

# Stand-alone Type

## User's Manual

4/8/16 CH H.264 LCD DVR

D V R



**CAUTION!**

**RISK OF ELECTRIC SHOCK, PLEASE DO NOT REMOVE COVER WHEN POWER CONNECTED. NO USER SERVICEABLE PARTS INSIDE. 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.



**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 FCC Regulations.**



## **LIMITATION OF LIABILITY**

- This users' manual is supplied 'as is', with no warranties, be it expressed or implied, including, but not limited to, the implied warranties of merchantability, suitability for any exact purpose, or non-infringement of any third party's rights.
- This publication may include technical inaccuracies or typos. The manufacturer holds the right to introduce any changes to the information contained herein, for any purpose, including but not limited to, improvements of the publications and/or related to the product, at any time, without prior notice.

## **DISCLAIMER OF WARRANTY**

The supplier shall not be liable to any party or any person, except for replacement or reasonable maintenance of this product, for the cases, included but not limited to the following:

- Any damage or loss, including but not limited to: direct/indirect, consequential, special, exemplary use arising out of or related to the product;
- Inappropriate use or negligence of the user in operation of the product, resulting in personal injury or any damage;
- Unauthorized disassembly, repair or modification of the product by the user;
- Any problems or consequential inconvenience, loss or damage, caused by connecting this product to devices of the third parties;
- Any claim or action for damages, brought by any photogenic subject, be it a person or organization, due to violation of privacy whereby the surveillance picture and/or saved data becomes public or is used for the purpose other than surveillance.

# SAFETY INSTRUCTIONS

- Read these instructions and keep them in a safe place for future reference.
- 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.
- Place the unit on a flat surface not prone to vibration or impact.
- 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.
- Install the unit away from heat sources such as radiators, heat registers and stoves. Installation of the unit near consumer electronics devices, such as stereo receiver/amplifiers and televisions, is permitted as long as the air surrounding the terminal does not exceed the above mentioned temperature range.
- **Handle hard disk drives with care.**

It is possible to damage hard drives if they are moved while their motors are still running. To allow the hard drive to spin down and park its heads, wait at least 10 seconds after disconnecting power before moving the unit.

To avoid shock and vibration damage to the internal hard drive, do not move the unit while it is plugged in.

Protect hard disk drives from static electricity.

Do not stack hard disk drives or keep them upright.

Do not use an electric or magnetic screwdriver to fix hard disk drives.

- Do not place the unit in an enclosed area where the cooling vents are blocked or impede the flow of air through the ventilation openings.
- Protect the power cord from being stepped on or pinched particularly at plugs 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 drop or shake, as this may damage the device.
- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do not install the unit in an area where condensation occurs. Do not operate with wet hands. 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 an 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.



#### **CARING FOR THE ENVIRONMENT BY RECYCLING**

When you see this symbol on a product, do not dispose of the product with residential or commercial waste.

#### **Recycling your Electrical Equipment**

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact your local authorities for information about practices established for your region

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# 1. YOUR DVR AT A GLANCE

## Product Overview

Model	4 Channel	8 Channel	16 Channel
Video Format	PAL/NTSC		
Video Format	H.264 Baseline Compression		
Video Input	BNC 4 Input / 1 Output	BNC 8 Input / 1 Output	BNC 16 Input/ 1 output
Audio Format	G.726 8Kx16bit ADPCM Mono		
Audio Input*	RCA 2 Input / 1 Output (For 10" LCD DVR) RCA 4 Input / 1 Output (For 15" LCD DVR)	RCA 8 Input / 1 Output	
Alarm Type*	Motion detection, Sensor Input, Relay Output , Video Loss		
Sensor In/Out*	4CH Input / 1CH Output		8CH Input /1CH Output
Display Frame Rate	Each Channel PAL : 25 FPS, NTSC : 30 FPS		
LCD Monitor*	10"Color LCD,4:3,CCFL 15" Color LCD, 1024x768, 4:3, 450:1, 150nit, CCFL	Two type LCD monitor: One is 15"color LCD, another is 19"color LCD	19"color LCD
Playback Resolution(CH1)	NTSC:30fps/(CIF) 30fps/(halfD1),15fps/D1 PAL:25fps/(CIF) 25fps/(halfD1),12fps/D1	NTSC:30fps/(CIF) 15fps/(halfD1),7.5fps/D1 PAL:25fps/(CIF) 12.5fps/(halfD1),6.25fps/D1	NTSC:30fps/(CIF), 15fps/(halfD1),7.5fps/D1 PAL:25fps/(CIF), 12.5fps/(halfD1),6.25fps/D1
Record Frame Rate	NTSC: 120FPS@CIF, 120FPS@halfD1,60FPS@D1 PAL: 100FPS@ CIF, 100FPS@halfD1,50FPS@D1	NTSC: 240FPS@CIF, 120FPS@halfD1,60FPS@D1 PAL: 100FPS@CIF, 100FPS@halfD1,50FPS@D1	NTSC: 480fps@CIF, 240fps@half D1,120fps@D1 PAL: 400fps@(CIF), 200fps@(half D1),100fps@D1.
Record method	Power-on Auto Record, Scheduled Record(Manual Record, Motion Detection, Sensor Trigger), Support Privacy Mask		
HDD Interface	SATA Interface support 1000GB	15"LCD DVR support SATA Interface support 1000GB, 19"LCD DVR support SATA Interface 1000GB*2	Support SATA Interface 1000GB*2
Network Protocol	TCP-IP/ DHCP/DNNS/PPPoE/E-Mail		
Network Function	IE Browser Live Monitor, Configuration, Download Video Mobile Phone Surveillance		
USB 2.0 Interface	Mouse / Portable Mobile HDD/ Flash Drive/ DVD Burner/ Firmware Upgrade		
Playback Method	Normal Play, Fast Forward, Rewind, Single Step		
Network Interface	RJ45 10M/ 100M Ethernet Auto Detect		
PTZ Protocol*	PELCO-P, PELCO-D		
Video Backup	AVI		
Power Adapter	DC 12V Adapter		
Power Consumption	10~15W		
Operating Temperature	-10℃~+40℃		
Operating Humidity	10%~90% RH		
Dimensions (L x W x H) *	10"LCD DVR: 315x232x57 (mm) 15"LCD DVR: 59.4x312x52(mm) (Not Including Bracket)	15"LCD DVR: 59.4x312x 52 (mm) 19"LCD DVR: 463x412x 70 (mm) (Not Including Bracket)	19"LCD DVR: 470 x 360 x 70(mm) (Not Including Bracket)

### \* **Model dependent**

Congratulations on purchasing your state-of-the-art Digital Video Recorder (DVR) offering industry's best triplex functionality with video/audio recording, playback, and network capability. Your new device allows you to run all three functions simultaneously, streamlining the use of your CCTV system and boosting the security level of your home, business or social venue. You can access live or recorded feed from your standard or PTZ cameras immediately at the location of the DVR installation, or anywhere in the world using web-browsers or a mobile phone\*. The video may be stored at a remote location for safety.

(\*Some limitations apply to web- and phone-based features, please see the related sections for detailed description.)

Please get acquainted with the parts and accessories as well as the ways to use the appliance as described in this instruction manual. If you have any questions that this guide cannot answer, please contact your vendor or a certified specialist.

## **2. Contents of the Box**

- DVR device
- This reference guide
- Installation CD
- Remote control
- Power cord
- Mouse (optional, depends on the model)
- Hard disk drive (optional, depends on the model) (if you would like to use your own Hard disk drive, please see **Appendix 3** for the list of compatible HDDs)

### **2.1 Getting Started Check-List**

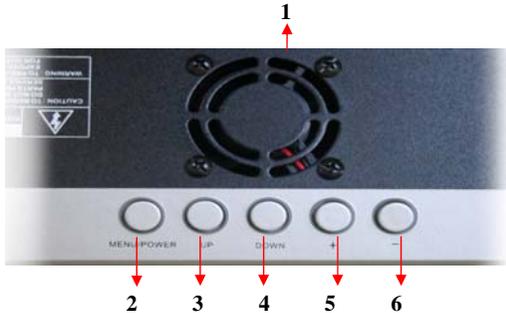
Before starting to work with your new DVR please make sure all relevant connections are done correctly.

- Are the power and video in/out cables plugged in? Please see **Section 3.6.1 Basic Connections** for more.
- Is the HDD installed and formatted? Please see **Sections 3.6.2 Installing HDD and 5.2.5 HDD Manage** for more.
- Did the DVR start recording? Please see **Section 4.2.2 Manual Recording** for more.

## **3. Hardware**

### **3.1 Top Panel**

## (a) Top panel for 10"LCD DVR



### 1. Cooling Fan

2. **Menu/Power:** Turn on / off the LCD monitor. When press the key over 3 seconds, it will turn off. If you push the key again, it will be turn on. When the LCD monitor is on, press this button to configure LCD monitor
3. **UP:** Move up cursor to the item you want to configure
4. **Down:** Move down cursor to the item you want to configure
5. **“+”:** Increase value.
6. **“-”:** Reduce value

### Menu Interface

If you need to adjust the parameters of the LCD monitor, you can press “Menu/Power”. The menu will be displayed on the LCD screen. Then press “UP” or “DOWN” to move the cursor leftwards or rightwards to select the option that user wants to modify. Then, press “+” or “-” to increase value or reduce value. After adjusting the value, this action will take effect immediately.



#### PICTURE

“BRIGHT”: 0~100.

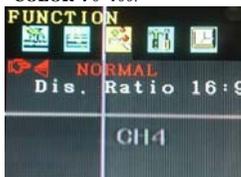
“CONTRAST”: 0~100.

“COLOR”: 0~100.



#### AUDIO

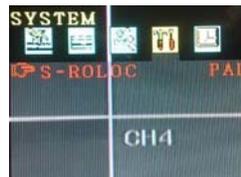
“VOLUME”: 0~100.



#### FUNCTION:

Press the button “UP” or “DOWN” to change the display mode - “NORMAL & DOWN” of the LCD monitor.

“Display Ratio”: 16:9 · 4:3.



#### SYSTEM:

In this menu interface, users can choose format of display.

“S-ROLOC”: AUTO · NTSC · SECAM & PAL.



**PRESET:**

In this menu interface, users can close the screen automatically in two ways. First, sets for the time of dormancy, the screen will be closed automatically in stipulated time.

“SLEEP”: 0–240 minutes. The value is increased or decreased by ten. The value of “sleep” indicates how long the LCD monitor will be turned off automatically if “OFF-TIME” is not set.

Second, sets for closedown time and time of starting the LCD monitor, the screen closes and reveals at corresponding time point.

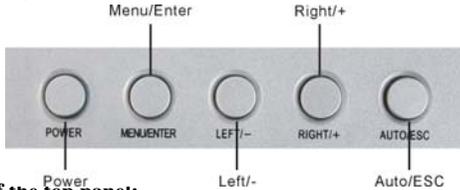
“TIME”: --: --, the current time of system.

“OFF-TIME”: --: --, the time of the screen turning off automatically.

“ON-TIME”: --: --, the time of the screen turning on automatically.

When modify “TIME·OFF-TIME·ON-TIME”, press “+” to adjust the value of minute and press “-” to adjust the value of hour.

### (b) Top panel for 15”LCD DVR and 19”LCD DVR



**Function of the top panel:**

Function	Description
<b>POWER</b>	Turn on / off the LCD monitor. When press the key over 3 seconds, it will turn off. If you push the key second time on 19” device, it will display the image from VGA Input Connector.
<b>MENU/ENTER</b>	Press the key to configure of the LCD monitor.
<b>RIGHT/+</b>	Move the prompt of the parameters on the screen or increase value.
<b>LEFT/-</b>	Move the prompt of the parameters on the screen or reduce value.
<b>AUTO/ESC</b>	Press the key to exit the configuration of the LCD monitor.

### Menu Interface

If you need to adjust the parameters of the LCD monitor, you can press “Menu/ENTER”. The menu will be displayed on the LCD screen. Then press “LEFT/-” or “RIGHT/+” to move the cursor leftwards or rightwards to select the option that user wants to modify. Then, press “LEFT/-” or “RIGHT/+” to increase value or reduce value. After finished the setting, press the “AUTO/ESC” to exit.



Brightness: 0~ 100

Volume: 0~100

Contrast: 0~ 100

Saturation: 0~100

Color Temp: 5000K/6500K/7500K



OSD Language: English/Chinese

OSD Time: display time

Factory Reset: YES/NO



Input Port: VGA / AV

Auto Color: Yes / No



EXIT

### 3.2 Front Panel

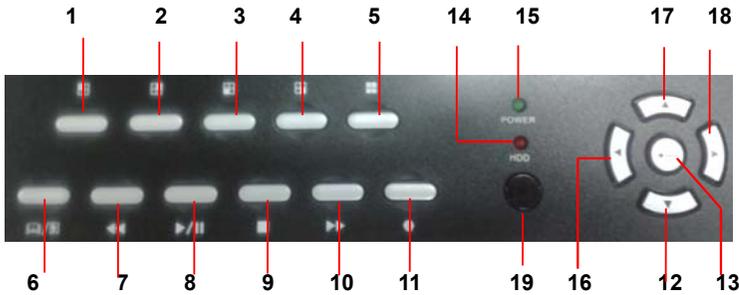


Fig 1 Front panel of 4CH DVR

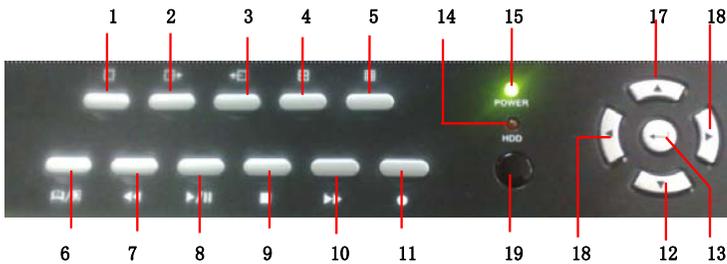


Fig 2 Front panel of 8CH 15" LCD DVR

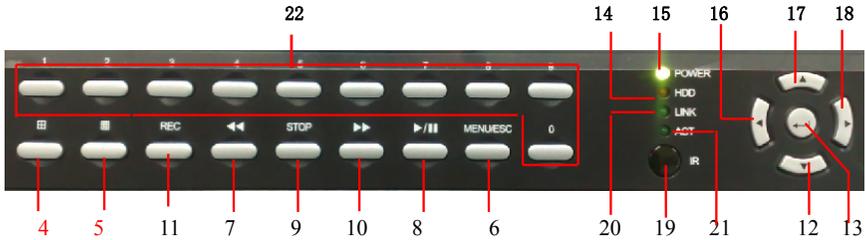


Fig 3 Front panel of 8CH 19" LCD DVR

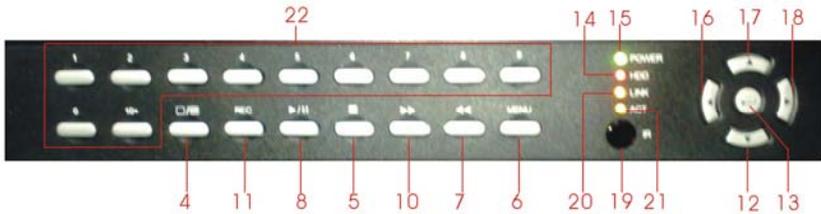


Fig 4 Front panel of 16CH 19" LCD DVR

7. **1, 2, 3, 4, 5 / 6, 7, 8, 9, 10 (1-5) buttons**

Using these buttons you can choose to output video on your monitor either as a full-screen view of each of the cameras individually (Channels 1 through 4\*/8 depending on the model), or from all Channels simultaneously (11, 12).

8. **11, 12, 13, 14, 15, 16, 17, 18**

Use arrow buttons to move among the menu items. Press Enter (16) to confirm your choice.

On live view the [16] button is used as PTZ control key.

9. **Power LED, HDD LED (15, 14)**

LED lights indicating your connection to the power supply and the HDD supply.

10. These buttons have the following functions:

**6 Menu (11, 12):** Access tool bar/Hide tool bar/Exit menu/Exit sub menu.

**7 Rewind (13):** Rewind video during playback.

**8 Play/Pause (14):** Opens video search and playback menu. When the playback mode is activated, press this button to play/pause playback.

**9 Stop (15):** Stop playback.

**10 Fast Forward (16):** Fast forward video during playback.

**11 REC (17):** Start or Stop manual recording.

11. **IR Window (19):** Infra-red sensor for remote control.

12. **LINK LED, NET LED(20,21)**

This lights indicate your connection with Internet.

13. **Numerical 0-9 buttons (22)**

Using these buttons, you can choose to output video on your monitor either as a full-screen view of each of the cameras individually (Channels 1 through 16). You can also use this buttons as numerical buttons to input numbers.

### 3.3 Back Panel

(a) Back panel of 10"LCD DVR



#### 1. USB connectors

Use these USB ports to connect the mouse and backup devices (flash drive, DVD recorder).

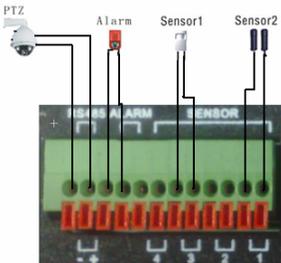
**Note:** There is another USB connector on the lateral panel.

#### 2. Alarm Input Connectors (ALARM IN 1-4)

For connecting to external sensor device

Each alarm has one input pin on the Terminal Block of the rear panel.

Connect positive(+) and ground(-) output pins of the device to the input slots(Alarm in) on the DVR terminal block(1-4).



Port functions:

Pin 1: Sensor 1 input

Pin 2: Sensor 2 input

Pin 3: Sensor 3 input

Pin 4: Sensor 4 input

Pin ALARM: Alarm Output (N.O)

Pin -, Pin +: RS-485A、RS-485B

**Alarm Output Connectors**

**(ALARM)----(optional)**

For connecting to external alarm device

**RS-485 Connector (pin A-B)----(optional)**

For connecting PTZ camera control

### 3. Video Input Connectors (1-4)

4/8 channels video input, for connecting analog video signal input, BNC (1Vp-p, 75Ω)

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

### 5. Audio Input Connectors (AUDIO IN 1-2)

2 channels audio input, for connecting audio signal (4ch-RCA)

### 6. Audio Output Connector

1 channel audio output, for connecting speakers (RCA)

### 7. Power Switch

### 8. Ethernet Connector

RJ-45 10/100 Base-T Ethernet network

### 9. Video Output Connector

Video output for connecting monitor or TV, BNC (1Vp-p, 75Ω)

### 10. Ground – Ground the machine if necessary

## (b) Back panel of 15" LCD DVR



#### 1. Video Input Connectors

4 channel video input, BNC (1Vp-p, 75Ω) for 4 CH device, 8 channel video input for 8CH device.

#### 2. Video Output Connector

Video output to display monitor, BNC (1Vp-p, 75Ω)

#### 3. Audio Input / Output Connector

4 channel audio input / output, RCA (2Vp-p, 600Ω) for 4 CH device, 8 channel audio input / output, RCA (2Vp-p, 600Ω) for 8 CH device,

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

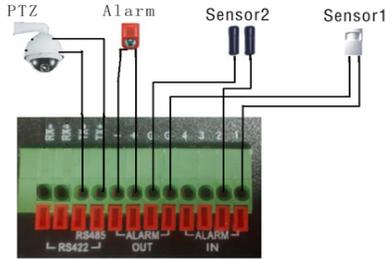
For connecting to external sensor device

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

For connecting to external alarm device

#### RS-422 / RS-485 Connector (9-12)

For connecting PTZ camera control



**5. Ethernet Connector**

RJ-45 10/100 Base-T Ethernet network

**6. USB connectors**

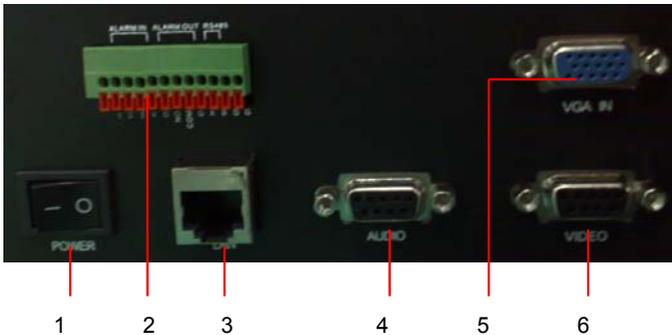
Use these USB ports to connect the mouse and backup devices (flash drive, DVD recorder).

**7. Power Input Socket (12V DC)**

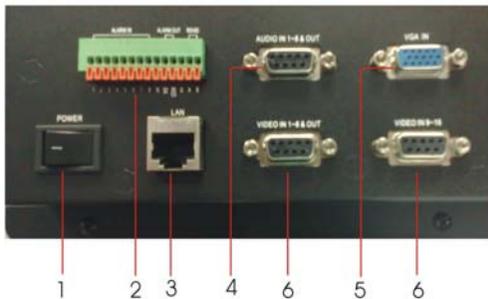
**8. Power Switch**

**Note:** If your back panel does not match above, it means that your DVR did not come with that option.

**(c) Back panel of 8CH 19"LCD DVR**



**(d) Back panel of 16CH 19"LCD DVR**



### 1. Power Switch

### 2. Alarm Input Connectors (ALARM IN 1-4, 5,8,11,12 Ground)

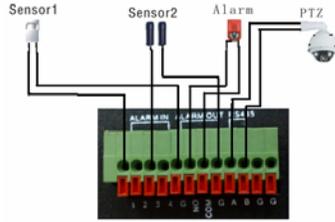
For connecting to external sensor device

### Alarm Output Connectors (ALARM OUT 6-7)

For connecting to external alarm device

### RS-422 / RS-485 Connector (9-10)

For connecting PTZ camera control



### 3. Ethernet Connector

RJ-45 10/100 Base-T Ethernet network

### 4. Audio Input(1-8) / Output Connector

Connected to DB9PIN/8\*RCA adaptor, it accepts line-in audio signals supplied from external devices such as microphone amplifiers. It also supplies line-out audio signals to external devices such as speakers. Recorded audio will be supplied from AUDIO OUT during playback.

### 5. VGA Input Connector

Connect PC VGA output port to the VGA Input connector so as to be a LCD monitor. Moreover, you must push the key of "POWER" on the top of monitor just one time.

### 6. Video Input(1-8&out),(9-16)/ Output Connector

Connected to DB9PIN/8\*BNC adaptor, it accepts video signals supplied from external devices such as cameras. It also supplies video signals to external devices such as TV, monitor.

**Note:** If your back panel does not match above, it means that your DVR did not come with that option.

## 3.4 Lateral Panel



Lateral Panel of 10"LCD DVR or 15"LCD DVR



Lateral Panel of 19"LCD DVR

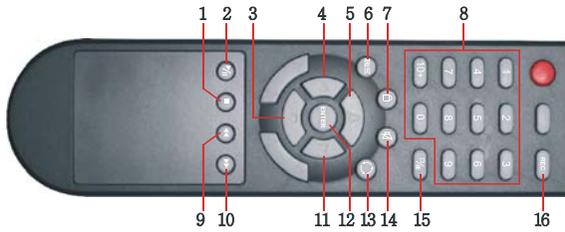
Brief Introduction : **1. HDD box**

**2. Power jack**

**3. USB port** for mouse connection or to backup device.

## 3.5 Remote Control

In device operation, the enter key on the remote control or the front panel has the same function as a mouse left click. The IR Range of the remote control is up to 10 meters. The buttons on the remote control correspond 1-1 with the buttons on the front panel.



**1 Stop (■):** Stop playback

**2 Play/Pause (▶/||):** Opens video search and playback menu. When the playback mode is activated, press this button to play/pause playback.

**3, 4, 5, 11 (▲ ◀ ▼ ▶):** Move selected item in menu.

**6, Menu (MENU/ESC):** Displays/exits the main menu.

**7 Lock (🔒):** If the password is enabled, press it to logout the system.

**8 Numerical Button:** Using these buttons, you can choose to output video on your monitor either as a full-screen view of each of the cameras individually (Channels 1 through 8), or you can use this buttons to input numbers.

**9 Rewind (◀◀):** Rewind video during playback.

**10 Fast Forward (▶▶):** Fast forward video during playback

**12 ENTER:** This button is used as the “enter” key in most circumstances. And on live view press this button to enter into PTZ mode.

**13 Spot View (📍):** Press to enable auto sequencing,

**14 Mute ON/Mute Off (🔇):** Turn on or turn off sound.

**15 Quad (📺):** Press this button to switch display modes. There are 4-CH mode, 6-CH mode, 8-CH mode, 9-CH mode, 16-CH mode. You can use it according to your demand.

**16 REC (●):** Start or Stop manual recording.

## 3.6 Hardware Installation

It is recommended that the installations described below are carried out by qualified personnel.

### 3.6.1 Basic Connections

- Cameras

Connect each of the cameras' outputs to the video input socket in the rear panel of the DVR using appropriate cables. The video input interface is a standard BNC connector, 1Vp-p, 75  $\Omega$ . Please keep the video signal cable away from strong electromagnetic and electric interference

■ **Audio Connection**

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

Please keep the audio signal cable away from strong electromagnetic and electric interference

■ **Monitor**

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

■ **Power**

Please use the 12V DC adapter supplied for connecting your DVR device with the power source.

**Alarm Input/Output**

Connect Alarm In 1-4 to N.O. (Normally Open) or N.C. (Normally Closed) alarm connectors and one Ground connection. Connect Alarm Out to the corresponding connections and Ground accordingly

For detailed description please see **Section 5.6. Alarm Setting**

■ **Ethernet**

For remote access to the video images from your cameras via LAN or the Internet, please connect the standard RJ-45 twisted-pair Ethernet cable to the Ethernet connector.

■ **USB**

For connecting the mouse, USB flash drive, USB portable HDD, USB portable DVD Recorder (for the list of compatible HDDs see **Appendix 3**, for the list of compatible DVD Recorders see **Appendix 4**).

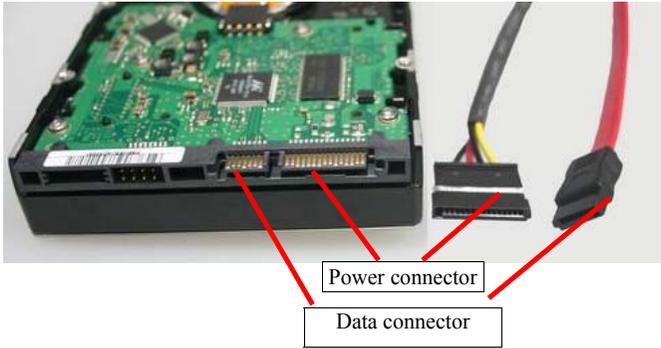


**NOTE** : The device only supports FAT32 file system on the USB devices.

### 3.6.2 Installing Hard Disk Drive



Before you can record onto your HDD it should be formatted by the DVR system, because standard PC formatting is not compatible. It can be done in the Maintenance Tab of the Tool Bar Main Menu. Please refer to Section 5.2.5 HDD Manage for the detailed description of this process. Depending on the size of your HDD, the format process can take several minutes.



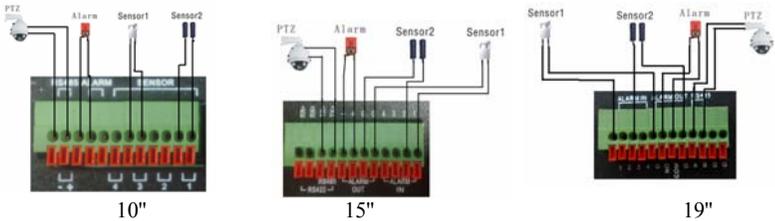
Your HDD should be installed inside the DVR. Please connect the HDD in the standard way. All necessary cables are delivered with the DVR. Use instructions that came together with the hard drive for exact wiring. Please connect the power cable to the appropriate socket, and the data cables to their corresponding connectors.



For the list of HDD drives tested for compatibility please see **Appendix 3**.

### 3.6.3 PTZ Control Connections

Connect the PTZ control jacks to the corresponding RS422/RS485 Tx+ and Tx- interfaces on the rear panel.



For detailed description of PTZ protocols, baud rates and IDs, please refer to the setup section in the PTZ manual.

## 4. Getting Started and the Main Screen

- 1) Switch on your DVR and wait for the system program to load. If you have not yet installed a hard disk drive into the device, or the device didn't read the HDD, or a new HDD didn't be formatted, or there is no space of the HDD to record, it will display an icon “” in the video preview interface. You must format the HDD in the DVR before first using. The steps as follows: System settings > SYSTEM > HDD management > format. After formatting for the first time, the system will restart. If the HDD is already installed, then the default setting is for the DVR to start recording and a red dot  on the screen will indicate that.



### 4.1 The Main Screen

The standard layout is four (or nine, depending on the device) windows evenly distributed over the screen. From the main screen you can access menu options and switch among channel views, displaying either all channel feeds simultaneously or bringing forth a full-screen view of a selected channel.



#### 4.1.1 Displaying a Single Channel

In the multiple screen view, you can make a particular window active by left-clicking on it once with a mouse, or navigating to it using directional buttons. If an audio output device is connected to this channel, you can monitor both audio and video feeds.

To full screen display a single channel you can press the corresponding numerical or positional buttons on the remote (channel number is displayed in the top left corner of each window); alternatively you can do so by left double-clicking on the desired window.

In order to return to the multi-screen view you could either double-click on the screen again or press the single/multiple view button either on the remote control or the front panel. You can choose to display the Status Bar, Tool Bar or neither of them by single right-clicking on the screen. These three options alternate in sequence.

### 4.1.2 Status Bar

Located at the bottom of the screen, the Status Bar may be called up by pressing the **Menu** button or right-clicking anywhere in the screen. 



### 4.1.3 Login DVR

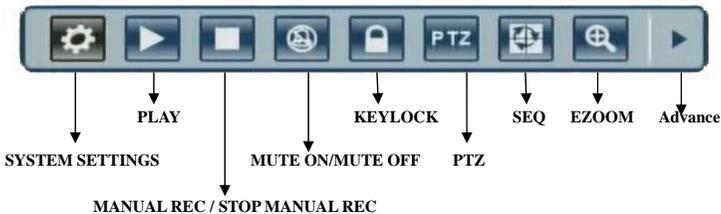
In live view, press the button “ ” twice or double-click right key of mouse on live view to display tool bar, it will appear the login window if the password is enabled. You can login from the LOGIN window as shown as previous fig. Select user name and user password via numeric key-board. You can access the main menu by pressing [] if the password is enabled.



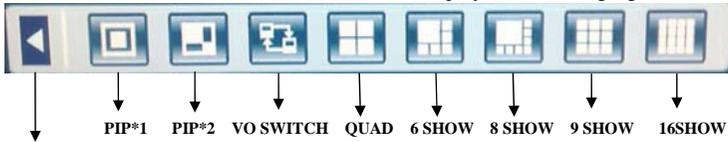
The default password for **Admin** is “888888”. For your convenience and system safety, you can change password of admin and add other username.

### 4.1.4 Tool Bar (In this section, 8CH device will be taken as an example to introduce)

After logging in system, it will display the following tool bar.



Click the “ADVANCE” button and the screen will display the following figure:



Hide Advance

The functions of the buttons present in the Tool Bar are as follows:



System configuration



Search, playback and backup of recorded files



**MANUAL REC/STOP MANUAL REC:** Click the [MANUAL REC] button to start manual recording. Click [STOP MANUAL REC] menu or press [■] button to stop manual recording.



**KEYLOCK:** If the password is enabled, click “KEYLCK” to logout the system.



**PTZ:** Enters PTZ control.



Switching split mode between quad view, six, eight, nine and sixteen windows.



**AUTO SEQUENCE:** Click “AUTO SEQUENCE” on the tool bar to enable auto sequencing, the channels with images will be in sequence: channel 1-channel 2-channel 3-channel 4-channel 1..... (4-CH DVR) / channel 1-channel 2-channel 3-channel 4-channel 5-channel 6-channel 7-channel 8-channel 1..... (8-CH DVR). Channels without images won't display. To interrupt auto sequencing, press any button or click the mouse while in auto sequence mode.



**EZOOM:** Click “EZOOM” to enter into zoom mode, and then click left key and drag to select the area that you want to magnify. Right click to exit.



**PIP 1\*1:** This feature displays a small picture in a full screen.



**PIP 1\*2:** This feature displays two small pictures in a full screen.



**VO SWITCH:** On live view press the button [ ] or [ ] or numerical button “1” ten times when there is no tool bar or click the button “VO SWITCH” on the tool bar, this will switch the main menu between CVBS video output and VGA video output.  
See the following subsections for a detailed description of each of these functionalities.

## 4.2 Tool Bar Menu Options

### 4.2.1 System Configuration



Pressing this button will bring up a screen for setting up all system configurations. You can adjust such settings as **Record**, **Video**, **System**, **Network**, **Alarm** and **PTZ (optional)**. Please refer to **Section 5. DVR Settings** for the detailed description of these settings.

**Note:** In order to validate the sub-menu setting, you must press “”. It will not be effective if you do not press  and exit directly. This DVR has a special feature: explanation and information will be shown automatically when you move the cursor over the Menu.

### 4.2.2 Manual Recording



There are three ways of recording live video/audio feed from your cameras: **manual recording**, **scheduled recording** and **time recording**.

If the recording schedule is in conflict with manual recording, the manual recording will be processed first until stopped. Recording modes are displayed in the top right corner of the respective screen.

For detailed description of time recording see [Section 5.4.8 Record Mode](#). Description of the manual recording function follows.

In order to record a video/audio feed, please select the Manual Record button in the Tool Menu. Alternatively you can use the REC button on the remote or the front panel. Pressing this button again will stop the recording process.

### 4.2.3 Video Playback

Move the cursor to  (the icon will be highlighted when selected) and left click to enter into the setting interface; Or press the  button to enter into the setting interface.

There are three methods of searching for recordings.



#### Method 1: playback by date

Date input: Adjust the checking date and time, and press **[Enter]** to input the number directly to adjust the year, month, date. Next, input the time in the next box, click “play” and then choose playback channel as shown in right Fig, then click “play”. If you choose one channel it would playback that channel in full screen mode. If you choose two or more channels there will be the same channels to playback simultaneously on four frames.

#### Method 2: playback by recording time:

Input the date, click **[search]** and you can see the recording status on this date.

#### Instruction:

**CHN:** There are five channel options: CH1, CH2, CH3, CH4 and ALL. Press **[Enter]** and you can change the channel to be displayed on file listing.

**MONTH:** It will show all the recordings in this month. Green means normal recording, Red means alarm recording, and Gray means no recording. Click any date in this frame to search the recording status of that day, and the search results will be showed in the date frame.

**DATE:** Date will show all the recordings and their statuses on this day, you can playback the recorded files in any period clicking the corresponding period.

**Method 3: playback by file list:**

Input the searching date and click “SERACH” to view the recording status. Click an exact day and then click “FILE LISTING” to see the interface of “FILE LISTING”.



1. **TYPE:** There are three options: all, normal and alarm. Press **[Enter]** and the content will be displayed in a list.

**Instruction:**

2. **[FILE LIST]:** “CHN” shows which channel the file was recorded under, “TIME” shows the recording time, and “SIZE” is the displaying size of this file (Unit: MB), “TYPE” is the displaying type of the recording file, either normal or alarm. Pressing the “SELECT” button will export the selected files to USB storage.
3. After moving the cursor up or down and selecting the files, left click to enter into playback interface. It will playback a single channel in full screen.
4. If the [RECORD TIME] section is marked as “ON” under the [VIDEO DISPLAY]section, it will show the date/time when playing back recorded file ; If it is marked as “OFF,” it will not display the time.
5. During playback, press **[>>>]** to play slowly; press **[>>>]** or **[<<<]** to fast forward and rewind; press **[|>]** to pause and frame-by-frame play ; press **[X]** to exit from playback and return to the former menu;
6. When playback files finish, it will return to the file list interface.

**LOG SEARCH**

Move the cursor to **[>]** (the icon will be highlighted when selected) and left click to enter into the [REC. SEARCH] setting interface or press the button **[>||]** to enter into the setting interface, move the cursor to option “LOG” and press the [ENTER] button or left click to access the Log Search(as shown in the figure below).



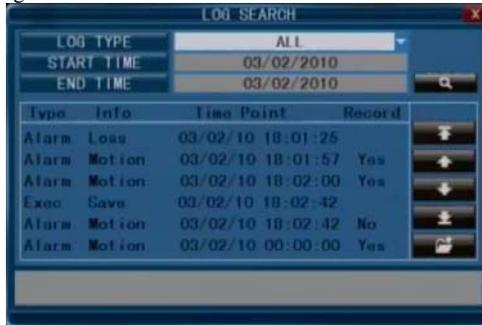
Display the system log for the convenience of alarm and operation.

**[LOG TYPE]:** Choose between the following options: [All]、 [ALARM] and [OPERATION].

**[STARTING TIME]:** Set the starting time of log search.

**[END TIME]:** Set terminal time of log search.

Push “Search” button after the setting of log time and type, and the system will display the required log in the list. Click [↕]、 [↑]、 [↓] and [↩] to switch page, and click [💾] to save the log list to USB disk.



### Playback Control

In the playback mode you can see the playback control panel as well as the date and time of the played file.



Options for the playback control panel are described below:



 Fast rewind, the available speeds are 2x, 4x, 8x, 16x, 32x and 64x.

 Slow forward, the available speeds are 1/2x, 1/4x and 1/8x.

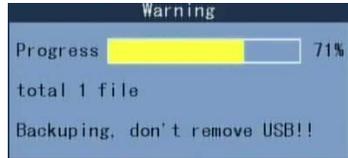
 Play

 Pause/Frame-by-frame view

 Fast forward, the available speeds are 2x, 4x, 8x, 16x, 32x and 64x.

 Zoom: When it is play normally, click this icon to enter into zoom mode, and then click left key and drag to select the area that you want to magnify. Right click to exit.

  59 Adjust the volume.



## 4.2.4 Video Backup

Back up can be initiated from the same dialog window as the playback function.



You can use USB for backup by inserting USB device into the USB2.0 port before backing up files. The device also supports USB OTG.

On the “FILE LISTING” menu you can select the recording file by using the direction keys. Press **【Enter】** to confirm your selection. A checkmark “√” will appear at the end of the filename after you make your selection. Press **【Enter】** again, and the “√” will disappear, thus cancelling your selection. You can start exporting the selected recording files by pressing **【】**.

### Note:

1. When the backup device does not have enough free space to download the file, the system will prompt you with “Space not enough”.
2. You can remove USB device directly when backup is finished.
3. If the system cannot recognize the connected devices or none are connected, you will see a warning message “No USB DISK!”
4. If you use USB disk to back up file, the format of file is AVI, you can use Windows Media Player to play it directly. If you use DVD to back up file, the format of file is NVR, you had to change its suffix from NVR to 264, then use “Hsplayer.exe” player to play it.

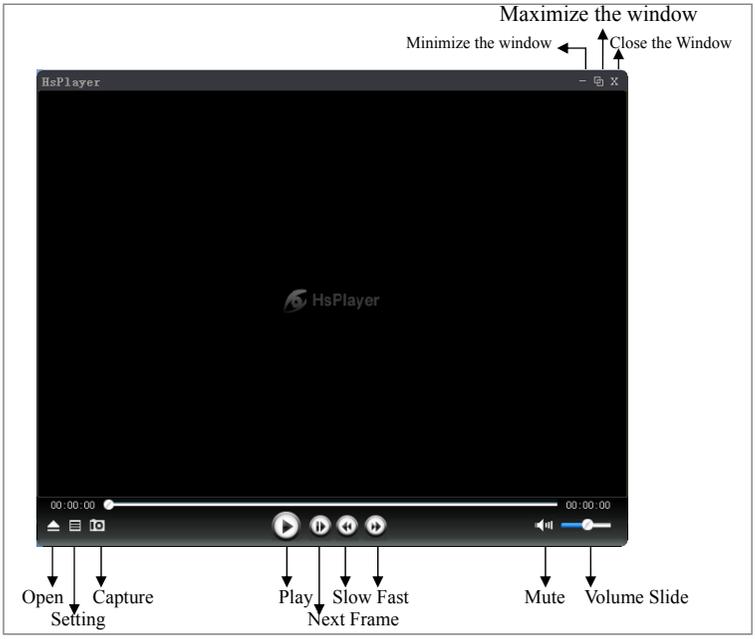
Currently you can connect such external media as USB flash drives, portable USB HDDs and USB DVD recorders. For the list of DVD burners tested for compatibility, see **Appendix 3**.



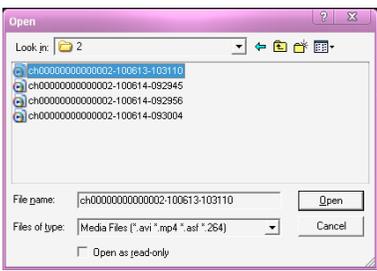
**The system only supports the FAT32 file system for USB flash drives and HDDs**

## 4.2.5 Playing backed up video on your PC

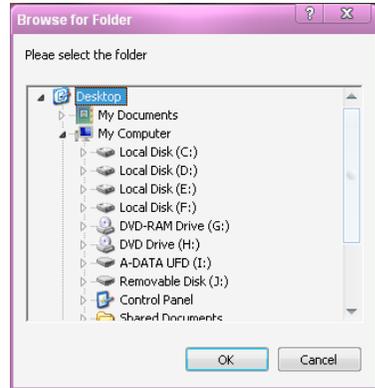
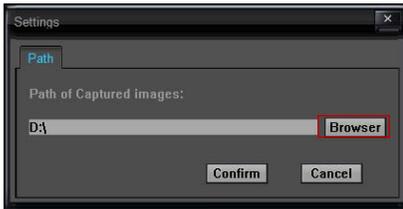
- 1) Copy the program “Hsplayer.exe” from the installation CD to your PC. Double click the icon “ HsPlayer.exe” to run the program directly.



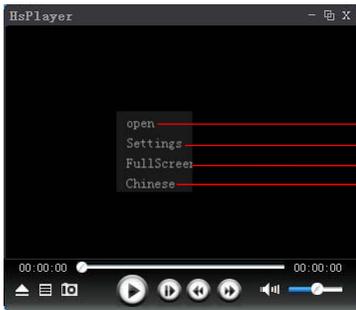
- 2) Click “” to open the video recorder in “\*.avi” or “\*.264” format. Select a file and click **【Open】** to play the file.
- 3) Click “” to capture a still picture. Click “” to enter into the “Settings” menu interface to set up the path for saving captured images. Click [Browser] to change the path for captured



images. For example, select the folder “Desktop” and click [OK] to save the path.



4) Right click to open the shortcut menu window.



open	open the video recorder in “*.avi” or “*.264” format
Settings	to set up the path for saving captured images
FullScreen	Full Screen
Chinese	Change language

Note:

If you back up file by USB disk, you can play them by Windows Media Player directly. If you back up file by DVD burners, you should change its suffix from **NVR** to **264**, for example: if the backed file is named “ch00000000000004-101021-161117-161151-01p10002000000400.nvr”, you have to change its suffix as” ch00000000000004-101021-161117-161151-01p10002000000400.264”

## 4.2.6 PTZ Control---(optional)

Chapter [5.7 PTZ](#) talks about setting up PTZ parameters, here we will discuss how to operate the PTZ control.

### A. Connection

- 1) Connect the control line of the speed dome camera to the RS-485 interface of the DVR. Make sure that A and B are matching.
- 2) Connect the video line of the speed dome camera to video input of DVR.
- 3) Activate the speed dome camera.

### B. Preparation

- 1) Set the control address of the speed dome camera and choose relevant control protocol.
- 2) Switch the current frame to the corresponding display channel.

### C. Operation

Double-click the right mouse button to enter tool bar menu under real-time monitoring frame, and choose “PTZ” or push “ENTER” key to enter the control frame.



Under PTZ control frame press the [  ] button (or button  for 8 CH) or right click and an icon “  ” will appear at the top right corner of the screen.

**[PTZ Direction Control]** Under PTZ control frame, move the mouse to the upper, lower, left and right locations of the current frame, and this time, left click and hold the mouse. Enter the control area of the corresponding location.

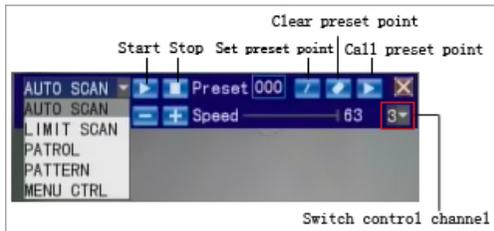
In “  ” mode, use the mouse or the [  ] [  ] [  ] [  ] buttons on the remote control front panel to control detection.

**[SPEED]** Regulate the rotating step length of the PTZ by using the slide bar. This function is mainly for the controlling direction operation. The bigger the value is, the faster the rotational speed is, with values ranging from 0~63.

**[IRIS - 、 IRIS +]** Regulate the diaphragm.

**[FOCUS - 、 FOCUS+]** Bring objects into focus finely.

**[ZOOM - 、 ZOOM+]** Zooms the Lens in and out. Magnification can be changed by using the mouse wheel under the current frame.



#### [MODE]

<**Auto scan**> controls the automatic scanning of the speed dome camera from left to right boundary after starting.

<**Limit Scan**> controls the limit scanning of the high speed dome after starting.

<**Patrol**> runs the patrol scanning of the high speed dome after starting.

<**Pattern**> runs the pattern scanning of the high speed dome after starting.

<**Menu CTRL**> calls the menu of the high-speed dome after starting. After entering into the menu of high-speed dome, use [IRIS+] to confirm and use [IRIS-] to cancel. Left click to move the cursor up or down.

**Note:** Operating functions need to be supported by head end equipment and matched with the protocol.

[PRESET] Adjust the direction and angle of the camera, and input corresponding presetting point numbers and then click “” button to preset the point number of the menu.

Input the presetting point number, and click “” button, to automatically switch the camera to the corresponding location of presetting point.

Functions of these menu options may vary depending on the make and model of the PTZ camera you are using. For detailed description of the available options please refer to the manual of your PTZ camera.

### 4.3 Channel Status Display

The top right corner of each channel image features the following status icons:



Icon indicates that the channel has detected motion in the motion detection mode.

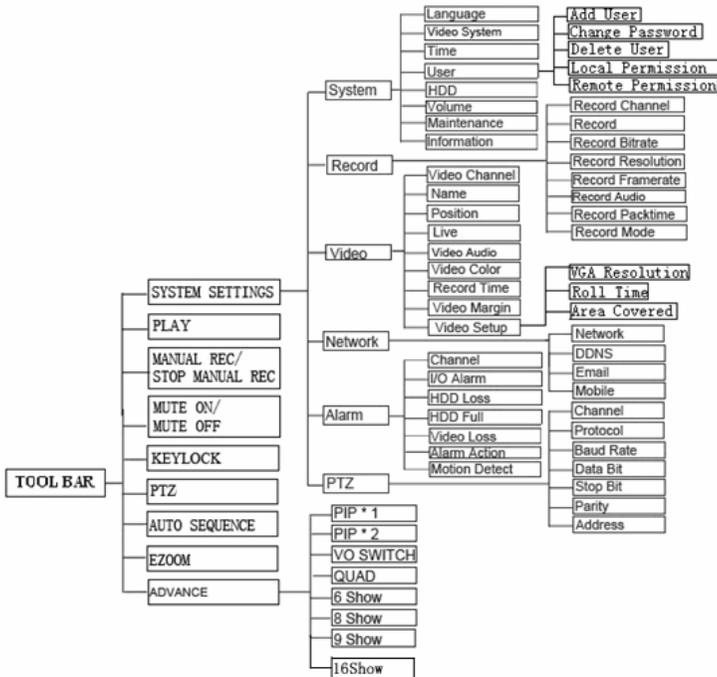


Icon indicates that the channel has detected sensor alarm in the alarm mode.

● Red dot indicates that the channel is running in the mode of recording.

## 5. DVR Settings

### 5.1 Menu Tree



### 5.1.1 Menu Options

In order to modify/adjust system configuration, you need to enter the System Menu by pressing the Setting Page button  in the Tool Menu.

You will see the dialog window with settings for all systems and options available in your DVR. The settings are subdivided into 5 subsections, each with its own tab: **Record, Video, System, Network, Alarm** and **PTZ (optional)**. Below is the detailed description of these settings.

The following tab provides general system settings for operating your DVR. Titles of the menu list items are located on the left, and the corresponding changeable or non-changeable values are represented in the fields to the right. You can:

- (a) Select the values from the list (toggling the preset data by pressing the arrows on each side of the field);
- (b) Input the required data after entering a customized window by pressing the [ >> ] button in some of the fields;
- (c) Familiarize yourself with the existing non-changeable settings.

When entering the fields using the remote control directional keys or the DVR front panel, as well as when positioning the mouse over them, a short description of the setting in question will appear at the bottom of the window.

Several tabs have options that are positioned on more than one window, and you can navigate between them by pressing the “” button.

## 5.2 System

Move the cursor to select “SYSTEM” (the icon will be highlighted when selected) and press **[ENTER]** to enter into the system setup interface.



### 5.2.1 Language

Use this option to change the language of the DVR menu text and the On-Screen Display.

### 5.2.2 Video System

Adjust system output to be consistent with camera input, including PAL or NTSC.

**Note:** The device will restart when you modify the camera mode.

## 5.2.3 Time Setup

Click [System settings → System → Time] to enter [Time setup] menu.



**DATE:** Set up system date using the number keypad.

**DATE FORMAT:** Press ENTER to switch the date patterns, from YY-MM-DD to MM/DD/YY and vice versa.

**TIME FORMAT:** Press ENTER to switch the time format from 12 HOURS to 24 HOURS and vice versa.

**TIME:** Set up the system time using number keypad.

**DST:** Daylight saving time. “On” means DST is enabled. You can setup the start time and end time of DST. For example in left FIG, the start time is at 10:00:00 from Sunday of the first week on January and end time is at 20:00:00 from Sunday of the second week on February.

**Note:** You must press  to save after you modify the time and date, your modifications will not be saved if you exit directly.

## 5.2.4 User Management



Click [System settings → System → User Management] to enter [User Management] menu.

This option allows user to set the device ID for the DVR and to switch system password. After turning on password and clicking the  button, you should exit to login system to manage users.

**Device ID:** Set Number to identify device. The default name is “000000”

**Password:** Switch of password.

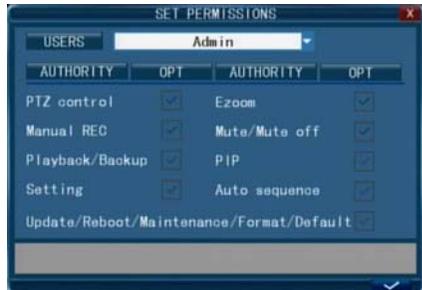
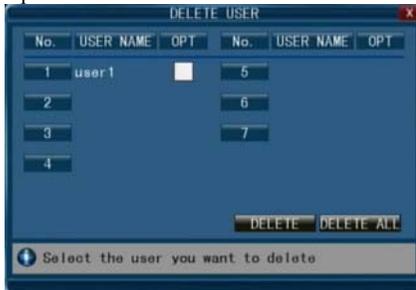
All of the following setting can be set by admin merely.

**Add Users:** Add new User. You can write down new user's name and password. Password should be written twice to confirm and password can't exceed 6 digits.

**Change Password:** You can select the name you want to change password and write a new password. Before set new password, you should fill in old right password.

**Delete User:** In this interface. You can select the user you want to delete and click the [  ] button.

**Set Permission:** It is a very important function to set user different permission, such as PTZ control, Manual REC, Playback/Back up, Setting, Ezoom, Mute/Mute Off, PIP, Auto sequence, Update/Reboot/Maintenance/Format/Default.



**Remote Permission:** It is a very important function for remote operation. Administrator can set every users' remote permission, such as: PTZ Control, Record/Capture, Playback/Download, Setting, Mute/Mute Off.



After the password verification is set up (marked with "ON") you can setup seven user password as well as an administrator password. If password function is enabled, you have to input password before logging in.

**Note:** When password is enabled, you should login system as admin to manage user. And administrator's name can't be modified.

The default password for **Admin** is **"888888"**.

## 5.2.5 HDD

Click [System settings → System → HDD] to enter [HDD management] menu.

**STATE:** There are three available statuses: OK, un-format, No Disk. If HDD cannot run

normally ( including unformatted and no HDD ) , there will be a icon  displayed on video live view. If a new HDD is used on the DVR for the first time, the system will restart after the HDD is formatted.

**TOTAL/FREE:** Indicates total space available and unused space available on the hard drive disk.

**FREE TIME:** Indicates remaining recording time of the HDD.

**OVERWRITE :** Includes “CLOSE 、 AUTO 、 1 HOUR 、 3 HOURS 、 1 DAY 、 2 DAYS 、 7 DAYS 、 30 DAYS and 90 DAYS”.

If user chooses “CLOSE”, the recording stops when the hard disk drive is full. It won't record until “overwrite” is enabled. If user chooses “AUTO”, recording continues and overwrites previous recording when hard disk drive space is full. If user chooses “2 DAYS”, the recording record on the hard disk for two days at most. After two days, the recording will be overwritten. The other options are similar to the “2 DAYS” option.



**FORMAT HDD :** Move the cursor to select your device and press  to start formatting.

**FORMAT USB:** This function allows you to directly format the USB device.

## 5.2.6 Volume

Click [System settings → System → Volume] to enter [volume] menu.

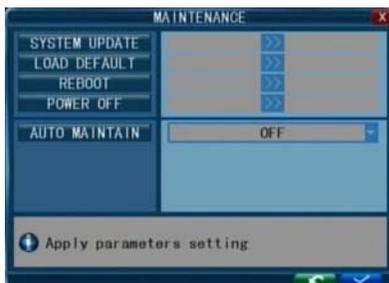
Press [◀] or [▶] or drag the cursor to adjust the volume, to previous and move the cursor to  to save.



## 5.2.7 Maintenance

Click [System settings → System → Maintenance] to enter [Maintenance] menu.

**SYSTEM UPDATE:** Create a new root directory called “dvrupgrade” on a thumb driver, copy the update file to it, and then insert it into USB port. Press [Enter] to upgrade the firmware and it will display the process of the system upgrade.



The system upgrade will require more than two minutes. After completing the upgrade, the DVR

will restart.

**LOAD DEFAULT:** Restores all the settings to factory settings.

**REBOOT:** Use this function to restart the device.

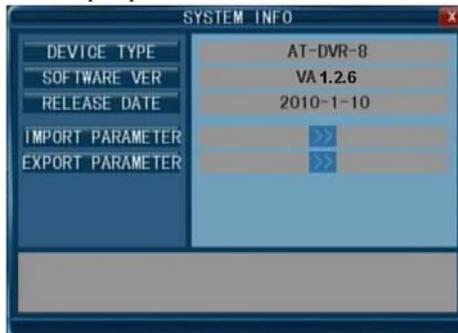
**POWER OFF:** Use this function to power off the device.

**AUTO MAINTAIN:** When AUTO MAINTAIN is on, you can setup the time for device to restart. The system will restart automatically according to the parameter chosen.



## 5.2.8 Information

Click [System settings → System → Information] to enter [System INFO] menu. This interface includes: device type, software version, release date, import parameter and export parameter. You should export parameter into your USB disk before importing parameter from the USB disk, otherwise, you will be fail to import parameter.

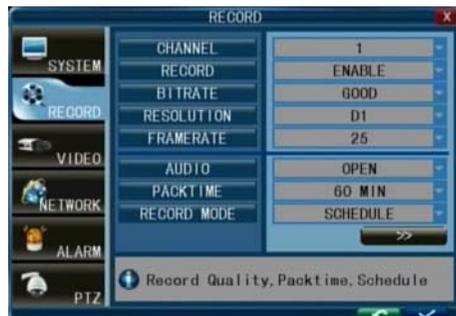


## 5.3 Record

Move the cursor to **RECORD** (the icon will be highlighted when selected). Press **Enter** to enter the setting interface. You can use the direction keys and cursor to change the options.

### 5.3.1 Record Channel

This option allows you to select the camera (channel) number whose settings you want to modify. If you want the changes to apply to all available channels, you need to select "All". Make the selection by pressing the arrow buttons; the options include CH1, CH2, CH3, CH4 and ALL.



### **5.3.2 Record**

“ENABLE” indicates that the channel is enabled for recording.

### **5.3.3 Record Bit-rate**

There are three options: GOOD, NORMAL and LOW, corresponding to HIGHEST, HIGH and NORMAL data stream standard. The bit rate of each channel for recording can be adjusted independently.

### **5.3.4 Record Resolution**

It indicates the setup resolution and code rate for recording. There are three options: D1、HD1 and CIF resolution. The resolution of each channel for recording can be adjusted independently.

### **5.3.5 Record Frame Rate**

In this section you can choose the recording frame rate (frames per second) for current channel. The higher the record frame rate, the more natural movement you will see in playback mode. Make your choice depending on the precision with which you want to follow the events unfolding before your cameras. It is possible to adjust each channel frame rate independently.

For PAL video output format, the default value of the system’s resolution is CIF and the default value of the system’s frame rate is **25** frames per second with each channel, which means the system, will record 100 frames per second with all channels. User can set frame rate from **1 to 25** frames per second for each channel. The maximum value of total frames per second with all channels is **200** frames with CIF resolution.

For NTSC video output format, the default value of the system’s resolution is CIF and the default value of the system’s frame rate is **30** frames per second for each channel, which means the system, will record 120 frames per second with all channels. User can set frame rate from **1 to 30** frames per second for each channel. The maximum value of total frames per second with all channels is **240** frames with CIF resolution.

### **5.3.6 Record Audio**

“OPEN” indicates that the audio recording for all channels is enabled; “CLOSE” indicates that audio recording is disabled.

### **5.3.7 Record Pack Time**

There are four options: 15min, 30min, 45min, and 60minutes. It will pack as the mode you selected when alarm record is disabled.

### **5.3.8 Record Mode**

Record mode includes two options: “ALWAYS” and “SCHEDULE”.



**ALWAYS:** indicates that the device will start recording when it starts up.

**SCHEDULE:** This setup function allows you to create a schedule for recording tasks throughout the week, so that only certain selected events are actually recorded on the HDD. For example, you may set up the system to record non-stop throughout the business hours, making it an alarm-triggered recording at lunch time (that means no recording will be performed unless an alarm event happens), night time being set to motion detection recording with certain hours made more secure with the combined alarm and motion detection triggered recording, finally making it more sophisticated by specifically setting a no-record time slot when you usually stay in the office alone at the wee hours of weekday mornings. You can setup schedule as you want.

Please note that manual recording overrides all record settings and will be carried on until stopped by the operator.

**CHANNEL:** You can select all channels or just one channel.

There are three modes for recording: ALARM, NORMAL and NO RECORD. Different colors signify different recording modes: Red means alarm record, green means normal record, grounding means no record.

To set up weekly schedules, click on the box of the recording status you want (Alarm, Normal or No record) and then click on each box in the schedule time line that you want this method to apply to. Also you can left click to drag the frames on boxes in the schedule time line that you want to. You can use the [FROM-TO] pull-down menus and COPY button settings to repeat setting from one day to another day or all days.

After you complete the schedule you activate it by clicking the [] button.



**When you select the option of alarm recording, in order for the actual recording to happen, it is necessary to set the motion detection sensitivity and area. Please refer to Section 5.6.7 Motion Detect for details. When alarm recording is selected, please set the alarm triggering settings beforehand.**

Scroll to  and press enter to restore to default settings.

Scroll to  and press **ENTER** to save the new settings.

## 5.4 Video

Move the cursor to [VIDEO] (the icon will be highlighted when selected). Press [Enter] to enter the setting interface. You can use the direction keys and cursor to change the options.



### 5.4.1 Video Channel

You can select one channel to set up.

### 5.4.2 Video Name

User can modify the name of the camera for each channel. Please note that the name of each channel supports up to nine character or four Chinese characters.

### 5.4.3 Video Position

Name location is optional. You can press [Enter] to switch from U-L, D-L, U-R, D-R and OFF.

### 5.4.4 Live

“ON” indicates that the channel is allowed to view the live mode; “OFF” means it is not.

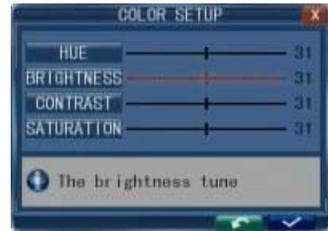
### 5.4.5 Video Audio

You can set up audio inputs for the current channel. The option includes UNBIND · CH1 · CH2 · CH3 and CH4. For example, if the current channel is CH1 and the “AUDIO” is set at “UNBIND”, there will be no audio for CH1; if the current channel is CH1 and the “AUDIO” is set at “CH2”, the audio of CH2 will play on CH1.

### 5.4.6 Video Color

Click [System settings → Video → Color] to enter [Color setup] menu. You can adjust camera color attributes for the best image rendition. By default the values are set at 31 as the average value. Please make your adjustments depending on the actual conditions at the location where the camera is installed.

Press [▶] / [◀] key or directly drag the cursor to setup colors. Clicking [DEFAULT] button to reset the color parameter values, press [▼] to save the parameters once the setup is



completed.

### 5.4.7 Record Time

You can define which information will be recorded onto the video as the OSD (On-Screen Display) string.

### 5.4.8 Video Margin

Click [System settings → Video → Margin] to enter [Video margin setup] menu. You can move the entire video screen up, down, left and right using this option.

### 5.4.9 Video Setup

Click [System settings → Video → Video Setup] to enter [Video Setup] menu.

VGA resolution: Options include 1024\*768 and 1280\*1024(HZ).

Sequential Time (SEC): This refers to sequencing time when auto-sequence is enabled. Values can be set from 1~300 seconds.

Channel: Select one channel to set up area covered.

Area Covered: Set privacy area. This device can



be set four pieces of privacy area for each channel.

**Note:** The device will restart when you modify the VGA resolution.

## 5.5 Network

Move the cursor to [NETWORK] (the icon will be highlighted when selected), and press [Enter] to access setting interface. User can setup “network”, “DDNS”, “email” and “mobile” and “IP access”.



be

### 5.5.1 Network Setup

After selecting network mode - such as static, DHCP and PPPoE allocation and setup web port,

you could visit DVR remotely via the internet.

- 1) When selecting static allocation, you need to set up an IP address, a subnet mask, a gateway and a web port.

**MEDIA PORT:** Transfers video data between client and device.

**WEB PORT:** Sets up the port of IE browser via HTTP.

The default number for the WEB port is 8090. But model dependent.

**SETUP PORT:** This port is fixed and you can't modify it, the value is 8000.



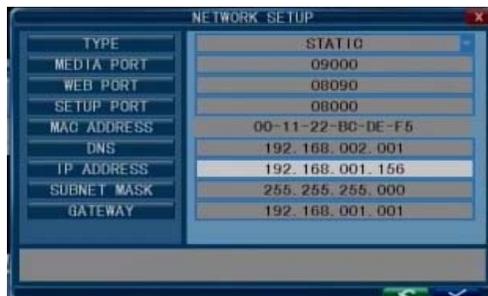
**DNS:** Press [Enter] and input numbers for the net mask.

**IP ADDRESS:** IP ADDRESS sets up the IP address press [Enter] and input numbers for the IP address.

**SUBNET MASK:** Press [Enter] and input numbers for the net mask.

**GATEWAY:** Press [Enter] and input numbers for the default gateway.

- 2) When selecting PPPOE, you need to input PPPOE USER and PASSWORD provided by ISP supplier.



**MEDIA PORT:** Port for private protocol of DVR and PC, default: 9000. If this port of computer is applied by other server, please change to other free port.

**WEB PORT:** Http port. Default: 8090. If admin change WEB port to: e.g. 8088, port No. should be added behind IP, http://192.168.15.145:8088 should input into IP of IE.

**IP address:** Fill in IP address according to the net of DVR.

**PPPOE user and password:** Enter the username and password provided by the internet service. Click the button  and the system will reboot automatically. After rebooting, the device will save it and set the PPPOE as default network type. The IP address will be automatically configure as dynamic IP of WAN.

3) When selecting DHCP, the server will allocate DVR IP address automatically.

**NOTE:** Save it when select DHCP and it will automatically connect with the server. Will allot IP address when connect ok and the address will showed on the interface.

## 5.5.2 DDNS Setup

Move the cursor to DDNS SETUP and press [Enter] to enter the interface.

**DDNS:** Options are “ON/OFF”. If there is a DDNS server, select “ON”.

**SERVER:** There are five options: 3322, dyndns, perfecteyes.

**HOST NAME:** Input the name of the host server.

**USER NAME:** Input the name of the user.

**PASSWORD:** Input the password.

## 5.5.3 Email Setup

Click the [Email setup] menu to enter into its sub menu.

**On the [Email setup] mode, refer to its parameter setup shown as picture when setting email alarm to “on”.**



**SSL:** SSL is a security link transport protocol. You can encrypt your communication info (including your email) using SSL to prevent hackers from monitoring your email or communication info and even your password.

**Interval:** This indicates the interval for sending email, including 5s, 10s, 30s, 1minute and 3minutes.

**SMTP Port:** This indicates sender port of SMTP server. Generally the SMTP port value is 25, but there are exceptions, for example, SMTP port of G-mail server should be 465.

**SMTP:** This indicates server address you use.

**Sender:** Sender indicates sender’s email address. The email address should be consistent with the server you use. That is to say, when you use email address – [abc@gmail.com](mailto:abc@gmail.com), the corresponding server should be smtp.gmail.com.

**Receiver:** This indicates the receiver’s email address. The email address is used to receive image transmitted from motion detection alarm of DVR. Please clear the images you have received as soon as possible to avoid overloading your email account. For detailed SMTP protocols settings refer to the above Fig.



## 5.5.4 Mobile Setup

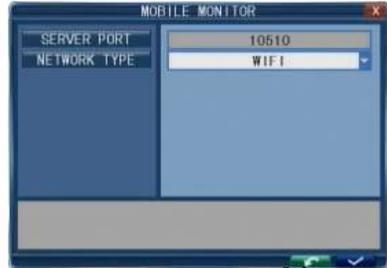
Move the cursor to **【MOBLE SETUP】** (the icon will be highlighted when selected), and press **【Enter】** to enter into the setting interface.

**SERVER PORT:** Mobile monitoring port. Input the correct mobile port and press **【↵】** to confirm. The setting range is between 1024 and 65535. The default value is 10510.

**NETWORK TYPE:** Select from different mobile network including 3G, 2.5G, 2.75G and WIFI; press **【↵】** to choose a new network.

**Explanation:** Please connect DVR to Internet before setting DVR port number and the server port is not equal to network menus.

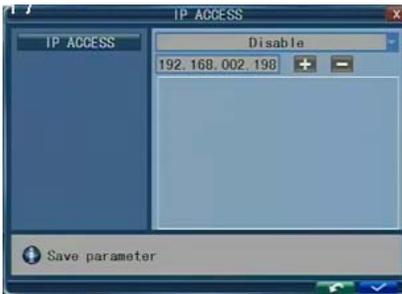
**Note:** You can only see one channel at one time when viewing from a mobile phone. The speed of the display depends on the speed of the internet connection.



## 5.5.5 IP access setup

Move the cursor to **【IP access setup】**(the icon will be highlighted when selected),and press **【enter】** to enter into the setting interface.

**IP access:** including disable, forbidden, allow access. Press **【↵】** to confirm



**Note:** You can only see one channel at one time when viewing from a mobile phone. The speed of the display depends on the speed of the internet connection.

## 5.5.6 Other settings

Move the cursor to **【other settings】**(the icon will be highlighted when selected) and press **【Enter】** to access setting interface.

**Note:** The **Auto ID** is used for connecting the IE interface. For detail operation please reference appendix 6.



## 5.6 Alarm

Move the cursor to **[ALARM]** (the icon will be highlighted when selected) and press **[Enter]** to access setting interface.



### 5.6.1 OUTPUT

This function sets the output time for I/O alarm when an alarm is triggered. Options include “OFF”, “5s”, “10s”, “30s” and “60s”. If you choose “OFF”, the alarm will not be triggered in any case.

### 5.6.2 DURATION

This function sets the duration of the recording time after alarm recording is activated. Options include “30s, 1min, 2min and 5min”.

### 5.6.3 BUZZER

This function sets the buzzer calling time when the alarm is triggered. Options include OFF, 5 seconds, 10 seconds, 30 seconds and 60 seconds. If you choose “OFF”, the buzzer will not be triggered whatever happens.

### 5.6.4 PRERECORD

It sets the record time of duration before alarm is activated. Preview recording time setup: OFF and 5 seconds.

### 5.6.5 EXCEPTION

The Tool Bar → **System Setting** → **Alarm** → **Exception Alarm** → [**>>>**] button will bring up the dialog window where you can set buzzer and I/O output for HDD Full, HDD Loss and Video Loss.

**HDD FULL:** You can set buzzer alarm and I/O output alarm when there is little space for HDD to recording. Options include “OFF”, “1G”, “5G”, “10G”, “1 hour”, “5 hours”, “10 hours” and “20 hours”.

**HDD LOSS:** “ON” indicates that the relevant alarm will go on if there is no HDD and an icon “” will be displayed on the left bottom of channel 1 in the live view.

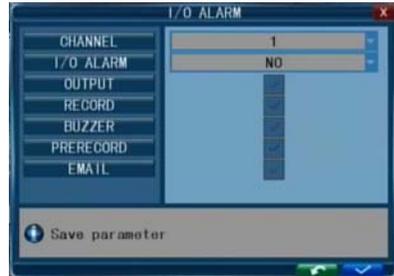


**VIDEO LOSS:** “ON” indicates that the relevant alarm will go on when one channel has no video input.

**Note;** If the buzzer alarm in section 5.6.2.1 or I/O alarm in section 5.6.2.3 had turned off, they will not be triggered in any case.

## 5.6.6 I/O ALARM

The Tool Bar → System Setting → Alarm → I/O Alarm → [>>] button will bring up the dialog window where you can set I/O Alarm, Output, Record, Buzzer, Prerecord and Email.



**CHANNEL:** select the channel you need to setup.

**I/O ALARM:** Each channel corresponds to an I/O status, which means when an alarm is triggered, it will activate the corresponding channel to start alarm recording.

**N.O.:** Normally open type. It means that in the normal state, the sensor device is kept under constant low voltage. If output voltage changes from low to high, then the alarm is triggered.

**N.C.:** Normally closed type (also – “normally connected”). The normal state of the sensor device is under constant high voltage. If output voltage changes from high to low, then the alarm is triggered.

**OFF:** Set to “Off” if you are not going to use external sensor alarms.

**OUTPUT:** “ON” indicates that an alarm will go on if it had been triggered by sensor.

**RECORD:** “ON” indicates that the relevant channel will record if it had been triggered by sensor.

**BUZZER:** “ON” indicates that the buzzer will turn on if it had been triggered by sensor.

**Prerecord:** “ON” indicates that the relevant channel will prerecord 5 seconds if it had been triggered by sensor.

**Email:** “ON” indicates that the picture of relevant channel will be send to mail if it had been triggered by sensor.

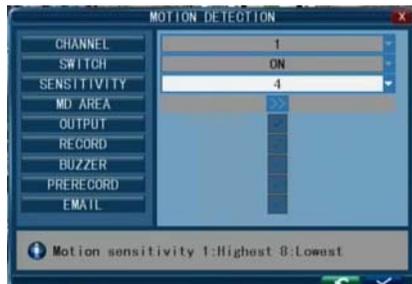
**Note:** If the output time, record, buzzer, prerecord and Email had been turned off, the relevant option will not be triggered in any case.

## 5.6.7 Motion Detection

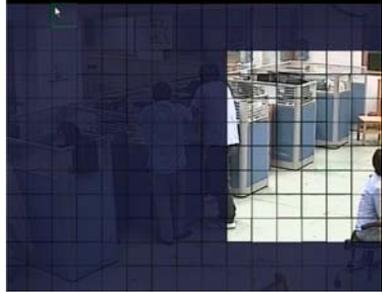
The Tool Bar → System Setting → Alarm → Motion → [>>] button will bring up the dialog window where you can set Sensitivity, MD Detection, Output, Record, Buzzer, Prerecord, Email.

**CHANNEL:** Select the channel you need to setup.

**SWITCH:** Each channel has a corresponding channel switch, press [Enter] to turn on or turn off the motion detection for each channel.



**SENSITIVITY:** Each channel has a corresponding sensitivity setting; including eight standards and “1” indicates highest sensitivity, press **[Enter]** to switch.



**MD AREA:** Sometimes you need to have some regions in your camera view with the enabled motion detection feature, while other regions in the same view should be free of this functionality. This may be handy when, for example, the camera covers the road and an adjoining territory. While you would like to have the motion detection working on the area near the entrance to the building, you most likely would not like to see it triggered every time a car or truck passes on the nearby road.

Each channel has a corresponding regional motion detecting setting, move the cursor to corresponding **[setting]** and press **[Enter]** to enter regional setting interface. The blue area means motion detection is activated, transparent block means motion detection is not activated. Press the direction key on remote control to move the cursor along the small pane: position of cursor is indicated by green frame. Press **[Enter]** to select or cancel motion detection in this small pane. When the setup is finished, press **[Home]** or right click to go back to MD setup interface and move the cursor to “” to save settings.

**Note:**

Mouse operation: Left click and drag the frame to setup the region for motion detection.

**OUTPUT:** “ON” indicates that an alarm will go on if it had been triggered by motion.

**RECORD:** “ON” indicates that the relevant channel will record if it had been triggered by motion.

**BUZZER:** “ON” indicates that the buzzer will turn on if it had been triggered by motion.

**Prerecord:** “ON” indicates that the relevant channel will prerecord 5 seconds if it had been triggered by motion.

**Email:** “ON” indicates that the picture of relevant channel will be send to mail if it had been triggered by motion.

**Note:** If the buzzer alarm in section 5.6.2.1 or I/O alarm in section 5.6.2.3 had turned off, they will not be triggered in any case.

## 5.7 PTZ---- (optional)

Move the cursor to [PTZ] (the icon will be highlighted when selected) and press [Enter] to access setting interface. You can setup the parameters for each channel separately.



### 5.7.1 PTZ Channel

The channel with PTZ is connected.

### 5.7.2 PTZ Protocol



**Note:** When making changes to PTZ camera functionality / settings, make sure that these changes are being made to actual PTZ cameras by selecting the correct number in the previous field (Camera Channel).

Select the PTZ device protocol. It must be consistent with the protocol of the actual PTZ cameras installed. You can make the choice among two available options: Pelco-D and Pelco-P. The changes will take effect after you save and exit.

### 5.7.3 PTZ Baud Rate

Select the PTZ device baud rate. It must be consistent with the baud rate of the actual PTZ cameras installed. You system supports four options: 1200, 2400, 4800, 9600. The changes will take effect after you save and exit.

### 5.7.4 PTZ Data Bit

Options include 5, 6, 7 and 8. The default setting for DATA BIT is 8.

### 5.7.5 PTZ Stop Bit

Options include 1 and 2. The default setting is 1.

### 5.7.6 PTZ Parity

Options include None, Odd, Even, Mark and Space. The default setting is none.

### 5.7.7 PTZ Address

Select the PTZ device ID. It must be consistent with the ID of the actual PTZ cameras installed. Make your choice of any number from 1 to 255. Please note that this is not the same as the

number of the channel to which you hook up the PTZ camera in your DVR system. The system allows for step-by-step selection of the values by pressing the arrow buttons at each end of the field. The changes will take effect after you save and exit.

Please note the above mentioned channel setting must match the settings of the PTZ camera.

## 6. Web Browser Operation

### 6.1 Feature

Install the software through the IE browser of OS to operate the network remotely and conveniently. DVR supports C/S, B/S, and access in LAN and WAN. It also supports IP and domain name visiting.

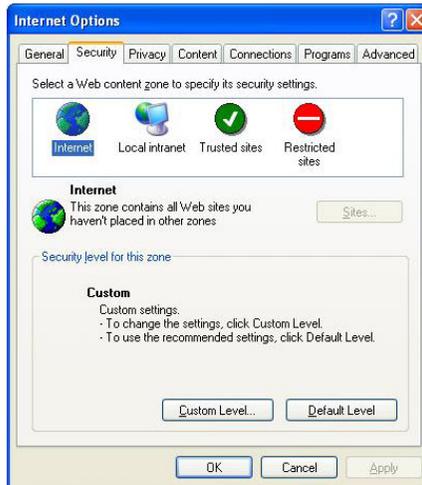
#### RESTRICTION CONDITION :

To ensure PC's stable visiting of DVR, we recommend Windows XP or Windows Vista operation system, and IE 6.0 or IE 7.0 browsers.

### 6.2 Network Security Setting

Prior to control installation, please program the network security level by using the following operations:

- (1) Open the IE browser and click [Tools→ Internet Options].
- (2) Choose the “Security” label in the dialogue box.



- (3) Click “Customization level” to enter into the security setting.



**Set the ActiveX control and pluggable unit. Select the following options**

- √ ActiveX control auto-prompting
- √ Run the script of the ActiveX control which is marked to be that can safely implement the script.
- √ Implement initialization and run the script of the ActiveX control which is not marked to be that can safely implement the script.
- √ Binary system and the script behavior
- √ Download the unsigned ActiveX control
- √ Download the signed ActiveX control
- √ Perform the ActiveX control and pluggable unit

**It’s extremely importation to “enable” the items above.**

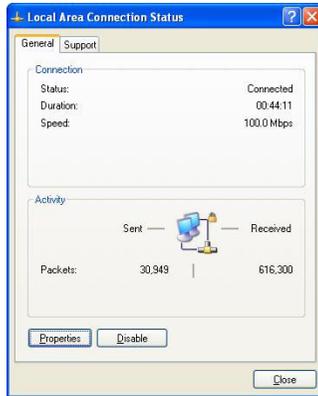
**Prompt: Before control installation, please turn off the fire wall and the anti-virus software.**

### 6.3 Connection Setting

The remote access for the hard disk recording machine should be carried out through the network. In the local area network connection, the IP address of the client-side computer must be in the same network section with that of the hard disk recording machine. While in the wide area network connection, just ensure that two sides can visit the public network, and connect through the IP address or the dynamic domain name. The following will mainly focus on the connecting and setting method for the local area network.

**Step 1:** Right click on “Network neighborhood” and click “Attribute” in the ejected menu to open the “Network connection”.

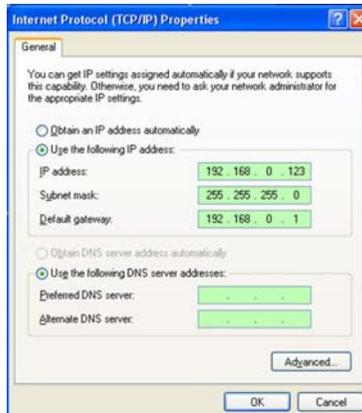
**Step 2:** Double click to open “Local connection”.



Step 3: Click “Attribute”.



Step 4: Double click “Internet protocol (TCP/IP)”.



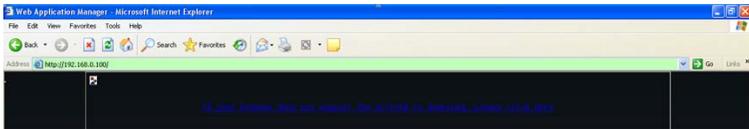
**Step 5:** Examine the IP address, subnet mask, and default gateway on the PC.

**Step 6:** Set the corresponding IP address, subnet mask, and default gateway on the DVR (refer to 5.5.5 Network Setup). If the subnet mask and default gateway on DVR are the same with those of the PC, then the IP address must be in the same network section but cannot be the same with the used one. Otherwise, it will cause IP address conflicts. Take the figure above as an example, the IP address should be: 192.168.0.X, wherein, X cannot be 40 or 1 (including other IP addresses currently being used), and cannot surpass 255, the subnet mask is 255.255.255.0, and the gateway is 192.168.0.1.

## 6.4 Control Download and Installation

After finishing the aforementioned settings, open the IE browser, input <http://192.168.0.X> (192.168.0.X is the setting IP address of the DVR) and confirm. If the http port of DVR setting has been changed (not 80), it's will be must to add colon + port number (assume that the current port number is P), like <http://192.168.0.X:P>, for correct visit. Then, please click “If your browser does not support the ActiveX to download, please click here”, the network will download and install the control automatically.

After connecting to the internet, IE will automatically download the file to PC as follows.



The system will automatically enter GUI as follows.



Select English interface from the top left side. Input correct password if password is enabled to enter the system. The password is the same as the one set in DVR.

**USER ID:** Input user name. The administrator has all authorities, but common user has been limited authorities by administrator. Administrator can change user's remote permission at User Management.

**PASSWORD:** The password is as the same as the password of Device.

**NETWORK:** LAN/WAN

**Note:** If you connect the device in WAN, the IP should be a public IP.

## 6.5 Operation Interface

Options in the main interface include LIVE, REPLAY, REMOTE SETTING, LOCAL SETTING and LOGOUT. Click any option to access.

### 6.5.1 Live

Click [Live] to enter into the interface as follows.



### 6.5.2 Control

Move cursor to the icons, which will become highlighted when selected.

Connect all windows or disconnect all windows.

Capture picture, save in local disk, system save default path is "c:\DVR\BACKUP".

Quick-start to record video on all channels. The left upper corner of each channel has normal recording video symbol .

Click icon to switch between single screen /quad /nine /16 split /full screen .

Adjust the volume.

### 6.5.3 Other Operation

1. Select one channel at preview screen (the selected channel's frame will be change to blue), and double click to the selected channel single screen display.
2. Click one channel at the preview screen, and then right click to open the shortcut menu window.

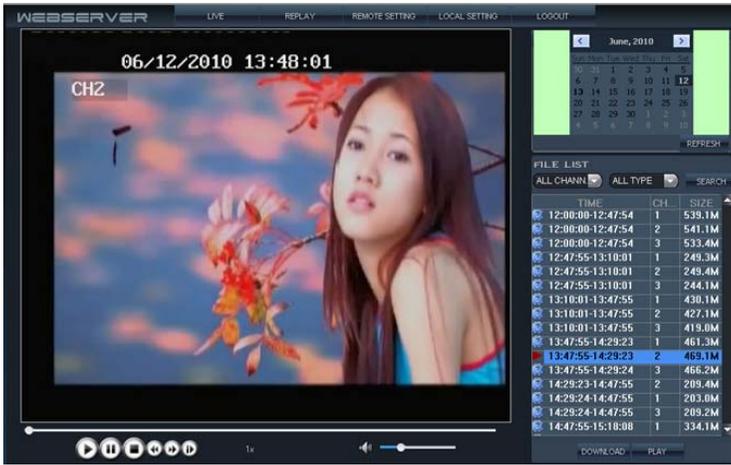


You can open, shut down and start this channel's record using the shortcut menu.

- Right click a live view screen, and click “connect all” or “disconnect all” to quickly open or close all windows.

## 6.5.4 Replay

Click “REPLAY” to enter into playback interface.



Click right up of calendar interface  and , to set the month for searching; click “REFRESH” at the calendar interface to display the recording information of current month.



The highlighted date indicates that video was recorded on that day. Click on a date to search the recording file list of that day. For example, the above fig shows that June, 12th, 13<sup>th</sup> have recorded video when it shows on bold, and current search date is June 12<sup>th</sup>.

Select channel and type at the bottom of the calendar. Click “SEARCH” and the result will display as follows.

FILE LIST		
ALL CHANN	ALL TYPE	SEARCH
TIME	CH	SIZE
12:00:00-12:47:54	1	539.1M
12:00:00-12:47:54	2	541.1M
12:00:00-12:47:54	3	533.4M
12:47:55-13:10:01	1	249.3M
12:47:55-13:10:01	2	249.4M
12:47:55-13:10:01	3	244.1M
13:10:01-13:47:55	1	430.1M
13:10:01-13:47:55	2	427.1M
13:10:01-13:47:55	3	419.0M
13:47:55-14:29:23	1	461.3M
13:47:55-14:29:23	2	469.1M
13:47:55-14:29:24	3	466.2M
14:29:23-14:47:55	2	209.4M
14:29:24-14:47:55	1	203.0M
14:29:24-14:47:55	3	209.2M
14:47:55-15:18:00	1	334.1M

DOWNLOAD PLAY

Double click one of the listed recorded video to playback. Or select one of the listed recorded video and click the button [PLAY] to playback. The file icon will change to ▶.

 The user can download files on PC, and save them to HDD for backup or play. Download file format is AVI file.

### 6.5.5 Instruction of Toolbar



Play Stop Fast play

Volume Control

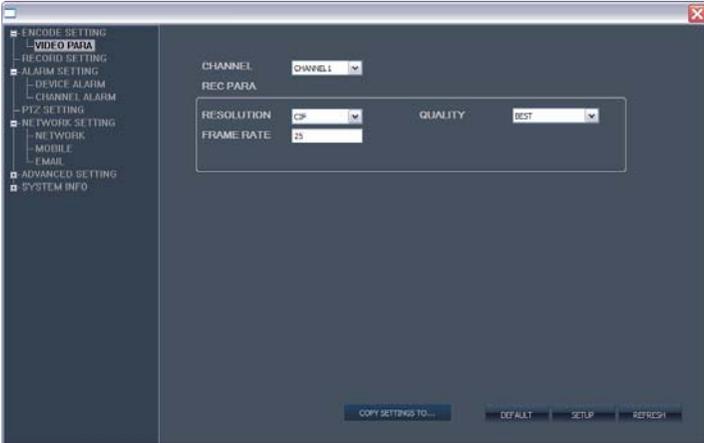
Pause Slow Play Single Frame

### 6.5.6 Remote Setting

Click [Remote Setting] to enter into setup interface, this interface includes record, alarm, PTZ, network, advanced and system information six menus.

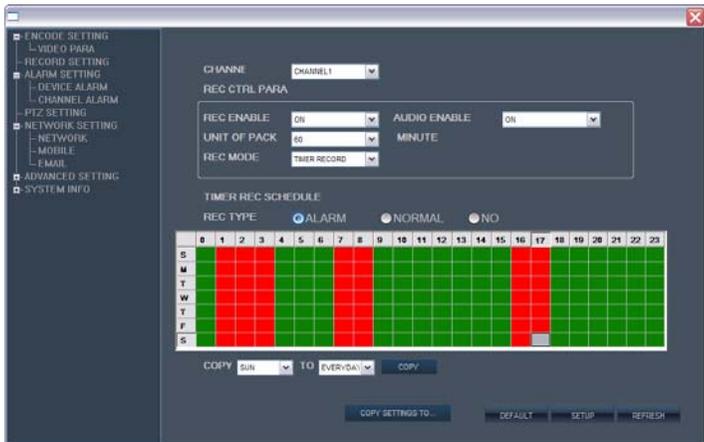
#### A. Encode Setting

Click [Encode Setting] – [Video Para] to enter into setup interface. User can adjust recording parameters (resolution, quality and frame rate) for each channel remotely via net-viewer.



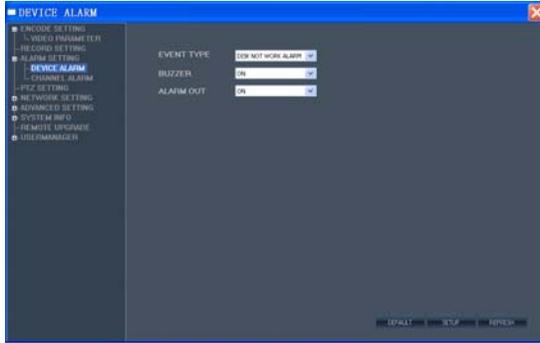
### B. Record Setting

Click [Record Setting] to enter into the menu interface, user can select “on/off” for each channel, and adjust recording parameters (audio, pack time, REC mode and REC schedule) remotely via net-viewer.

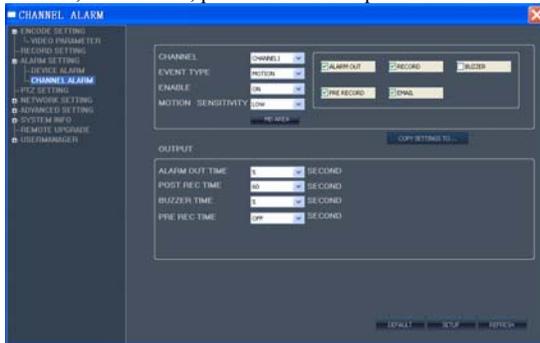


### C. Alarm Setting

Click [Alarm Setting]-[Device Alarm] to enter into setup interface.

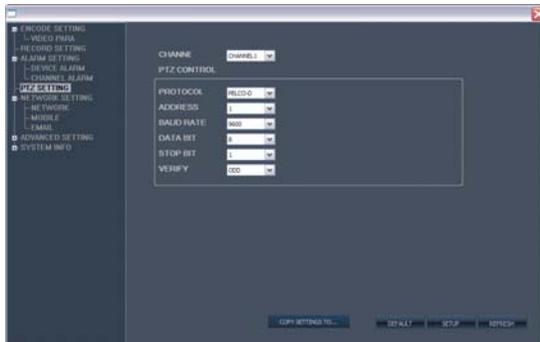


Click [Alarm Setting]-[Channel Alarm] to enter into setup interface. User can set up alarm event types; also can set I/O alarm for each channel, motion detection alarm, motion area, motion sensitivity, alarm out time, buzzer time, pre REC time and post REC time.



#### D. PTZ Setting

Click [PTZ Setting] to access setup interface. User can setup PTZ parameters remotely using the same methods as in the local DVR setup.



#### E. Network Setting

Click [Network Setting] - [Network] to enter setup interface. The menu allows user to set a lower bandwidth for Internet video transmission.

Click [Network Setting] - [Mobile] to enter setup interface.

Click [Network Setting] - [Email] to enter setup interface.

User can setup network parameters using the same methods as in the local DVR setup.

The screenshot shows the 'NETWORK SETTING' interface with the 'NETWORK' tab selected. The left sidebar lists various settings: ENCODE SETTING, VIDEO PARAM, RECORD SETTING, ALARM SETTING (DEVICE ALARM, CHANNEL ALARM), PTZ SETTING, NETWORK SETTING (selected), MOBILE, EMAIL, ADVANCED SETTING, and SYSTEM INFO. The main area is titled 'BASIC ATTR' and contains the following fields:

- TYPE: STATIC (dropdown)
- IP ADDRESS: 192.168.1.101
- NET MASK: 255.255.255.0
- PREFERRED DNS: 202.96.128.386
- MEDIA PORT: 9000
- WEB PORT: 82
- GATEWAY: 192.168.1.1
- INTERNET BANDWIDTH: (dropdown)

Below this are sections for PPPoE and DNS:

- PPPoE: PPPoE ENABLE (OFF), USER NAME, PASSWORD
- DNS: DNS ENABLE (OFF), SERVICE, HOST NAME, USER NAME, PASSWORD

At the bottom right, there are buttons for 'DEFAULT', 'SETUP', and 'REFRESH'.

The screenshot shows the 'NETWORK SETTING' interface with the 'MOBILE' tab selected. The left sidebar is the same as in the previous screenshot. The main area contains the following fields:

- MOBILE ENABLE: (checkbox)
- MOBILE: (checkbox)
- PORT: 2210
- NETWORK TYPE: WPA (dropdown)

At the bottom right, there are buttons for 'DEFAULT', 'SETUP', and 'REFRESH'.

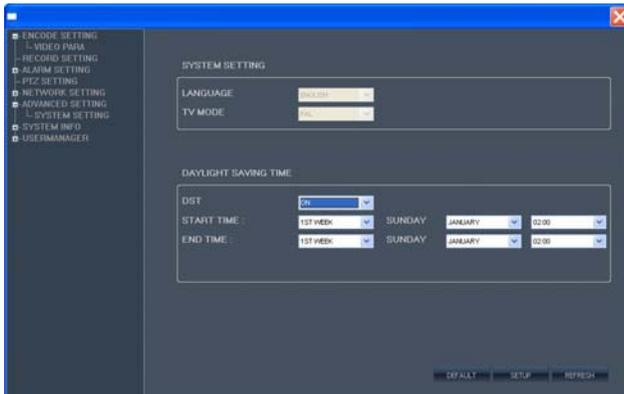
The screenshot shows the 'NETWORK SETTING' interface with the 'EMAIL' tab selected. The left sidebar is the same as in the previous screenshots. The main area contains the following fields:

- EMAIL ENABLE: OFF (dropdown)
- SEND INTERVAL: (input field) SECOND
- SSL ENABLE: OFF (radio), ON (radio)
- EMAIL SETTING: SMTP SERVER, SENDER, ADDRESS 1, ADDRESS 3, SMTP PORT, PASSWORD, ADDRESS 2

At the bottom right, there are buttons for 'DEFAULT', 'SETUP', and 'REFRESH'.

## F. System Setting

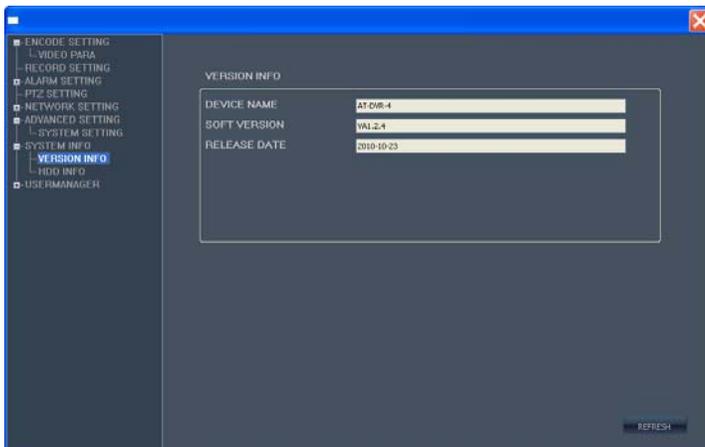
Click [Advanced Setting] - [System Setting] to enter setup interface. The menu allows user to set daylight saving time.

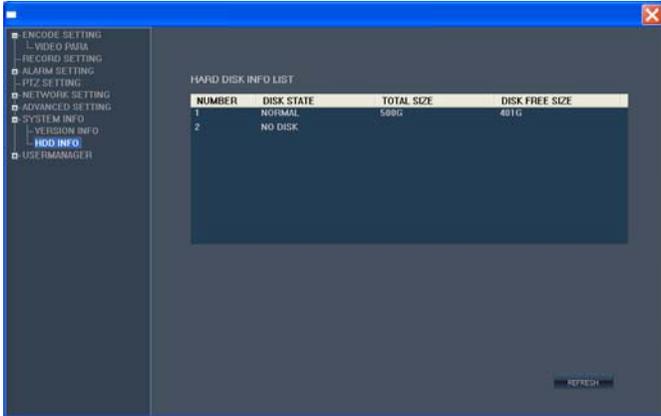


## F. System INFO

Click [System INFO] - [Version INFO] to enter setup interface. Here user can check the device's ID and software version.

Click [System INFO] - [HDD INFO] to enter setup interface. Here user can check HDD state, total size of HDD and free size of HDD.

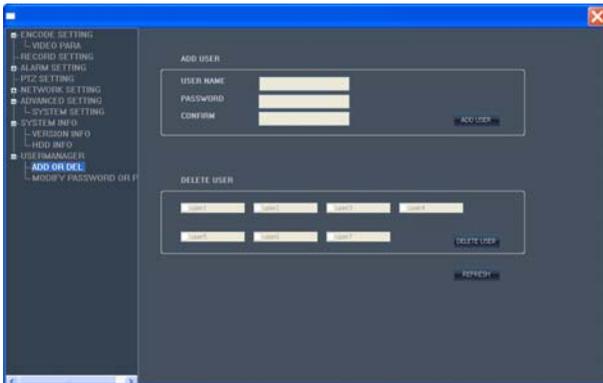


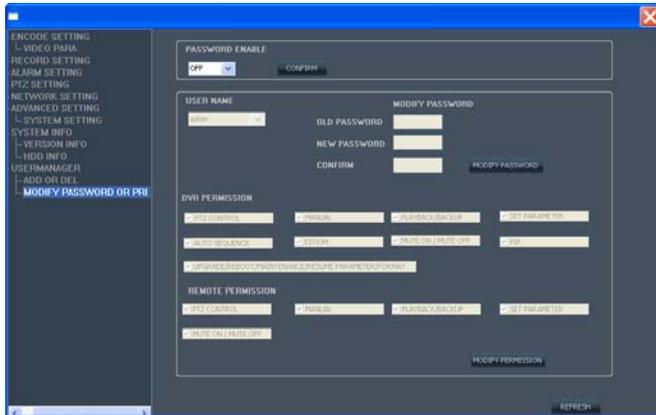


### G. User Manager

Click [User Manager] - [ADD OR DEL] to enter setup interface. This interface could only be seen by administrator when password is available. Administrator can add new user or delete any user.

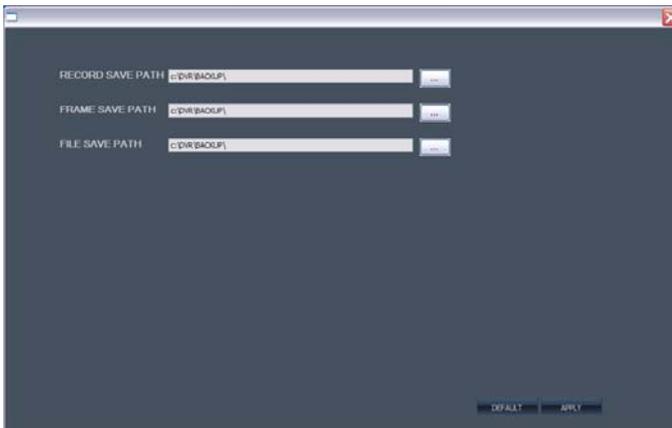
Click [User Manager] - [MODIFY PASSWORD OR PRI] to enter setup interface. This interface could only be seen by administrator when password is available. Administrator can change password, local authority and remote authority.





## 6.5.7 Local Setting

Click [Local Setting] to enter setup interface. User can setup the save path for local setting. “Record save path” is for recording, “Frame save path” is for capture and “File save path” is for download. Click the button “...” to setup save path.



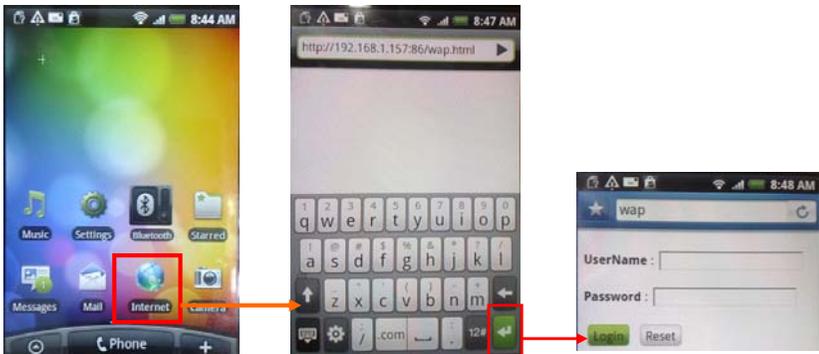
## 6.5.8 Logout

Click [Logout] to log out of the system.

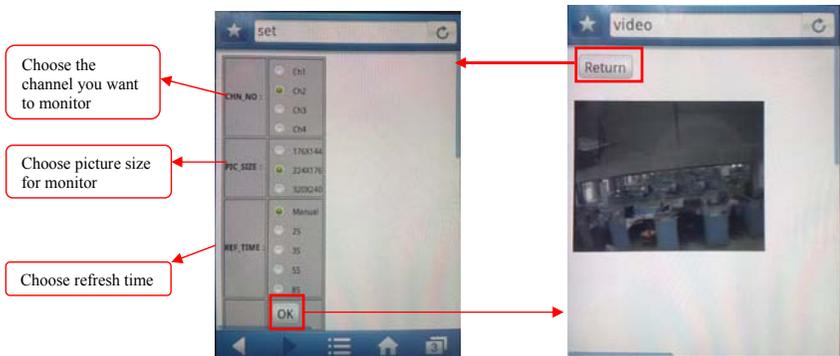
## 7. Wap Connection

The digital video recorder can also be remotely accessed by using a web browser installed on a mobile phone that support **xHTML** and **MJPEG file format**, and has screen resolution at **320x240** or above. Then follow this step to access the digital video recorder.

1. Make sure the digital video recorder connects to Internet accurately.
2. Open Internet Browser on mobile phone and fill in IP address of DVR. For example: if the IP address of DVR is 192.168.1.157 and its web port is 86, you can fill its address column with <http://192.168.1.157:86/wap.html>, click button ENTER.
3. There will be a login interface, you should fill in your user name and password, then click “login”. The user name and password will be blank if password of DVR is disabled, and the user name and password will be the same as the DVR’s if password of DVR is enabled.



4. After logging on system successfully, there will be a setting page. You can set channel you want to monitor, picture size and the refresh time. Click “OK” to take them effect.
5. Now you can get picture from the monitor channel. The picture will refresh in several minutes. The monitor channel, the picture size and refresh time is decided by setting page. If you want to configure again, you can click “Return” to configure parameters.



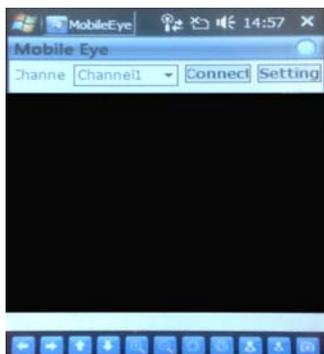
**Note:**

1. If you choose manual as refresh mode, the monitor picture will not refresh automatic until you refreshed by yourself. But if you choose a time as refresh time, it will refresh automatic.
2. You can only monitor one channel. If you want to look over other channel, you should return and configure again.

## 8. Mobile Phone Support

A state-of-the-art feature of this DVR device is transmitting live feed from the CCTV cameras to your mobile phone, so that you can have ‘on the go’ access to your surveillance system from virtually anywhere in the world. Currently, there are a limited number of phones that can support this feature: Windows CE Mobile, Symbian S60 3<sup>rd</sup> Edition OS, Apple iPhone, Andriod and Blackberry.

### 8.1 Windows Mobile



**Note: Prior to using this feature, you should apply for an Internet connection service for your mobile phone, such as 3G or 2.5G. Please contact your mobile service provider for details.**

From the installation CD, install file “xxx.cab” onto your Windows Mobile phone. See your phone user manual for more details on installing this application.

Find and execute program “MobileEye”. Click the **Setting** button to setup the IP address for your DVR.



In the following screen, input the User Name, Password, Server (IP address for your DVR) and Port (default 10510). Next, choose the channel Count for streaming data from the drop-down menu and choose the Default Channel when connecting. Choose a Record Name for your favorite files.

Click OK to save the settings.

The main window of the Mobile Phone application offers a choice of channels, **Connect** and **Settings** buttons.



You can only watch one live feed channel at a time with your mobile phone. Split mode and playback of recorded files is not available at the moment.

To connect to the system and start watching the live feed from your CCTV cameras, click on the **Connect** button.

To choose the camera, use the **Channel** drop-down menu.

To modify settings, press the **Setting** button.

On-screen data will provide information about frame rate (fps), resolution (size) and bit rate (Kbps) of current channel.

The menu bar contains the following controls.

- Directional buttons for controlling the direction of the PTZ camera view
- Zoom in / out
- Iris
- Focus
- Snapshot



## 8.2 Symbian S60 3rd Phone

From the installation CD, install file “xxx.sisx” onto your Symbian S60 3<sup>rd</sup> Edition mobile phone (for the list of mobile phones tested for compatibility, please see “List of Symbian Supported Mobile Phones”). For instructions on installing software onto your mobile phone, please refer to the phone’s user manual.



**Note:** Prior to using this feature, you should apply for an Internet connection service for your mobile phone, such as 3G or 2.5G. Please contact your mobile service provider for details.

Please see a sample installation process shown below:



After the installation is complete, please locate the Mobile Eye icon “” in the list of applications on your mobile phone.

In order to start working with the CCTV feed on your Symbian mobile phone, you will have to configure the program by entering the preferred network access point, IP address of the DVR, mobile phone port, username and password.

Click the  icon to enter the setup window.

In the **Setting** screen, enter the following data:

**Default Access Point:** Choose the network through which you connect to the Internet. The options are: “None”, “WAP over GPRS”, and mobile service providers operating in your country. If you choose “None”, then after pressing the ► button you will be offered a list of available networks to choose from.

**Server Address:** DVR IP address

**Server Port:** 10510(default port)

**Username:** Device ID of the DVR

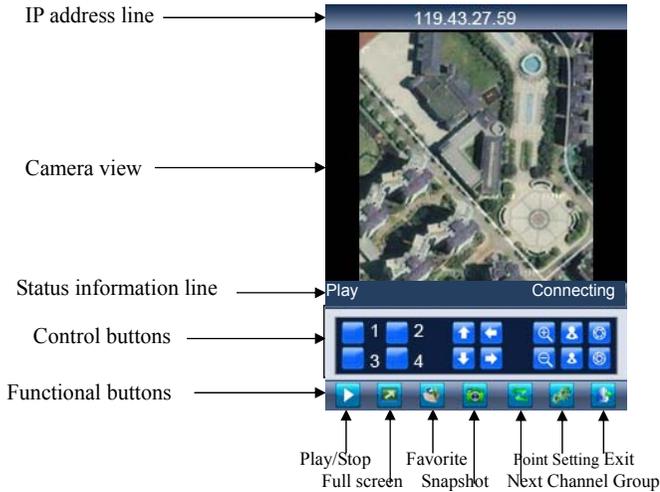


**Password:** The password will be blank if password of DVR is disabled, and the password is the same as the DVR's if password of DVR is enabled.

Save and return to the main window by pressing **Done**, or press **Cancel** to discard the changes.

Press the ► button to connect to the DVR. After your device successfully logs in to the DVR, you can watch the remote video feed on your Symbian mobile phone.

Execute the Mobile Eye program and the window will appear on the screen.



In order to navigate between the buttons, use the directional keys of your Symbian mobile phone.

**Explanation of the menu buttons and program interface:**

**Status information line.** The first status tag indicates the name for the selected functional button in the below control bar (in the illustration, it is “Play”). The second tag word denotes the current status of the program (in the illustration, it is “Connecting”).

**Control buttons:**



Select channels. If your system supports 8-channels, use functional button  to switch between channel buttons 1-4 and 5-8.



PTZ camera direction controls



PTZ camera Zoom, Focus and Iris controls

**Functional buttons:**

When highlighting these buttons, the name of the corresponding function will be displayed in the status information line (the first tag name).

**Play / Stop**

Use these buttons to play and stop the video.

**Full screen**

This function displays the camera feed in the full-screen mode. All menus and buttons will be hidden.

**Snap**

The function allows you to take a snapshot of the camera view.

**Setting**

The function brings up the connectivity setup screen.

**Next Group**

This function can toggle between two available 4-channel views: 1-4 5-8, 9-12 and 13-16.

**Exit**

This function allows you to exit the Mobile Eye program.

## List of Symbian Supported Mobile Phones

Please review the list of Symbian mobile phones tested for compatibility with the remote access to DVR.

LG-KT610	S60 3rd_FP1	10-Feb-08
LG KS10	S60 3rd_FP1	09-Oct-06
LG-KT615	S60 3rd_FP1	30-Oct-08
Nokia 3250	S60 3rd_INIT	13-Sep-05
Nokia 5320 XpressMusic	S60 3rd_FP2	22-Apr-08
Nokia 5500 Sport	S60 3rd_INIT	09-May-06
Nokia 5630 XpressMusic	S60 3rd_FP2	10-Feb-09
Nokia 5700	S60 3rd_FP1	29-Mar-07
Nokia 5730 XpressMusic	S60 3rd_FP2	11-Mar-09
Nokia 6110 Navigator	S60 3rd_FP1	08-Feb-07
Nokia 6120	S60 3rd_FP1	17-Apr-07
Nokia 6121	S60 3rd_FP1	18-Jun-07
Nokia 6210 Navigator	S60 3rd_FP2	11-Feb-08
Nokia 6220	S60 3rd_FP2	11-Feb-08
Nokia 6290	S60 3rd_FP1	28-Nov-06
Nokia 6710 Navigator	S60 3rd_FP2	16-Feb-09
Nokia 6720 Classic	S60 3rd_FP2	16-Feb-09
Nokia E51	S60 3rd_FP1	18-Sep-07
Nokia E55	S60 3rd_FP2	16-Feb-09
Nokia E60	S60 3rd_INIT	09-Oct-05
Nokia E61	S60 3rd_INIT	09-Oct-05
Nokia E61i	S60 3rd_INIT	10-Feb-07
Nokia E62	S60 3rd_INIT	09-Sep-06
Nokia E63	S60 3rd_FP1	12-Nov-08
Nokia E65	S60 3rd_INIT	09-Feb-07
Nokia E66	S60 3rd_FP1	16-Jun-08
Nokia E70	S60 3rd_INIT	09-Oct-05
Nokia E71	S60 3rd_FP1	16-Jun-08
Nokia E75	S60 3rd_FP2	16-Feb-09
Nokia E90	S60 3rd_FP1	11-Feb-07

Nokia N71	S60 3rd_INIT	09-Nov-05
Nokia N73	S60 3rd_INIT	09-Apr-06
Nokia N75	S60 3rd_INIT	27-Sep-06
Nokia N76	S60 3rd_FP1	08-Jan-07
Nokia N77	S60 3rd_INIT	12-Feb-07
Nokia N78	S60 3rd_FP2	11-Feb-08
Nokia N79	S60 3rd_FP2	21-Aug-08
Nokia N80	S60 3rd_INIT	09-Nov-05
Nokia N81	S60 3rd_FP1	29-Aug-07
Nokia N81 8GB	S60 3rd_FP1	29-Aug-07
Nokia N82	S60 3rd_FP1	14-Nov-07
Nokia N85	S60 3rd_FP2	21-Aug-08
Nokia N86 8MP	S60 3rd_FP2	17-Feb-09
Nokia N91	S60 3rd_INIT	14-Apr-05
Nokia N92	S60 3rd_INIT	09-Nov-05
Nokia N93	S60 3rd_INIT	09-Apr-06
Nokia N93i	S60 3rd_INIT	08-Jan-07
Nokia N95	S60 3rd_FP1	26-Sep-06
Nokia N95 8GB	S60 3rd_FP1	29-Aug-07
Nokia N96	S60 3rd_FP2	11-Feb-08
Samsung I7110	S60 3rd_FP2	20-Oct-08
Samsung INNOV8	S60 3rd_FP2	25-Jul-08
Samsung SGH-G810	S60 3rd_FP1	11-Feb-08
Samsung SGH-i400	S60 3rd_FP1	26-Apr-07
Samsung SGH-i450	S60 3rd_FP1	14-Oct-07
Samsung SGH-i520	S60 3rd_FP1	09-Oct-06
Samsung SGH-i550	S60 3rd_FP1	15-Oct-07
Samsung SGH-i560	S60 3rd_FP1	16-Oct-07
Samsung SGH-L870	S60 3rd_FP2	28-May-08

## 8.3 Apple iPhone

### 1) MobileEye installation

Open iPhone App store “A screenshot of the iPhone App Store home screen. At the top, the status bar shows "无 SIM", signal strength, Wi-Fi, time "17:33", and battery. Below is a search bar with a magnifying glass icon and the Chinese characters "搜索". The main area is mostly blank with a grey background. At the bottom is a dock with five icons: "Featured", "Categories", "Top 25", "Search", and "Updates".

Fig 1

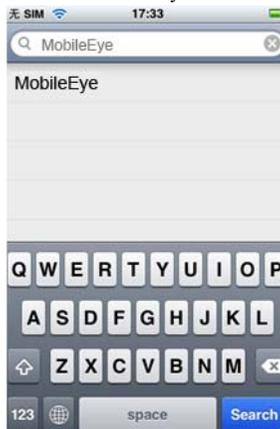
① Click “A screenshot of the iPhone App Store search results for "MobileEye". The status bar is the same as in Fig 1. The search bar now contains the text "MobileEye". Below the search bar, the results list shows "MobileEye" as the only entry. A QWERTY keyboard is visible at the bottom of the screen, with a blue "Search" button highlighted.

Fig 2

② Click “

70



Fig 3

③ Click “Free” as shown in Fig 3. It will display the screen shown in Fig 4. Click the “install” button shown in Fig 4 “Install” and it will display the screen shown in Fig 5. Input your Apple account password, then click “OK”. The screen will look like the one shown in Fig 6.



Fig 4



Fig 5



Fig 6

“”waiting: indicates that the “MobileEye” software is downloading ..... When the “” process bar display “” status, the MobileEye software has finished installing. After installing “MobileEye”, the iphone screen will display the screen shown in Fig7.



Fig 7

## 2) How to use MobileEye

(1) Click the “MobileEye” icon to open the “MobileEye”.



- ①PTZ arrow control(up down left right)
- ②PTZ lens control(zoom+, zoom-), (focus+, focus-), (iris+, iris-).
- ③Select the live view channel.
- ④Shortcut key, including pause, capture, full screen, next channel grouping and settings.
- ⑤Exit

(2) When you enter the Setting menu, the window below is shown:

- ①Server IP: DVR Internet address.
- ②Port: Default 10510.
- ③User name
- ④password



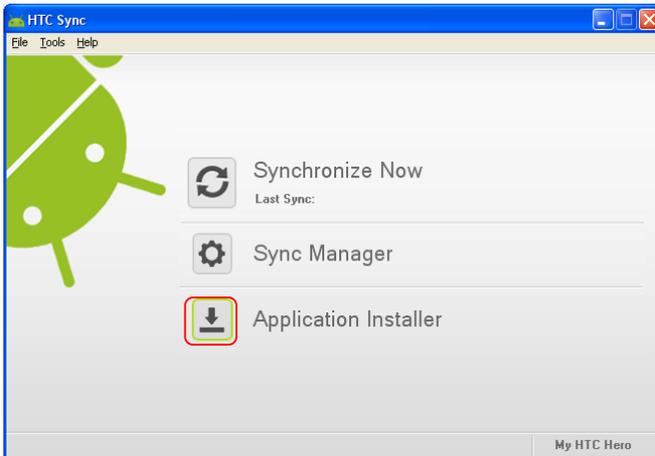
## 8.4 Andriod Mobile

### 1). Install the program

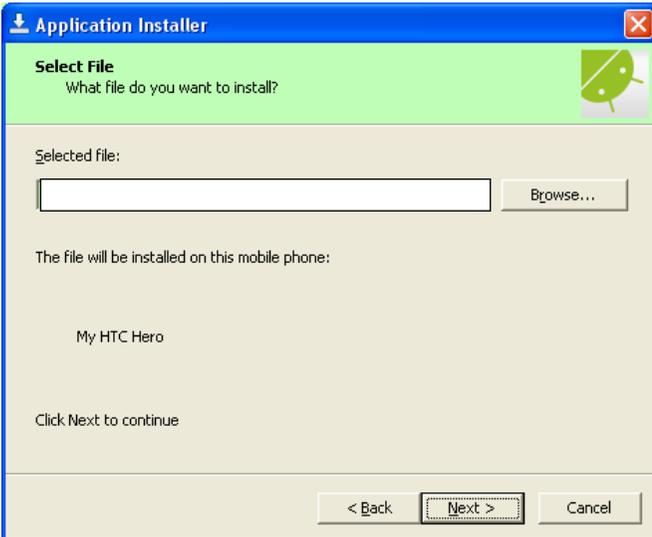
1. Copy the setup software “**Mobile Eye-Android.apk**” to your computer.
2. For instructions on installing software onto your mobile phone, please refer to the phone’s user manual.

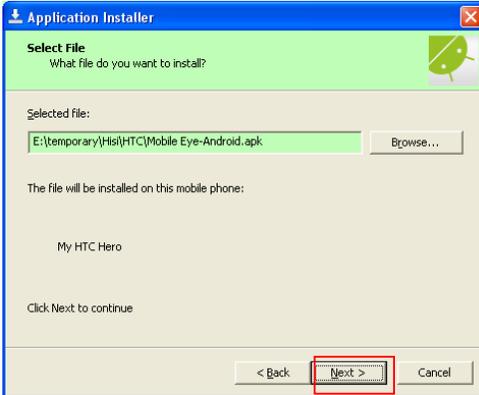
**Note: Prior to using this feature, you should apply for an Internet connection service for your mobile phone, such as 3G or 2.5G. Please contact your mobile service provider for details.**

3. Install a HTC manager “**HTCSync.exe**” on your computer. Otherwise the phone cannot establish the connection with the PC.
4. Connect HTC mobile telephone to your computer through USB cable. Run the program “**HTC Sync**”.

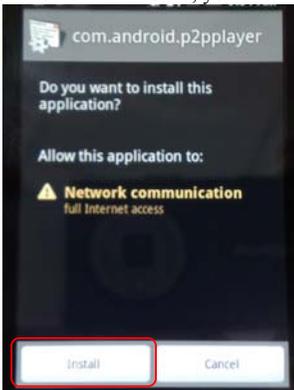


Select option “Application Installer” and click the left mouse, then the user can find the setup file; install “**Mobile Eye-Android.apk**” on your mobile telephone according to the following method.

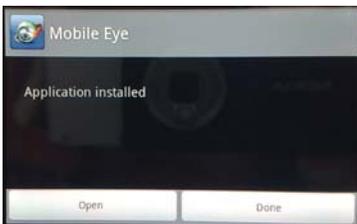




Please ensure that if asked, you allow the application access to the internet.



When application has finished installing, your phone may show the following screen.



## 2). System explanation

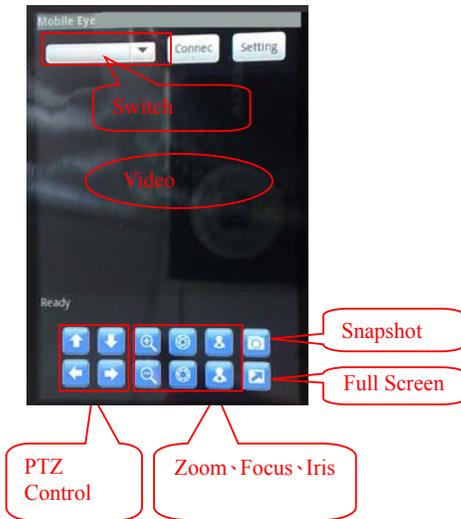
Mobile Eye application mainly allows: live video surveillance, channel switching, full screen viewing, PTZ control, focus, and image capture, save as favorite and exit function.

### 2.1) System main interface

After the installation, select the “Mobile Eye” icon in the application, see below picture:

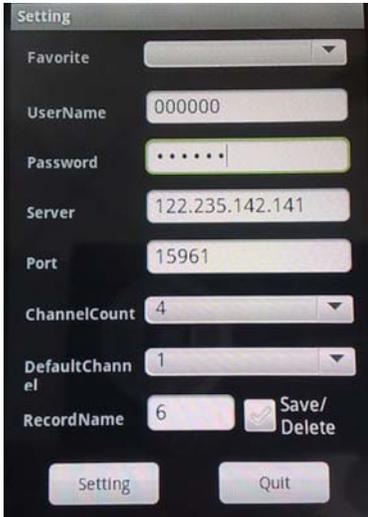


Below is displayed the main start page of the application:



## 2.2) System setting interface

Press the [setting] button to access the parameters settings. You will need to use this for the first time you use the system and later if you want to change the parameters of the system.



**Save as favorite:**

Save settings for future usage;

**User name:**

The device ID which is set on DVR [phone surveillance];

**Password:**

The user password which is set on DVR [phone surveillance];

**Server:**

The public IP address or dynamic domain name of DVR

**Port:**

The server port which is set on DVR [mobile phone]—default is “10510”.

**Channel Count:**

Set the number of channels accessible from the DVR

**Default channel:**

Set the default channel shown when connected to the DVR.

**Record Name:**

Save the name of the record.

①After changing your settings, press [SAVE] to save the information in your designated folder. Later you can find the record in the file.

②After saving your settings, press [setting] to return to the main interface.

Next, press “connect” button on the main interface and then it will connect the server. You can also switch the channel, PTZ control, including zoom/iris/focus, phone capture and full screen display in this menu.



See below for more details:

 : Press this icon to connect to the DVR

 : Press this icon to open the settings menu

 : Change live view channel.

 : Use the arrows to move the PTZ up, down, left and right.

 : These icons operate the zoom, focus and iris.

 : This function will capture the current viewed image.

 : Press it to enter into full screen mode, press it again back to the common mode.

## 8.5 Blackberry Mobile

### 1) Program installation

1. Copy the setup software “MobileEye.cod” and “MobileEye.alx” to your PC.
2. In order to be able to install applications and themes via BlackBerry Desktop Manager, firstly the PC should install BlackBerry Desktop Manager. BlackBerry Desktop Manager will be known as “DM.”; otherwise the phone cannot establish the connection with the PC.
3. Connect your BlackBerry mobile phone to your computer via the USB cable that came with it, or any USB cable that fits. Start the DM.
4. Before the installation, open the BlackBerry Desktop Manager. Shown as the red sign on the following pictures, Fig1 means the phone isn’t connected to the PC, Fig2 means the phone has been connected to the PC.

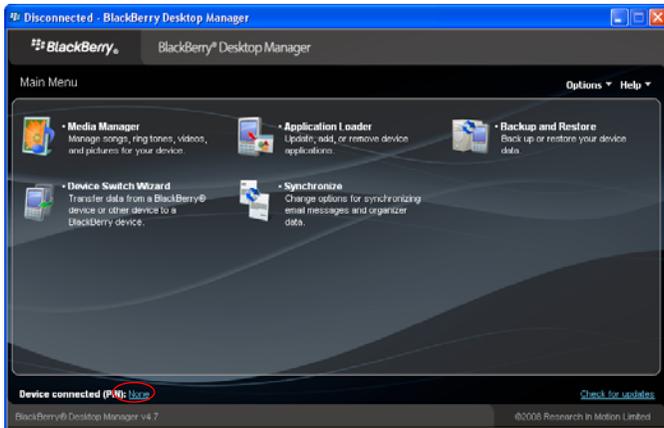


Fig1

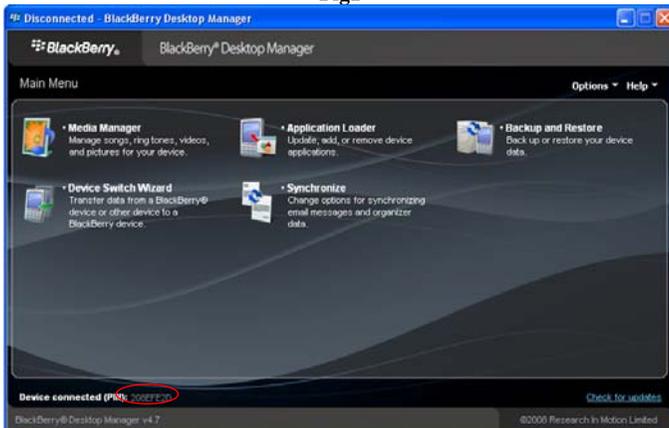
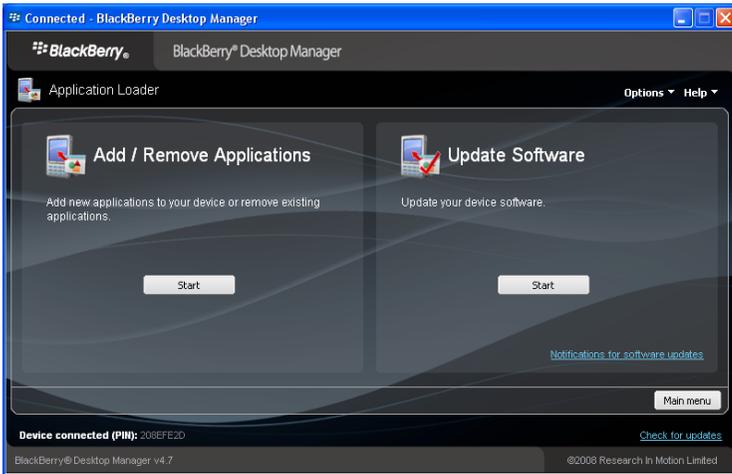
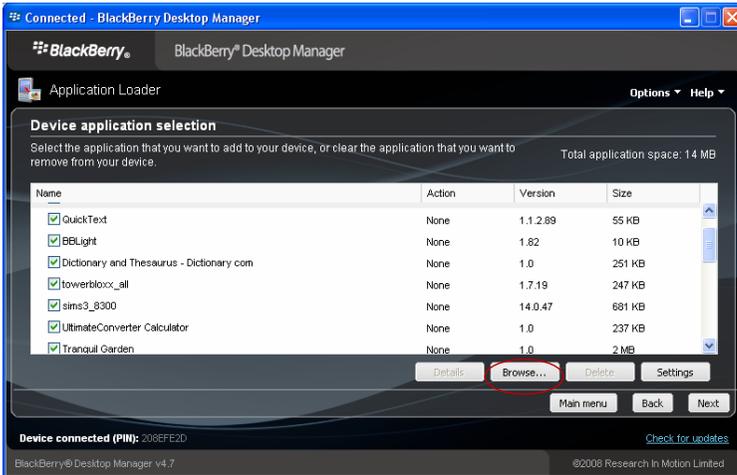


Fig2

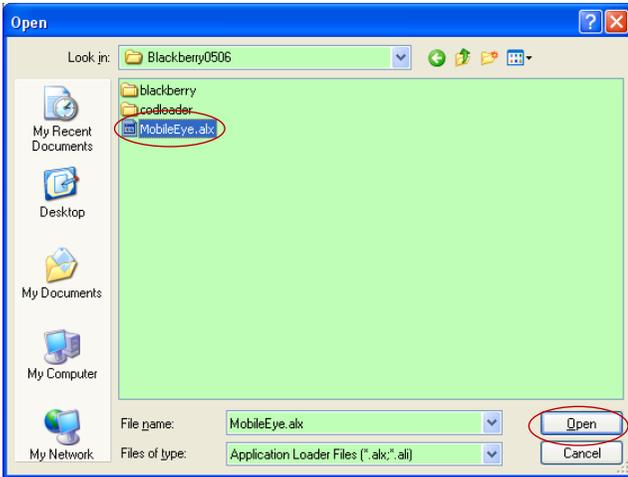
5. Click on “Application Loader” to enter into its interface. In this screen you have two options to select from. Select “Add/Remove Applications” (shown as follows).



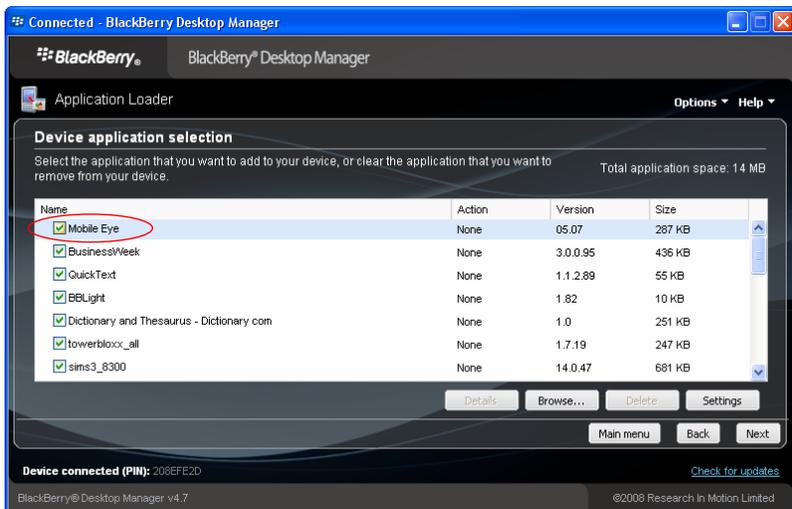
6. You should now see something like what you see below. From this screen, click “Browse” (shown as follows).



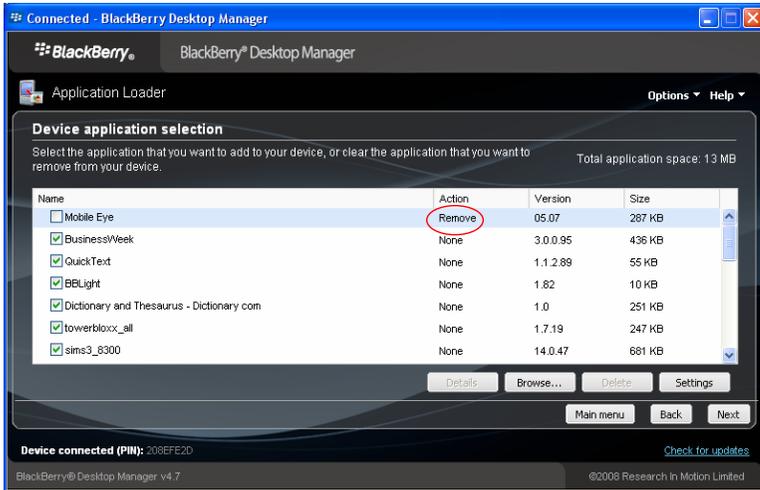
7. Once you click “Browse” you will see a file search screen like the one below. Go to and locate where you saved the application files. Make sure you saved both the “.alx” file and “.cod” file in the same folder. After finding the “MobileEye.alx” file for the application, highlight it and click “open”.



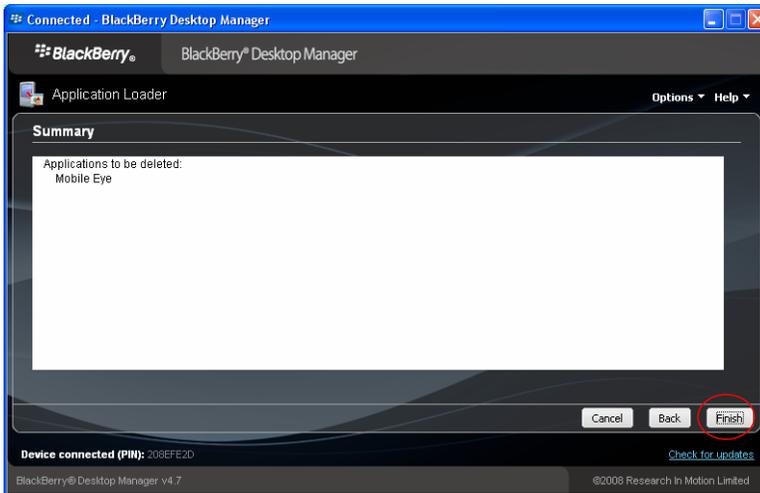
8. You will now return to the Application Loader screen. From here you should see “MobileEye” now listed with Install under the Action column (shown as follows) if the installation is successful.



9. You can remove the program “MobileEye” as the following method. To enter into Application Loader screen, on “Device application selection” you can select the application that you want to clear from your device. When the option “Action” is “Remove”, it means the program will be clear from your device.



10. Click “Next” and the screen will show as follows. Click “Finish” to confirm and the application “MobileEye” can be removed from your device.



## 2) System explanations

MobileEye phone port has the following capabilities and functions: live video surveillance, channel switch, full screen display, PTZ control, including zoom/focus/iris, image capture, save as favorite and exit function.

### ① System main interface

After the installation, press “MobileEye” icon in the application, see the below picture.

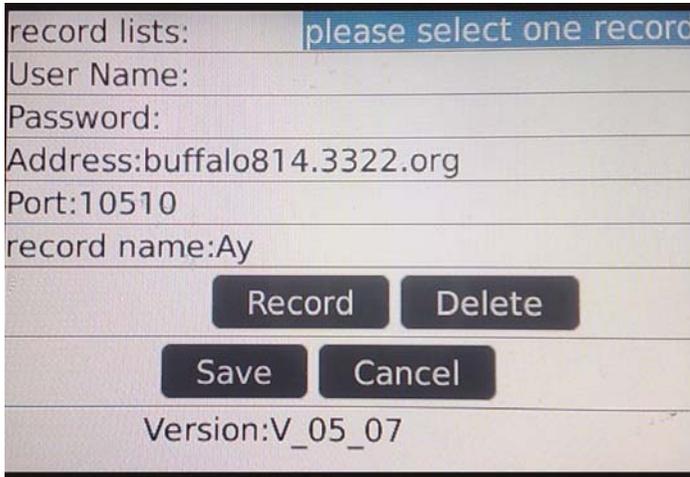


Open the main interface, see the below picture.



## ② System configure interface

Press [Configure] button to access to the parameters setting when using the or as needed to change the settings. Modify your parameters as necessary.  
Please see the below picture:



**Record lists:**

The record which is saved can be found here;

**User name:**

The device ID which is set on DVR menu [phone surveillance];

**Password:**

The user password which is set on DVR menu [phone surveillance];

**Address:**

The public IP address and dynamic domain name of DVR.

**Port:**

The server port which is set on DVR menu [mobile phone]. Default is 10510.

**Record name:**

Save the name of the record. After the setting press [SAVE] then it will go to the favorite folder.

Next time you can find the record in the file.

**Save:**

Save the settings.

**Cancel:**

Cancel all operations.

③ **System Live interface**

After changing your settings, press [Save] or [Cancel] button to return to the main interface, and press [Live] button to enter into the surveillance condition, please refer to the below picture:



See below for more details:

Choose Channel : This function switches the channel. It may only be enabled AFTER connecting to the DVR.



: This function moves the PTZ up, down, left and right.



: This function operates the zoom, focus and iris.



: Press it to enter full screen mode, press it again to go back to common mode.



: Use this function to capture images.

#### ④ Connect to DVR

To connect to the server, press the menu button on your mobile phone it will bring up menu as follows. Move the icon to “Connect” and it will be highlighted. Press the enter button on your mobile to connect to the server.



In the interface the user can switch the channel, PTZ control, image capture and full screen display, please see the below picture:



### ⑤ System Help interface

After the setting, back to the main interface and press [Help] button to enter into the help interface.

### ⑥ System Exit interface

To exit, go back to the menu interface and press [Exit] button. You will be prompted “Do you want to exit?” Press “yes” to exit the program, or press “no” to return to the Menu interface, please see the below picture:



## 3) Familiar questions and their answers

1 : Why can't it connect to the server?

A: Check that the server, port, user name, password settings are correct.

B: Make sure the mobile phone is connected to the Internet.

2 : Why can't I control the PTZ after entering into the main interface?

A: Check if the channel is a PTZ camera and properly set up.

B: The PTZ might take a few moments to load; please be patient.

# Troubleshooting

This basic troubleshooting guide will help you identify general malfunctions and offer steps for quick resolution of such.

If the failure or malfunction can't be solved by following these steps, please contact a qualified technician.

## 1. DVR is not working after starting. What happened ?

-  Check the adaptor input.
-  Check the on-off power line, is it well-connected?
-  Check the power on-off.
-  Check the upgrade procedure.
-  Check the main board of DVR.

## 2. What if DVR is rebooting automatically or stopped after starting the DVR for several minutes?

Check for the following problems:

-  Instability or low input voltage.
-  Bad track hard drive or the line of hard drive is bad.
-  On-off power supply is not enough.
-  High temperature, too much dust, or other factors affecting the DVR's operating environment.
-  The main board is not well-connected with other boards.
-  The hardware of DVR is defective.

## 3. What if there is no output of single channel, multi channel or all channel video?

-  Check the adaptor of camera whether to see if it is well-connected.
-  Check the cable for connecting video input/output in the back panel of DVR.
-  Insert the video source directly into the display device and check if they are causing the problem.
-  Check the brightness of the picture and bring it back to its original default setting.
-  Check if there is no video input signal or too weak.
-  Make sure the display settings in the preview set to be closed or not.
-  The hardware of DVR could be defective.

## 4. What if DVR cannot record after startup and the interface is showing " " ?

-  Make sure power adaptor is DC 12V.
-  Make sure HDD is formatted.

- ✚ Check the power and data connection cables of the HDD.
  - ✚ The HDD could be defective.
  - ✚ The SATA port may be not working.
- 5. What if the DVR is having problem with real-time images, such as bad image color or serious brightness distortion**
- ✚ If PAL or NTSC is not correctly selected on the BNC output, the images will be in black and white.
  - ✚ Make sure the DVR is compatible with monitor.
  - ✚ Make sure the video transmission distance is too far.
  - ✚ Try adjusting the setting of DVR color, brightness and so on.
- 6. What if there is no sound when monitoring?**
- ✚ Check the sound box or speaker functions. Also check for possible short circuiting problems.
  - ✚ Audio source may be connected to the video channel. You can click to full-screen to check.
  - ✚ The hardware of DVR could be defective.
- 7. What if there is no audio sound when playing back?**
- ✚ There may be setting problem: open audio-video item and check your settings.
  - ✚ Check the audio to see if it is closed in playback interface.
- 8. What if the system time is not correct?**
- ✚ The wrong setting might be selected. Make sure to click “” to confirm changes.
  - ✚ The battery may not be connected properly.
  - ✚ The battery might be dead. Please change the battery.
- 9. After right clicking “Stop recording” on the tool bar, the recording does not stop. How do I stop recording?**
- ✚ The “Stop recording” by the right mouse button is only suitable for Manual recording. It can't stop recording when it's in “start recording” or the video in video plan.
  - ✚ If you want to stop recording, please set the time is not recording.
- 10. What if motion detection is not working?**
- ✚ The setting of motion detection area is not correct.
  - ✚ Check the sensitivity of the motion detector. Maybe the sensitivity is too low.

### **11. What if the remote control cannot work?**

-  The address of remote control may be incorrect.
-  The distance of remote control may be too far or the angle may be too large.
-  Check the remote control batteries
-  Make sure that the remote control is not damaged or the front panel of the DVR is not damaged.

### **12. Why can't login to the WEB?**

-  Please check the network to see if it is connected. Check if LINK or 100M LED is displayed normally on the panel; use ping xxx.xxx.xxx.xxx (DVR IP) to check if the Internet is linked properly.
-  Recommended to use Windows XP or Vista operating system, also use IE6.0 browser or IE7.0 browser.
-  ActiveX control has been blocked. Please manually reinstall ActiveX control.
-  Please install DX8.1 and upgrade your video card driver.

## Appendix 1 Setting up Internet Connections for Remote Access

This section will explain the ways to connect your DVR to the internet using static and dynamic IP addresses. To connect to the internet, you will need to use a modem and a router.

As a network device, your DVR should have its own address called an Internet Protocol (IP) address. This address can be used by other network devices (ie. computers) to access the DVR to remotely monitor the CCTV cameras and change settings. You can get a static IP address from your internet service provider – this way you will always have the same address at all times, though this method is rather expensive. If you have a static IP, enter your static IP in the DVR settings and the router will connect your DVR to the internet.

You may alternatively choose to use dynamic IP, which means that the IP address of your DVR may frequently change, but it will still be possible to find your DVR from remote computers, by using DDNS (Dynamic Domain Name System) which dynamically assigns IP addresses to the DVR. This functionality allows the DVR to automatically update its IP address to the DDNS Server each time its Dynamic IP address changes. Your DVR is equipped with the DDNS functionality and has a list of related domain names through which you can acquire an IP address. (See **Section 5.5.2** for details.)

Setup an account with a DDNS service provider and with the account information available, login to the router and go to the DDNS page. Select the address of your service provider and type in the account password. After saving, the router will send IP updates to your DDNS account and the connection will always be forwarded to you current IP.

## Appendix 2 Compatibility Table for HDDs

Please find below the list of tested Hard Disk Drives, found to be compatible with the DVR. If you want to use a HDD not found in this list, please test it for compatibility before use.

Brand name	Model Number	Size (GB)	Drive
WD	WD7500AAKS	750	SATA
WD	WD10EACS	1000	SATA
WD	WD10EARS	1000	SATA
WD	WD5000AADS	500	SATA
WD	WD10EARS	1000	SATA
HITACHI	HDS721010CLA332	1000	SATA
Seagate	ST3500418AS	500	SATA
Seagate	ST31000340AS	1000	SATA
Seagate	ST31000528AS	1000	SATA

## Appendix 3 List of Compatible Portable USB DVD Recorders

Please find below the list of tested portable USB DVD recorders found to be compatible with the DVR. If for backing up your data from the DVR, you wish to use a DVD recorder not found on this list, please test it for compatibility.

- ASUS DRW-2014S1
- Pioneer DVR-XD09C

## Appendix 4 How to access DVR through Firefox browser

1. Please install Firefox on Windows(This document will make Firefox 3.6 as an example )
2. After installing Firefox, search for additive file for IE TAB, and this file is named “ie\_tab\_plus-1.95.20100930-fx+sm(IE Tab Plus (FF 3.6+).xpi”.(This file can be loaded from relevant website)
3. The method to install: Double-click Firefox, open “Tools’, select “Add Discreteness” and there will be a dialog. Then choose tab which is named “Get Accessory Discreteness”, drag “ie\_tab\_plus-1.95.20100930-fx+sm(IE Tab Plus (FF 3.6+).xpi” to the window, a dialog will prompt you to install or cancel and you can choose” Install immediately”. After installing, restart Firefox Browser.
4. Open Firefox Browser, connect DVR IP
5. Right-click mouse at blank, select item named “Use IE TAB Plus to play this Page” and choose “Switch browse engine”, then you can connect DVR successfully.

## Appendix 5 How to access DVR through Chrome browser

1. Please install Chrome browse on Windows(This document will make Chrome browse 7.0.517.36 as an example )
2. After installing Chrome browse, search for additive file for IE TAB, and this file is named “extension\_1\_4\_30\_4.crx”.( This file can be loaded from relevant website)
3. Open chrome browser, fill in the IP address of your DVR into address bar, enter it and it will be showed as below Fig.



4. Drag additive file into browse interface and the interface will show as follow.



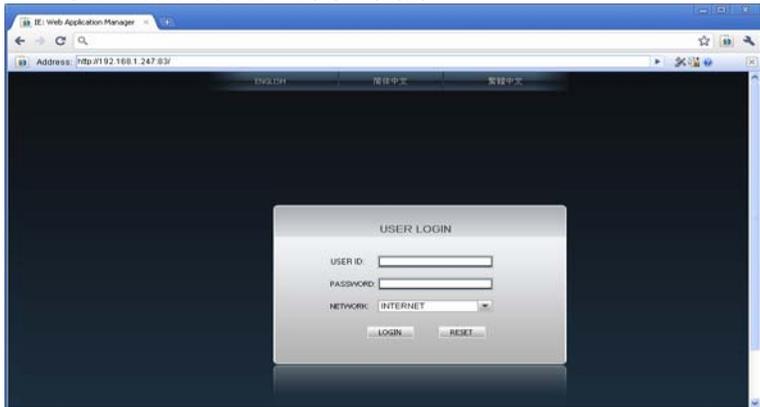
5. Select “Allow” to download multiple file and the interface will show as follow.



6. Select “Continue” to continue installing extensions and the interface will show as follow.



7. Click “Install” and the interface will show as follow.



Note: If the web page still can not open, you can press the icon  on the right hand to display this page in an IE based-tab.

8. Fill in your correct user name and password to login.



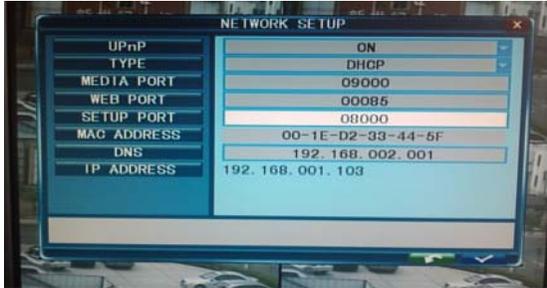
## Appendix 6 How to use Auto ID

1. The ID number of the product has been set up in the factory .Click [tool bar]—[system setting] —[user] , The screen will display user manager menu, and you will see the ID number. As following:

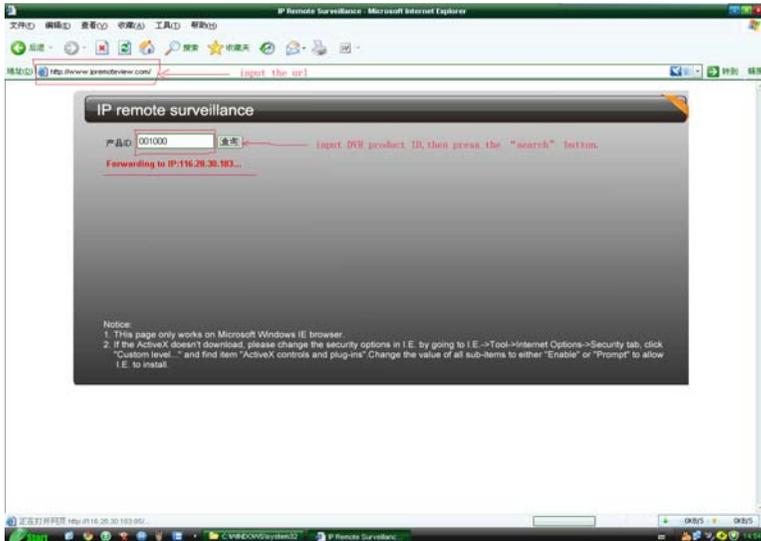


2. Then open the menu, click [Network]—[Other settings]—[Auto ID], to open the Auto ID.

3. About using the router to search internet. At first you should mapped the transmit codex of the router's port. Or open the UPNP, then the router will mapping the port automatic.



4. When the network has been connected, in the another independence INTERNET circumstance, input the address: <http://www.ipremoteview.com> in the IE at your PC. And then input the ID of the DVR into the product number as below to search. When finished succeed, the screen will display the IE monitor menu of DVR.



5. After the page layout connected succeed. It will switch to the IE interface self-motion. As following.

### Statement

- ⊙If there is any doubt or disputability in manual, you can call on our company and take its plain as authority;
- ⊙This manual provide reference for sevral types machine and you can contact with our customer service department if you have any difficulty;
- ⊙There maybe some different description with real device as our products are upgrading all along. Please forgive us for not informing latest updating.

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