTSC system, and network settings (IP address, subnet mask, gateway, HTTP port) will not be recovered by restoring to factory defaults.**

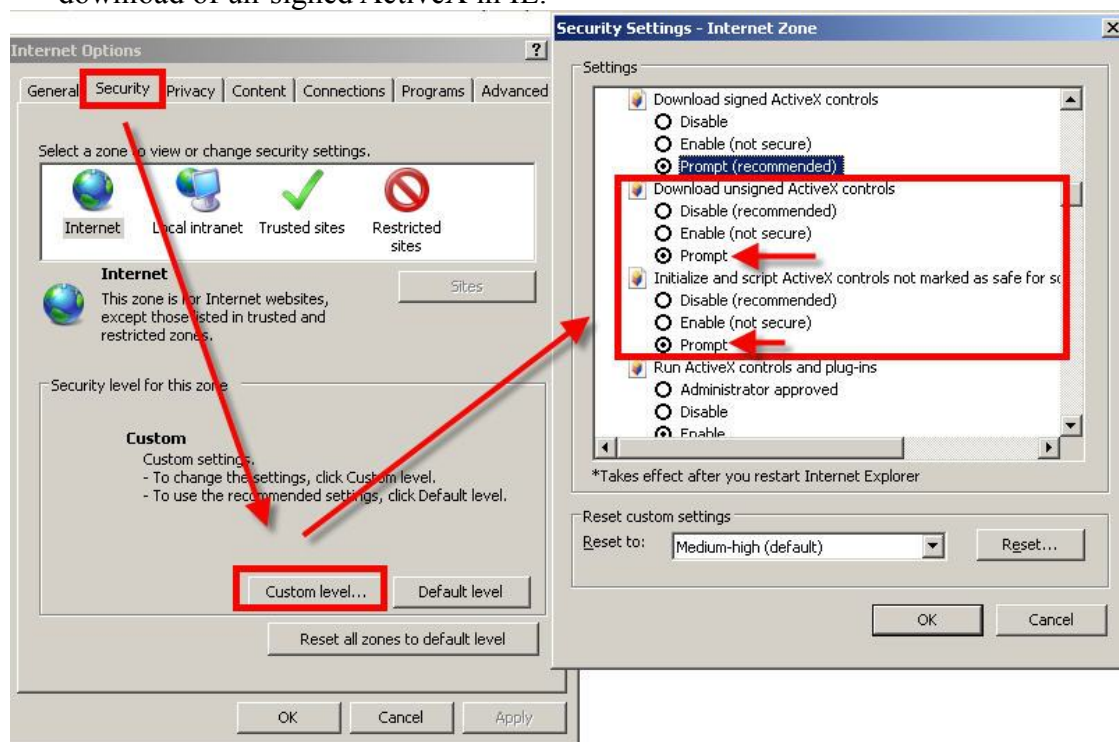
### 5.8.4 Logout

Save all setting and exit menu.

## 6. Web Browser Operation (IE Browser only)

### 6.1 Enable Download Un-singed ActiveX Control

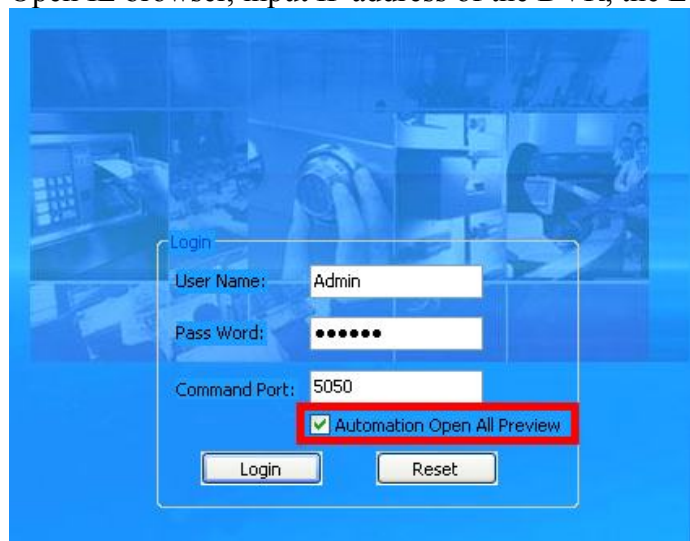
User's computer need download ActiveX components for web access at the first time connect to DVR. If user's Internet explorer prohibits the download action then please manually enable the download of un-singed ActiveX in IE.



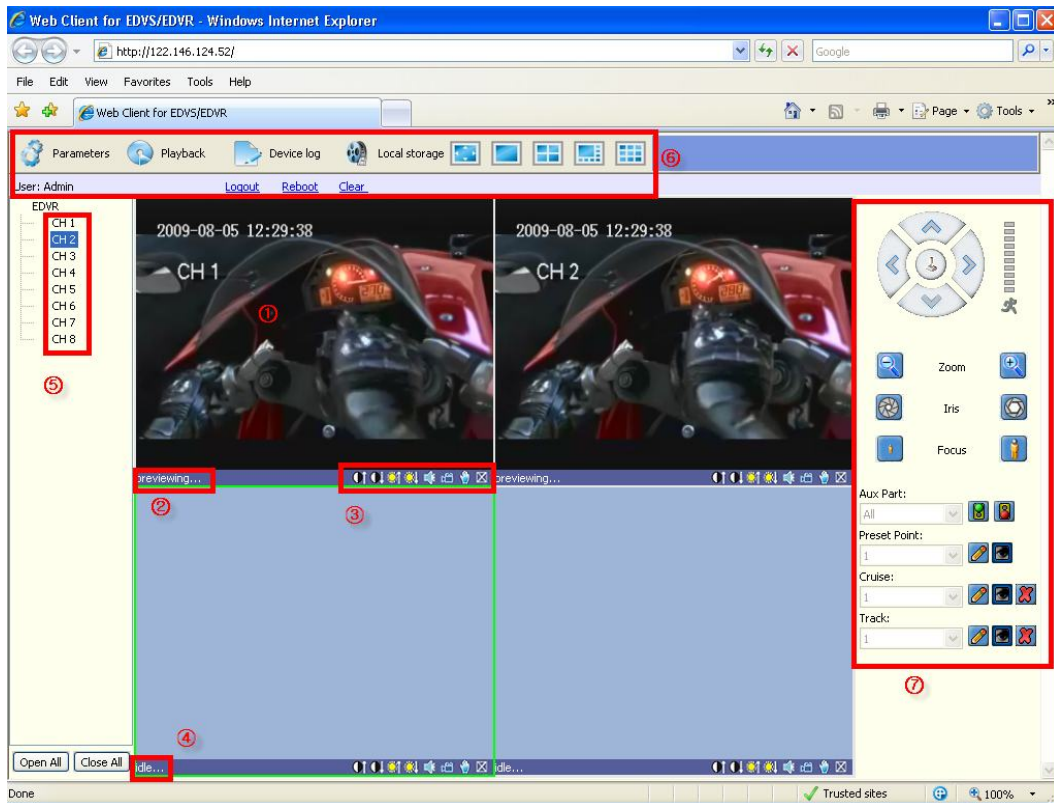
Download unsigned ActiveX controls → Enable or Prompt  
Initialized and script ActiveX controls not marked as safe → Enable or Prompt

### 6.2 Web Browser Main Screen

Open IE browser, input IP address of the DVR, the Login windows will appear.



Check "Automation Open All Preview" to watch all cameras after login.



1 Camera view window , 1 camera/ 4 cameras / 8 cameras

2 Camera view is previewing

3 Camera view tools

 : Adjust image contrast up/down.

 : Adjust brightness up/down.

 : Start/stop voice monitoring. The icon will turn to green when recording.

 : Start/stop recording. The icon will turn to green when recording.

 : Click to snapshot.

 : Stop preview.

Click  Local Storage to set the storage directory of record files and pictures captured.

4 Camera view is idle.

5 Available Camera list

6 Tools Bar



The description of icons from left to right is:

- Parameters: configure device parameters(set up), please refer to [6.4 Device Parameters Settings](#)
- Talk-back: Future growth
- Playback: Search and playback record files, please refer to [6.5 Video Files Playback & Download](#)
- Device log: View logs and export them, please refer to [6.5.3 Device Log](#)
- Local storage: Set the storage directory of record files.  
Click to switch camera view modes among full-screen, single split view mode and 4/9 splits view mode.

User: Admin      [Logout](#)    [Reboot](#)    [Clear](#)

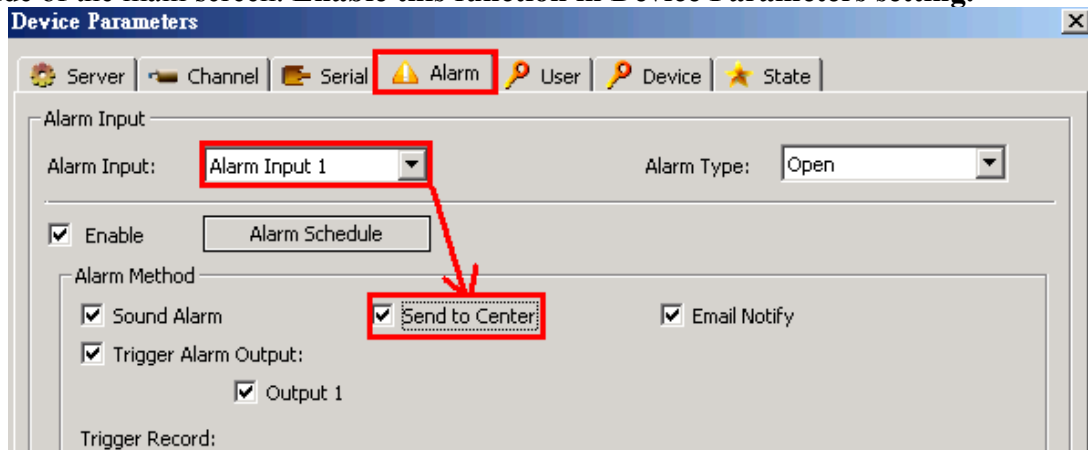
Current Account, Log-out, restart device, Clear alarm

## 7 PTZ Control

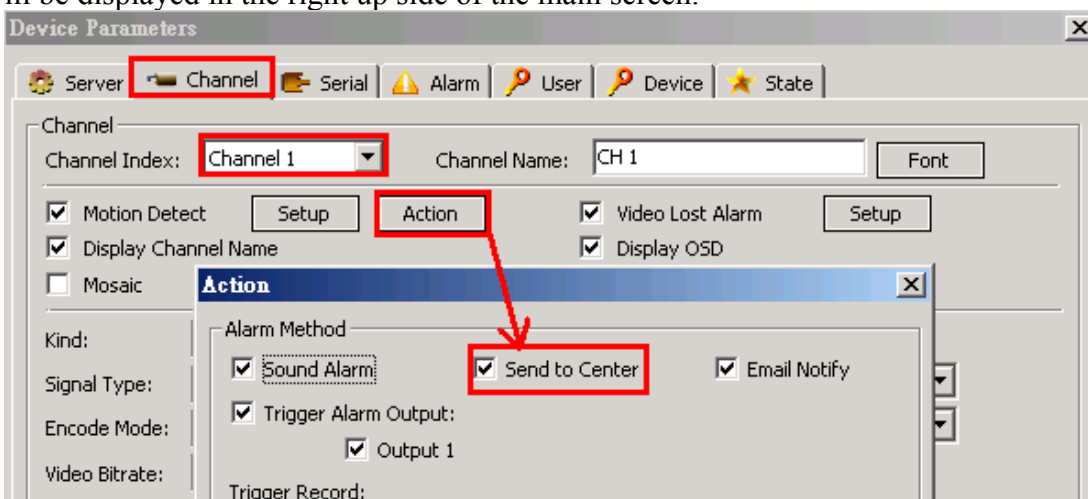
[Please refer to 4.8 PTZ Control](#)

## 6.3 Alarm Notification

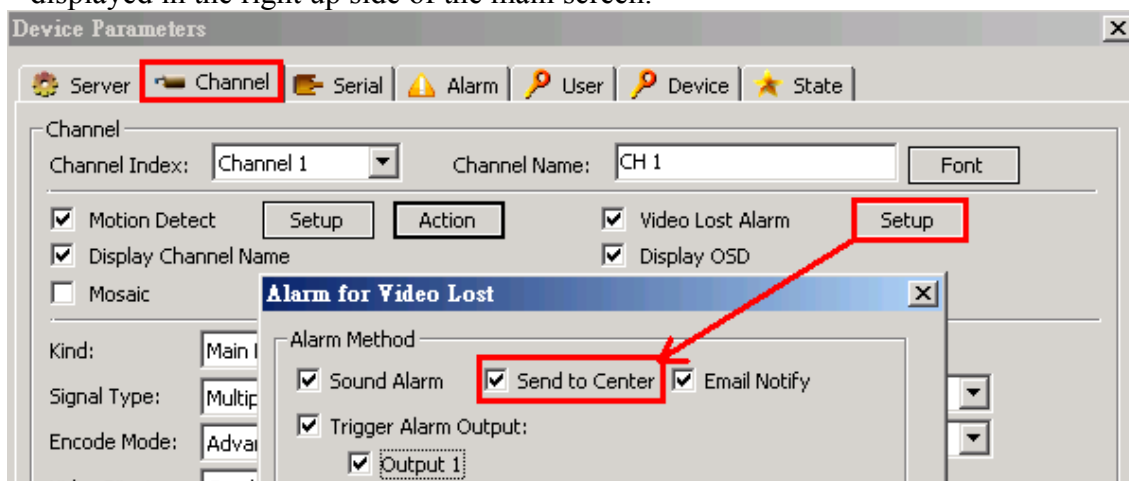
- ◆ When network connection is broken or abnormal, the alarm notification of “**No heartbeat of device, please check the network!**” will be displayed in the right up side of the main screen. After recovery of network, the preview will be displayed automatically.
- ◆ When alarms of remote notification occur, the alarm notification with alarm input number contained such as “**Device alarm: IO alarm, IO input x**” will be displayed in the right up side of the main screen. **Enable this function in Device Parameters setting.**



- ◆ When alarms of motion detection with remote notification occur, the alarm notification with the alarm channel number contained such as “**Device alarm: motion detection, channel X**” will be displayed in the right up side of the main screen.



- ◆ When alarms of video loss with uploading to center occur, the alarm notification with the alarm channel number contained such as “**Device alarm: video loss, channel x**” will be displayed in the right up side of the main screen.



## 6.4 Device Parameters Settings

Click  Parameters, the Device Parameters will appear

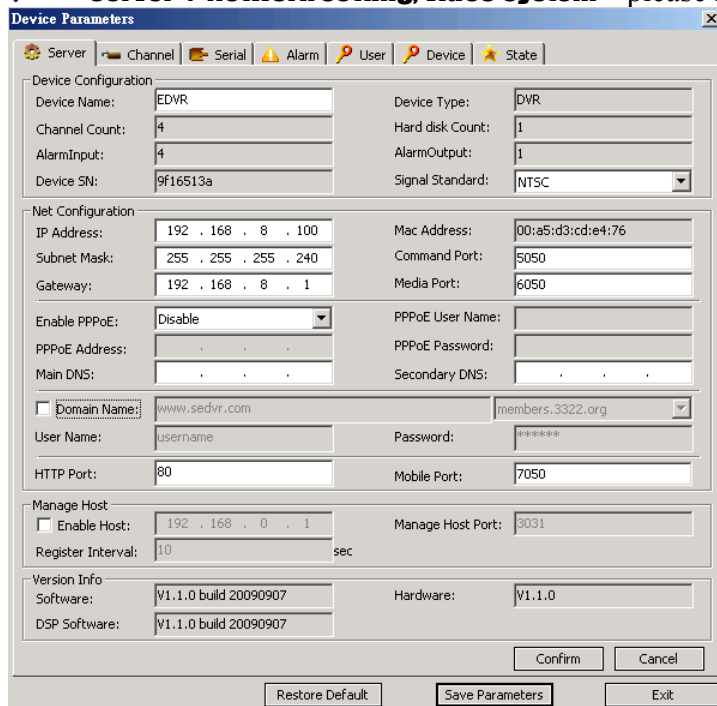
### Device Parameters

Server Channel Serial Alarm User Device State

, please refer to [Chapter 5 DVR Settings](#) as well. After settings, please click “Confirm” and “Save Parameters” to be effective for

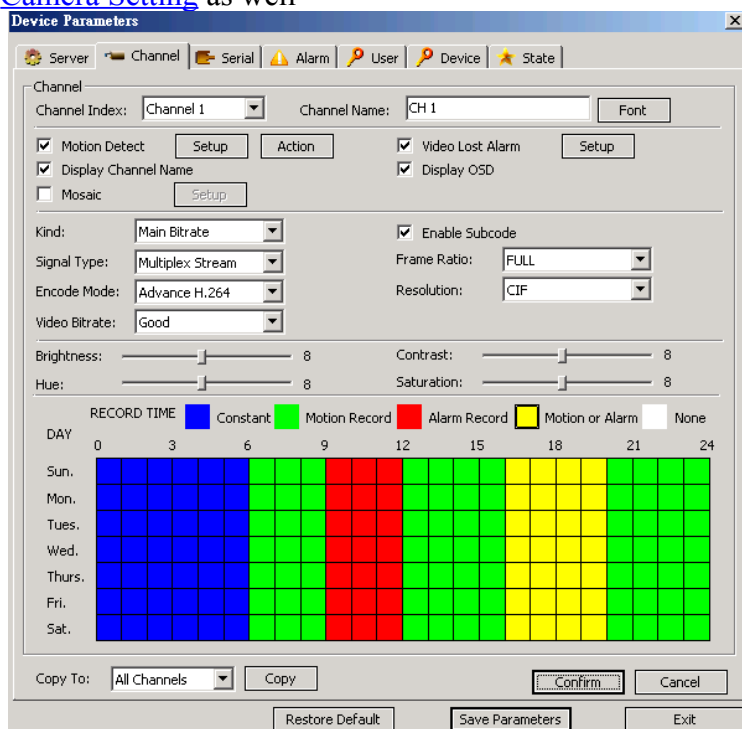
each setting window:

◆ **Server → Network setting, video system** – please refer to [5.5 Net Setting](#) as well



The screenshot shows the 'Device Parameters' window with the 'Server' tab selected. The 'Net Configuration' section is active, showing fields for IP Address (192.168.8.100), Subnet Mask (255.255.255.240), Gateway (192.168.8.1), Mac Address (00:a5:d3:cd:e4:76), Command Port (5050), Media Port (6050), Enable PPPoE (Disable), PPPoE User Name, PPPoE Password, Main DNS, Secondary DNS, Domain Name (www.sedvr.com), User Name (username), Password (\*\*\*\*\*), HTTP Port (80), Mobile Port (7050), Manage Host (192.168.0.1), Manage Host Port (3031), Register Interval (10 sec), Version Info (Software: V1.1.0 build 20090907, Hardware: V1.1.0), and DSP Software (V1.1.0 build 20090907). Buttons for Confirm, Cancel, Restore Default, Save Parameters, and Exit are at the bottom.

◆ **Channel → Camera setting, Record setting** – please refer to [5.3 Record Setting](#) and [5.4 Camera Setting](#) as well



The screenshot shows the 'Device Parameters' window with the 'Channel' tab selected. The 'Channel' section is active, showing fields for Channel Index (Channel 1), Channel Name (CH 1), Font, Motion Detect (checked), Video Lost Alarm (checked), Display Channel Name (checked), Display OSD (checked), Mosaic (unchecked), Setup, Kind (Main Bitrate), Enable Subcode (checked), Signal Type (Multiplex Stream), Frame Ratio (FULL), Encode Mode (Advance H.264), Resolution (CIF), Video Bitrate (Good), Brightness (8), Contrast (8), Hue (8), Saturation (8), RECORD TIME (Constant, Motion Record, Alarm Record, Motion or Alarm, None), DAY (Sun, Mon, Tues, Wed, Thurs, Fri, Sat), and a grid for recording times. Buttons for Copy To, Copy, Confirm, Cancel, Restore Default, Save Parameters, and Exit are at the bottom.

- ◆ **Channel→ Camera setting, Sub Bitstream, Subcode** – please refer to [5.3.7 Dual Streaming for Network\(Record- Advanced Setting\)](#) as well

For limited upload bandwidth of internet that DVRs connect, or limited streaming capability of some mobile phone/PDA, you have to adjust bandwidth of DVR to internet.

**Device Parameters**

Channel

Channel Index: Channel 1 Channel Name: CH 1 Font

☒ Motion Detect Setup Action ☒ Video Lost Alarm Setup

☒ Display Channel Name ☒ Display OSD

☐ Mosaic Setup

Kind: Sub Bitstream ☒ Enable Subcode

Signal Type: Video Stream Frame Ratio: 15

Encode Mode: Advance H.264 Resolution: CIF

Video Bitrate: 32 Kbps

### ◆ **Serial→PTZ Setting**

**Device Parameters**

Serial

RS485 Configuration

Channel: Channel 1

Baud Rate: 2400 Data Bit: 8 Stop Bit: 1

Parity: None Flow Control: None

Decoder: PelcoP Decoder Address: 1

Copy To: All Channels Copy

### ◆ **Alarm→ alarm input / output setting**

**Device Parameters**

Alarm

Alarm Input

Alarm Input: Alarm Input 1 Alarm Type: Open

☒ Enable Alarm Schedule

Alarm Method

☒ Sound Alarm ☒ Send to Center ☒ Email Notify

☒ Trigger Alarm Output: ☒ Output 1

Trigger Record:

☒ Channel 1 ☒ Channel 2 ☒ Channel 3 ☐ Channel 4

PTZ Linkage

Joint Channel: Channel 1 Preset Point:

Copy To: All Alarm Input Copy

Confirm Cancel

Restore Default Save Parameters Exit

## ◆ Device → Firmware upgrade , time synchronize and E-mail Notify setup

**Device Parameters**

Server Channel Serial Alarm User **Device** State

**Upgrade**

Upgrade File:

State:

Progress:

**Time Synchronization**

System Time:

**Email Notify**

Server Address:  Server Port:

User Name:  Pass Word:

Addresser:

| Addressee           |                                       |
|---------------------|---------------------------------------|
| username@server.com | <input type="button" value="Add"/>    |
|                     | <input type="button" value="Modify"/> |
|                     | <input type="button" value="Delete"/> |

## ◆ User → User account and authority setting

**Device Parameters**

Server Channel Serial Alarm **User** Device State

**Super User**

**User1**

**Basic Information**

User Name:  Binding IP:

Password:  Confirm Password:

Binding MAC:  :  :  :  :  :

**Local**

- ☒ Ptz Control
- ☒ Manual
- ☒ Playback
- ☒ System Setup
- ☒ Clear Alarm
- ☒ Shut down
- ☒ Preview

**Remote**

- ☒ Ptz Control
- ☒ Manual
- ☒ Playback
- ☒ System Setup
- ☒ Clear Alarm
- ☒ Reboot
- ☒ Preview

☐ Accredited

☒ ---- Purview for all channels

☐ ---- Purview for no channel

Note: Fixed purview for super user

◆ **State – HDD capacity, Channel and Network status**

Device Parameters

Server

Channel

Serial

Alarm

User

Device

State

Hard disk State

| Hard disk | Capacity  | Remain    | State   |
|-----------|-----------|-----------|---------|
| 1         | 953867 MB | 932174 MB | writing |

Channel State

| Channel | Record    | Signal     | Main Bitrate | Sub Stream | Sub Bitrate |
|---------|-----------|------------|--------------|------------|-------------|
| 1       | Recoding  | Has Signal | 686 Kbps     | Enable     | 397 Kbps    |
| 2       | No Record | Has Signal | 666 Kbps     | Enable     | 174 Kbps    |
| 3       | No Record | Has Signal | 607 Kbps     | Enable     | 185 Kbps    |
| 4       | No Record | Has Signal | 680 Kbps     | Enable     | 161 Kbps    |

☒ Automatic Refresh (5s)
 

Refresh

Restore Default

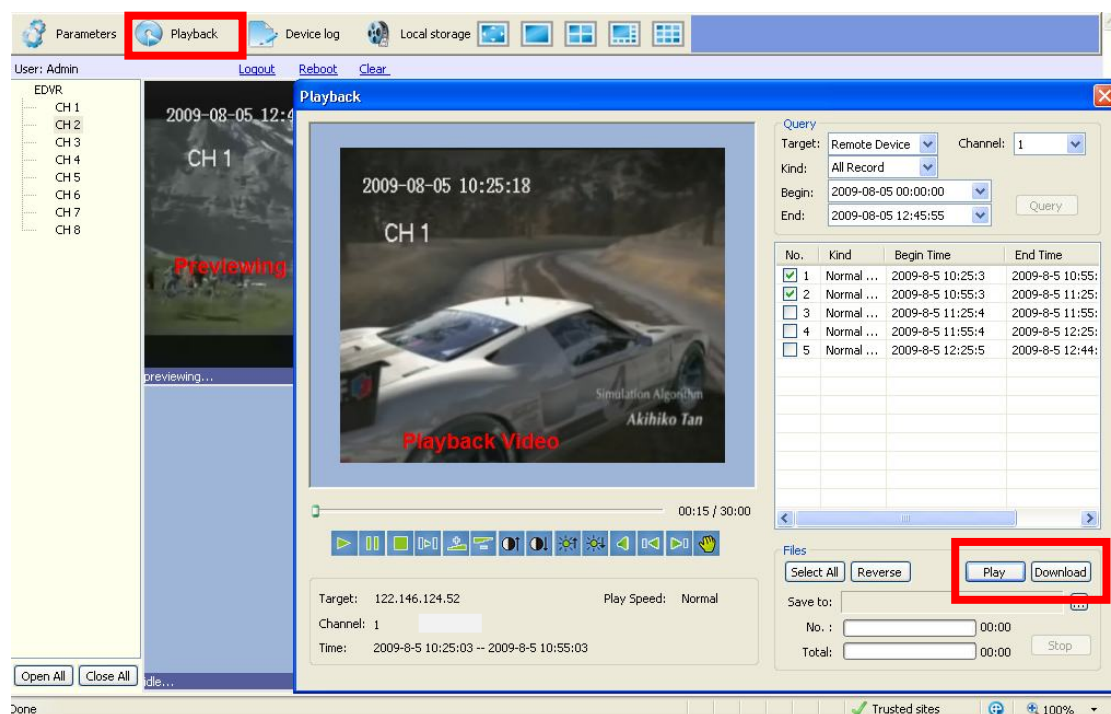
Save Parameters

Exit

## 6.5 Video Files Playback & Download

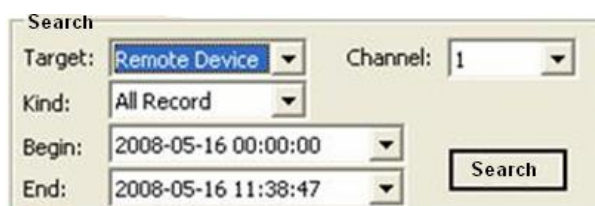
### 6.5.1 Video Files Playback

Click , the playback screen will appear. It includes video files search, playback and video files download.



#### ◆ Video Files Search

The file search part is on the right upper side of the screen, please set target, type, start time and end time there. Then click Query to start searching. The result will list on the table. Specify the files in the table list and click on the playing control button or download button to do the relevant operations.



#### ◆ Video File Playback

The play control screen is on the left side of the screen. It includes image display area, play control bar, and channel information.

Click Play, the record files selected will be displayed in time order. The progress of playing is shown as the figure below:



The playing control bar is shown as the figure below. The descriptions of all these icons from

left to right are as follows:



**Play; Pause; Stop; Go to next frame; Fast play** option (The speed of playing will be doubled by each clicking. It includes: 2X, 4X, 8X, and 16X); **Slow play** option (The speed of playing will be half down by each clicking. It includes 1/2X, 1/4X, 1/8X, and 1/16X); **Enhance contrast; Reduce contrast; Enhance brightness; Reduce brightness; Open/close voice; Go to previous file; Go to next file**

( and ) is enabled only when multiple record files being selected to play); Snapshot ( the storage directory can be set on the pop-up screen by clicking ).

The information of the record file selected will be displayed in the area shown as the figure below. It includes device's IP address, current play speed, channel number and start/end time of the record file.

|                      |                    |
|----------------------|--------------------|
| Target: 172.1.10.220 | Play Speed: normal |
| Channel: 1           |                    |
| Time:                |                    |

## 6.5.2 Download Video Files

Click to set the storage directory of the video file. Click Download to start downloading.

Please refer to Chapter 4.6 for playback downloaded video by Windows Media player.

## 6.5.3 Device Log

Click , the screen of device logs will appear. There are four options for choosing: **All, according to time, according to type, according to time and type.**

To search logs, please select the search mode and channel number needed first and then click Query to progress.

Click Export to export logs in html format.

| Log                             |           |                               |        |        |                     |         |
|---------------------------------|-----------|-------------------------------|--------|--------|---------------------|---------|
| Log                             |           |                               |        |        |                     |         |
| Query Kind: All                 |           | Channel: All                  |        | Query  |                     |         |
| Type: All                       |           | Sub Type:                     |        | Export |                     |         |
| Begin Time: 2009-08-05 00:00:00 |           | End Time: 2009-08-05 17:45:26 |        |        |                     |         |
| No.                             | Type      | Sub Type                      | Detail | Ch...  | Time                | Operatc |
| 1                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:57 | Admin   |
| 2                               | Alarm     | Motion Detection Alarm End    | None   | 7      | 2009-08-04 17:29:57 | Admin   |
| 3                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:57 | Admin   |
| 4                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:57 | Admin   |
| 5                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:58 | Admin   |
| 6                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:58 | Admin   |
| 7                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:58 | Admin   |
| 8                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:59 | Admin   |
| 9                               | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:59 | Admin   |
| 10                              | Alarm     | Motion Detection Alarm End    | None   | 8      | 2009-08-04 17:29:59 | Admin   |
| 11                              | Operation | Remote PTZ Control            | None   | 7      | 2009-08-04 17:29:59 | Admin   |

## 7. 3G/3.5G Mobile Phone/PDA Support

To streaming from 3/3.5G mobile phone or PDA, you have to open the mobile port of DVR, the default setting is 7050, please refer to [5.5.5 PPPoE/DDNS\(Net- Second Page\]](#) or IE [6.4 Device Parameters Settings](#) Server→Network setting, video system

For limited upload bandwidth of internet that DVRs connect, or limited streaming capability of some mobile phone/PDA, you have to adjust bandwidth of DVR to internet, please refer to [5.3.7 Dual Streaming for Network\(Record- Advanced Setting\)](#) or [6.4 Device Parameters Settings - Channel→ Camera setting, Sub Bitstream, Subcode](#) (from IE) for more details

Note: User's mobile phone must apply internet connection service at first, such as 3G or 3.5G service. Please contact mobile company for detail.

### 7.1 Windows Mobile PDA

Open accessory CD and find the “**xxx.cab**” for the surveillance software.

Please refer to PDA user manual, copy \*.cab into windows mobile pda

Double click on \*.cab can start install software into PDA. After install completed, user can find QQEYE in the application list.

Execute QQEYE program and click setting to setup IP address of remote DVR.

QQEYE

Channel: cam01 ▼ connect setting

0kbps/0fps/0x0 Ready

Username: Admin ▼

Password: 888888

Server:

Port: 7050

Channel: cam07 ▼

ok Cancel

version:20090408



Input user name 『Admin』 and password. IP address of DVR and port:7050 for streaming data.

Click ok to save the setting.

In the main windows, click “connect” to login DVR and watch the steaming video from DVR.

At the bottom is the PTZ control and picture snapshot.

## 7.2 Nokia/Samsung/LG Symbian S60 3<sup>rd</sup> Phone

Open accessory CD and find the “**xxx.sisx**” for surveillance software.

Please refer to user manual of mobile phone to install the software into mobile phone.

After installation completed, user can find the QQEYE  icons at the application list.

Execute QQEYE, First step is configuring the IP address of DVR, username, password.

Click  icon to show the setup windows,

Server Address: DVR IP address

Serer Port:: 7050

Username: 『Admin』

Password: By default are 888888

Save and return to main windows



Click  icon to connect DVR immediately, after login DVR successfully, user can watch the remote video from mobile phone.



switch channel , click  show another 4 channel list



Control PTZ camera direction, Zoom, Focus. , Iris.



Picture Snapshot.



Exit QQEYE

### Mobile phone reference list:

|                        |               |           |
|------------------------|---------------|-----------|
| Nokia 5730 XpressMusic | \$60 3rd_FP2  | 11-Mar-09 |
| Nokia N86 8MP          | \$60 3rd_FP2  | 17-Feb-09 |
| Nokia E55              | \$60 3rd_FP2  | 16-Feb-09 |
| Nokia E75              | \$60 3rd_FP2  | 16-Feb-09 |
| Nokia 6710 Navigator   | \$60 3rd_FP2  | 16-Feb-09 |
| Nokia 6720 Classic     | \$60 3rd_FP2  | 16-Feb-09 |
| Nokia 5630 XpressMusic | \$60 3rd_FP2  | 10-Feb-09 |
| Nokia E63              | \$60 3rd_FP1  | 12-Nov-08 |
| LG-KT615               | \$60 3rd_FP1  | 30-Oct-08 |
| Samsung I7110          | \$60 3rd_FP2  | 20-Oct-08 |
| Nokia N79              | \$60 3rd_FP2  | 21-Aug-08 |
| Nokia N85              | \$60 3rd_FP2  | 21-Aug-08 |
| Samsung INNOV8         | \$60 3rd_FP2  | 25-Jul-08 |
| Nokia E66              | \$60 3rd_FP1  | 16-Jun-08 |
| Nokia E71              | \$60 3rd_FP1  | 16-Jun-08 |
| Samsung SGH-L870       | \$60 3rd_FP2  | 28-May-08 |
| Nokia 5320 XpressMusic | \$60 3rd_FP2  | 22-Apr-08 |
| Samsung SGH-G810       | \$60 3rd_FP1  | 11-Feb-08 |
| Nokia 6220             | \$60 3rd_FP2  | 11-Feb-08 |
| Nokia N78              | \$60 3rd_FP2  | 11-Feb-08 |
| Nokia N96              | \$60 3rd_FP2  | 11-Feb-08 |
| Nokia 6210 Navigator   | \$60 3rd_FP2  | 11-Feb-08 |
| LG-KT610               | \$60 3rd_FP1  | 10-Feb-08 |
| Nokia N82              | \$60 3rd_FP1  | 14-Nov-07 |
| Samsung SGH-i560       | \$60 3rd_FP1  | 16-Oct-07 |
| Samsung SGH-i550       | \$60 3rd_FP1  | 15-Oct-07 |
| Samsung SGH-i450       | \$60 3rd_FP1  | 14-Oct-07 |
| Nokia E51              | \$60 3rd_FP1  | 18-Sep-07 |
| Nokia N95 8GB          | \$60 3rd_FP1  | 29-Aug-07 |
| Nokia N81              | \$60 3rd_FP1  | 29-Aug-07 |
| Nokia N81 8GB          | \$60 3rd_FP1  | 29-Aug-07 |
| Nokia 6121             | \$60 3rd_FP1  | 18-Jun-07 |
| Samsung SGH-i400       | \$60 3rd_FP1  | 26-Apr-07 |
| Nokia 6120             | \$60 3rd_FP1  | 17-Apr-07 |
| Nokia 5700             | \$60 3rd_FP1  | 29-Mar-07 |
| Nokia N77              | \$60 3rd_INIT | 12-Feb-07 |
| Nokia E90              | \$60 3rd_FP1  | 11-Feb-07 |
| Nokia E61i             | \$60 3rd_INIT | 10-Feb-07 |
| Nokia E65              | \$60 3rd_INIT | 09-Feb-07 |
| Nokia 6110 Navigator   | \$60 3rd_FP1  | 08-Feb-07 |
| Nokia N76              | \$60 3rd_FP1  | 08-Jan-07 |

|                  |               |           |
|------------------|---------------|-----------|
| Nokia N93i       | \$60 3rd_INIT | 08-Jan-07 |
| Nokia 6290       | \$60 3rd_FP1  | 28-Nov-06 |
| LG KS10          | \$60 3rd_FP1  | 09-Oct-06 |
| Samsung SGH-i520 | \$60 3rd_FP1  | 09-Oct-06 |
| Nokia N75        | \$60 3rd_INIT | 27-Sep-06 |
| Nokia N95        | \$60 3rd_FP1  | 26-Sep-06 |
| Nokia E62        | \$60 3rd_INIT | 09-Sep-06 |
| Nokia 5500 Sport | \$60 3rd_INIT | 09-May-06 |
| Nokia N93        | \$60 3rd_INIT | 09-Apr-06 |
| Nokia N73        | \$60 3rd_INIT | 09-Apr-06 |
| Nokia N92        | \$60 3rd_INIT | 09-Nov-05 |
| Nokia N71        | \$60 3rd_INIT | 09-Nov-05 |
| Nokia N80        | \$60 3rd_INIT | 09-Nov-05 |
| Nokia E70        | \$60 3rd_INIT | 09-Oct-05 |
| Nokia E61        | \$60 3rd_INIT | 09-Oct-05 |
| Nokia E60        | \$60 3rd_INIT | 09-Oct-05 |
| Nokia 3250       | \$60 3rd_INIT | 13-Sep-05 |
| Nokia N91        | \$60 3rd_INIT | 14-Apr-05 |

## 7.3 3G/3.5G iPhone Series

Please use iPhone and go to their App Store, search the “APlayer”, download and install it, it is

free; Execute APlayer program and click  to setup IP address of remote DVR as below right screenshot

Server IP: DVR IP address

Port: 7050 by default

Username: 【Admin】

Password: By default are 888888

Save and back to main windows



Click  icon to connect DVR immediately, after login DVR successfully, user can watch the

remote video from mobile phone; the other icons function are as follows:



switch channel , click  show another 4 channel list



Control PTZ camera direction, Zoom, Focus, Iris.



Picture Snapshot.



Full Screen

## 8. Appendix

### Appendix A-HDD Capacity Estimate

#### 1) Calculate the maximum capacity of the build-in hard disk.

- **Timing Recording:**

Step 1: Calculate the maximum capacity of the hard disk needed in selected channel per hour, suppose as  $S_i$  (MByte) ( $i$  is the channel number), and suppose the bit rate of the channel selected as  $D$  (Kbit/s). The formula of calculation is:

$$S_i = ( D * 3600 ) / ( 8 * 1024 ) = D * 0.439453125 \text{ MB}$$

Step 2: Confirm the storage time length, suppose as  $T$  hours. The total maximum capacity of the hard disk needed in selected channel for  $T$  hours, suppose as  $S_t$  is:

$$S_t = T * S_i$$

Step 3: Confirm the total numbers of the channels, suppose as  $n$ . The total maximum capacity of the hard disk needed, suppose as  $S_c$  is:

$$S_c = S_1 + S_2 + \dots + S_n$$

- **Alarm Recording**

Suppose the rate of alarming as  $\alpha\%$ . The capacity of the hard disk needed in alarm recording supposed as  $S_a$  is:

$$S_a = S_c * \alpha\%$$

#### 2) Calculate the compression bit rate for recording $T$ hours.

- **Timing Recording**

Step 1: Suppose the capacity of the hard disk as  $S$ , the total numbers of the channel as  $n$ . The capacity of hard disk needed per channel supposed as  $D_i$  is:

$$D_i = S / n$$

Step 2: Suppose the total recording time as  $T$  hours. The capacity of the hard disk needed per hour per channel supposed as  $D_t$  is:

$$D_t = D_i / T$$

Step 3: The bit rate of all the channels supposed as  $D_c$  is:

$$D_c = D_t * ( 8 * 1024 ) / 3600 = D_t * 2.2756 \text{ ( Kbit/s )}$$

#### Alarm Recording

Step 1: Suppose the rate of alarming as  $\alpha\%$ , capacity of hard disk as  $S$ , the total numbers of the channel as  $n$ . The capacity of hard disk needed per channel supposed as  $D_i$  is:

$$D_i = ( S / n ) * \alpha\%$$

Step 2: Suppose the time length of recording as  $T$  (hours). The capacity of hard disk needed per hour per channel supposed as  $D_t$  is:

$$D_t = D_i / T$$

Step 3: The bit rate of all channels supposed as  $D_c$  is:

$$D_c = D_t * ( 8 * 1024 ) / 3600 = D_t * 2.2756 \text{ ( Kbit/s )}$$

## Appendix B– Compatible HDD List

The other brand or model, please test by yourselves

| Item    | Model Number             | Size(GB) | Drive |
|---------|--------------------------|----------|-------|
| WD      | WD5001ABYS               | 500      | SATA  |
| WD      | WD5000AVVS               | 500      | SATA  |
| WD      | WD7500AACS               | 750      | SATA  |
| WD      | WD10EADS                 | 1000     | SATA  |
| WD      | WD15EADS                 | 1500     | SATA  |
| WD      | WD20EADS                 | 2000     | SATA  |
|         |                          |          |       |
| HITACHI | HDS721075KLA330          | 750      | SATA  |
| HITACHI | HDT721010SLA360          | 1000     | SATA  |
|         |                          |          |       |
| Maxtor  | 6V16010                  | 160      | SATA  |
|         |                          |          |       |
| Seagate | ST3250310SV              | 250      | SATA  |
| Seagate | ST3500320SV, ST3500320AS | 500      | SATA  |
| Seagate | ST31000528AS             | 1000     | SATA  |
| Seagate | ST31500341AS             | 1500     | SATA  |
|         |                          |          |       |
| Samsung | HD161HJ                  | 160      | SATA  |
| Samsung | HD501LJ                  | 500      | SATA  |

## Appendix C– Compatible USB portable DVD Burner List

The other brand or model, please test by yourselves

- \* Sony DRX-S70U-R
- \* HUGE USB Slim Portable Optical Drive
- \* LG GE20LU10
- \* Lite On eSAU108
- \* Buffalo DVSM-P58U2/B