

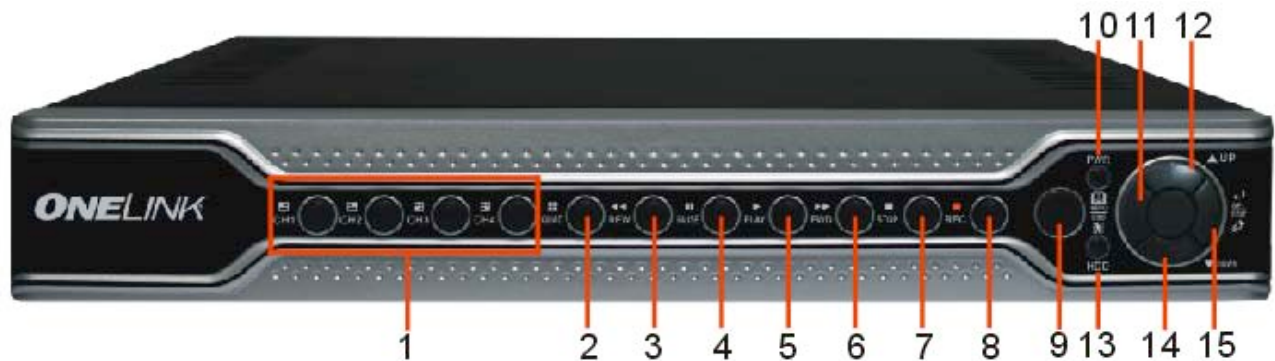
Chapter 1: DVR Features

DVR Features

- MPEG4 compression
- Video input / output: 4-CH video input
1-CH video output
- Internet ready
- System format: NTSC/PAL
- Uses SOC chip with high stability
- Linux operation system, stable network performance
- Supports multiple recording modes: Continuous, Motion Detection, Time Schedule
- Supports event list and search/playback by specified time
- Supports hidden channel and playback display
- Missing video signal alarm function
- Password protection function
- Supports IR remote control
- Supports SATA hard drive up to 500GB

Chapter 2: Overview

2.1 Front Panel



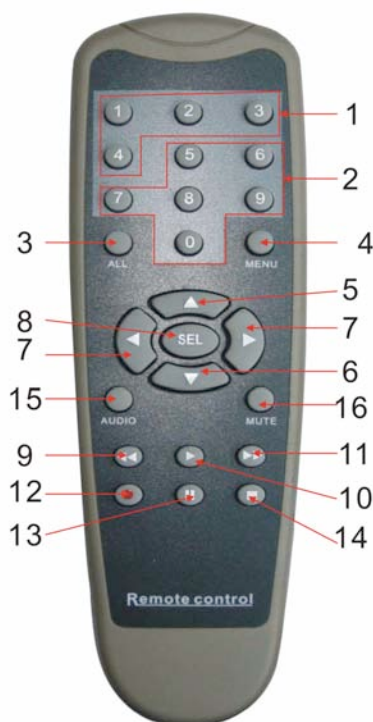
Item	Key title/Indicator	Marks	Functions
1	Channel Select: CH1 CH2 CH3 CH4		Select single channel to display
2	QUAD		Display 4 cameras in live display or playback mode
3	REW		Move left / rewind
4	PAUSE		Pause
5	PLAY		Play
6	FWD		Move right / play forward
7	STOP		Stop playback; stop manual recording
8	REC		Start manual recording
9	IR Receiver		Receives signal from remote control
10	Power indicator	PWR	If the “Green” indicator is illuminated, the DVR is powered on.
11	MENU/ESC		Enter into main menu or exit menu
12	Up		Move up
13	HDD indicator	HDD	When the “Red” indicator flashes, it means the hard drive is being read or written to.
14	Down		Move down
15	SEL/EDIT		Enter into pop up menu; Select key / edit

2.2 Rear Panel



1	Audio output	4	Video output
2	Audio input	5	4 BNC video inputs
3	LAN	6	Power Supply Input

2.3 Remote Control



1	1-4	Channel Select 1-4
2	5-9 0	Numeric Key
3	ALL	Preview all Channel
4	Menu	Enter/Exit Main Menu
5	▲	Up Key
6	▼	Down Key
7	◀ / ▶	Left / Right Key
8	SEL	Select Key/ Edit Key
9	◀◀	Rewind key
10	▶	Play Key, Enter to recording search menu
11	▶▶	Forward Key
12	●	Manual Recording
13		Pause
14	■	Stop manual recording; Stop Playback
15	Audio	Undefined
16	Mute	Turn on/off audio output

Chapter3: Installation

3.1 Installing Hard Drive

(If your DVR comes with a pre-installed hard drive, please ignore this part)

Note: Don't take out HDD when DVR is running, and make sure the HDD is set as the MASTER according to the hard drive manual.

1. Unplug the power supply. Don't install or uninstall HDD when DVR is running.
2. Remove the DVR cover carefully.
3. Connect the power cord and data cable to HDD.



4. Use the provided screws to fix hard drive on the rack, and then replace the cover.

3.2 Connecting Camera and Monitor

There are 4 camera inputs and 1 video output with BNC connectors (Refer to the diagram of the Rear Panel in 2.2.)

3.3 Connecting the Power Supply

Please only use the power adapter supplied with the DVR. The standard power supplied to the DVR is DC 12 Volt.

Chapter 4: Starting the DVR

4.1 Firmware version



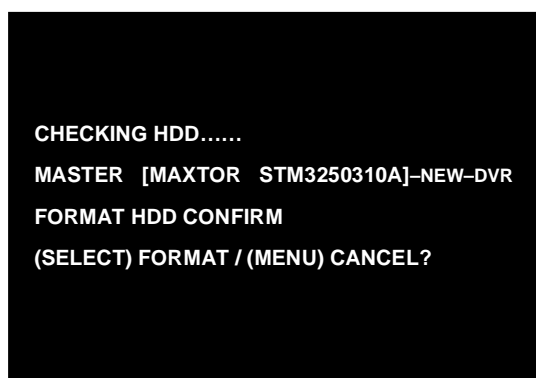
After turning on the unit, the DVR will boot-up and display the current version and release date of the DVR firmware.

4.2 Detecting Installed Hard Drive



During start up, the DVR will automatically detect the installed hard drive and show the hard drive information.

4.3 Format Hard Drive

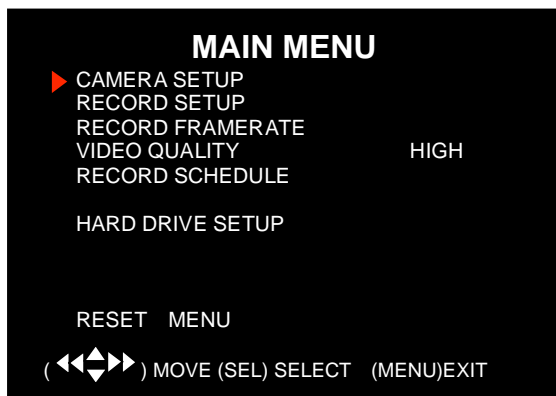


When detecting a new hard drive, the DVR will automatically prompt you if you need to format the hard drive before recording.

Please press [SEL] to format, or [MENU] to cancel, and then start the system.

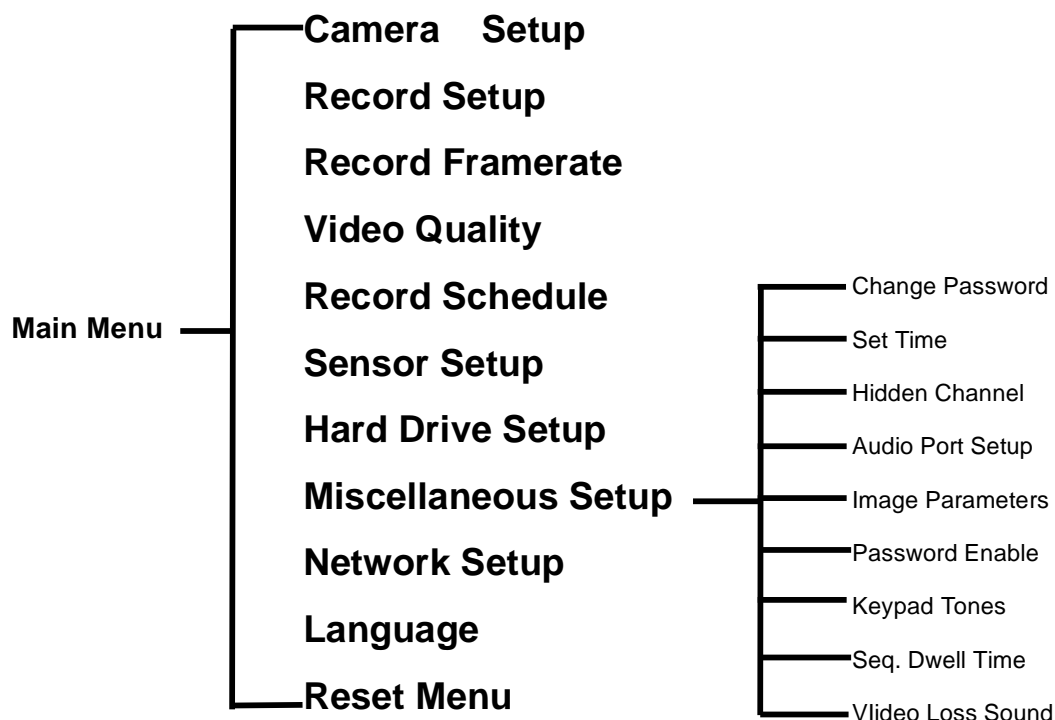
Chapter 5: DVR Setup

5.1 Browsing the Main Menu

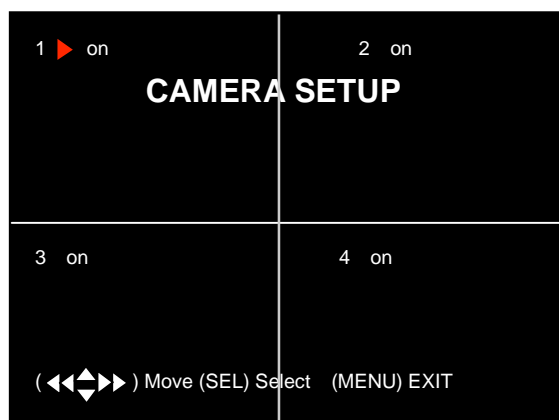


When start up is finished, please press [MENU] to enter the Main Menu.

5.2 Menu Directory



5.3 Camera Setup

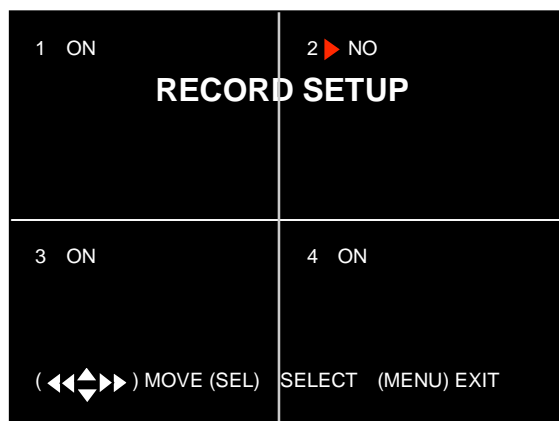


Camera Setup allows you to turn cameras on or off.

Press [\blacktriangle , \blacktriangledown , \blacktriangleleft and \blacktriangleright] buttons to select a channel, and then press [SEL] to modify the setting to “on” or “off”.

Note: If a channel is disabled in Channel Setup, the DVR will not record or set frame rate.

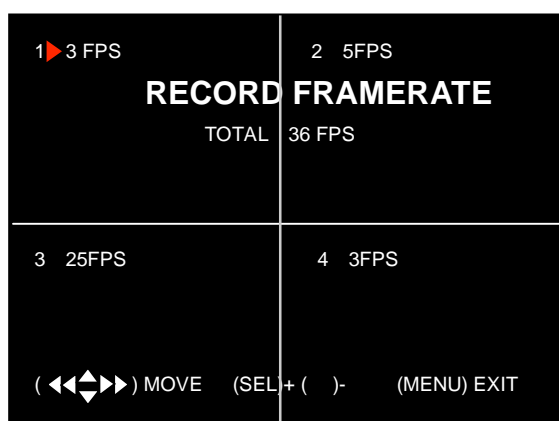
5.4 Record Setup



Record Setup allows you to set up recording channels. Press [\blacktriangle , \blacktriangledown , \blacktriangleleft and \blacktriangleright] to select a channel, and then press [SEL] to change the setting to on or off.

If a channel is disabled in Camera Setup, it will not be recorded, and the characters “NOCAM” will be displayed on the screen.

5.5 Record Framerate

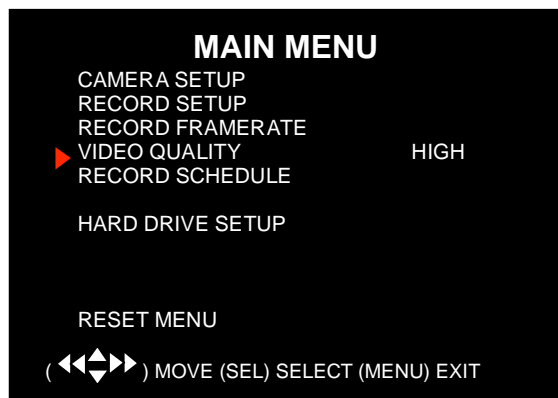


The total frame rate is 50fps (PAL) or 60fps (NTSC). You can set the frame rate for each channel to meet your requirements up to the 50fps or 60fps limit.

Press [\blacktriangle , \blacktriangledown , \blacktriangleleft and \blacktriangleright] buttons to select a channel, and then press [SEL] to increase the value or press [\blacksquare STOP] to reduce the value.

Note: Higher frame rate shows smoother video, but requires more hard-drive space.

5.6 Video Quality



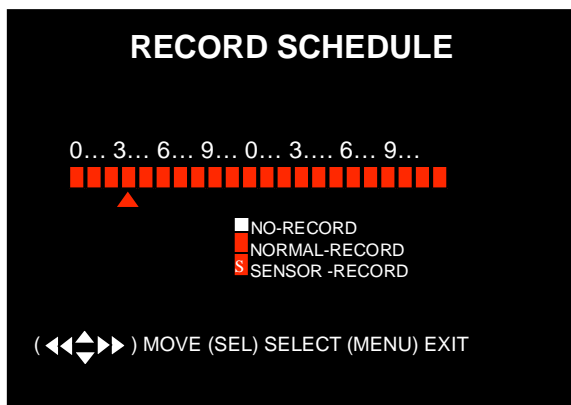
Video Quality has 4 different settings, including: Highest, High, Normal and Low.

The Higher the video quality, the better the quality of images, however higher quality images require more hard drive space.

Press [SEL] button to change the quality setting.

5.7 Record Schedule

Setting the Record Schedule allows you to customize the type of recording you want to use depending on the time of day.



The time line indicates 24 hours of a day based on AM/PM (0=12).

Press [▲, ▼, ◀◀ and ▶▶] buttons to select a time point, press [SEL] to modify the recording mode.

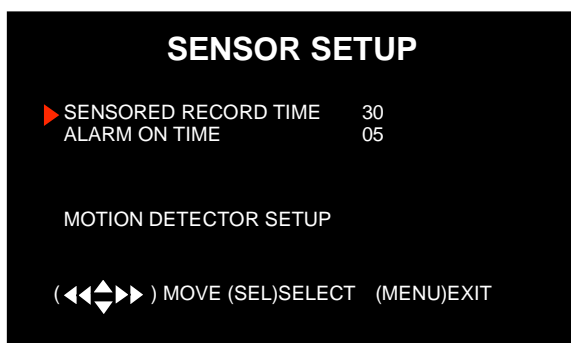
NO-RECORD []:DVR will not record during this period.

NORMAL RECORD []:DVR will record continuously during this period.

SENSOR RECORD []:DVR will record when sensor or motion is triggered

Note: In order to activate the record schedule, please press [REC] button to start Record schedule, otherwise, the DVR will not begin recording.

5.8 Sensor Setup



Sensor Record Time is no use here as this model does not support external sensor inout/output.

Alarm On Time indicates how long the r long the buzzer will sound when motion is detected.

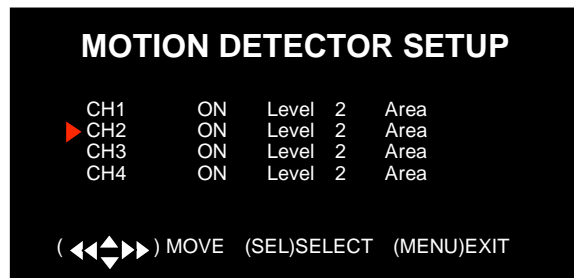
CONT: Continuous alarm until any key is pressed.

OFF: No alarm

Note: Alarm On Time is measured in seconds.

5.9 Motion Detector Setup

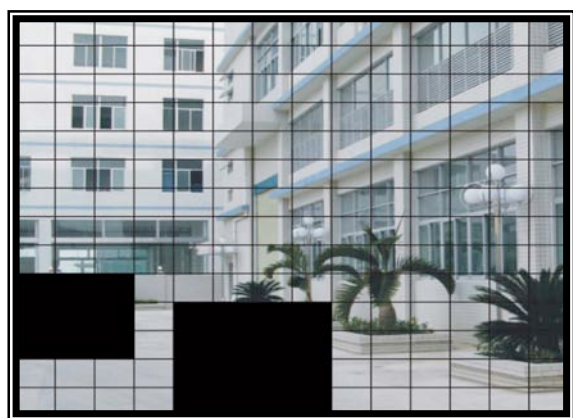
This section allows you to set up motion detection options for each camera.



On/off: Enable or disable motion detection recording.

Level: Sensitivity for motion detection. There are 3 levels of sensitivity: Level 1 to 3 with 3 being the highest.

Area: Select detectable area on the screen.

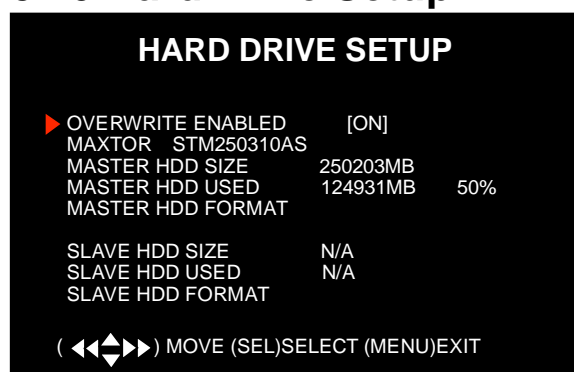


Area Selection: Press [▲, ▼, ◀▶ and ▶▶] buttons to select a block and then press [SEL] button to set the block to detect motion. The area is detectable when it is clear, the area is not detectable when it is covered by a shadow.

buttons to select a block and then press [SEL] button to set the block to detect motion. The area is detectable when it is clear, the area is not detectable when it is covered by a shadow.

Press the "Stop" button to disable all areas, and press "Quad" button to select all areas.

5.10 Hard Drive Setup



OVERWRITE ENABLED:

ON: System overwrites oldest files when hard drive is full;

OFF: System stops recording when hard drive is full.

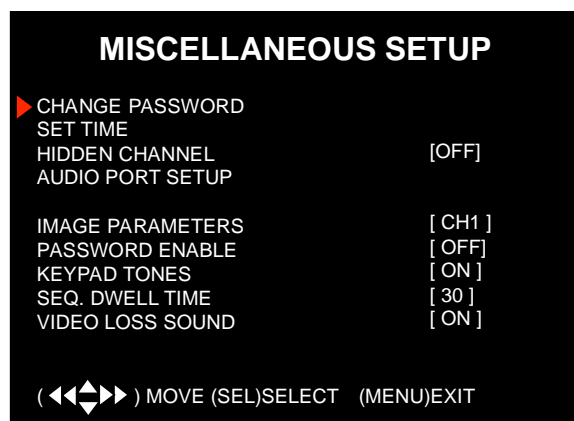
HDD SIZE: indicates the total capacity of the hard drive installed in the DVR.

HDD USED: indicates the space used in the hard disk drive for recording and the percent used.

HDD FORMAT: will erase all video and data on the installed hard drive.

Note: You will be prompted for the password when formatting a hard drive and the default password is "111111".

5.11 Miscellaneous Setup – Change Password



This option allows you to change the system password. The password must be six characters. All keys can be used as a password key except the [MENU] key, which is used to exit.



Enter the current password first, and then enter six characters as your new password, repeat the new password to confirm.

If you forget your password, please free feel to contact First Alert Tech Support for assistance.

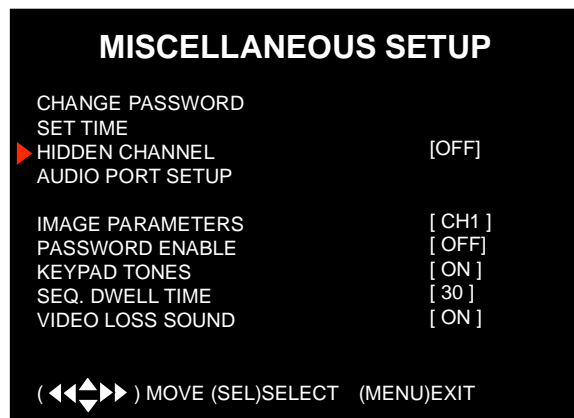
5.12 Miscellaneous Setup – Set Time



The system date and time format is YYYY/MM/DD and HH:MM:SS.

Press [◀◀] or [▶▶] buttons to select a data, press [SEL] button to modify the data, and press [MENU] button to save and return to previous menu.

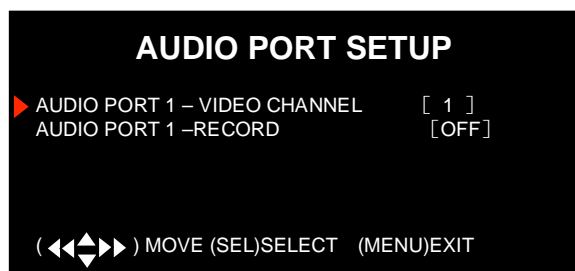
5.13 Miscellaneous Setup – Hidden Channel



The system provides a function to hide a channel in monitoring mode. The selected channel can still be recorded while it's hidden; but the video will not be viewable on the live screen.

Press [SEL] to select a channel to hide.

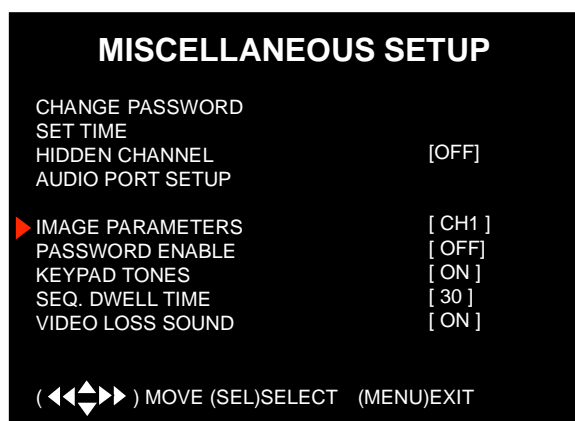
5.14 Miscellaneous Setup –Audio Port Setup



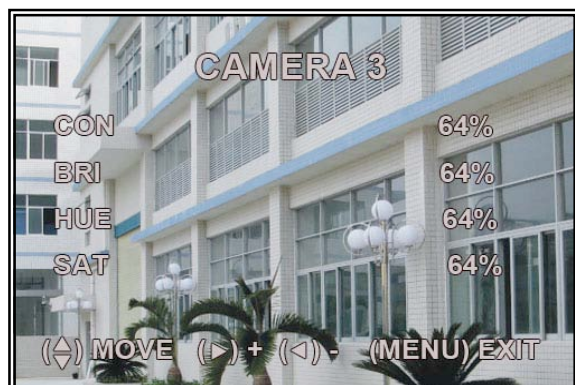
When you move the cursor to “AUDIO PORT VIDEO CHANNEL” and press the “SELECT” button, the option will be changed to “CH2”. If you push “SELECT” button one more time the option will be changed to “CH3” and one more time will set the channel to “CH4”.

When you move the cursor to “AUDIO PORT RECORD” and press the “SELECT” button, the option will be changed to ON or OFF. If the option is ON, the audio will be recorded onto the hard drive when you press the RECORD button.

5.15 Miscellaneous Setup – Image Parameters



You can adjust the image parameters to meet your needs. The controls are shown below:



CON: Contrast

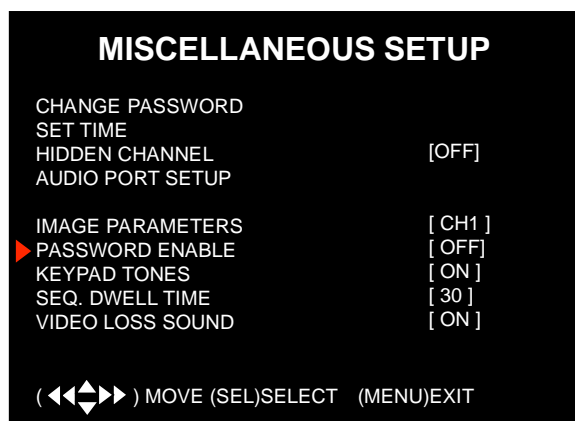
BRI: Brightness

HUE: Hue (color)

SAT: Saturation (color)

Press [▲] or [▼] buttons to select the item, and press [◀◀] or [▶▶] buttons to adjust the setting.

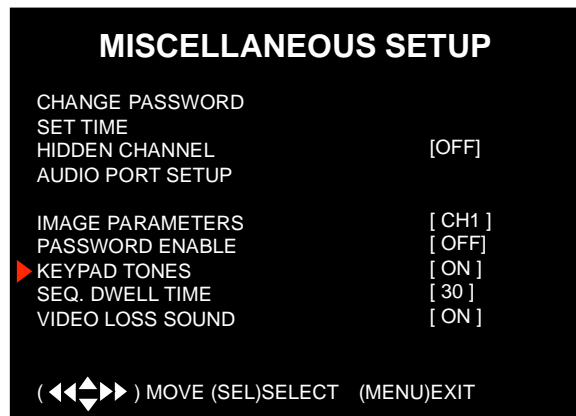
5.16 Miscellaneous Setup – Password Enable



When Password Enable is set to “on”, the password will be required and must be entered correctly; otherwise, you will not be able to enter the system.

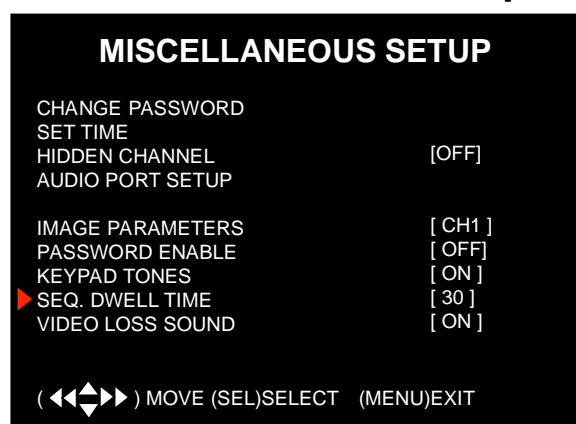
Entering the password will not be required if the Password Enable is set to “off” (except of formatting hard drive and menu reset)

5.17 Miscellaneous Setup – Keypad Tones



This function allows you to enable or disable the audio beeper sound when pressing [SEL] button to select ON or OFF.

5.18 Miscellaneous Setup- Seq. Dwell Time

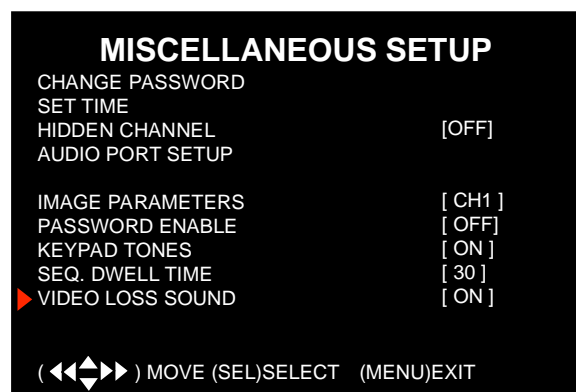


Press [◀◀], [▶▶] buttons to select Seq. Dwell time and select “OFF” to enable or disable individual camera sequential display.

Note: Seq. Dwell Time Option can be

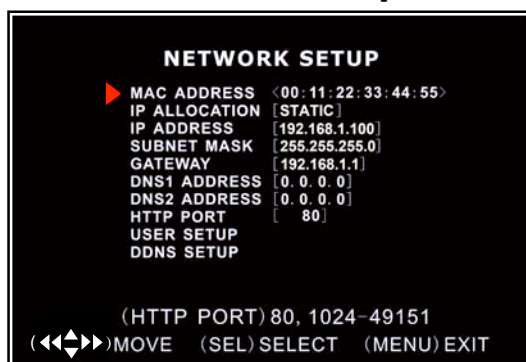
1sec, 5sec, 10sec, 15sec, 30sec, or 60sec

5.19 Miscellaneous Setup- Video Loss Sound



This function allows you to enable or disable the audio buzzer sound for video loss, when pressing [SEL] button to select ON or OFF.

5.20 Network Setup

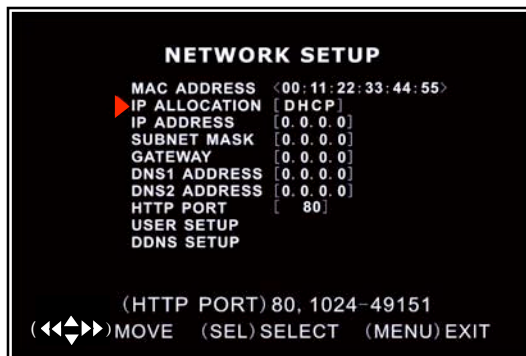


Network Setup allows you to prepare the DVR for viewing over an internet or local network

MAC ADDRESS: In a local area network (LAN), the MAC (Media Access Control) address is your computer's unique hardware identity code,

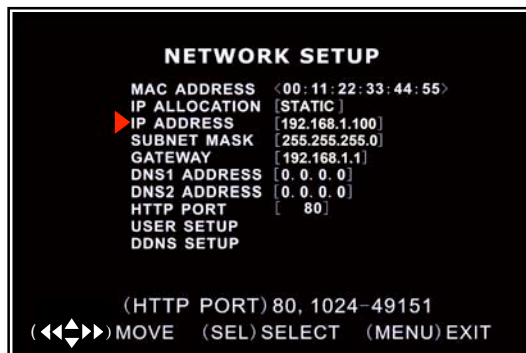
IMPORTANT: This setting should only be changed if multiple DVRs are being setup on the same network and the first code “00” must not be changed.

NOTE: The DVR must be restarted after changing network settings before they take effect.



IP ALLOCATION: DVR supports DHCP and Static IP modes. If your modem/router supports DHCP mode use DHCP.

When using STATIC mode, you will be required to setup your internet settings manually. After setting the DVR to DHCP mode restart the unit for your settings to take effect.



IP Address: In a local network, the IP address is a unique designated address for your DVR. Ensure this number is within the range usable by your network.

Press [REW◀◀ FWD▶▶] buttons to move the cursor to the number to be changed,

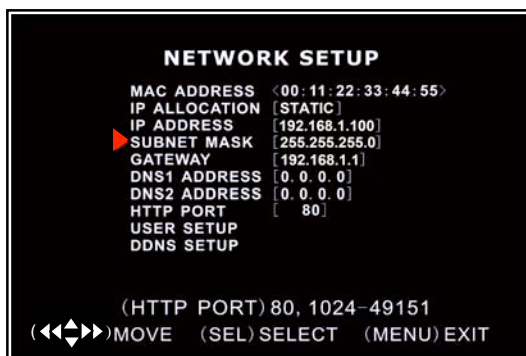
Press [▲, ▼] buttons to select the number you want to change to.

Press [SEL] to make the change

Press [STOP ■] to delete a number

Press [REC ●] to insert a number

Press [MENU] to save and return to previous menu.



SUBNET MASK: Subnet Mask is used to determine what subnet an IP address belongs to.

Press [REW◀◀ FWD▶▶] buttons to move the cursor to the number to be changed,

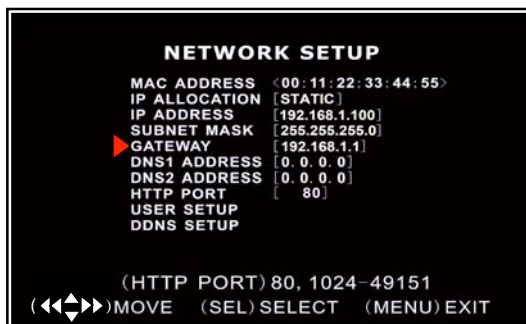
Press [▲, ▼] buttons to select the number you want to change to.

Press [SEL] to make the change

Press [STOP ■] to delete a number

Press [REC ●] to insert a number

Press [MENU] to save and return to previous menu.



GATEWAY: Set this number to the gateway set by your modem/router.

Press [REW◀◀ FWD▶▶] buttons to move the cursor to the number to be changed, Press [▲, ▼] buttons to select the number you want to change to.

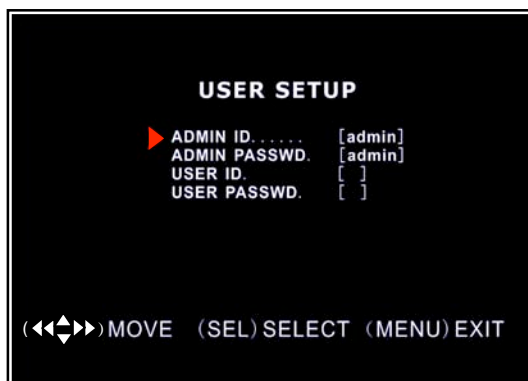
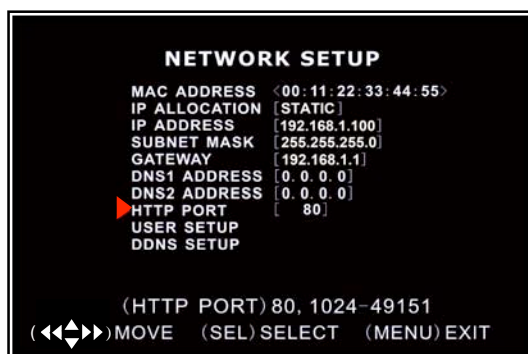
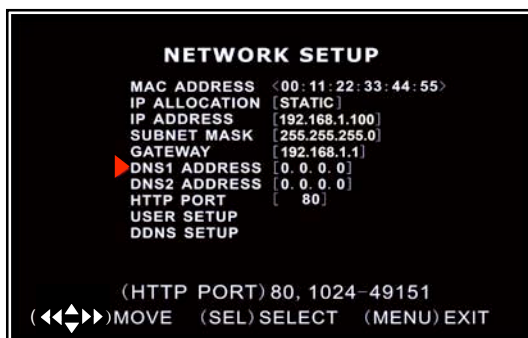
Press [SEL] to make the change

Press [STOP ■] to delete a number

Press [REC ●] to insert a number

Press [MENU] to save and return to previous menu.

NOTE: You only need to adjust the IP ADDRESS, SUBNET MASK and GATEWAY values, when the [STATIC] mode is selected.



ADMIN: has full access and you can change DVR settings, playback and record video over a network

Default User ID = admin
Default password = 111111

USER: has limited access and can only view live video over a network

Default User ID = not used
Default password = not used

DNS ADDRESS: This code should be provided by your local ISP.

This is only used if DDNS is to be used with a dynamic IP address

HTTP PORT: This port number is used to communicate with PC Client. The default value is 80. Press [REW◀◀ FWD▶▶] buttons to move the cursor to the number to be changed,

Press [▲, ▼] buttons to select the number you want to change to.

Press [SEL] to make the change

Press [STOP ■] to delete a number

Press [REC ●] to insert a number

Press [MENU] to save and return to previous menu.

USER SETUP: When accessing the DVR from a remote location you will be prompted for a login and password.

User ID and USER PASSWORD are used to restrict the access rights over a network to prevent tampering.

Press [REW◀◀ FWD▶▶] buttons to move the cursor to the number to be changed,

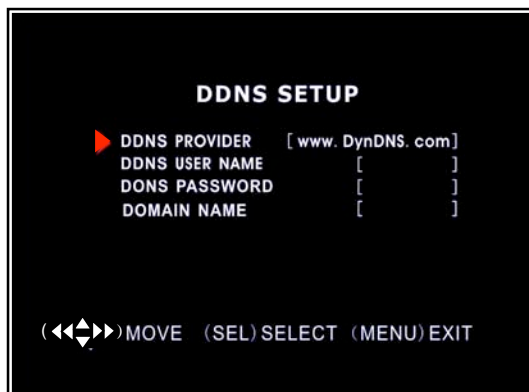
Press [▲, ▼] buttons to select the number you want to change to.

Press [SEL] to make the change

Press [STOP ■] to delete a number

Press [REC ●] to insert a number

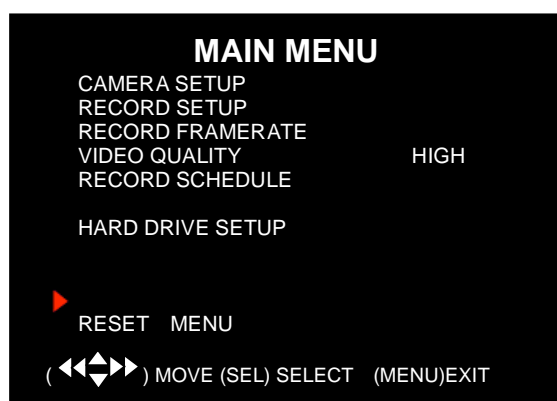
Press [MENU] to save and return to previous menu



DDNS SETUP: If you require an external service to maintain a dynamic IP address enter the user information here.

You need to register a www.dyndns.org to get a free account. After registration, you will have a user name and password. You can also register your domain name on the website.

5.21 Language

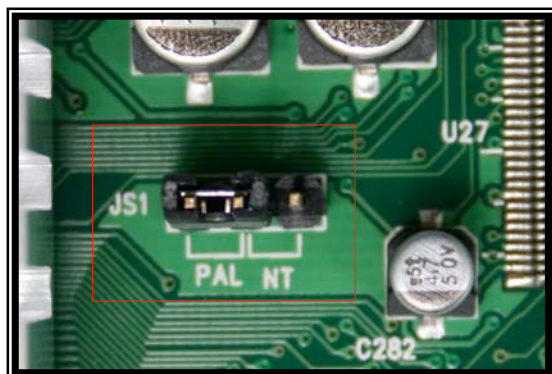


You can change the OSD from the default language to other language if your DVR supports multi-language.

5.22 Reset Menu

The system allows you to reset all your settings to the DVR factory default. You will need to enter your password to reset the menu.

5.23 NTSC/PAL Output Select



Change the jumper JS1 to select NTSC or PAL video output format shown on the silkscreen shown in the picture on the left. The picture shows the setting for PAL, move the jumper to the right side for NTSC

Chapter 6: Recording

6.1 Starting Recording

Press [●REC] button to start the record according to the record schedule you have set. There will be a [●] red icon shown in the top left of the screen when recording.



[●]: Indicates that the channel is being recorded.

[A-REC]: Indicates the current record schedule is set to NORMAL-RECORD mode.

[S-REC]: Indicates the current record schedule is set to SENSOR-RECORD mode.

[N-REC]: Indicates the current record schedule is set to NO-RECORD mode.

[39%]: Indicates the percentage of hard disk space used.

[M]: HDD info ([M] MASTER HDD; [S] SLAVE HDD).

6.2 Audio Recording

[1🔊]: indicates this video channel is assigned an audio port, and the audio output is on.

[1]: indicates the audio output is off.

[1🔊]: indicates the audio is being recorded and the audio output is on.

You may press the [DOWN] button on the front panel to mute the audio output. The audio input can be still recorded while the output is muted.

6.3 Stopping Recording

Press the [■STOP] button to stop recording. If password protection function is enabled,

the system will prompt you to input your password. Only the correct password can stop the recording process.

6.4 Estimated Recording Time

Estimated record time based on 320GB HDD (in hours)

Standard	Quality	60fps	48fps	32fps	16fps	1fps
NTSC	Highest	124	156	232	464	7440
	High	176	220	330	660	10,560
	Normal	214	268	402	802	12,840
	Low	240	300	450	900	14,400

Standard	Quality	50fps	36fps	24fps	12fps	1fps
PAL	Highest	128	178	266	534	6400
	High	180	250	376	750	9000
	Normal	220	306	458	916	11,000
	Low	246	342	512	1026	12,300

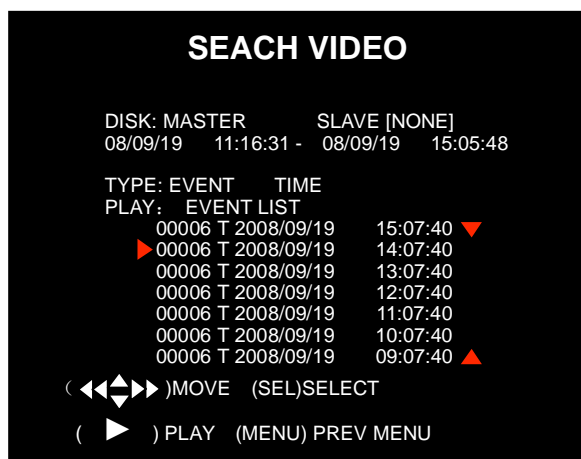
Unit : Hours

Chapter 7: Playback

7.1 Playback Control

Press the [▶] PLAY button to go into PLAYBACK mode. The newest recorded event

will be played.



Chapter 8: USB Programming

8.1 Software Installation



- (1) Insert driver CD to your CD-ROM driver;
- (2) Open CD directory;
- (3) Run “Installation” program;
- (4) Follow the setup wizard to finish the installation.

8.2 Program Interface

Button functions:





1、PTZ Control(not available)	11、Convert Streams to AVI file
2、Zoom in, Zoom out(not available)	12、Fast Rewind 60s
3、HDD Play Mode	13、Fast Rewind 10s
4、FILE Play Mode	14、Forward
5、NET Play Mode	15、Stop


6、Event List	16、Playback
7、Program Local Setting	17、Fast Forward 10s
8、Shift Storage Device	18、Fast Forward 60s
9、Remote DVR Control	19、Playback Slider
10、Capture Image	20、Audio Slider

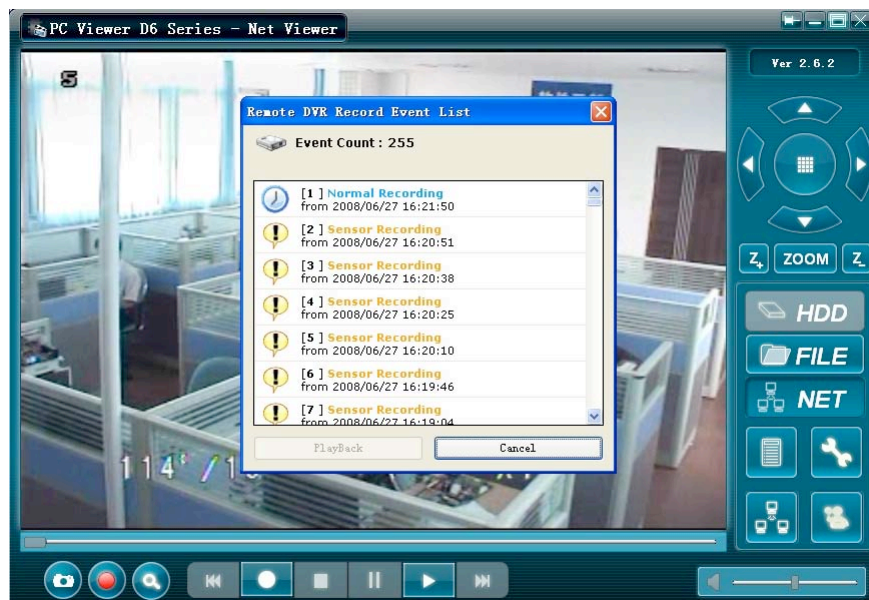
8.3 Program Running


8.3.1 HDD Play Mode

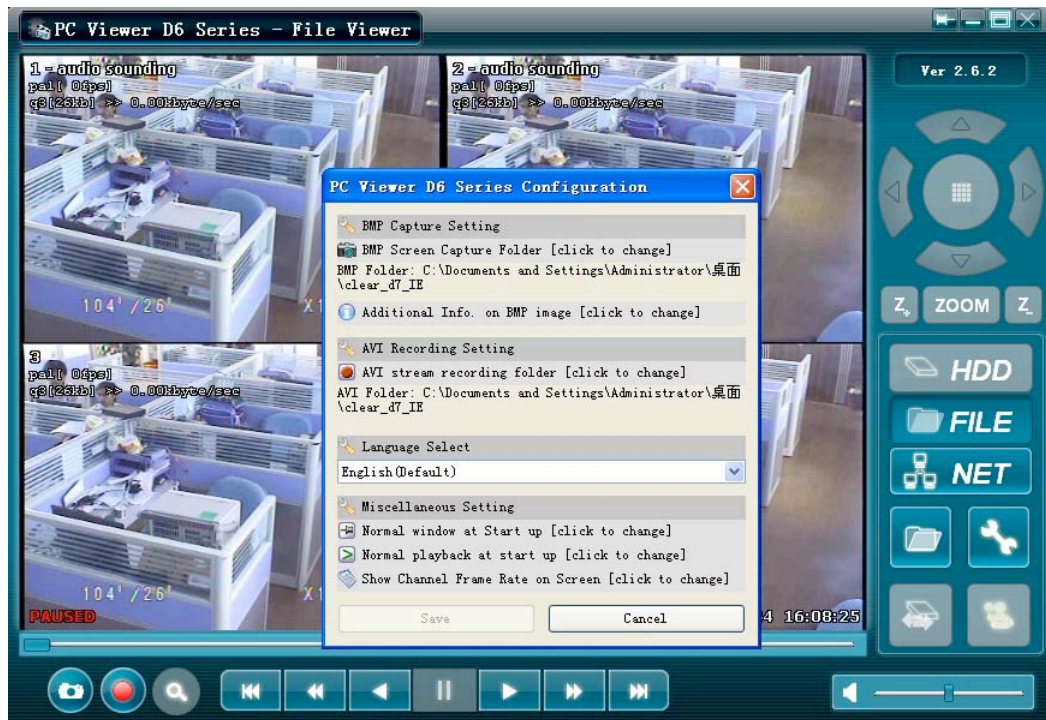
System will detect HDD automatically when you connect DVR to your PC with USB cable. An USB icon “” will appear in the system tray (right bottom corner of the screen). After seeing this icon, double-click the “” icon on your desktop to run the program.


Note: If you do not strictly follow above-mentioned steps, the program may fail to read recording files.

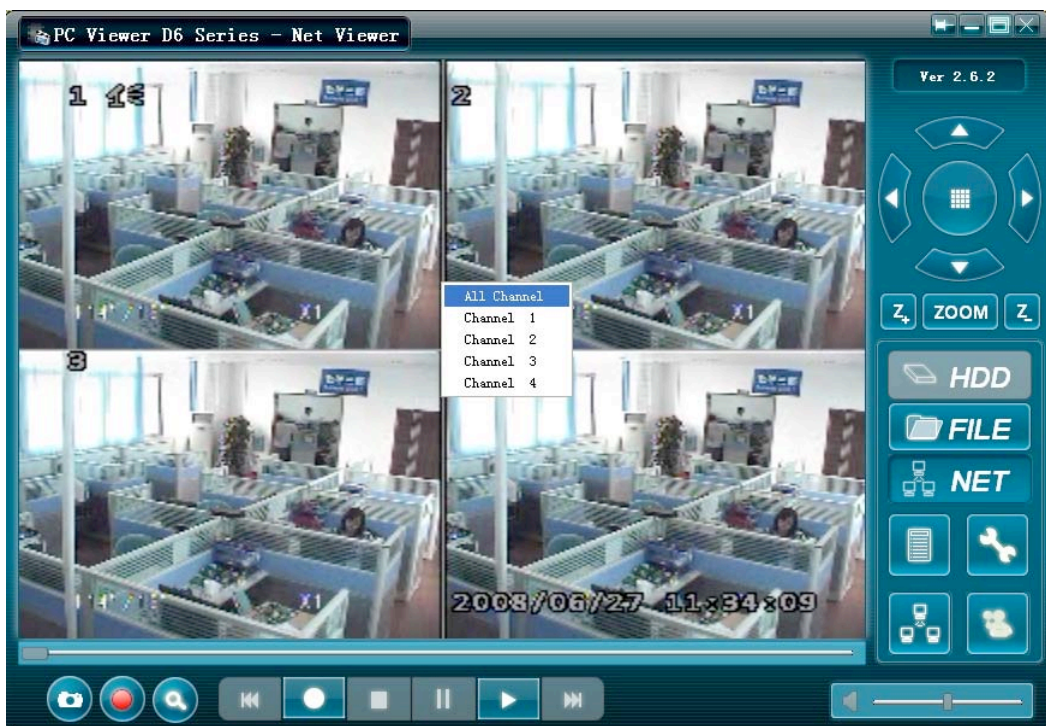
Press the “” (button 6) to open the video event list.



Press the “” (button 7) to proceed the program local settings. E.g.: Save route settings for capture image and AVI record files




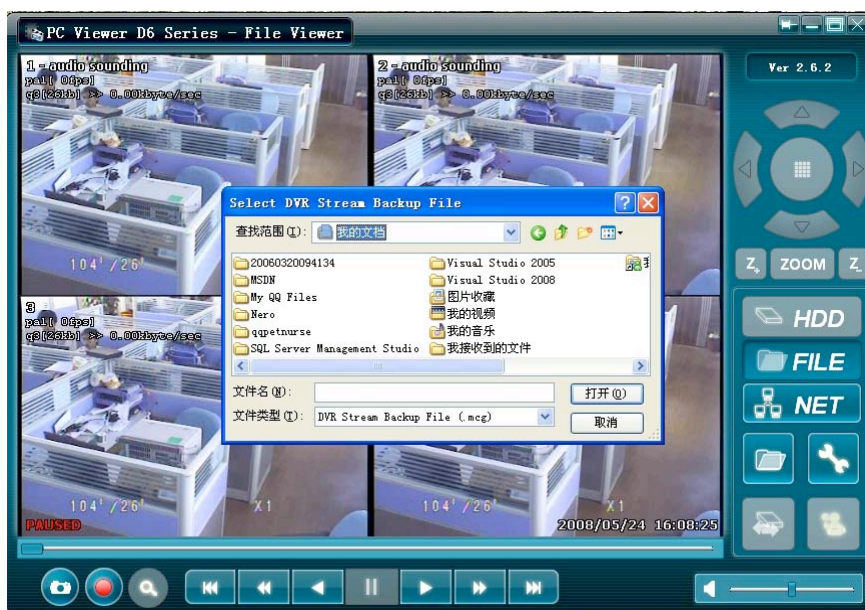
Press the “” (button 16) to play video.



8.3.2 FILE Play Mode

(Only when you insert a USB memory stick to your PC.)

Press the “ FILE” button to open a folder, select the file which you want to Play and double click to play video.

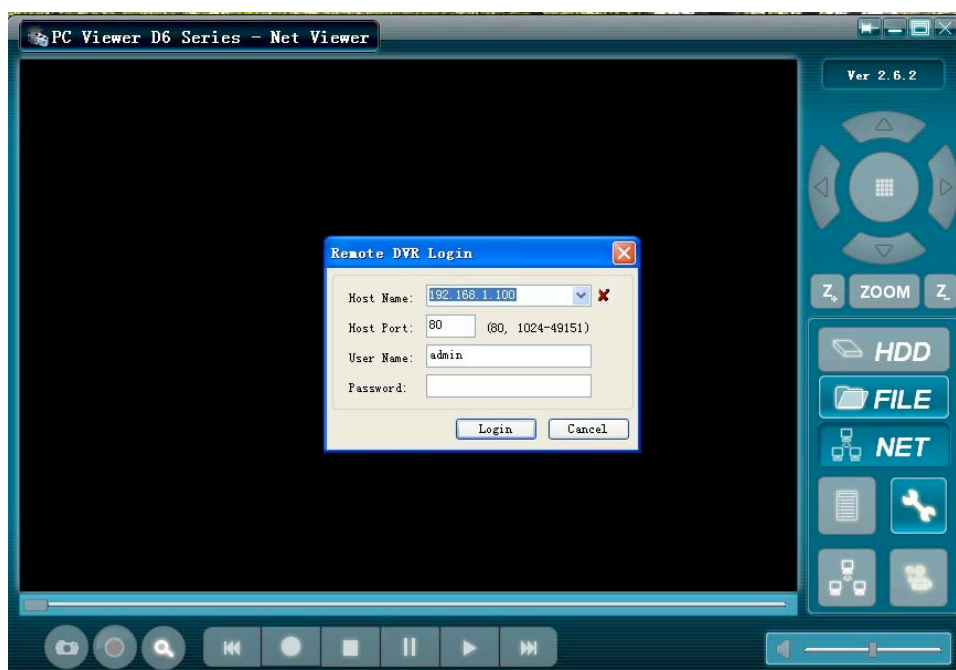


8.3.3 NET Play Mode

This mode allows you to remote control your DVR via internet or Intranet.

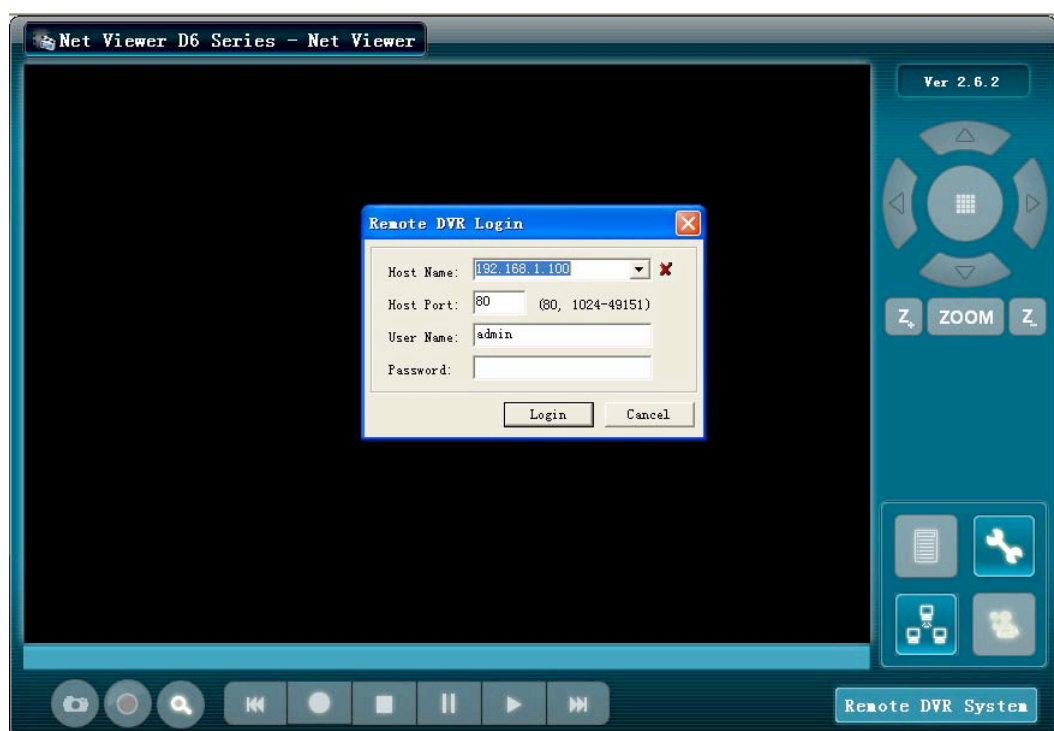
Press the “ NET” button to pop up a login window.

Fill in Host name, Host Port, User Name and Password of the DVR that you want remotely access and then click Login to enter the main page.




8.4 IE Remote control DVR

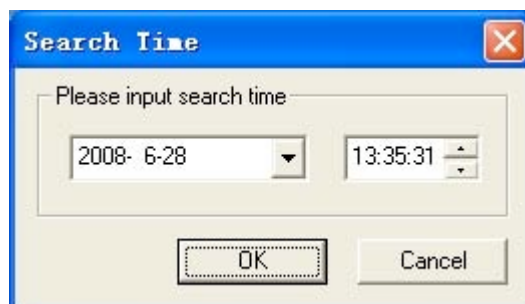
Enter IP address and domain name of remote DVR via Internet. (If port number is not 80, Please add the port No. before the IP address or domain name. the system will pop up the main page shown as below):




Note: If visiting your DVR at first time, please allow to install IE software package.(All the selection relative to the package installation should be set to “on” after entering the below steps: Tools → “Internet Option” → “Security” → “User- defined Level” → “Security Setting”).

Enter IP address, Port number, user name and password of remote DVR to login in.

Press the “” button, and system will pop up the below dialog box:



Enter specified time to search record file which you want, and Press “OK” button to play the record.

Note: The function will be available only when you visit international explorer
Press the “” button to connect or disconnect remote DVR.