# — DVR —

Notice: This content is subject to be change without notice.

Notice: Ghosting or fractured images may occur on the screen when there is a suddenly surge or lightning stroke which cause damage on IC in the DVRs.

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# Table of Contents

**Note：** **The number of channels, sensors, relays, and split screen, and the resolution in the following figures are for reference. The actual screen output may be different by different models.**

# Chapter 1 LIVE OPERATIONS

In the live mode, you may monitor all channels of the DVR, listen to live audio from cameras, and configure the DVR. The DVR can support 4:3 and 16:9 aspect ratios of the screen layout. There is a shortcut toolbar on the top of the screen for users to logout, to access system information, to change screen aspect ratio, to make the DVR window full-screen, and to configure network stream quality. In the 16:9 mode, there are two major panes, the configuration menu and channel pane for video of channels. In the 4:3 mode, a user may access the configuration pane by right-clicking the mouse on the screen splits and a channel status pane will appear when the mouse cursor moves to the bottom of the screen

## *RHD Series:*

**Shortcut toolbar**

**Configuration Panel**

**16：9 display - Operation screen**

**Shortcut toolbar**

**Channel Status Panel**
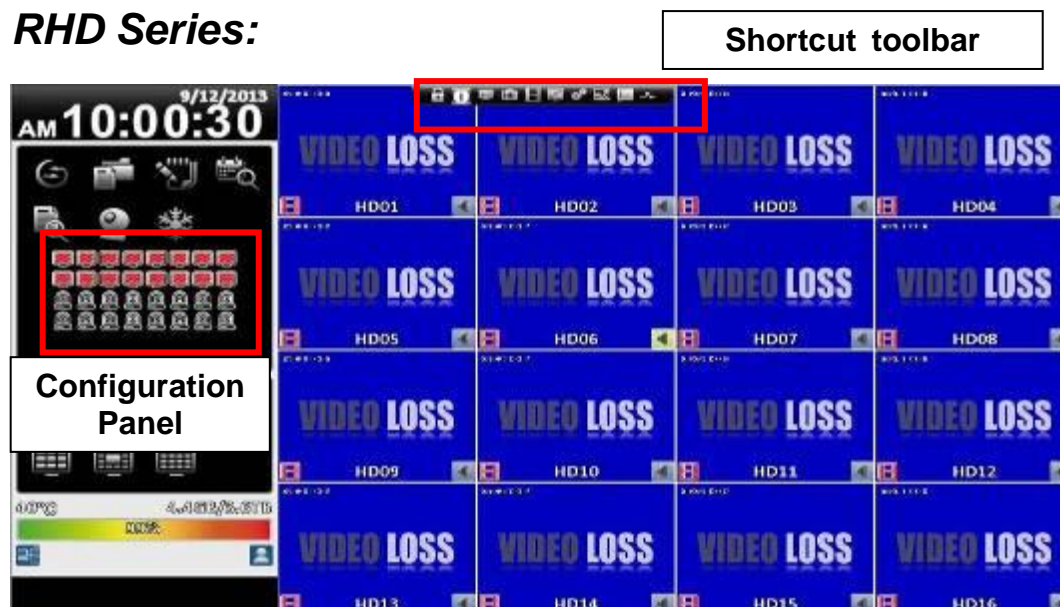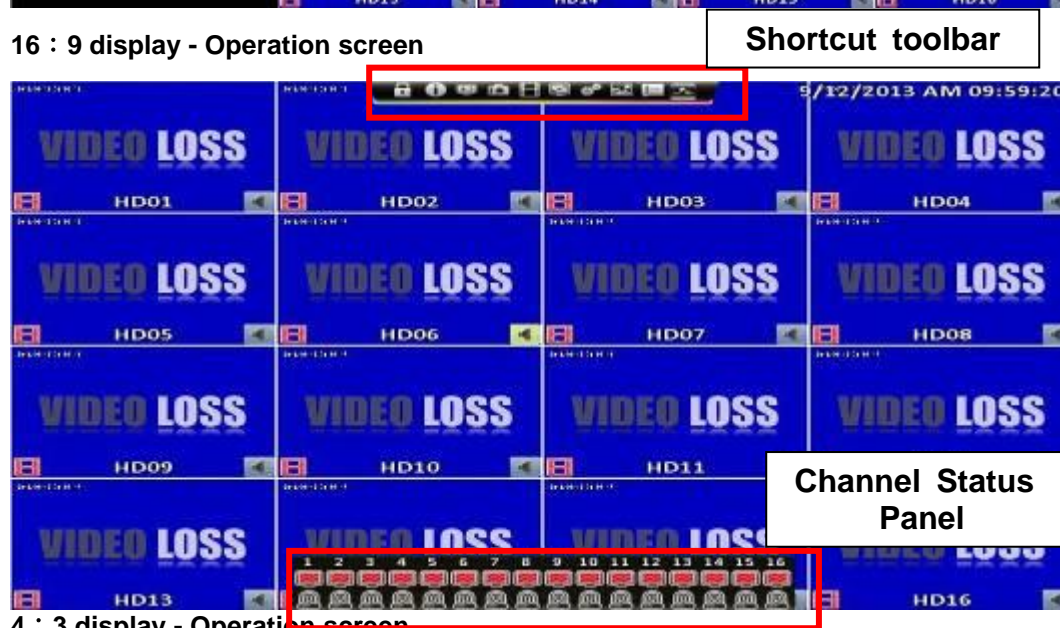
**4：3 display - Operation screen**

## HHD Series:

Configuration Panel

**16：9 display - Operation screen**

Shortcut toolbar



Channel Status Panel
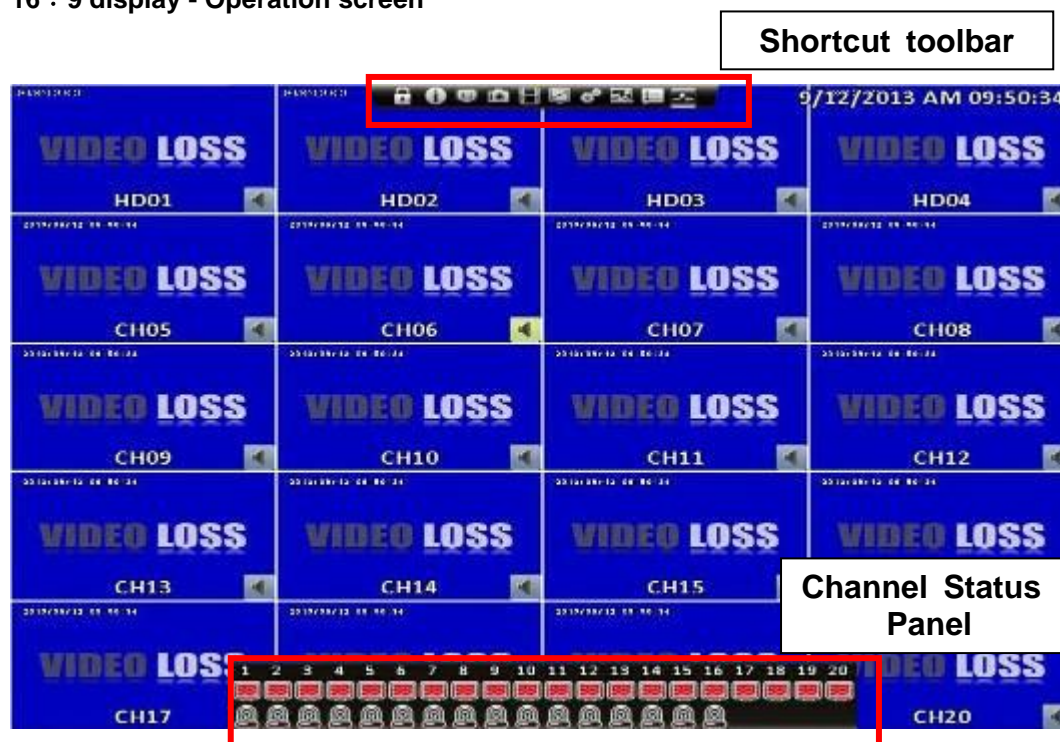
**4：3 display - Operation screen**

## *960H Series:*

**Configuration Panel**

**16：9 display - Operation screen**

Shortcut toolbar



**Channel Status Panel**
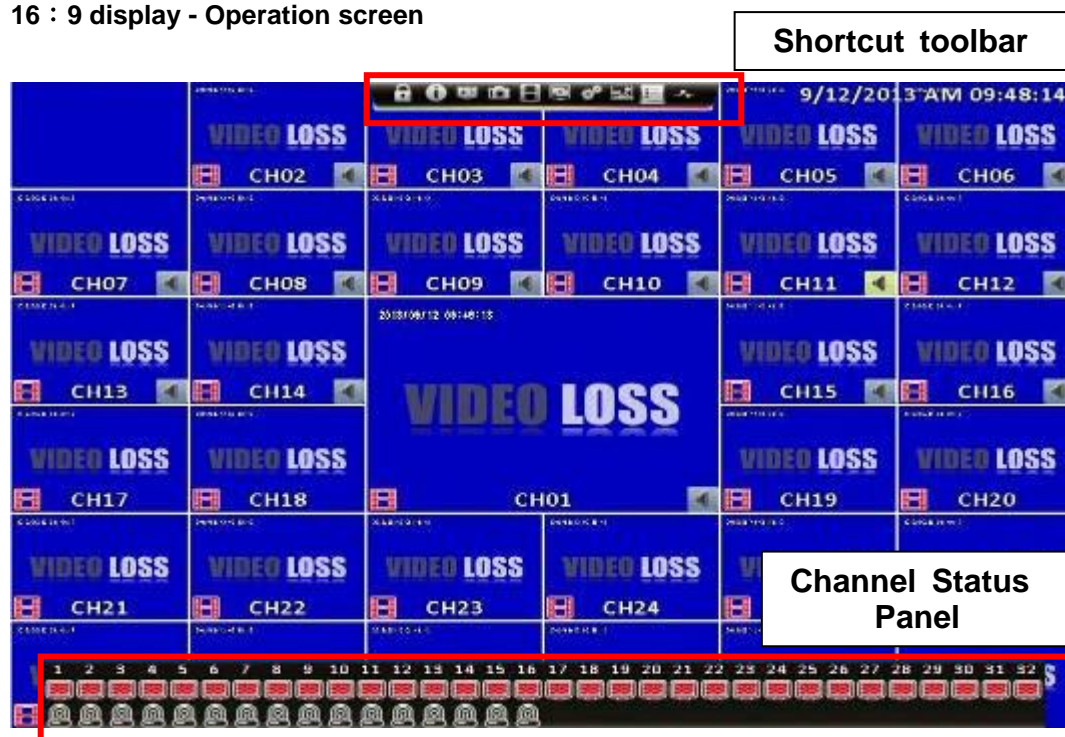
**4：3 display - Operation screen**

**Table 1-1 Icon description in live mode**

| Icon | Description |
|---|---|
| | Recording of a channel is activated. |
| | Live audio of a channel is activated. |
| | Live audio of a channel is not activated. |
| | Video signal of a channel is available. |
| | Event recording of a channel is active in this channel. |
| | Motion detection of a channel is triggered. |
| | Alarm is triggered of a channel. The number of available alarms depends on models. |
| | Alarm is not triggered of a channel. |
| | The channel video-loss alarm of a channel has been triggered. |
| | USB device has been detected. |
| | DVD device has been detected. |
| | Network connection is available |
| | Network connection is not available |
| | Displays the current user |
| 38°C 748.59GB/753.32GB 99% | Displays the current disk space and usage. (The figure shows 99% of the disk space has been used, and 1% is available.). The current disk temperature is also shown. |
| 2009/09/23 14:05:02 | Each channel shows the time stamp for local playback, remote live, remote playback, and backup -video. |

# Chapter 2    MAIN MENU SETUP

To enter the main menu and set up a DVR, log-in account and user password are required. The default password of the administrator is "**123456**". Please check the "Account Setup" for management of other log-in users.
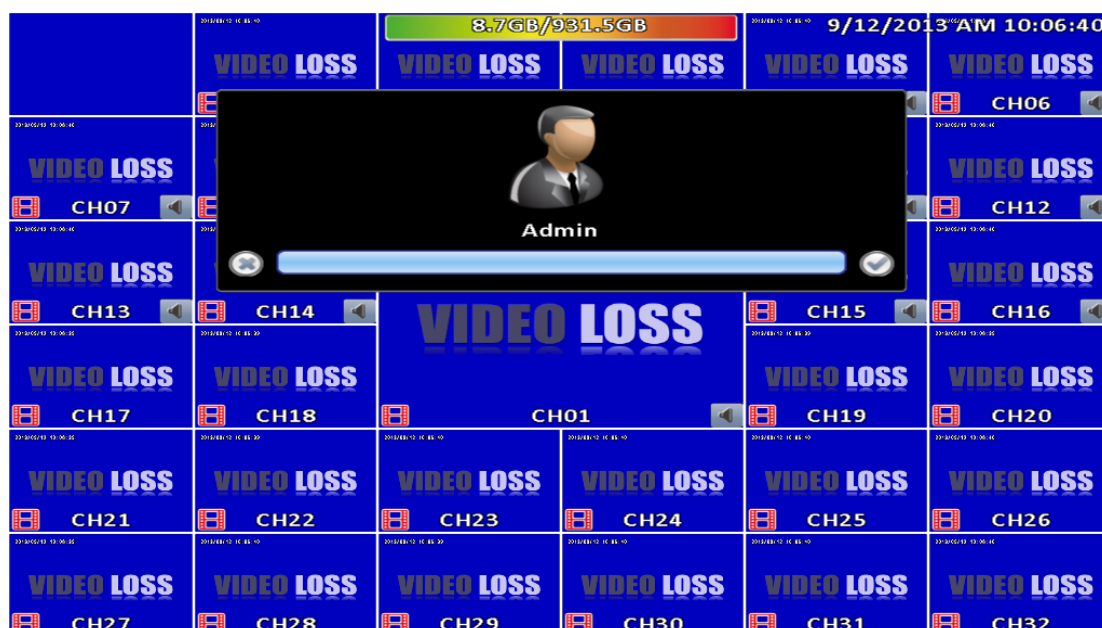


**Table 2-1 Definition of keys of virtual keyboard**

| Icon | Description |
|---|---|
|  /  | Switch between capital letters and lower-case letters. |
|  /  | Switch between numbers and letters |
|  | Delete the last character。 |
|  | Enter to verify the password. The DVR shows the setup menu, if the password is accepted. |
|  | Space key |

**Table 2-2 Available keys on the remote control in the main menu mode**

| Item | Description |
|---|---|
| ◄ ► | Switch to previous or next options of an item |
| ▲ ▼ | Switch to different items |
| MENU | Save setup and back to the LIVE mode |
| ESC | Back to upper level of menu without saving |
| ENTER | Enter the menu, or display virtual keyboard |

There are icons within the configuration pane on the live mode to operate different features of the DVR. The configuration pane is always on the left or right side of the screen in the 16:9 mode and can to be evoked by right-click in the 4:3 mode.
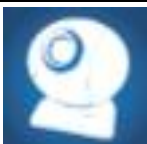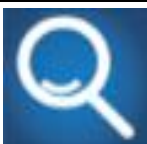


16:9 display, the main menu is on the right side of the screen
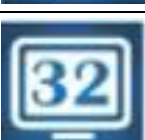


4:3 display, right-click on the screen to evoke the main menu.[1]

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[1] Icons may be slightly different by different models

**Table 2- 3 Description of icons**

| Icon | Description |
|------|-------------|
|  | Evoke the auto sequential menu |
|  | Set the backup menu to backup video data from DVR HDD. |
|  | Set the configuration menu to access recording settings, event settings, camera settings, account settings, network settings, storage settings, system configuration, and information |
|  | Set the time search menu to choose a specific time of the recorded video to playback |
|  | Playback Menu |
|  | Set the event search menu to access the list of events recorded by the DVR. The event list will show the event occurrence time, event category, channel events, and other information. |
|  | Set the PTZ mode |
|  | Focus Mode *1 |
|  | Set the Zoom-in function. The DVR supports zoom-in from 2x to 8x digital zoom |
|  | Set image freeze function |
|  | Disable image freeze function |

| | |
|---|---|
| | Enable/Disable PIP *2 |
| | Switch to single split |
| | Switch to 4-split display |
| | Switch to 9-split display |
| | Switch to 10-split display |
| | Switch to 13-split display |
| | Switch to 16-split display |
| | Switch to 20-split display |
| | Switch to 25-split display |
| | Switch to 32-split display |

*1.Maya V2 Series not support focus mode
*2 PIP not Support **RHD-813B、RHD-1613B、HHD-2013B & DVR-3213B**

## 2-1 Auto Sequential



16:9 display



4:3 Display

| Item | Description |
|------|-------------|
| Interval | The time interval between each channel display |
| All Channels | The DVR automatically switches between channels with designated interval. The DVR shows each channel in a single-split mode. |
| Quad-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 4-split mode. |
| 9-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 9-split mode. |
| 10-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 10-split mode. |
| 16-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 16-split mode. |
| 20-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 20-split mode. |
| 32-Screen Division | The DVR automatically switches between channels with designated interval. The DVR shows channels in 32-split mode. |

## 2-2  Backup

User can backup recorded video data of a specified time frame. The DVR can backup video data to either direct-attached storage, such as DVR or USB drive, or remote folder of a PC.

### 2-2.1  Selection

| Item | Description |
|------|-------------|
| From | The start time of video data to be backed up |
| To | The end time of video data to be backed up |
| Duration | The time duration of backup file |
| All | It can select all channels or clear all selected channels to backup |
| Required Space | Show the size of the backup file |

### 2-2.2  Select  Backup  Device

| Item | Description |
|------|-------------|
| Backup Device | Select target device of backup (USB/DVD-RW/remote folder) 。 |
| Status | The status of target backup device |
| Free Space | The available space in the target backup device. (not available for remote folder backup) |
| Backup | Start backup operation.<br>**Be sure to calculate the size of backup file BEFORE operating backup.** |
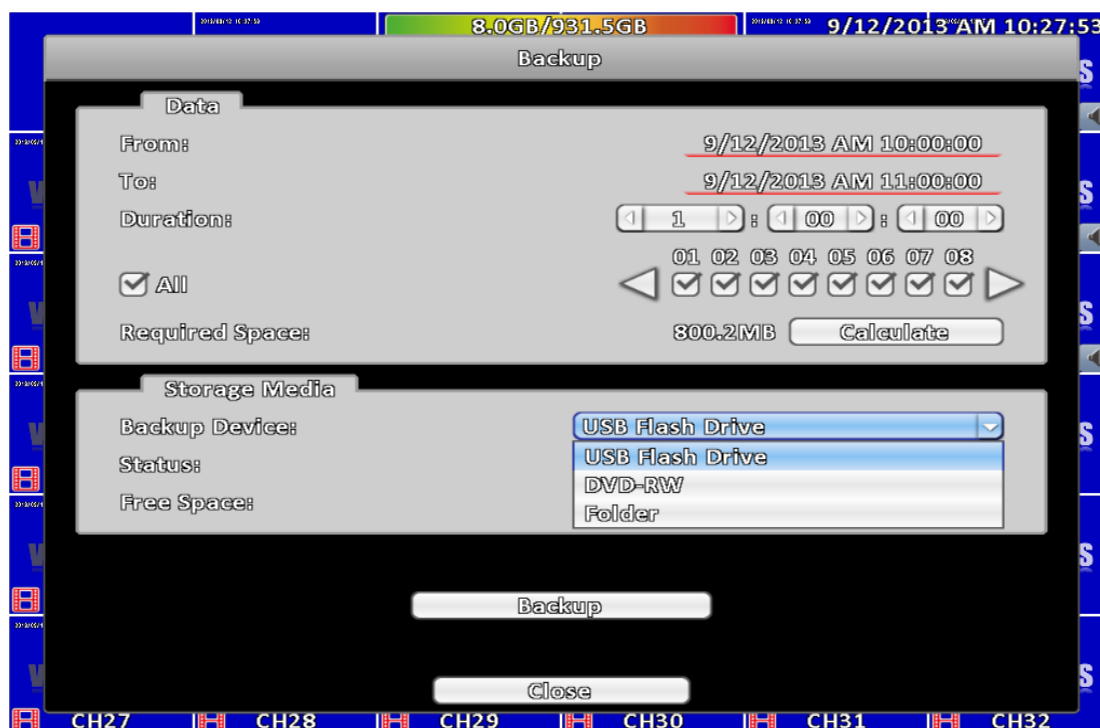


**Do not unplug the USB device or turn off the DVR during the backup process to avoid unrecoverable error.**

## 2-3  Configure

Evoke the configuration menu, recording settings, event settings, camera settings, account settings, network settings, storage settings, system configuration, and information. Please refer to chapter 3 for detail.

## 2-4 Time Search

Time search can search for the specific time of recorded data to playback. Note that dates with recording data are marked with a blue box. System will start playing video of specified time slot. Calendar will be shown by using mouse to click on "year" and "month".

Click "date" to display recording time of that specific date with time bar. You can change time (hour/minute/second) or click on a specific pint of time bar by mouse then press "ok". DVR will playback the recorded data of the specific time.



| Item | Description |
|------|-------------|
|  | Playback button, start playback. |
|  | Select playback time by sliding the position of the cursor to the specified time. The timeline scale is 24 hours. The blue chart represents available video data. |
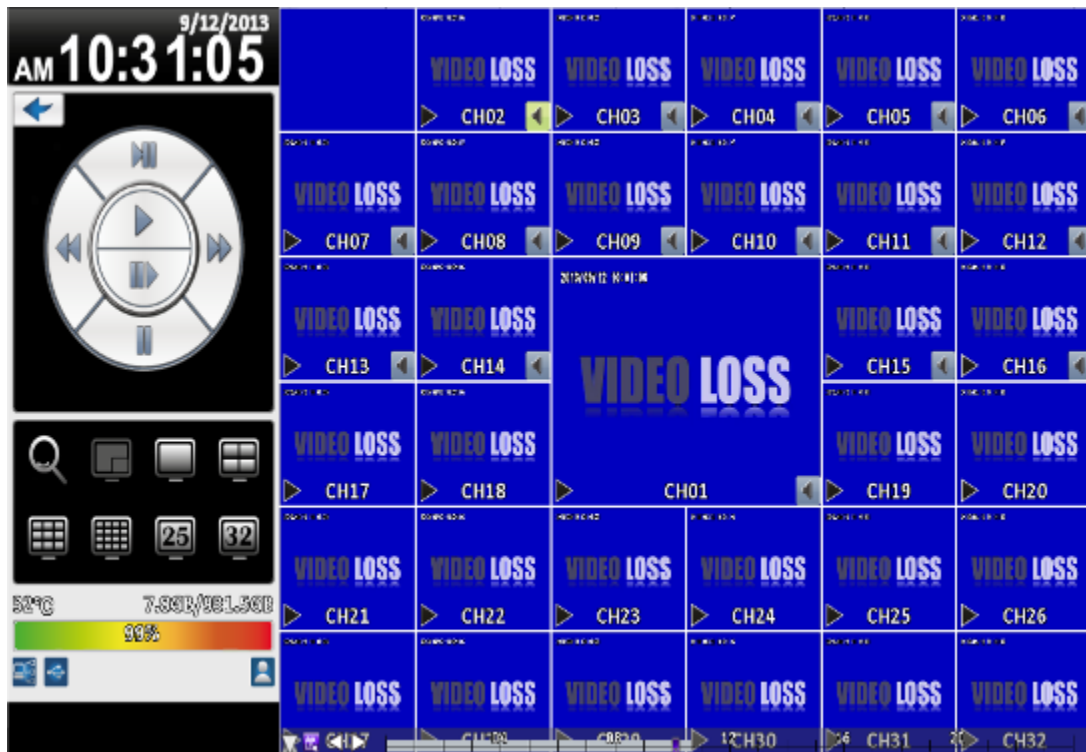
16:9 Display

**Playback configuration**



**4:3 Display**
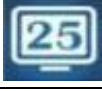
**Table 2-4 Available keys on the remote control functions in the PLAYBACK mode**

| Button | Description |
|---|---|
| **ENTER/ MODE** | Switch to full screen or multi split display. |
| **MENU / ❚❚** | Turn on/off PAUSE. |
| **PLAY** | Playback at normal speed. |
| **▲ / SLOW** | Playback at slower speed. The speed will be slowed to 1/2, 1/4, 1/8 playback speed, by each pressing of the button till the slowest speed. |
| **◄◄ / ◄** | Fast rewind. Each press increases the rewind speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X. |
| **►► / ►** | Fast forward. Each press increases the forward speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X. |
| **▼ / ■** | Stop playback. |

**Table 2-5 The mouse operation under the PLAYBACK mode.**

| Icon | Description |
|---|---|
| | Stop playback, and go to previous page |
| | Play |
| | Pause |
| | Fast rewind, speed 4x, 8x, 16x, 32x |
| | Fast forward, speed 4x, 8x, 16x, 32x |
| | Slow playback, speed 1/2x, 1/4x, 1/8x |
| | Step playback |
| | Zoom-in display, 2x~8x digital zoom |
| | Full screen display |
| | Quad display |
| | 9 screen display |
| | 10 screen display |

| | | |
|---|---|---|
|  | | 16 screen display |
|  | | 20 screen display |
|  | | 25 screen display |
|  | | 32 screen display |

**If you want to monitor single channel, please double-click the preferred channel.**



16:9 Display



4:3 Display
**P.S Can drag a small window**

## 2-4-1  Smart  search

Smart search is the function which allow user to search specified recording area with moving objects and backup, for example: motion…
Selecting specified area which was recorded with motion and triggered by moving objects.
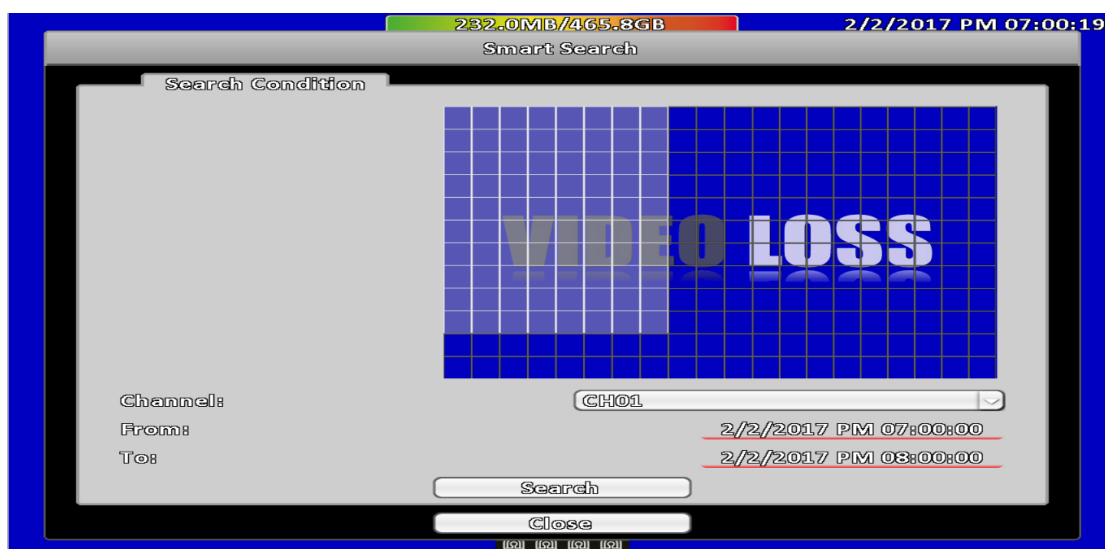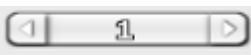
## 2-5  System Logs

The DVR logs events automatically. The event list shows the logged events, event type, event detail, event filter (criteria), and page number of the event list. If the event video is logged, there is a gray video symbol "►" on the left of the event. Move the cursor to event line and press "ENTER", or double-click mouse button, DVR playback this record video related to the event.
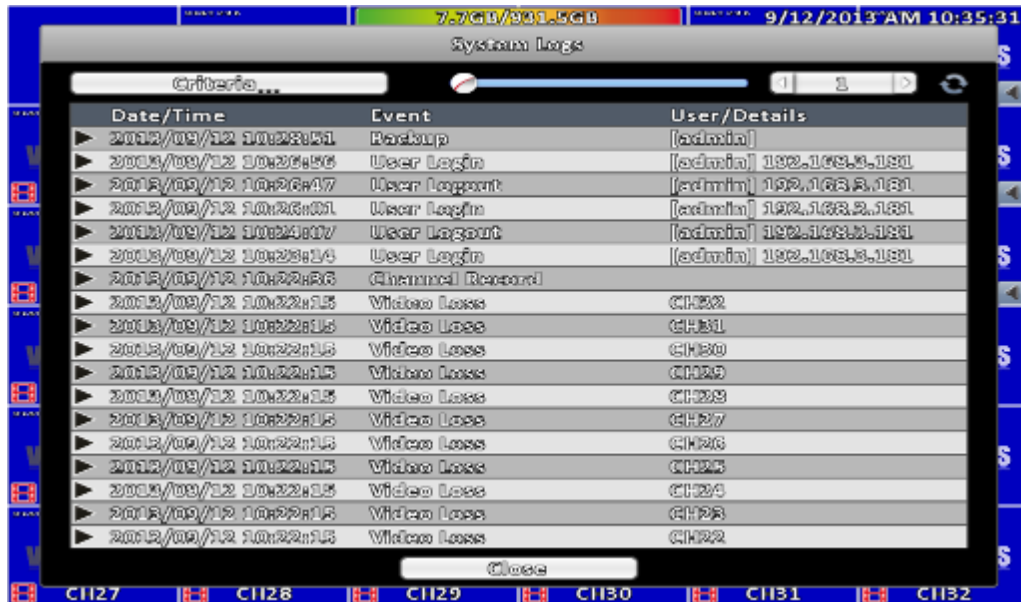


**Note: If the hard disk is not installed or has not started recording, the DVR will produce the event list, but the user cannot playback the video of a specific event by clicking the event.**

| Item | Description |
| --- | --- |
| Criteria | Set the conditions for the event search |
|  | Slide the slider to choose a page of the event list. The right numbers will show the corresponding page number |
|  | Press left and right arrow keys or enter the page number directly. It will go to the select event page. |
|  | Refresh the event list. |

### 2-5.1 Search Criteria

The number of event is up to thousands, therefore, to set "search criteria" to facilitate rapid classification of events. If the checkbox of start time and end time is checked, the event list will only display the events within the specific time slot. If the user unchecks some events and press the "OK ", the lists will only shows checked events. If you uncheck the channels, the event list will filter out un-checked the channels.
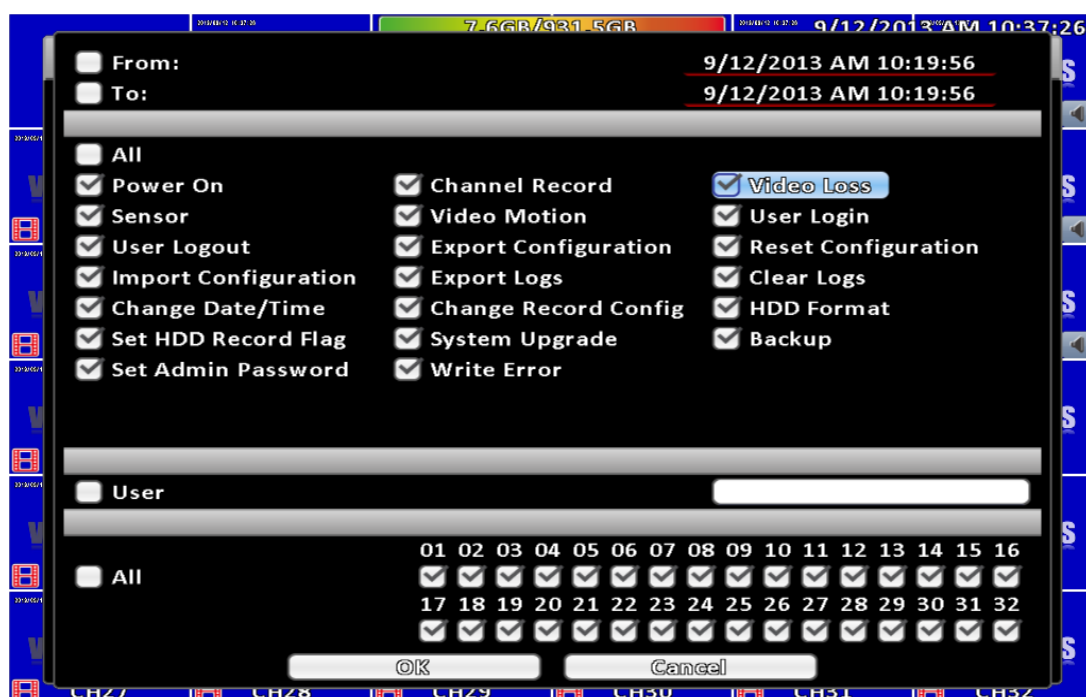
## 2-6  PTZ  Operation

Set up the camera PTZ settings in advance (refer to 3-3.1). Enter the PTZ con-figuration page, PTZ control panel displays the camera PTZ setting. There is a red cross on the center of the screen. Move the mouse to the Red Cross and hold down the left mouse button to the preferred location of the screen. The DVR will move the camera to the preferred place by placing the preferred place to the center of the screen. On the screen to move in any direction. It can control the PTZ camera in the direction.



Rotate only for remote used



**16:9 Display**

**4:3 Mode PTZ configuration**

**UTC Functions :**
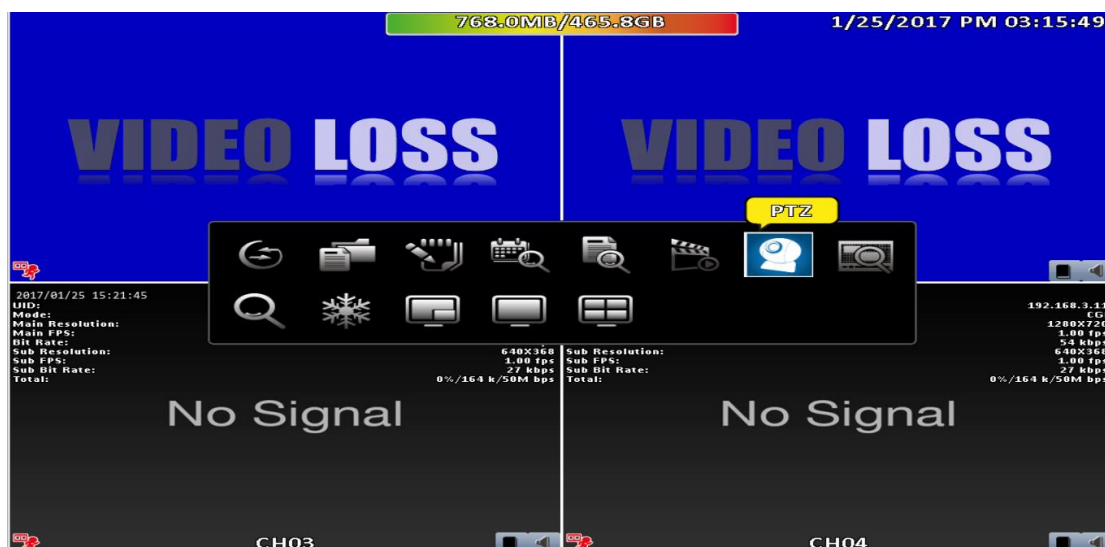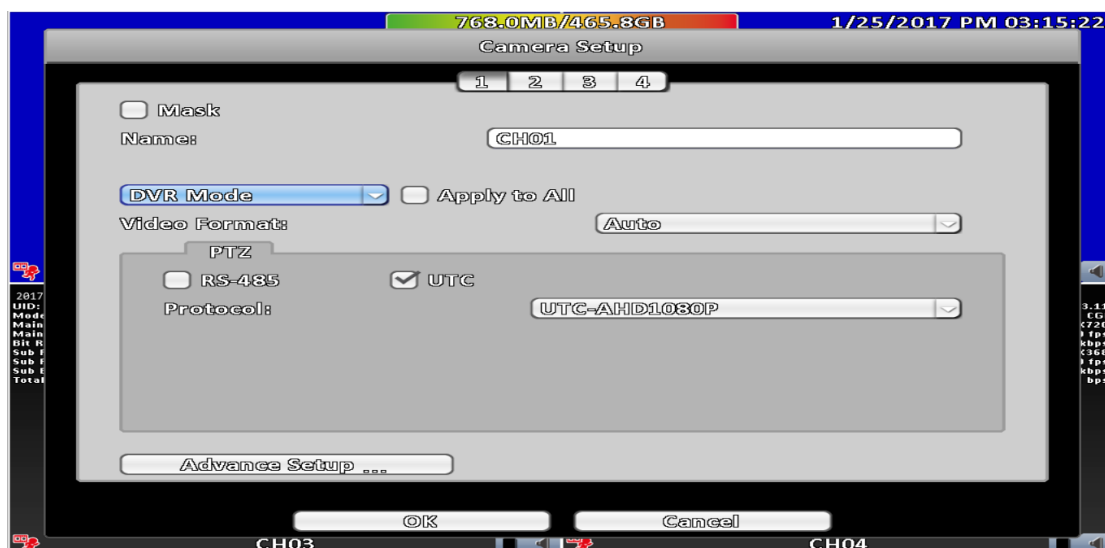
**Table 2-6 Function description**

| Item | Description |
|------|-------------|
| | ZOOM. Press + / - or move the slider to adjust the zoom level. |
| | FOCUS. Press + / - or move the slider adjust the PTZ focus |
| | IRIS. Press + / - or move the slider to adjust the PTZ iris |
| | Press left and right arrow keys to move the camera to the preset locations, and then press  to set current camera location to default point. |
| | Press left and right arrow keys to move the camera to the preset locations, and then press  to change the camera to next preset point. |
| Rotate Video | Make the display upside down |

## 2-7  Zoom

In the digital zoom mode, users may use the mouse to move the red rectangle of the zoom area.



**16:9 display zoom**



4:3 display zoom

**P.S Can drag a small window**

| Item | Description |
|---|---|
| ⊕ | Zoom-in the area specified by the red rectangle. |
| ⊟ | Zoom-out the area specified by the red rectangle. |
| ↩ | Exit zoom mode |

## 2-8 Shortcut toolbar

Real-time monitoring mode, move your mouse over the window function column appears above its fast operation



| ICON | Description |
|------|-------------|
| 🔒 🔓 | User login / logout: Auto lock is used. |
| ℹ | System Information: The host model, version, IP location, MAC values and hard disk information. |
| 🖥 | Wide screen switching: Switch 4:3 / 16:9 monitor display. |
| 📷 | Screenshot. |
| 🎞 | Turn on / off recording. |
| ▣ | Full screen. |
| ⚙ | Options: Change the PC side screen shots, video storage path. |
| 🖼 | Network Video Quality: You can follow the PC network bandwidth, adjust the   image transfer traffic. |
| 📋 | Displacement Windows settings. |
| ⌇ | Relays. The user can control the behavior of the relay on the DVR. |

※ recording function, full-screen, options, image quality network for remote use of these four functions

※ screenshots, video features, options, these three features are only available in
"iWatchDVR" use, IE 7/8/9 NOT support

## 2-8.1 network image quality



| Option | Description |
|---|---|
| Low Quality Single Image | Low quality static mode: insufficient bandwidth used for one second about running 1 ~ 2FPS. |
| Low quality | Low quality Dynamic mode: According to the DVR recording settings. |
| High-quality | High-definition single image under static mode: insufficient bandwidth to use for one second about running 1 ~ 2FPS. |
| High-quality | High-definition Dynamic mode: According to the DVR recording settings. |

※ **image fluency: To all actual field-based network environment**

## 2-8.2 Preference
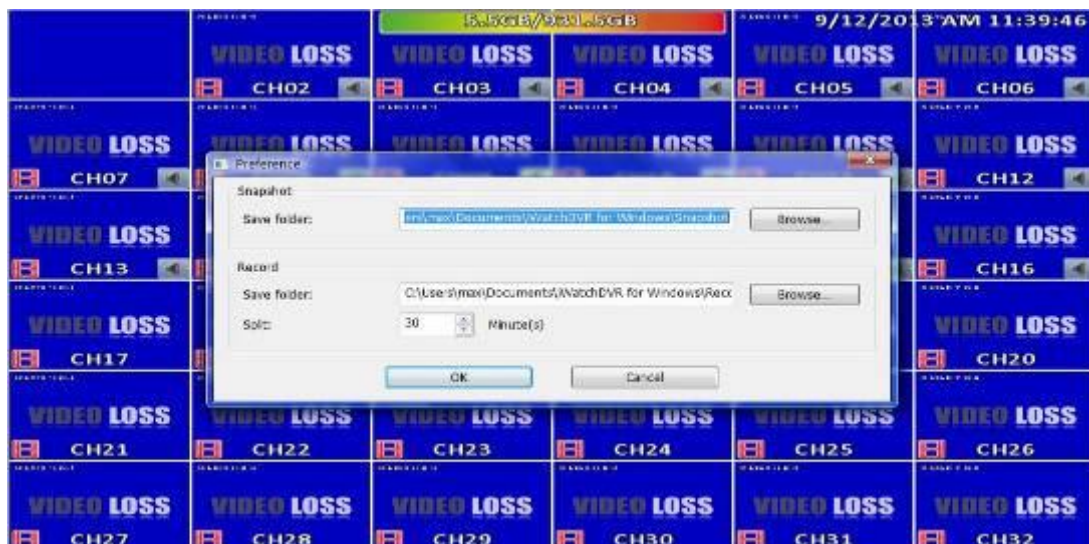
**2-8.3 Popup Setup**
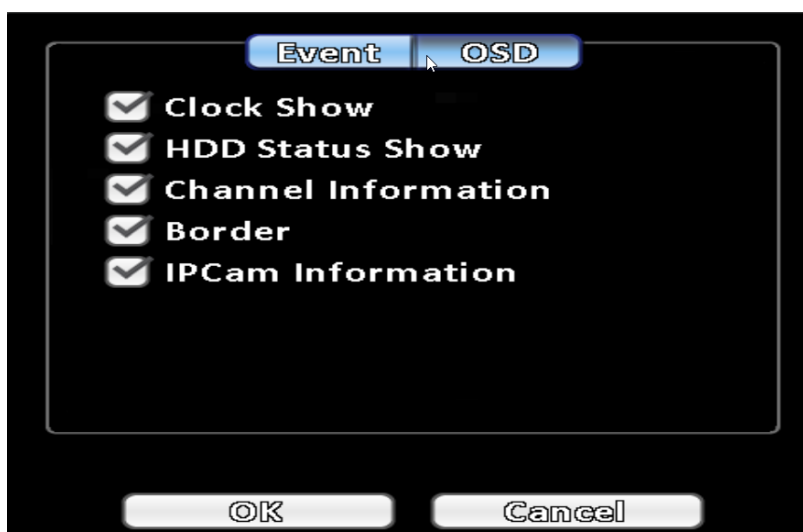




| Item | Description |
|------|-------------|
| Event | Prompt window displays the channel status。 |
| OSD | Display time, HDD status, channel information, channel border. |

## 2-8.4 Relay Setup
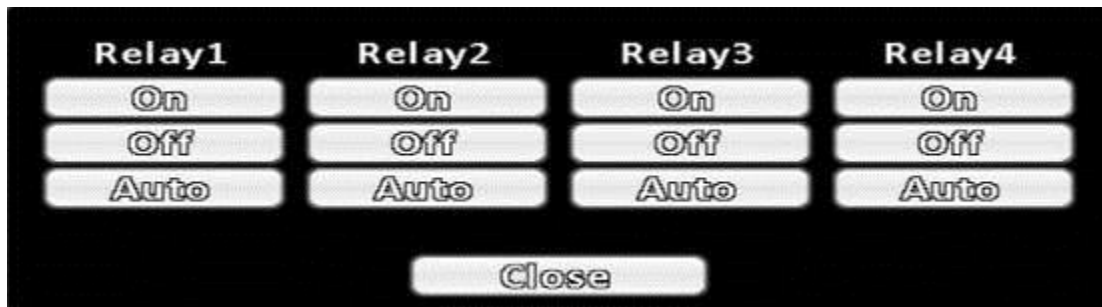


| Option | Description |
|---|---|
| Relay 1 ~ 4 | Relay<br>J Series x1, N Series x2, B Series x4. |
| Functional | open, close, automatically |

# Chapter 3        CONFIGURATION MENU



*PS. The initialization of new-installed HD is required before recording, please refer to "**UTILITY SETUP**" for detail.*

## 3-1  Record  Setup
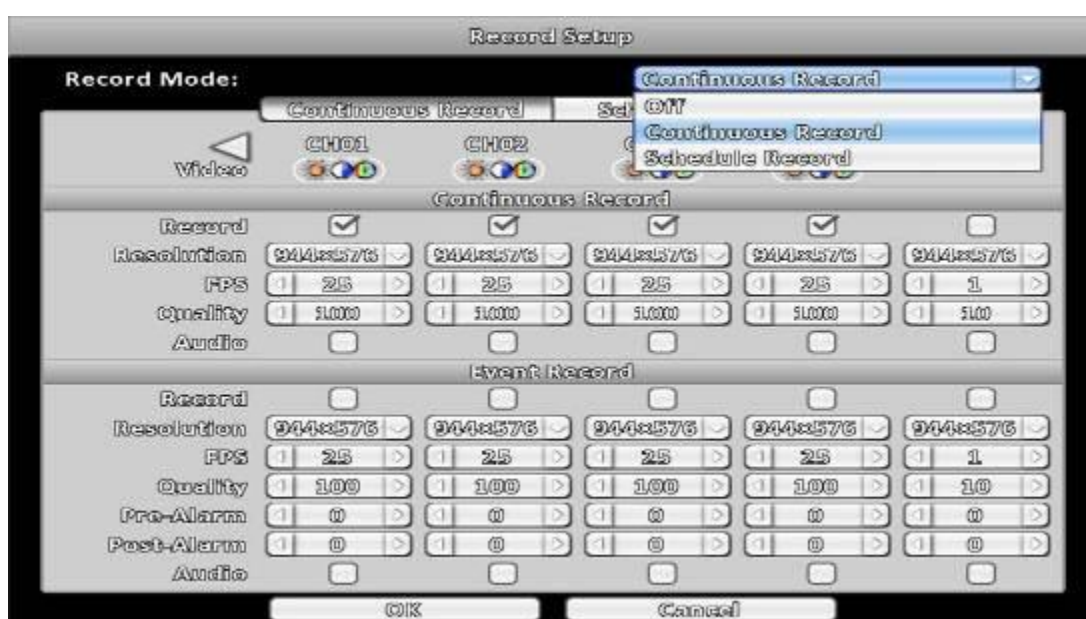


| Item | Description |
|---|---|
| Record Mode | Continuous Record/ Schedule Record/ Stop Record |

### 3-1.1 Continuous Record



| Item | Description |
|------|-------------|
| Video | Click [icon] icon, it will go to the video setting menu of this channel (below). In settings menu, press [icon] to save, press [icon] to go back to the original video settings menu *1 |
| Record | Enable / Disable recording for this channel |
| Resolution | Recording resolution selection *2 |
| FPS | Select recording frame rate, from 1 to 30 |
| Quality | Recording quality, from 10 to 100. The larger number means the better quality |
| Audio | Enable / Disable recording audio |

Note 1: Channel Source is "HD signal" no function

### 3-1.1.1 Video Settings



**16:9 display video settings**



4:3 display video settings

| Item | Description |
| --- | --- |
| Sharpness | Adjust sharpness from 0 to 255 |
| Brightness | Adjust brightness from 0 to 255 |
| Contrast | Adjust contrast from 0 to 255 |
| Saturation | Adjust saturation from 0 to 255 |
| Hue | Adjust hue from 0 to 255 |
| Volume | Adjust volume from 0 to 255 |

### 3-1.1.2 Event Recording

| Item | Description |
|------|-------------|
| Record | Enable / Disable recording of a channel |
| Resolution | Recording resolution selection *2 |
| FPS | Select recording frame rate from 1 to 30 |
| Quality | Recording quality from 10 to 100. The larger number means the better quality |
| Pre-Alarm | Set the record seconds before the event, from 0 to 5. |
| Post-Alarm | Set the playback seconds after the event, from 0 to 100 |
| Audio | Enable / Disable audio recording of event record of the specified channel. |

Note 2: Different models have different resolution settings

| Input Setting | Resolution | | |
|---------------|------------|------------|------------|
| NTSC (HD) | 1920 x 1080 | 1280 x 720 | 640 x 360 |
| NTSC (960H) | 944 x 480 | 704 x 480 | 472 x 240 |
| NTSC (D1) | 704 x 480 | 704 x 240 | 352 x 240 |
| PAL (HD) | 1920 x 1080 | 1280 x 720 | 640 x 360 |
| PAL (960H) | 944 x 576 | 704 x 576 | 472 x 288 |
| PAL (D1) | 704 x 576 | 704 x 288 | 352 x 288 |

### 3-1.2 Schedule Recording

Schedule recording can configure recording time by days of a week and hour. With the A, B, C, D four settings, users can set different recording scheme according to different configuration needs. In the day and time grid map, select the schedule time zone, and then press A, B, C, D one of the buttons to specify the video settings.



### 3-1.2.1 Configuration
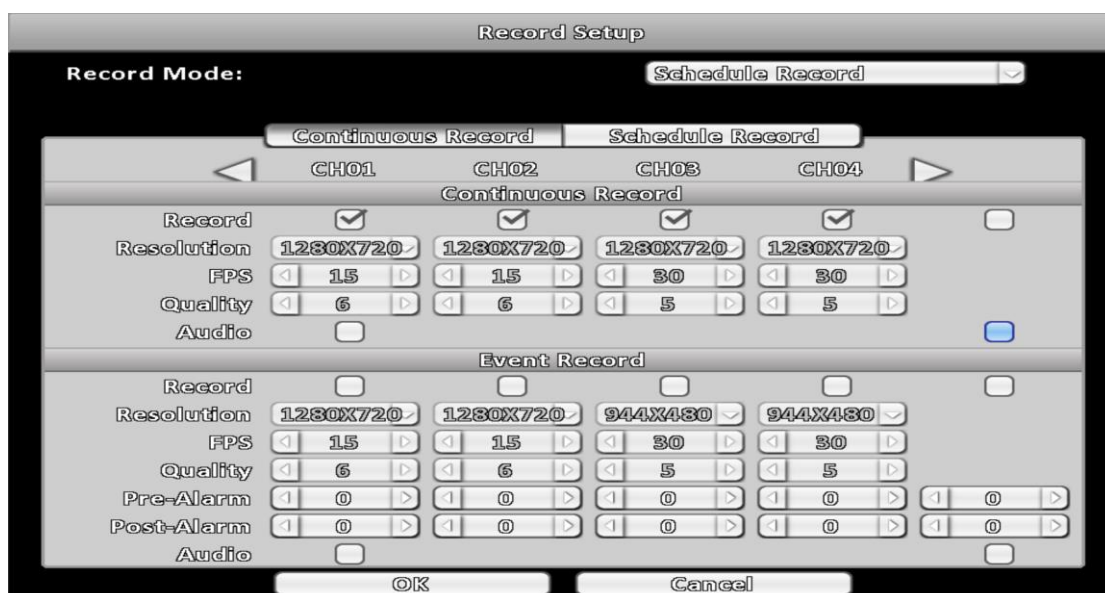


| Item | Description |
|------|-------------|
| Name | Change the recording name of the channel |

For the rest, please refer to 3-1.1 Continuous Record

### 3-1.2.2 Holiday Configuration

The number of holiday is up to 50. When the time comes to the specified holidays, the DVR will start recording according to holiday configuration.

Since holidays are different by different country and region, users can setup holidays according to user needs.

## 3-2  Event  Setup

### 3-2.1  Video  Loss



#### 3-2.1.1  Configuration

| Item | Description |
|------|-------------|
| Enable | Enable / Disable video loss detection function |

#### 3-2.1.2  Event  Handling

| Item | Description |
|------|-------------|
| Log | Write to event log when the video loss event happens. |
| Event Record | Select channel for event recording when event occurs. The video setup corresponds to the "Configuration → Recording Settings → Event Video Recording" (refer to 3-1-1-2 Event Record) |
| Popup | In the live mode, if video loss of a channel is detected, it will pop up the channel full screen. You can specify a warning window display, 1: the main screen, 2: the second screen.*1 |
| Popup Channel | When an event occurs, pop up the specified channel. |
| Buzzer | Specify the DVR behavior of whether to activate the buzzer when an event occurs. |
| Relay | Specify the DVR behavior of whether to activate the relay when an event occurs. |
| PTZ | Specify the DVR behavior of whether to change to the PTZ control mode to the specified channel when an event occurs. |
| Go Preset | Moves the camera to the specified preset point when an event occurs. |
| Resume Preset | Moves the camera back to the specified preset point when an event is finished. |

*1  Only  for  Maya  V2  Series

### 3-2.1.3 Receiver Setup
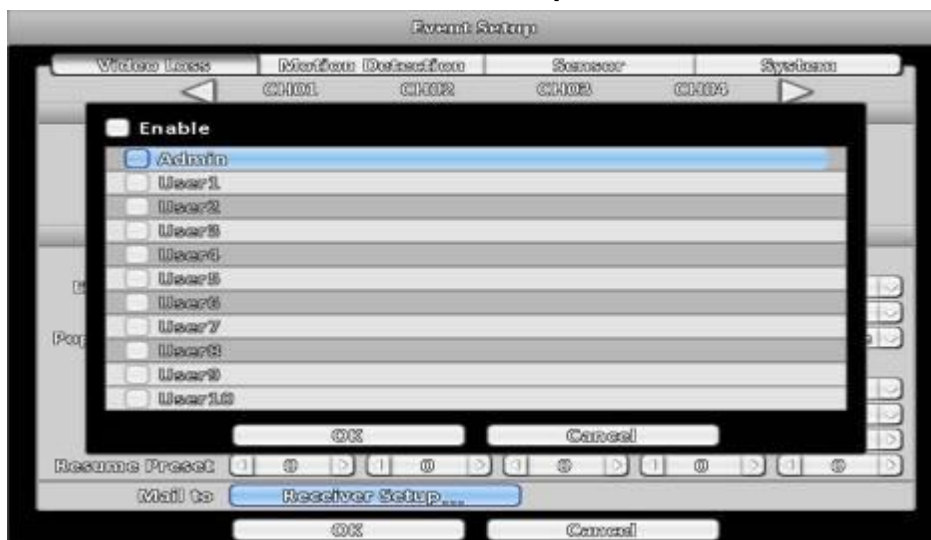


| Item | Description |
|---|---|
| Enable | Specify whether the DVR sends e-mail notice to specified users when an event occurs. |
| Admin / Users | Specify the receiver of e-mail notices |

## 3-2.2 Motion Detection
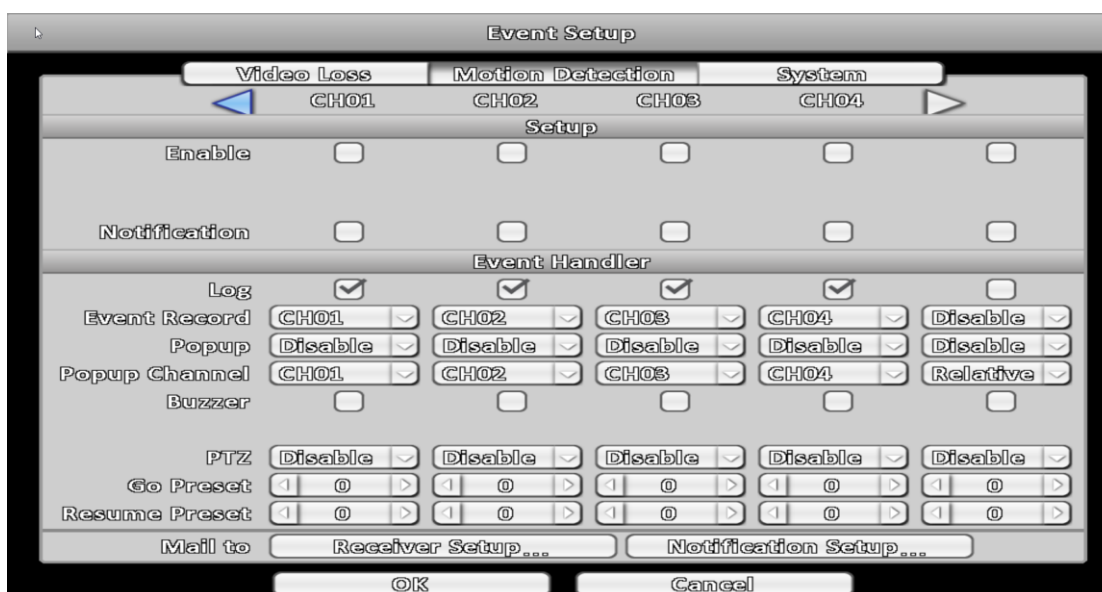


### 3-2.2.1 Configuration

| Item | Description |
|---|---|
| Enable | Enable / Disable the motion detection function of this channel |
| Sensitivity | The sensitivity value is from 0 to 100. The higher value means higher sensitivity. |
| Motion Area | Enter to setup motion detection area |

### 3-2.2.1.1 Motion Area Setup

The motion detection has been divided into 22 x18 grids. The default detection area is full screen. The screen is marked in transparent for detection area and grey for disabled area of motion detection.
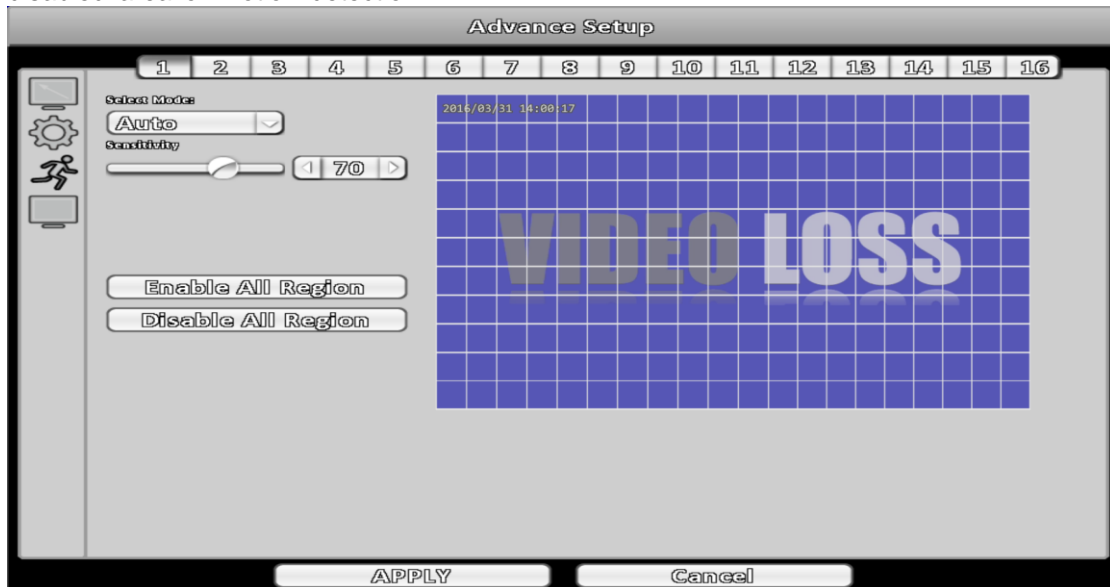


**16：9 display**

| Item | Description |
|------|-------------|
| CH01~ CH32 | Select Motion detection channel。 |
| Mask Mouse Selection | Switch between "select" and "deselect" for cursor-dragging function |
| Detect All Area | Select entire screen as detection area. |
| Mask All Area | Deselect entire detection area. |
| Apply to All | Apply the current settings to all channels |
| Exit | To leave and save settings |
| Close | Close and save the area settings menu. |

### 3-2.2.2 Event Handling

Please refer to 3-2.1.2 Event Handling

### 3-2.2.3 Receiver Setup

Please refer to 3-2.1.3 Receiver Setup

## 3-2.3 Sensor



※ Each sensor name can be modified and remotely can enter various languages

### 3-2.3.1 Configuration

| Item | Description |
| --- | --- |
| Enable | Enable/Disable sensor |
| Polarity | N.C: Sensor has not been triggered. When connected, sensor will be turned on |
| | N.O: Sensor has been triggered. When connected, sensor status will be turned off |

### 3-2.3.2 Event Handling

Please refer to 3-2.1.2 Event Handling

### 3-2.3.3 Receiver Setup

Please refer to 3-2.1.3 Receiver Setup

### 3-2.4 System

When the system event occurs, give a notice or warning according to the settings of relay, buzzer, and receiver. If the buzzer box is checked, the buzzer continually beeps for only errors related to the video (such as hard drives cannot write or not install the hard drive). The buzzer does not beep when other system events, such as login, log out or boot, etc., occurs.
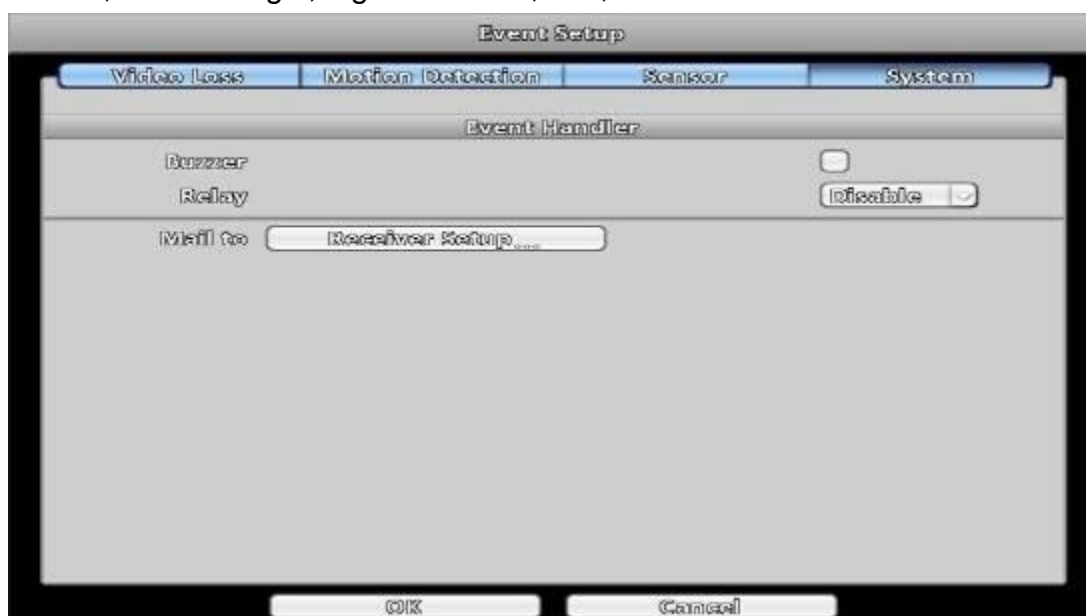


| Item | Description |
|------|-------------|
| Buzzer | Specify whether the buzzer beeps when a recording error occurs. |
| Relay | Specify the relay to be Set when an event occurs. |

### 3-2.4.1 Receiver Setup

Please refer to 3-2.2.3 **Receiver Setup**.

## 3-3 Camera Setup
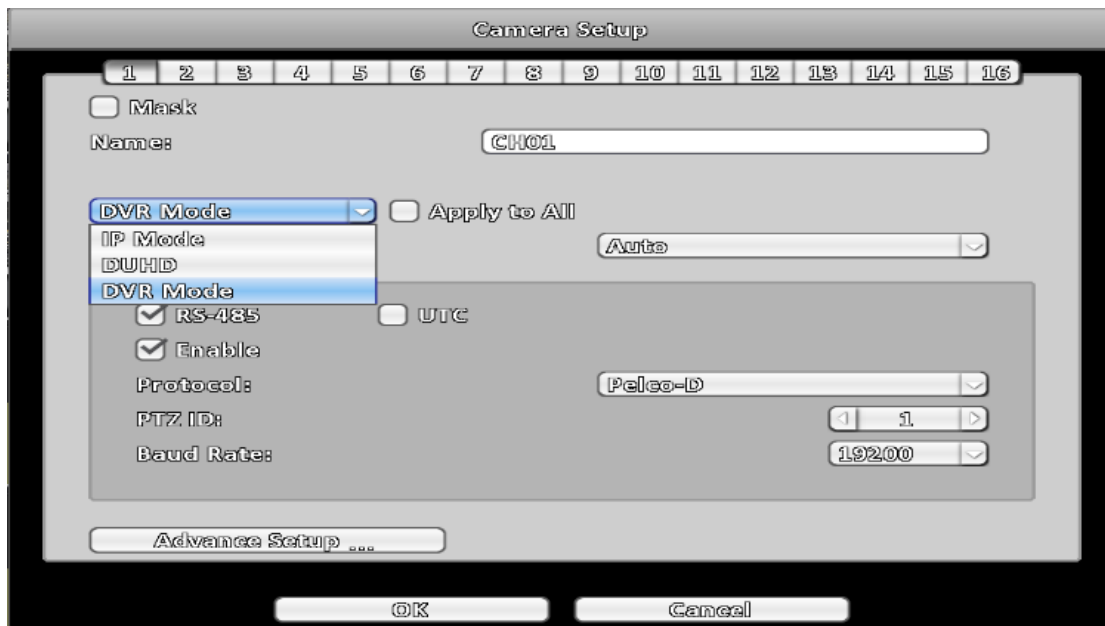


Please choose your camera mode.

### 3-3.1 DVR Mode
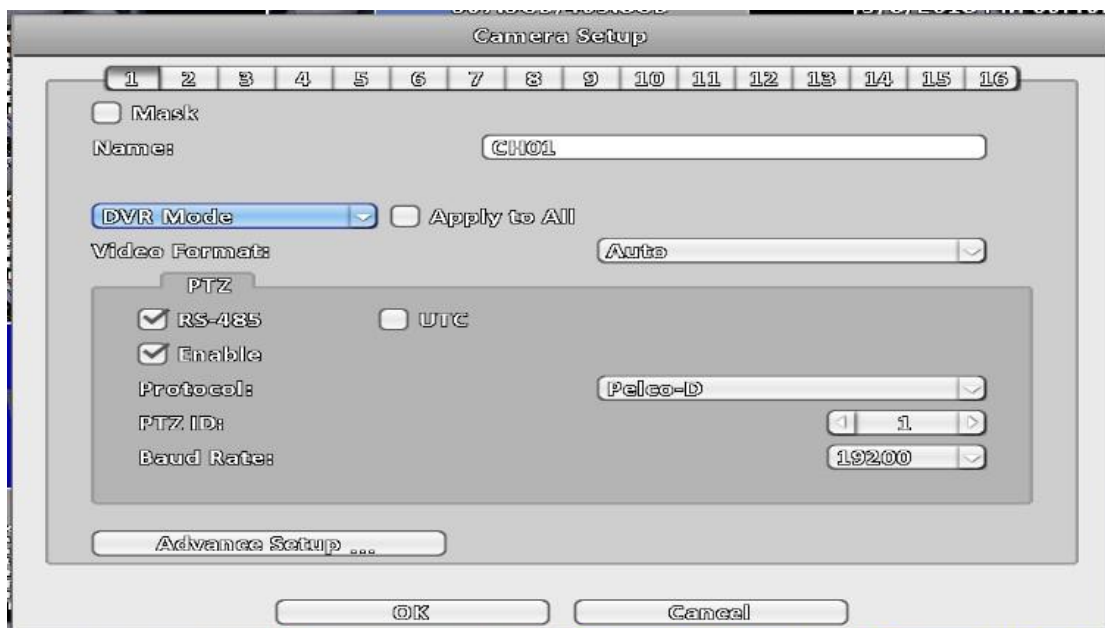


| Item | Description |
|---|---|
| Enable | Click the box to Enable/Disable PTZ function. Or to enable UTC for camera which support this function |
| Protocol | Set up the protocol of PTZ cam. The supported protocol are: PELCO-D、PELCO-P、Merit LiLin 1、Merit LiLin 2、SAMSUNG、 LG-MultixE |
| PTZ ID | Set up PTZ ID. The valid ID value is from 0 to 255. |
| Baud Rate | Select Baud Rate of PTZ control protocol from 2400, 4800, 9600,19200 |

## 3-3.2 IP Mode



| Item | Description |
|---|---|
| Remote Connection | It must be selected to active IP mode |
| Camera Set | Searching IP cam or DVR in the same segment of Network |
| Protocol | Select protocol of IP-based devices. ONVIF protocol is supported |
| IP | IP address of remote device |
| Port | Which port allocate in the IP address. Default is port 80 but you should change it to the correct one. |
| UID | P2P User ID number of remote device |
| User Name | User name of the remote device |
| Password | Password of the remote device |

### 3-3.3 DUHD Mode





| Functions | Description |
|---|---|
| Image | It allows you to modify Brightness, Contrast, Saturation and Sharpness. |
| Infrared Cutoff Filter | It allows you to switch B&W mode or color image. |
| BLC | Backlight compensation. |
| De Noise | It allows to reduce noise with live image. |
| Exposure | It allows to change the shutter speed & iris of live image, the value |

| | also means EV. |
|---|---|
| WDR | Wide Dynamic Range for image. |
| DIS | Digital Image Stabilization, the purpose is to reduce the blur image during vibrating of camera. |
| AWB | Auto wide balance of image |
| Defog | It allows you to get more clear view with fog environment. |
| Mirror Mode | User could reverse the image via this function. |

## 3-4 Account Setup

You can set the user password and permissions of 10 user accounts (1 admin + 10 users). These different accounts gives users different permissions of DVR features.

### 3-4.1 Administrator

The default admin account and password is **"admin"** and "**123456**"



| Item | Description |
|---|---|
| Enable | Check to activate the user's account. |
| Expire | Set the expire date of the user account |
| Name | Set up the username |
| Password | Set up the password. The password can be mixed of letters and numbers and is case-sensitive. |
| e-Mail | Set up user email |

### 3-4.2  Other Users
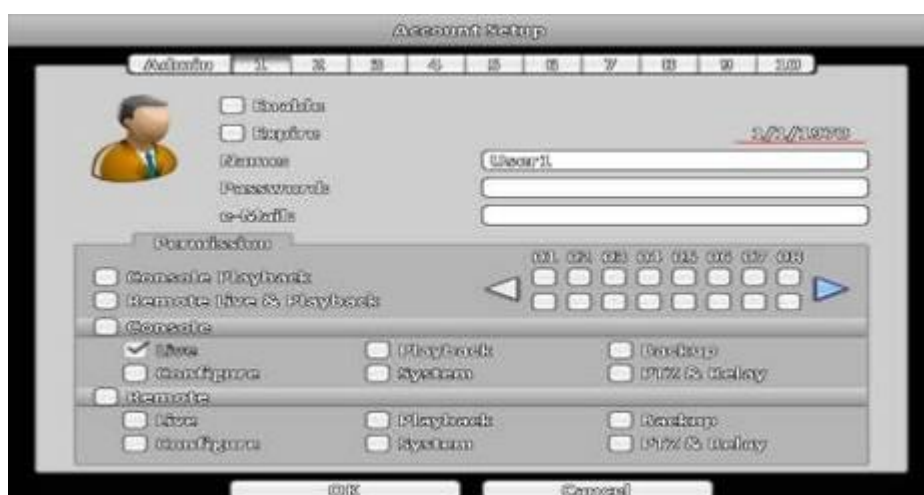


| Item | Description |
|------|-------------|
| Enable | Check to activate the user's account. |
| Expire | Set the expiration date of the user account |
| Name | Set up username |
| Password | Set up the password. The password can be mixed of letters and numbers and is case-sensitive. |
| e-Mail | Set up user email |

#### 3-4.2.1  Permission

The Account Setup is set to provide individual user role-based permissions, including access to Setup menu, Network operation, PTZ function, Playback, Utility, Backup, Password expiration date and Mask on specific channels while playing back.

| Item | Description |
|------|-------------|
| Console Playback | Allow the permissions to playback channel in local side |
| Remote Live & Play-back | Allow the permissions to live monitor/playback channel in remote side |
| Console | Allows the permissions to operate in local side (Live, Playback, Backup, Configure, System, PTZ) |
| Remote | Allow the permissions to operate in remote side (Live, Playback, Backup, Configure, System, PTZ) |



※ use of local, remote permissions, respectively, the option must be checked, otherwise it will not work

## 3-5 Network Setup



| Item | Description |
|------|-------------|
| DHCP | The DVR retrieves from a DHCP server automatically. |
| Static IP | Set up a Static IP address of the DVR. |
| PPPoE | Set up the username and password for PPPoE connection. |
| 3G Setup | Set up the login configuration of 3G connection |
| HTTP Setup | Set up the HTTP configuration for remote access. |
| DDNS | Set up the DDNS configuration. |
| NTP | Set up the NTP configuration |
| Mail Setup | Set up the mail sending configuration |
| FTP Setup | Set up the FTP configuration |

### 3-5.1 Networking Setup

There are three ways to connect to the network.

### 3-5.1.1 DHCP Setup

When DHCP is selected, IP address will be assigned by DHCP server automatically.
Notice: The IP address shown in this page is not the IP address obtained from the DHCP server.
The IP obtained from the DHCP server shown in the System Information Page.



### 3-5.1.2 Static IP Setup

Setup Static IP for network connection, the following information is required.



| Item | Description |
|------|-------------|
| Enable | Enable / Disable Static IP function。 |
| IP | Enter the static IP address provided by ISP |
| Subnet Mask | Enter IP address of Subnet Mask provided by ISP |

| | |
|---|---|
| Gateway | Enter IP address of the Gateway provided by ISP |
| DNS | Enter the DNS address provided by ISP.<br>**(Note: The correct DNS address must be entered for DDNS function).** |

### 3-5.1.3 PPPoE Setup

Select PPPoE for network connection, the following information is required.



| Item | Description |
|---|---|
| Enable | Enable / Disable PPPoE function。 |
| User | Enter user name provided by ISP |
| Password | Enter password provided by ISP |

### 3-5.1.4 3G Setup

Using the USB 3G dongle to access the network

PS: only specific chip of 3G dongle is supported and the 3G dial-up features may not be compatible to some ISPs.

| Item | Description |
| --- | --- |
| Enable | Enable / Disable 3G function. |
| Dial Number | Dial-up Number, offer by the ISP |
| PIN | Enter SIM card password |
| APN | Enter "internet" or other value offered by the ISP. |
| User | Enter ISP username |
| Password | Enter ISP password |

### 3-5.1.5 Bandwidth Limited



| Option | Description |
|---|---|
| Bandwidth | Range : 1~9999 |
| Limited | Kbps 、Mbps |

### 3-5.2 HTTP Setup



| Item | Description |
|---|---|
| Enable | Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated. |
| Port | Enter a valid port value from 1 up to 65535. The default value is 80. |

### 3-5.3 DDNS Setup







| Item | Description |
|------|-------------|
| Enable | Enable / Disable DDNS function. |
| Server | Enter the registered DDNS Server:<br>ez- dns.com 、i-dvr.net 、dyndns.org<br>**ez- dns.com 、i-dvr.net Supports automatic assignment DDNS**<br>When these two DDNS service,<br>The system will automatically bring up to C + DVR Mac Address last six yards at the beginning of a host site,<br>Such as the Mac end of the six yards of FD5CCD,<br>Then bring out the host site at CFD5CCD.i-dvr.net or CFD5CCD.ez-dns.com |
| Host | Enter the full DDNS address.<br>(Including username + Server)<br>If the user name is h.264 and you choose i-dvr as your server, you should enter: h.264.i-dvr.net |
| User | Enter user name. |
| Password | Enter password. |

＊For more detailed I-DVR.NET operation instruction, please refer to appendixⅠ、Ⅱ

### 3-5.4 NTP Setup

Setup he feature of network time synchronization.



| Item | Description |
|------|-------------|
| Automatically Synchro-nize | Check to enable DVR automatic synchronization function when rebooting |
| Update Interval (Hours) | Setup interval for time synchronization |
| Server | Setup time server address |
| Update Now | Update the time information from the NTP server immediately. |

### 3-5.5 Mail Setup

The Mail Setup tab controls the email-sending configuration when the DVR needs to send e-mail to specified users.



| Item | Description |
|---|---|
| Enable | Check the box to enable/disable E-mail Notification function |
| SMTP Server | Set up SMTP Server name and port |
| User | Enter to set up the username. |
| Password | Enter to set up the password. |
| Sender's e-Mail | Enter to set up e-mail address of the sender. |

### 3-5.6 FTP Setup



| Item | Description |
|------|-------------|
| Enable | Check the box to enable/disable FTP function |
| Server | Set up FTP Server name and port |
| User | Enter to set up the username. |
| Password | Enter to set up the password. |
| Directory | Upload FTP directory path |

## 3-6 Storage Setup

### 3-6.1 HDD Setup



※ Click the status bar to change the attributes of the hard disk
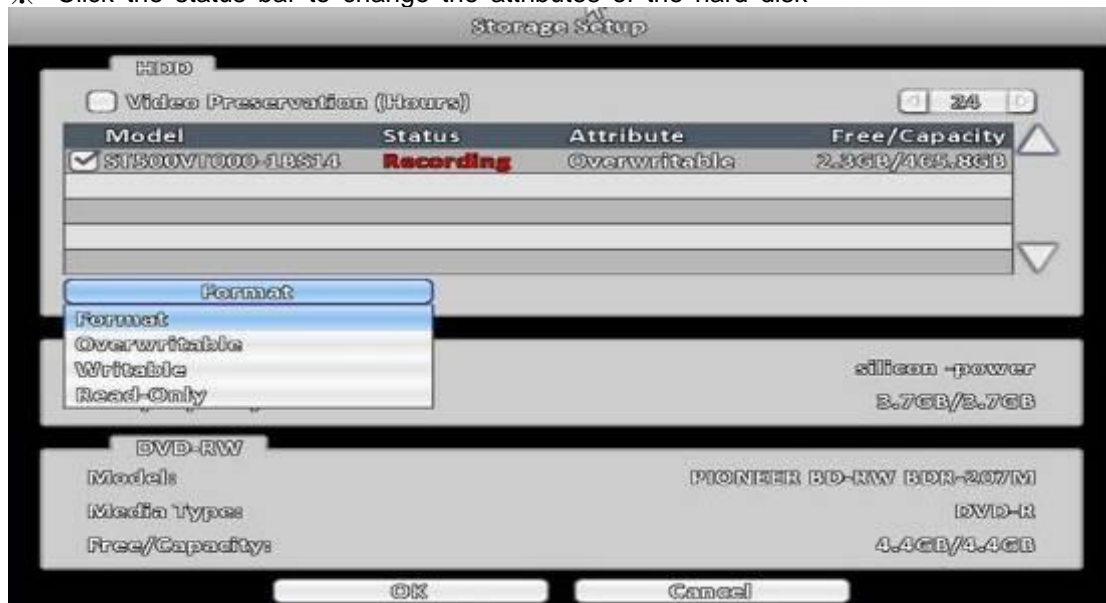


| Item | Description |
|---|---|
| Video Preservation (Hours) | Setup the video preservation period. Recorded video will be deleted automatically after expiry of preservation period. |
| Model | Display HDD model |
| Status | Display HDD status (Recording/Error) |
| Attribute | Display HDD Attribute ( Overwritable/Writable/Read-Only) |
| Free/Capacity | Display HDD capacity (Free/Capacity ) |
| Format | Check the hard disk drive and press "Format", there are four options to set the HDD.<br>Start Format HDD DVR. Status bar "successful" HDD initialization! Enter the menu, there will be all of the hard disk information (model, capacity). |
| Overwritable | Set the hard disk to be replicated state will start to overwrite the hard disk is full. |
| Writable | Set the hard disk as writable state, after the hard disk is full stop writing. |
| Read-Only | Set the hard disk is read-only, read-only cannot be written to the hard disk. |

### 3-6.2 USB Flash Derive Setup



| Item | Description |
|------|-------------|
| Model | Display USB flash drive model |
| Free/Capacity | Display USB flash drive capacity (Free/Capacity ) |

### 3-6.3 DVD-RW Setup



| Item | Description |
|------|-------------|
| Model | Display DVR-RW model |
| Media Type | Display disk type |
| Free/Capacity | Display DVR-RW capacity (Free/Capacity ) |

## 3-7 System Setup

### *RHD Series:*



### *HHD Series*

## *960H Series*



| Item | Description |
|------|-------------|
| DVR Name | The name of DVR to be shown while users login from remote site. |
| Language | Specify the OSD language. |
| Video Format Detection | Specify the format of video signal (auto-detect, NTSC, PAL). The configuration requires DVR reboot to take effect |

### 3-7.1 Auto Lock

| Item | Description |
|------|-------------|
| Enable | Enable / Disable Auto Lock |
| Timeout（Seconds） | Set the number of seconds to wait. It there is no action, the panel will be automatically locked and the DVR logs out current user. When DVR logs out automatically, it only supports basic operations, such as picture freezing, picture, zoom, auto switch channel, screen-split. To enter the setup menu, search menu, backup menu, status query, playback, and other operations, users need to input the username and password to login in. Available timeout value is from 10 to 9999 seconds |

### 3-7.2 Auto Reboot

| Item | Description |
|------|-------------|
| Disable | Enable / Disable Auto Reboot. |
| Every day | Setup the time of daily auto-reboot. |
| Every Week | Setup the time of weekly auto-reboot. |

### 3-7.3 Date/Time Setup



| Item | Description |
|------|-------------|
| Hour Format | 12HOURS/ 24HOURS |
| Date Format | MM-DD-YY/DD-MM-YY/YY-MM-DD |

### 3-7.3.1 Time zone

| Item | Description |
|------|-------------|
| Time Zone Setup | Set up the time zone of the DVR, from GMT - 13 ～ GMT+ 13。 |
| Daylight Saving Time | Enable / Disable Daylight Saving Time |

### 3-7.3.2 Daylight Saving Time Setup



| Item | Description |
|------|-------------|
| Beginning | Setup the beginning time of Daylight Saving Time. |
| Ending | Setup the ending time of Daylight Saving Time. |

### 3-7.3.3 Change Date and Time

Setup date and time of the DVR.

### 3-7.4 Monitor Setup

This feature is only support "Maya v2" series models.

Users have to decide which one is the main screen, which is the second screen.
In the setting can be used when there are three configurations.
In duplicate mode, both monitors display the same content.
In the HDMI (1) VGA (2) mode, HDMI will be the screen 1, VGA will be the screen 2.
In VGA (1) HDMI (2) VGA mode, VGA will be the screen 1, HDMI will be the screen 2.
BNC output terminals are the same as with the contents of a screen 1.
Screen 1 and Screen 2 output can be set separately in the upper left corner of the screen will show the current number.





**Monitor setup**

| Item | Description |
|------|-------------|
| 1、2 | set the main screen (1), the second screen (2) screen display setup menu |
| Resolution | selection screen resolution |
| Border Color | Set the color of border |
| Luminance | Setting brightness, from 0 to 100. |
| Contract | Setting screen display color contrast, from 0 to 100. |
| Saturation | Setting screen display color saturation from 0 to 100. |
| Hue | Tone color tone setting screen displayed from 0 to 100 |

Administrators can set up two separate configuration screen, you can display a live view screen contents, and another replay content. When managers are controlling them one screen, in the upper left corner of CH1 have a mouse icon appears. To switch between the two screens, you can press the shortcut bar dual screen switching button.

### 3-7.5  Input  Setup

The Input Setup allows user's setup input device (Key Tone, Remote control, Panel, Mouse, Keyboard, Touch screen).



| Item | Description |
|------|-------------|
| Key Tone | Enable / Disable Key Tone. |

### 3-7.5.1  Remote  Control  Setup



| Item | Description |
|------|-------------|
| Enable | Enable / Disable remote control. |
| IR ID | Default ID is 0. DVR is controlled by standard remote control; For one to many remote control, remote control on the number corresponding to the DVR numbers (DVR1 → IC01, DVR2 → IC02). |
| Test | Enable / Disable test function. |
| Pressed Key | Display pressed key information. |

### 3-7.5.2 Panel Setup



| Item | Description |
|---|---|
| Test | Enable / Disable panel button test function. |
| Press Key | Display information of the pressed key. |

### 3-7.5.3 Mouse Setup



| Item | Description |
|---|---|
| Speed | Setup the mouse cursor speed. The right side of the slider means faster mouse speed. (Only valid for local configuration) |

### 3-7.5.4 PTZ Keyboard Setup



| Item | Description |
|---|---|
| RS-485 ID | RS-485 ID, valid values range from 1 to 64 |
| RS-485 Baud rate | RS-485 Baud rate from 2400, 4800, 9600, 19200 |
| Keyboard | Select PTZ Keyboard |
| Test | Enable / Disable keyboard test function |
| Press Key | Display press key information |

### 3-7.5.5 Touch Screen Setup



Detects the touch screen



Users can calibrate the touch screen which needs recalibration.

### 3-7.6 Utility Setup



| Item | Description |
|------|-------------|
| Export Configuration | Export DVR configuration to a USB flash drive or a remote PC. |
| Import Configuration | Import configuration from a USB flash drive or a remote PC to DVR. |
| Reset Configuration | Reset system configuration. |
| Export Logs | Save DVR system log to a USB flash drive or a remote PC. |
| Clear Logs | Clear all DVR system log. |
| Upgrade Firmware | Upgrade DVR firmware through a USB drive.<br>Please stop recording and backup DVR configuration before upgrading<br>**System will reboot automatically when the upgrade is done.** |

### 3-7.6.1  Export  Configuration

There are several options for target storage of DVR configuration.

a.  Export to a USB Flash Drive: The default filename is "dvr.cfg"
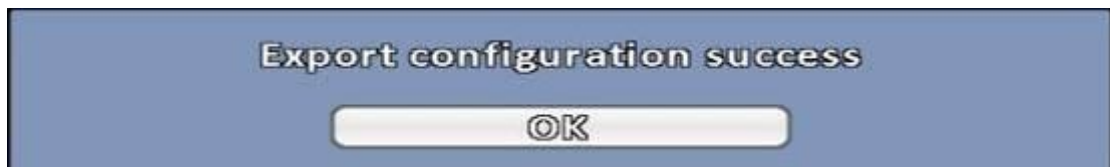






b.  Save *.cfg as PC

### 3-7.6.2 Import Configuration

Import configuration to the DVR from a USB drive or a remote computer.

a. Import from USB Flash Drive: Import the configuration from a USB flash drive.









b. Open *.cfg from PC

### 3-7.6.3  Reset  Configuration

Reset the DVR to default settings.
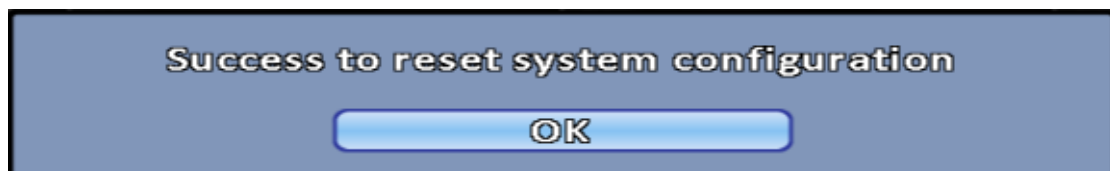




### 3-7.6.4  Export  Logs

a.  Export to USB Flash Drive: Export logs to a USB flash drive. The default file
name is "log.csv"





b.  Save *.csv as PC

### 3-7.6.5  Clear  Logs
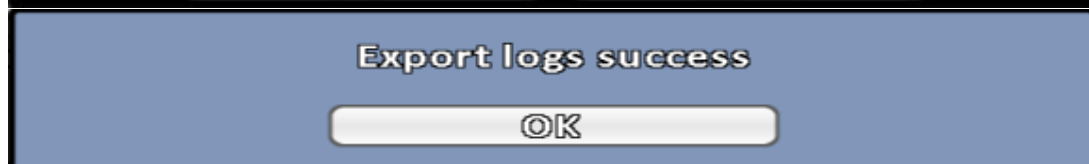
Clear the system logs.
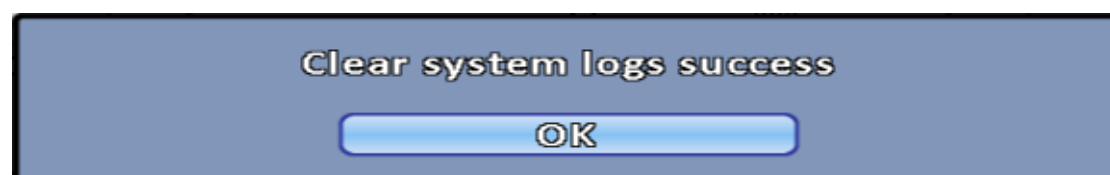
### 3-7.6.6  Upgrade  Firmware
**Notice! DO NOT TURN OFF POWER OR UNPLUG USB DEVICE DURING THE UPGRADE because that may cause incomplete firmware upgrade and damage the DVR.**

a.  Upgrade from USB Flash Drive...: Choose    the firmware from USB flash drive to upgrade
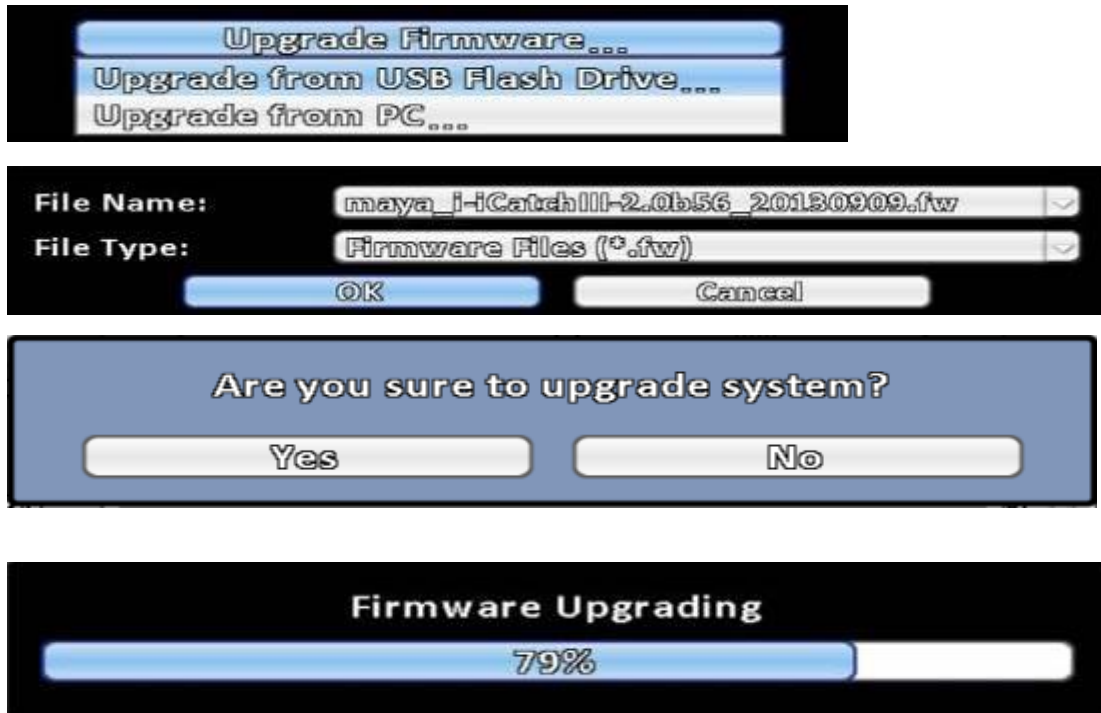








b.  **Upgrade  from  PC  :  Choose    the firmware from PC**

## 3-8 System Information
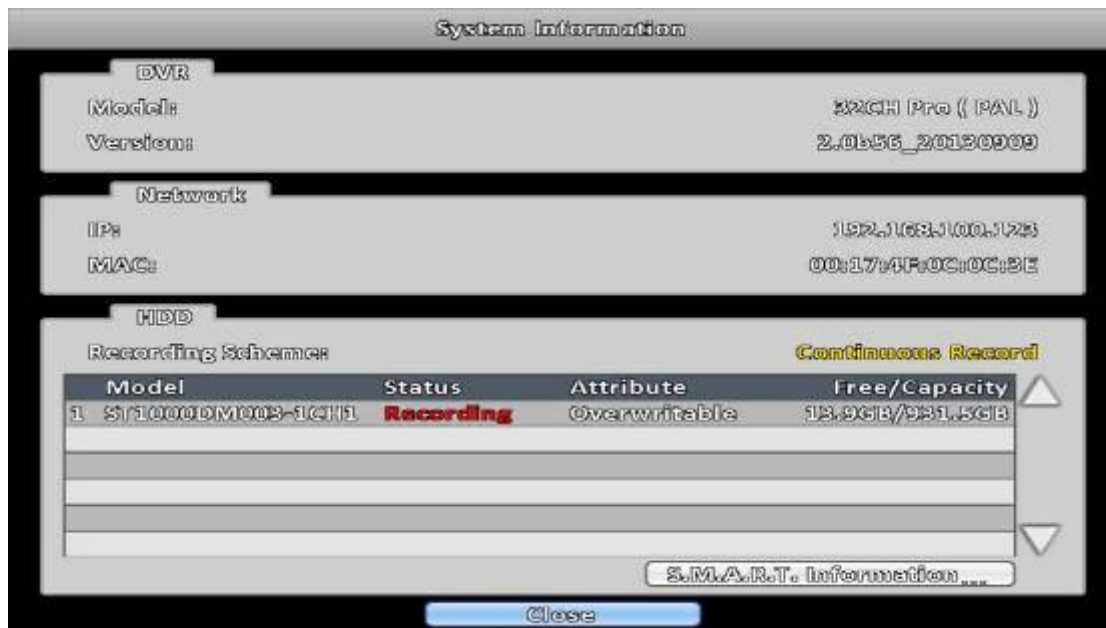


### 3-8.1 DVR Information

| Item | Description |
|------|-------------|
| Model | DVR model name and video type |
| Version | DVR firmware version |

### 3-8.2 Network Information

| Item | Description |
|------|-------------|
| IP | DVR IP address<br>If there is no network connection, it will show "Network is not connected. |
| MAC | The DVR MAC address |

### 3-8.3 HDD Information

| Item | Description |
|------|-------------|
| Recording Scheme | Display installed HDD recording type |
| Model | Display installed HDD model |
| Status | Display installed HDD recording status |
| Attribute | Display installed HDD attribute (Overwritable/Writable/Read-Only) |
| Capacity | Display installed HDD capacity (Free/Capacity ) |

### 3-8.4 S.M.A.R.T Information

**System Information**

**DVR**

| | |
|---|---|
| Model: | 32CH Pro ( PAL ) |
| Version: | 2.0b56_20130909 |

**Network**

| | |
|---|---|
| IP: | 192.168.100.123 |
| MAC: | 00:17:4F:0C:0C:3E |

**HDD**

Recording Scheme: **Continuous Record**

| | Model | Status | Attribute | Free/Capacity |
|---|---|---|---|---|
| 1 | ST1000DM003-1CH1 | Recording | Overwritable | 13.8GB/931.5GB |

S.M.A.R.T. Information...

Close

| ID | Value/Worst/Threshold | Raw |
|---|---|---|
| 01 Raw Read Error Rate | 116 / 99 / 6 | 117232968 |
| 03 Spin Up Time | 97 / 97 / 0 | 0 |
| 04 Start/Stop Count | 100 / 100 / 20 | 8 |
| 05 Reallocated Sector Count | 100 / 100 / 10 | 0 |
| 07 Seek Error Rate | 76 / 60 / 30 | 469152351 |
| 09 Power-On Hours Count | 98 / 98 / 0 | 2588 |
| 0A Spin-up Retry Count | 100 / 100 / 97 | 0 |
| 0C Power Cycle Count | 100 / 100 / 20 | 8 |
| B7 Unkown | 60 / 60 / 0 | 40 |
| B8 Unkown | 100 / 100 / 99 | 0 |

Close

| ID | Value/Worst/Threshold | Raw |
|---|---|---|
| BB Unkown | 100 / 100 / 0 | 0 |
| BC Unkown | 100 / 100 / 0 | 0 |
| BD Unkown | 39 / 39 / 0 | 61 |
| BE Unkown | 68 / 53 / 45 | 538902560 |
| BF G-Sense Error Rate | 100 / 100 / 0 | 0 |
| C0 Power-Off Retract Cycle | 100 / 100 / 0 | 8 |
| C1 Load/Unload Cycle Count | 100 / 100 / 0 | 129 |
| C2 HDA Temperature | 32 / 47 / 0 | 103079215136 |
| C5 Current Pending Sector Count | 100 / 100 / 0 | 0 |
| C6 Uncorrectable Count | 100 / 100 / 0 | 0 |

Close

# REMOTE SOFTWARE INSTALLATION and SETUP

The DVR allows users remotely access and control the DVR from a PC by「iWatchDVR」or IE v6.0 or above.

p.s. The DVR currently supports Windows XP SP2 or above and Windows Vista, Windows 7.

## 3-9 Application Software Connection

Step 1：Enter the IP address of DVR in IE browser.
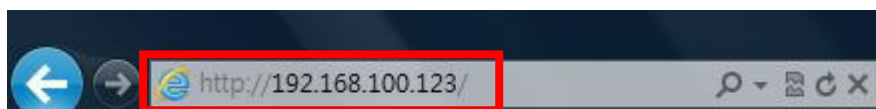


Step 2：Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check the section **"Account Setup**. "
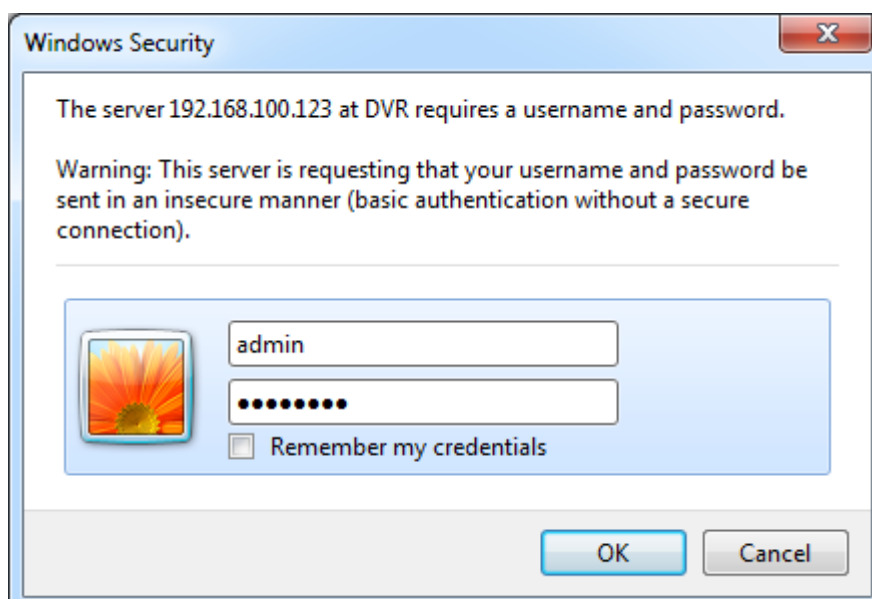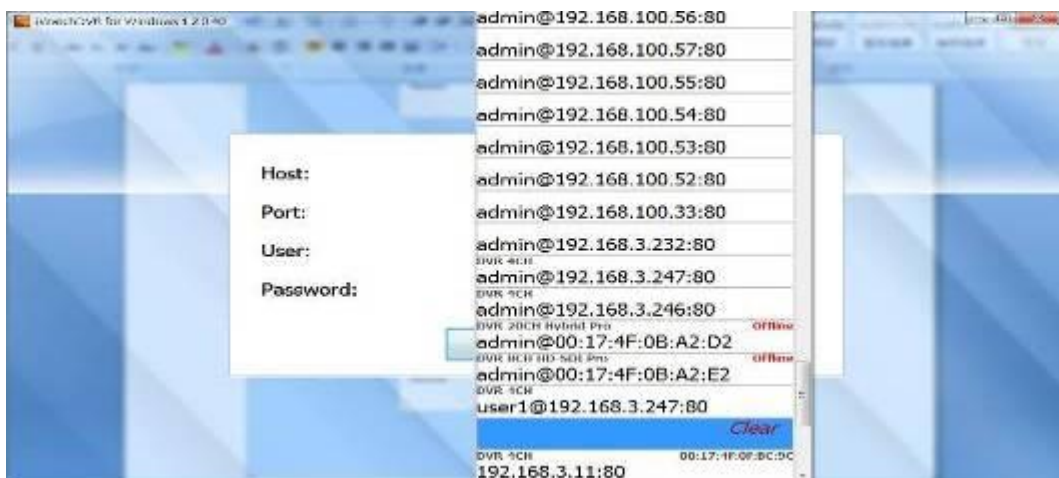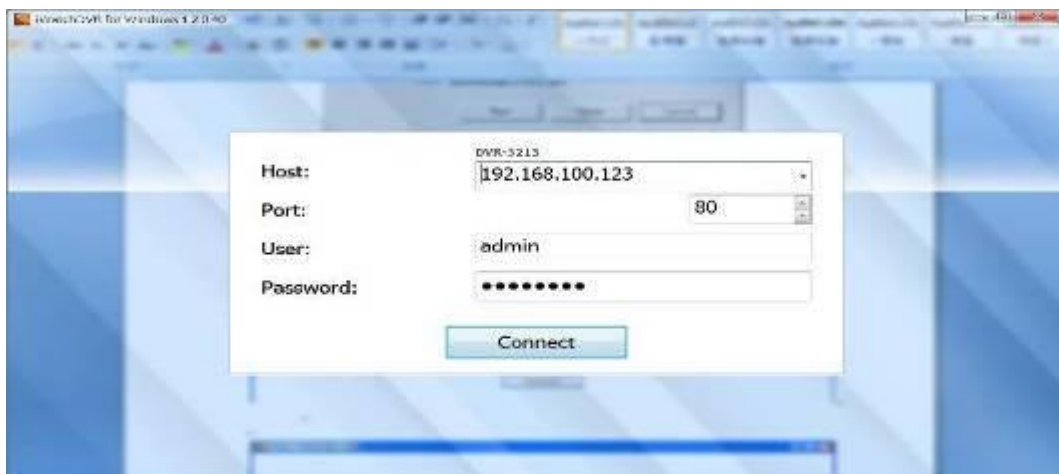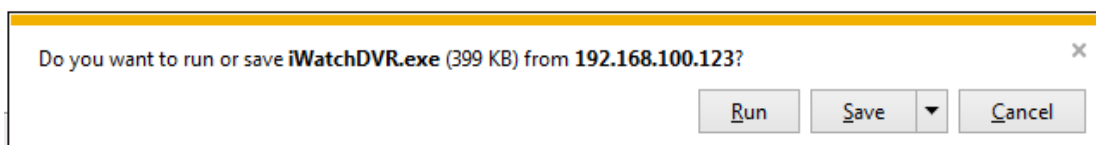


Step 3：Click on the link "**iWatchDVR for Windows XP/Vista/7"** to start downloading

the AP software.



Step 4：The program can be run directly, or save the program to the remote PC and execute later. If you choose to run the software, Start window will be shown up. Please enter information of login DVR: IP, Port, Username and Password.





The drop-down menu can be used to record IP address. Press "Clear" to clear IP address.

Step 5：You've logged into the DVR

## 3-10  IE  Connection

Step 1：Enter the IP address of DVR in IE browser. The address appeared in this image is only
for demonstration. Actual address is depending on the setup of on-site DVR



Step 2：Windows as below will show up. Please enter the user name and password. Default
user name and password is **admin/123456**. Other related setup about user account
and password, please check **"Account Setup**. " The user name and password ap-
peared in this image is only for demonstration. Actual user name and password
depend on the setup of on-site DVR.
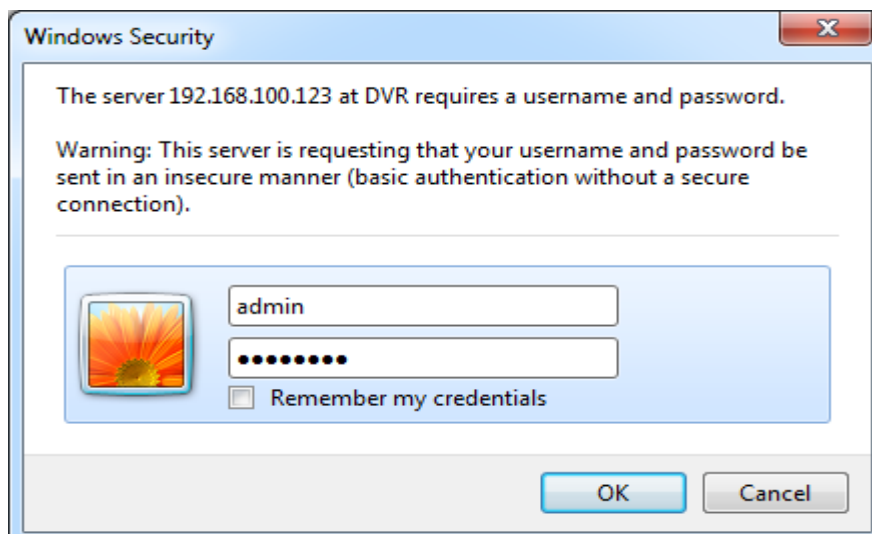


Step 3：Click on**" iWatchDVR for Internet Explorer 7/8/9 ".**

**p.s. There will be IE connection security issue when clicking this link for the first time. Please refer to index III for Remote Monitoring IE ActiveX Control Installation Instruction.**

Step 4：DVR images appear.。Default is 4:3 display.

## 3-11 APP Software Connection(Android for example)

1. Go "Google Play" or APP store (iOS) to download the "SoCatch".

2. Press the "New" icon in the upper right corner to add a new connection.

3. Give a Name of this connection and input network address、port (default:80)、Username (default：admin) and Password (Default：123456), or press "Lan Search IP" to search DVR/IP CAM IP in the same network.
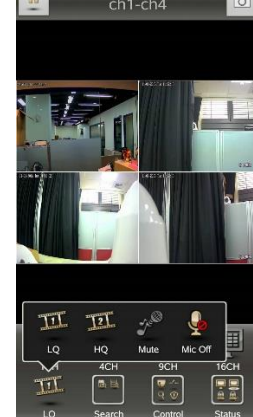
4. Devices in the same network segment are going to be found and you can pick one of them but only the device which Swift Connection supported can be show on the screen.
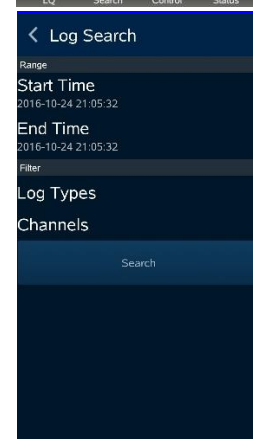
5. Multiscreen can be chose in Live view

6. Video quality 、mute and unmute audio
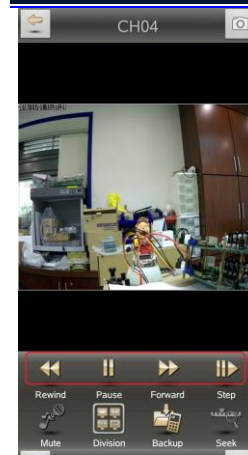
7. Searching by Time or Log files

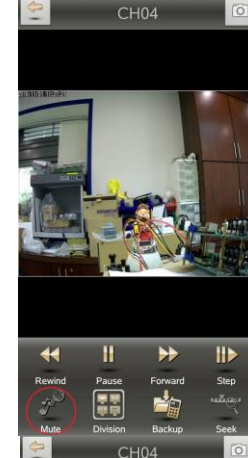8. You can search by time or event (log type) in the log search.

9. Highlights in the monthly calendar are those days which has video recording. Pick one of them and choose a start time to watch the recording.
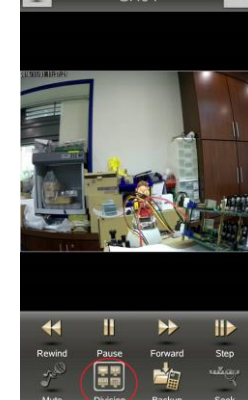


10. Play Rewind、Forward、Pause and Start/Stop



11. Mute and unmute the audio
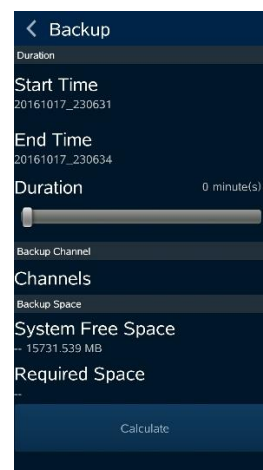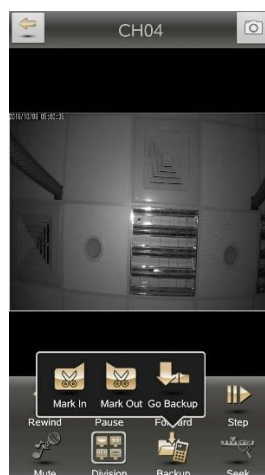


12. Multiple screen selection

13. Choose a section of the re-
coding and back it down to
your device
    i. Mark In/out ： Press
    "Mark In" to set start
    time and wait for a while
    then press "Mark Out" to
    set stop backup time.
    ii. Go Backup：After setting
    duration and channel,
    press "Calculate" key to
    calculate required
    space, then press
    "Download".
    *Note: DO NOT execute an-
    other application program
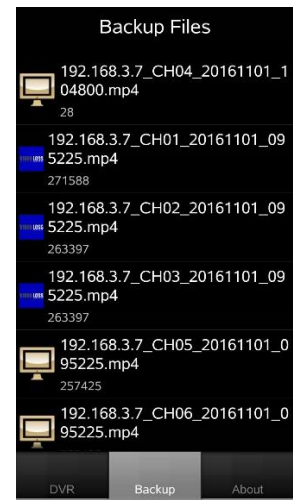    during backup download.
14. Other settings, such as PTZ、Relay、Zoom…etc.

15. Status：Status of each channel

16. Backup list：All the backup files should be listed on the backup list. Press any file on the list to execute the file.

## 3-12 P2P Connection Setup

**How to Setup**

1.  On your DVR/IVR, please go to Network Setup page:
    Main control panel => Configuration => Network Setup

2.  On lower part of Network Setup page, please input P2P Access Key for
    P2P and press Apply button.
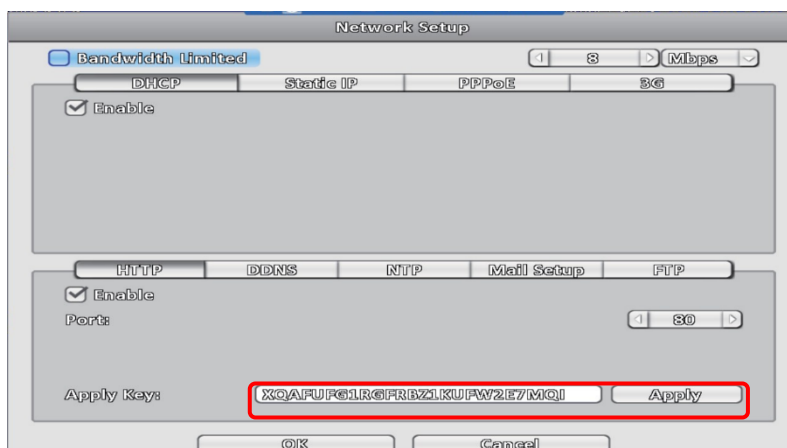


Please press OK button on lower part of Network Setup page and return to
Configuration level.

3.  Please go to System Information page:
    Main control panel => Configuration => System Information



Under Network tag, you can find QR code, access key and expiry date for
P2P feature.



Access Key          Expiry date

For computer use, please login iWatchDVR.
On prompting interface, please input P2P Access Key in Host field, input /
modify the rest of fields as appropriate
Click on Connect button

| Host: | 28KDGNDY2MU7BNTYS81D |
| Port: | 80 |
| User: | admin |
| Password: | •••••• |

Connect

4.  For mobile device (i.e., smart phone and tablet) users, please login APP
    "Socatch"
    Click '+' (iOS) / 'New' (Android) icon on upper right corner to add a new
    connection.
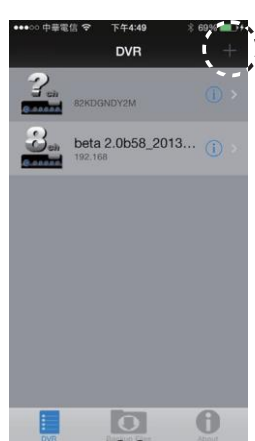
iOS                                          Android

5.  Click on Scan QR code button as shown on following picture.

iOS                                          Android

6. Please scan QR code on DVR's System Information page



*Access key information will be shown on Host field*



*Input / modify the rest of fields as appropriate.*

*Click on Save button on upper right corner.*

*Login with new settings*