

USER MANUAL

DVR

Digital Video Recorder

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Safety Instructions

1. Use proper power source.

Do not use this product with a power source that applies more than specified voltage (100-240V AC).

2. Never insert anything metallic into the DVR case.

Putting something into the DVR case can be a source of dangerous electric shock.

3. Do not operate in wet & dusty area or use near water.

Avoid places like a damp basement or dusty hallway.

4. Do not expose this product to rain or use near water.

If this product accidentally gets wet, unplug it and contact an authorized dealer immediately.

5. Keep product surfaces clean and dry.

To clean the outside case of the DVR, use a cloth lightly dampened with water (no solvents).

6. Provide proper ventilation.

This DVR has a built in fan that properly ventilates the system.

7. Do not attempt to remove the top cover.

If there are any unusual sounds or smells coming from the DVR, unplug it immediately and contact an authorized dealer or service center.

8. Do not attempt to remove the top cover.

Warning: You may be subjected to severe electrical shock if you remove the cover of the DVR.

9. Handle DVR box carefully.

If you accidentally drop your DVR on any hard surface, it may cause a malfunction. If the DVR doesn't work properly due to physical damage, contact an authorized dealer for repair or exchange.

10. Use standard lithium cell battery. (NOTE: Manufacturer has preinstalled battery.)

The standard lithium cell 3v battery located on the mother board should be replaced if the time clock does not hold its time after the power is turned off. Warning: unplug the DVR before replacing battery or you may be subjected to severe electrical shock. Properly dispose of old batteries.

11. Make sure there is good air circulation around the unit.

This DVR system uses a hard drive for video storage, which generates heat during operation. Do not block air holes (bottom, upper, sides and back) of the DVR that cool down the system while running. Install or place this product in an area where there is good air circulation.

Chapter 1: DVR Features

Real time monitoring	Supports real time surveillance via Monitor
Saves Recordings	DVR saves real-time recording image to HDD
Backup Recordings	Supports DVR backup via USB flash drive and hard drive.
Playback Recordings	Supports DVR single CH and multiple CH playback of recorded files
Network operation	Supports remote surveillance by multiple users simultaneously
Alarm Setting	Supports HDD & video input alarm management and external alarm signal inputs
Mouse Operation	Supports Mouse operation for faster menu navigation.
PTZ Control	Supports PTZ camera operations through RS-485.

List 1-1

Other Features:

H. 264 video compression format, supports D1, HD1, CIF resolution
 ADPCM audio compression format
 Windows Graphical interface
 BNC and VGA video out ports
 Supports remote live viewing via 3G mobile networks
 Supports sending email alerts when motion is detected by system
 Triplex (recording, playback and net transmitting at the same time)
 Supports USB mouse, IR remote control operation
 Rear USB2.0 ports for backup, upgrade and mouse operation.
 Supports Double Encode bit network transmission
 The video package time is adjustable
 Multiple alarm record mode
 Multiple language OSD
 Supports auto maintenance

Chapter 2:Layout

2.1 Panel Buttons

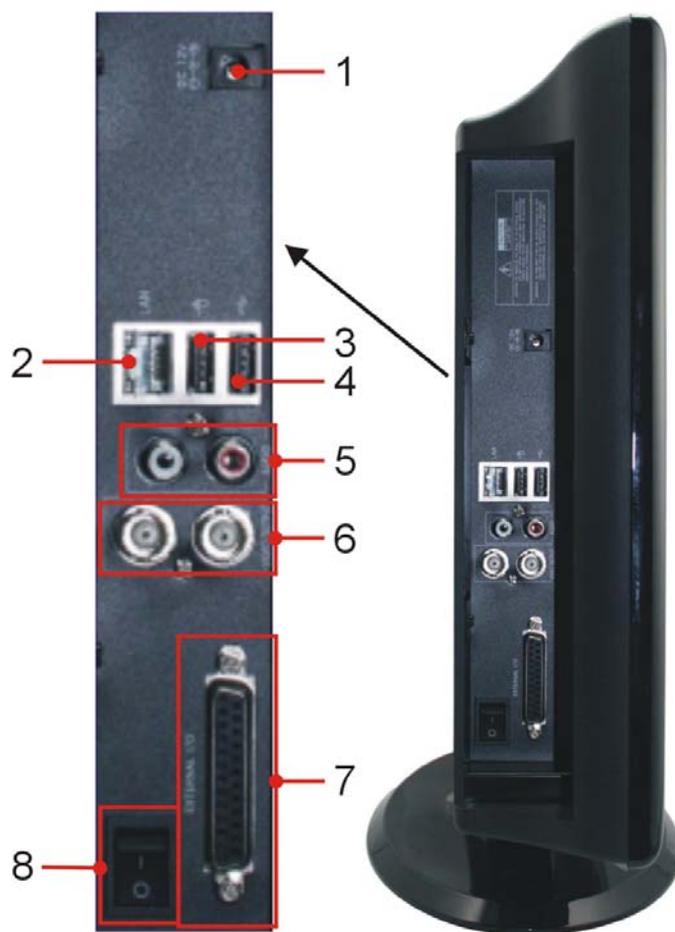
(Please refer to actual product for detail)



Item	Buttons/ Indicators	Marks	Functions
1	ON/OFF	ON/OFF	Turns the screen on or off.
2	MENU	MENU	Opens the Main Menu screen.
3	Up	UP	Move up
4	Down	DOWN	Move Down

2.2 Side Panel Interface

(Please see actual product for detail)

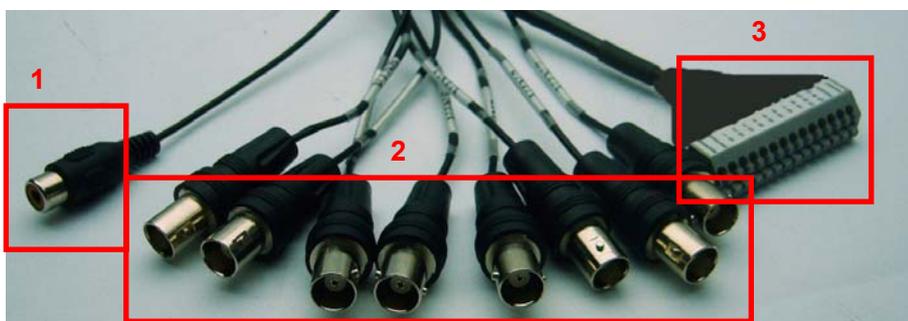


Item	Physical ports	Connection method
1	Power Port	Connect power supply - DC12V 5A
2	Ethernet Port	Connect intranet, internet (RJ45 interface)
3	USB Port	Connect USB mouse
4	USB Port	Connect USB device (Flash Drive, Hard Drive)
5	Audio output	Connect signal output (RCA interface)
6	Video outputs	Connect monitor output (BNC interface)
7	External I/O	Connects to the included "L" Adapter for connecting cameras and PTZ enabled cameras.
8	Power Switch	Powers the DVR On/Off completely.

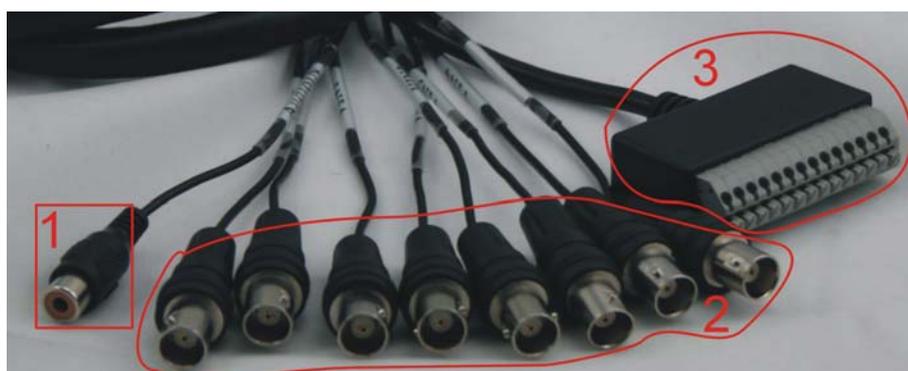
2.3 Multi I/O 'L' Adapter

(Please see actual product for detail)

4CH

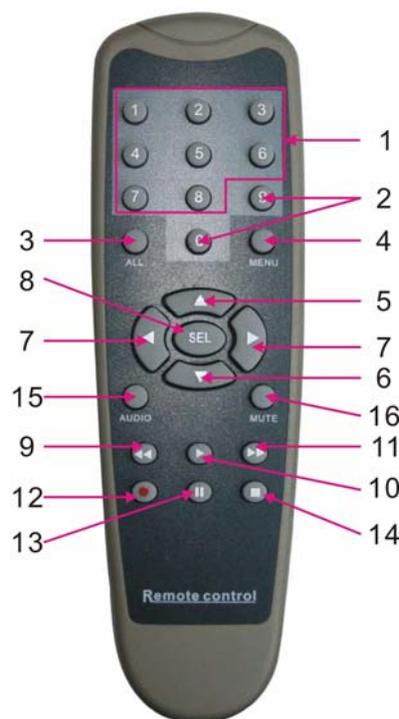


8CH



Item	Physical Jacks	Connection method
1	Audio Input	Connects to the audio output of an audio enabled camera
2	Video Inputs	Connect to the signal output of cameras
3	PTZ Outputs	Connect to the PTZ input of any Pan-Tilt-Zoom enabled camera

2.4 Remote Control



1	1-8	Channel Select 1-8 ; Numeric key
2	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 / Frame Play
14	■	Stop manual recording; Stop Playback
15	Audio	Undefined
16	Mute	Undefined

Mouse Operation

You can use a mouse instead of front panel buttons or remote control.

Click left key of Mouse	In menu lock mode, Enter into pop-up menu and clicking any sub menu to pop up Log-in window; on menu unlock mode, enter into pop-up menu, and then clicking left key to enter into any sub menu directly.
	After entering main menu, clicking left key could enter into any sub menu; On[Detailed file] menu mode, clicking left key could playback one recording file.
	Change the status of check box and motion detection area.
	Clicking combo box to access pull-down menu
	By clicking left key you can adjust Color control bar and volume control bar.
	By clicking left key you can select values in edit boxes or pull-down menu and supports Chinese word input, special symbol, numeric and character input, use instead of [Enter- 
	In the [Detailed file] menu mode, clicking left key will playback one recording file.
Click right key of Mouse	In live display mode, clicking right key will display pop-up menu (shown as Picture 5-1).
	In Main menu or sub menu mode, clicking right key will exit current menu.
Double-click Left key of Mouse	In live display or playback mode, double-clicking left key will maximize the screen.
Moving Mouse	Select menu item
Sliding Mouse	On motion mode, sliding mouse will select motion area; On [Color set] menu mode, sliding mouse will adjust color control bar and volume control bar.

List 2-3

Chapter 3: DVR Installation

3.1 Hard Drive Installation

Caution : Please do not Install or take out hard drive when DVR is running!

- (1) Remove screws and open DVR upper cover carefully;
- (2) Insert Power Cord and data cable into Pin of hard drive securely;
- (3) Put the upper cover back carefully, re-attach screws.

3.2 Camera and Monitor Connection

Connect camera cable to video input of DVR, and from video output of DVR to Monitor via BNC connector (Refer to section 2.2-Rear Panel); or

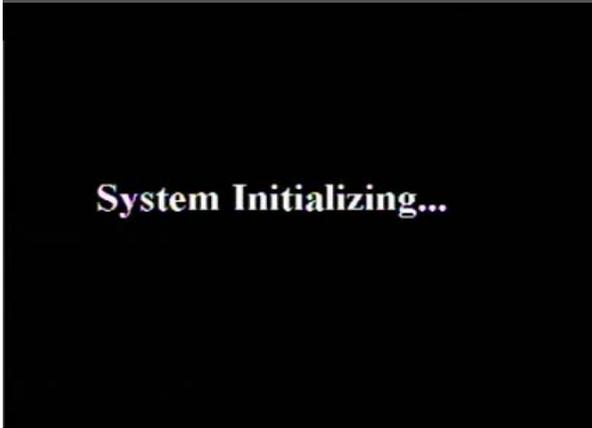
If the camera is a PTZ speed dome, you could connect RS485 A & B to the according port of DVR respectively (refer to system figuration on Chapter 8).

3.3 Power Supply connection

Please only use the power adapter supplied with the DVR .

Chapter 4: DVR Boot up

4.1. System Initialization



After connecting the power adapter the system will boot-up and start initializing.

4.2. Main Interface



After initialization, the system will display main interface. When there are video inputs, live images from the cameras will be displayed on screen. You can use mouse to double-click the live image of any channel for full screen display; by double-clicking again, the display will return to display all cameras.

On the main interface, you will be able to see current system date & time, channel title, recording status.

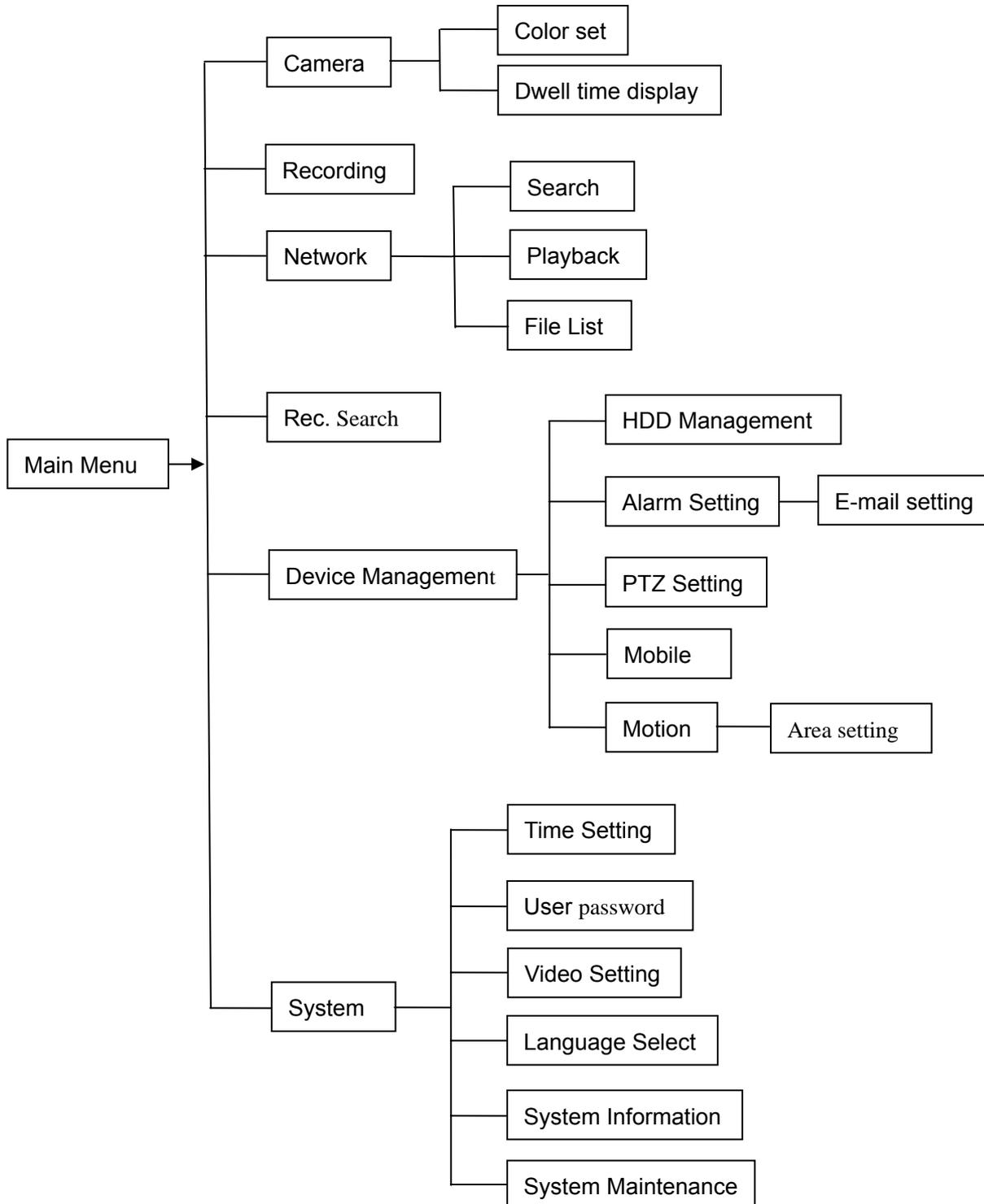
When there is no HDD installed in the DVR, or the HDD is in abnormal working condition, system will display "H" on screen.

Press **SEL** button on the front panel or click the right button of mouse, you will be able to see the pop-up menu bar. It's a short cut for your quick jump to menus in common use. Detailed method to operate the pop-up menu bar will be introduced in relative chapter.



Chapter 5. DVR Menu

5.1. Main Menu Preview



5.2 Main Menu



Picture 5-2

After clicking right button of mouse, pop-up menu will be displayed on the screen. You can click [main menu] button on pop-up menu to enter into Main menu interface (Shown as Picture 5-2). You can also use the Menu button on the front panel to bring up the window, when using the front panel buttons use the FWD and REW button to move in the menu, and the SEL button to select the icon. You use the ESC button to return to previous window. In Main Menu mode, you can control device management settings,

such as Camera, Recording, Network, Recording search, HDD, Alarm, PTZ Control, Mobile Phone & motion detection etc, you can also set system function settings, such as Time setting, User password, Audio/Video setting, Language select, and access system information, system maintenance etc.

5.2.1 Camera setup



Picture 5-3

Go to [Main Menu → Camera] to set up the name display and position display of each channel (Shown as Picture 5-3), You can also adjust image brightness, saturation, contrast and hue settings of each channel after entering into [Color] Menu and set up whether each channel can be previewed or not under Live display and/or Recording mode.

Please note that the name of each channel supports up to eight characters.



Picture 5-4

Below is the Color Menu where you can adjust image brightness, saturation, contrast and hue parameters of each channel.(shown as picture 5-4)

Explanation:

- 1、 The modifications will be available after clicking [APPLY] button on the bottom of the sub-menu windows and being prompted to save and then clicking [ok] button.
- 2、 If you want to cancel the modification, click [Exit] button to exit the menu.
- 3、 When clicking [DEFAULT] button, all system default values will be reset to default value.
- 4、 System default value indicates the value pre-set at the factory.



Picture 5-4A

Click [AUTOSEQ] button to start auto rotation function. (setting sub menu shown as Picture 5-4A. After starting auto rotation function, system will auto rotate the video images among CH1, CH2, CH3, CH4 and Quad in turn.

Default rotation time: 5 second

Settable time range: 0~10 second

5.2.2 Record setup



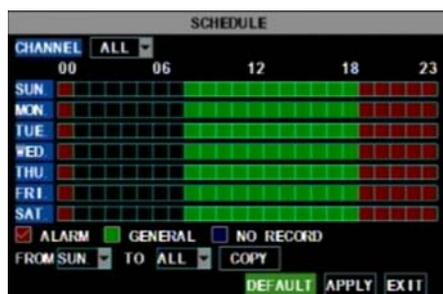
Picture 5-5

The [Record Setup] menu allows you set up recording status (on/off) of each channel, it also allows you setup recording image resolution and quality, and turn audio on/off. This menu also allows you select recording mode (recording after power on and scheduled recording) and recording file length.

Once a channel is set to “on” the channel can record, if it is set to “off” the video from the channel will not be recorded. **Resolution** options are D1, HD1 and CIF; and **Quality** options are Best, Good and Normal.

When Audio is set to “On”, system will also record audio from the channels and will have audio output on playback mode; if it is set to “off” you can not record audio and will have no audio output available on playback mode.

To record 24 hours a day set the Rec Mode to Always. To record on motion or a set schedule, select Time Schedule Record and click the “Schedule” option, the Schedule interface will open as shown in (picture 5-6):



Picture 5-6

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

You can also click on the Default button to use the system defaults. The system default settings are:

Hr01:00 am-07:59 am : No recording

Hr08:00 am-18:59 pm : Normal recording

Hr 19:00 pm- 00:59 pm : Alarm recording

Explanation: Under the recording Set menu and recording search menu, original color stands for no recording, “Red” stands for alarm recording, “Green” stands for normal recording and “Blue” stands for the channel and date you have selected.

5.2.3 Network Set

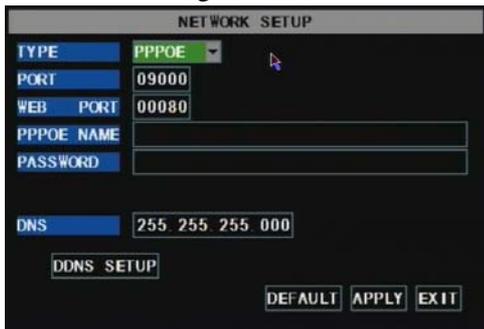
Enter into [Main Menu→Network Set] to proceed network set (Shown as picture 5-7):



Picture 5-7

After selecting network mode - such as DHCP, PPPOE and static allocation and setup web port, you could visit DVR remotely via network.

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



Picture 5-8

When selecting PPPoE, you need to input user and password provided by ISP supplier and set up web port (details please refer to the below picture 5-8).



Picture 5-9

When selecting static allocation, you need to setup IP address, net-mask, gateway and web port (shown as picture 5-9).



Picture 5-10

If you apply for DDNS service and set up net parameter of DVR accordingly, you could visit DVR remotely via IE browser. (shown as picture 5-10)

ID	Service Port	IP Address	Protocol	Enable
1	9000	192.168.1.101	ALL	<input checked="" type="checkbox"/>
2	8080	192.168.1.101	ALL	<input checked="" type="checkbox"/>
3	554	192.168.1.101	ALL	<input checked="" type="checkbox"/>
4		192.168.1.	ALL	<input type="checkbox"/>
5		192.168.1.	ALL	<input type="checkbox"/>
6		192.168.1.	ALL	<input type="checkbox"/>
7		192.168.1.	ALL	<input type="checkbox"/>
8		192.168.1.	ALL	<input type="checkbox"/>

Common Service Port: DNS(53) Copy to ID 1

Buttons: Clear All, Save

Picture 5-11

If you need to visit DVR via Internet, you should setup the inflection of video port at the public Router located in the DVR (shown as Picture 5-11).

Host Port: 9000

Web Port: 8080

LAN IP address of DVR: 192.168.1.101

Input http:// router IP:8080 (192.168.1.101:8080) to you computer IE browser, then you will visit your DVR freely.

5.2.4 Recording Search

Click [Main menu→ search] to enter into [Video Search] menu (shown as the below picture 5-20).



Picture 5-20

You can play video Forward at 2x, 4x, and 8x speeds, Slow play at 1/2x, 1/4x, and 1/8x, normal play, pause and play frame by frame using the playback control bar, and adjust volume by clicking or sliding tune control bar. When playback has finished, system will return to previous menu.

File list

On the [Video search] menu mode, click [File list] to pop up the sub-menu shown below as Picture 5-21. This option will allow you to view all of the available files by channel and type (all, normal, or alarm). You can select a file and push the SEL button to playback the file, or use the FWD button and down button to select the option and backup the recording file you selected. You can also put a checkmark in the box at the end of multiple files if you want to backup more than one file.



Picture 5-21

Searched playback:

If you input specific date and click [Search], you will find all the recordings for that day. When you select [Date] item, you will playback the recordings in 4 channel mode; or, click [File list] button to display File list interface, where you can playback or backup the file you selected. See File List heading below.

First: Indicates the first page of recording history you have searched. When you view other pages, clicking [First] button brings you back to Page one.

PRE (Previous page): When viewing event list, clicking [Previous page] button will take you back to page before the one you are currently viewing (except the first page).

NEXT (Next page): When viewing event list, clicking [Next page] button will take you to the page after the one you are currently viewing (except the last page).

LAST (Last page): Indicates the last page of recording history you have searched. When you view other pages, clicking [Last page] button will take you to the Last page.

ALL (Select All): Allows you to select all the events on the current page.

INVERSE (Select Invert): Allows you to select other events on the current page except those you have currently selected.

Recording File Backup

If you want to backup one recording from the file list, you just select the recording and click [Backup] button. When the backup is completed you will be notified. Please click [OK] button to save your backup (shown as Picture 5-22).

Explanation: Backup file will be in H264 format, you can convert it to AVI format using the Multimedia Player program that comes with the DVR or through the net-viewer program, so you can use any player which supports AVI format.



Picture 5-22



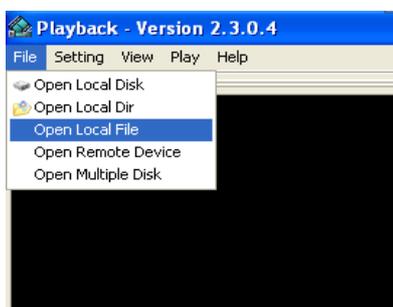
Picture 5-23

5.2.5 Multi player

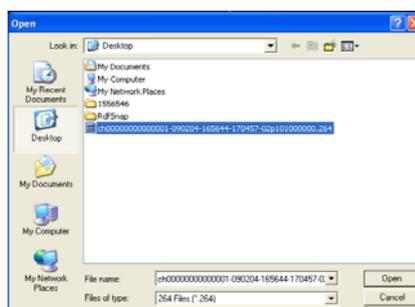
1、 Copy backup file to your PC.

2、 Open multimedia player and click [File→ Local (F)] to find/select the backup file, and then click [open] button

Note: the file type you have selected should be *.264 format.

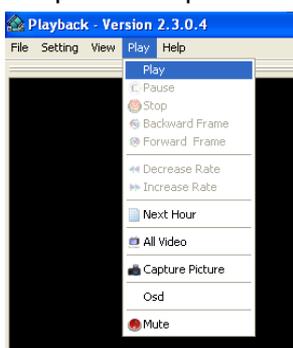


Picture 5-24



Picture 5-25

3、 Open backup file:

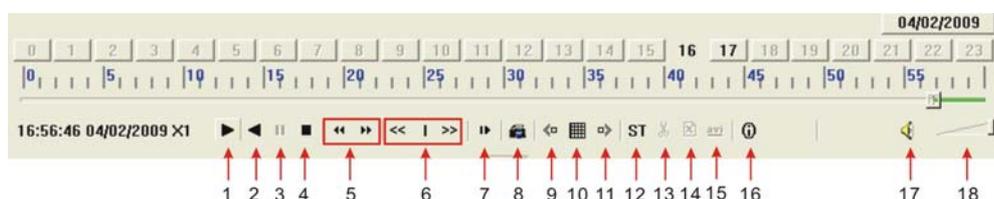


Picture 5-26

(1)、 Click [Play] menu (P) on the top of multimedia player interface to select playing the backup file;

(2)、 Click pop-up menu button  on the bottom of multimedia player and [Play-▶] button, then the backup file will be played on the according channel.

(3)、 The Menu brief on the bottom of multimedia player:



Date: **04/02/2009** recording date for the current backup file shown as right corner;
 24H recording time: lie under [Date] menu. Black number button stands for current recording playback is normal recording for the time line.



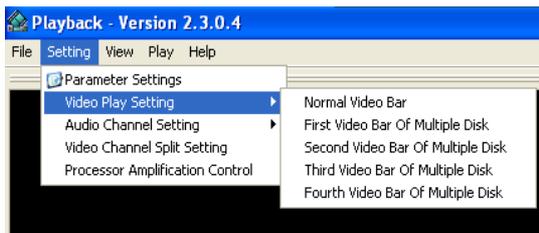
0~60 Minute recording time quantum: Green part on play processing bar stand for recording length for one hour recording.



Recording date and time processing for the current recording file

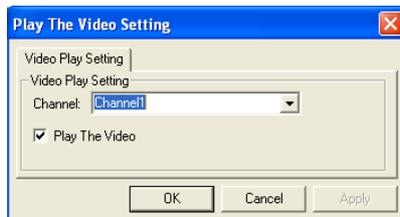
- | | | | |
|---|-----------------------------------|----|-----------------|
| 1 | Play | 10 | All the windows |
| 2 | Previous recording file | 11 | Add window |
| 3 | Pause | 12 | Start |
| 4 | Stop | 13 | Cut |
| 5 | Previous frame / Next frame | 14 | Delete |
| 6 | Slow play, Normal play, Fast Play | 15 | Convert AVI |
| 7 | Next Hour | 16 | OSD |
| 8 | Capture picture | 17 | Mute switch |
| 9 | Reduce window | 18 | Volume adjust |

4、Please refer to the below [Video on] setting procedure (System default - video for every channel is on)



Picture 5-27

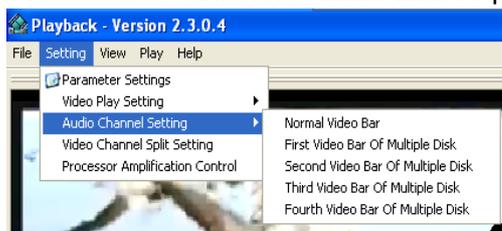
Setting→Video play setting →Normal video Bar→Select the channel you want to display→ Select to play the video→Apply→OK



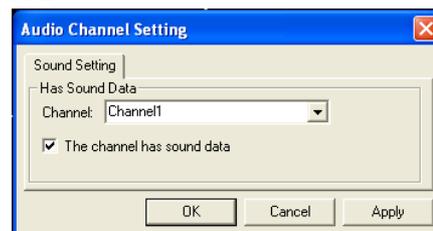
Picture 5-27A

5、Refer to the below for [Audio on] setting procedure. (Setting parameter will be available after re-starting multimedia player after [Audio on] set up.)

Setting→Audio channel setting → Normal video Bar→Select the channel you want to playback the audio→Select the channel has audio files→Apply→OK.



Picture 5-28A



Picture 5-28B

After successfully setting the above, when you playback the current channel, you can open the channel's audio function at the same time as the video

5.2.6 Device Management



Picture 5-29

Options in device management include Hard drive, External Alarm, PTZ control, Mobile Phone Monitoring, and Motion Detection.

5.2.6.1 HDD Management



Picture 5-30

Click [Main Menu→Device → HDD] to enter [HDD Management] menu (shown as Picture 5-30)



Picture 5-31

When you install a HDD, the system will automatically detect if HDD is formatted or not; If HDD needs to be formatted, HDD status will be shown as “Not format”, otherwise, the HDD status will be shown as “Normal” (refer to Picture 5-31)

TOTAL SPACE: Indicates total space available on Hard Drive.

FREE SPACE: Indicates unused space available on the Hard Drive.

USEABLE REC TIME: Based on current image detail/quality and frame rate, system will show you how

Recording time you have left on the Hard Drive.

OVERWRITE: If you select “on” the system will automatically overwrite the oldest recordings once the hard drive is full; if you select “off”, recording will stop once the hard drive is full.

HDD FORMAT: You use this option to format the hard drive, you can not record files to the hard drive until it has been formatted. Click [Format HDD] button to start formatting. When selecting [Format HDD] option the system will prompt you – “Format HDD will loss all the data, do you confirm?” ; click “OK”, system will prompt you – “Is formatting...” and “successful format”; and then system will restart automatically.

USB FORMAT: Use this option to format USB devices.

5.2.6.2 Alarm Set



Picture 5-32

BUZZER: Options are ON or OFF. Set this to OFF to disable the buzzer, or set this option to ON and then set the ALARM TIME option for how long the duration of the alarm will be. This option must be enabled if any of the alarm option below will be enabled.

OUTPUT: Set the duration of the trigger time of the external alarm.

MD ALARM and I/O ALARM: Check the box on the left to enable the buzzer to go off when motion is detected or when the external I/O is triggered. Check the second box to the right labeled “EMAIL” if you would like your DVR to send an e-mail to

an assigned e-mail account configured under “EMAIL SETUP”.

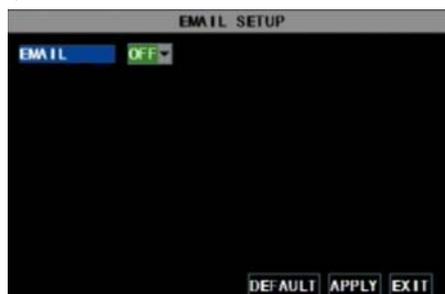
Check the box labeled “FULL SCREEN” on the right if you would like the channel that has detected motion to automatically expand to full screen.

HDD LOSS, HDD SPACE, VIDEO LOSS: Check this box if you would like to trigger the alarm when HDD is operating irregularly, HDD is full while “HDD Overwrite” is disabled, or video signal from the cameras has been loss.

ALARM TIME: Option for the duration of alarm after an alarm is triggered. If “Motion Detect” recording is enabled, this option controls the duration of the recording time after the motion has stopped.

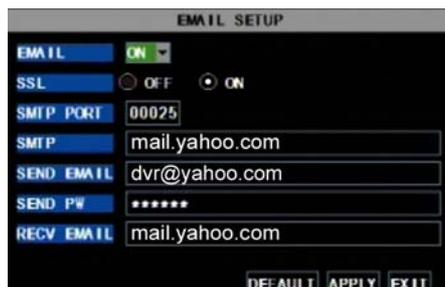
Email Alarm Notification

(to send notice to email account when motion alarm is triggered)



Picture 5-33

Click the [Email setup] menu to enter into its sub menu (shown as Picture 5-33).



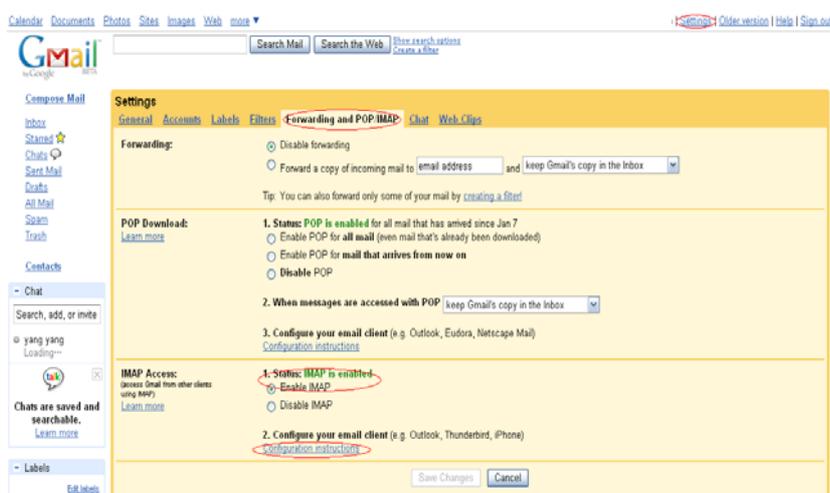
Picture 5-34

On the [Email setup] mode, refer to its parameter setup shown as picture 5-34 when setting email alarm to “on”.

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.

Please set SSL to “On” via Gmail.com server, and set to “Off” via other mail server.

If your setting is still not right, please contact the web site where you have applied for your email box to get SMTP server and SSL of mail box.



Picture 5-35

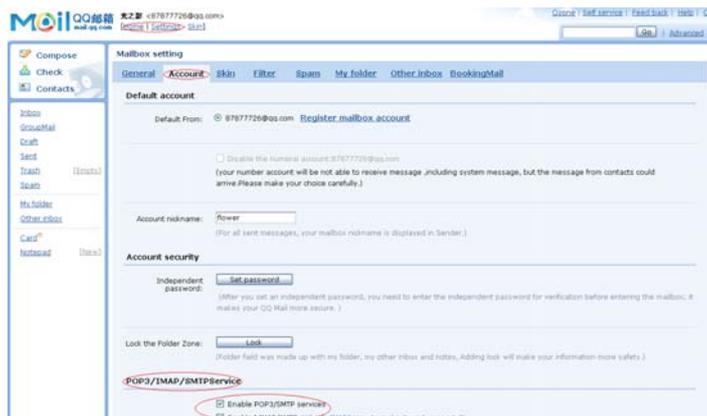
SMTP Port: indicates sender port of SMTP server. Generally the SMTP port value is 25, but there are exceptions, for example, SMTP port of G-mail server should be 465.

SMTP server: indicates server address you use.

Sender email: 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 – aaa@gmail.com, the according server should be smtp.gmail.com.

Receiver address: indicates 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 below

picture 5-35A.



Picture 5-35A

5.2.6.3 PTZ Setup



Picture 5-36

Enter into [Main menu→Device→ PTZ Setup] to select the channel you want to control and set PTZ protocol (Pelco-D or Pelco-P), Baud Rate (1200, 2400, 4800, 9600), Stop bit (1, 2), Parity Check (None, Odd, Even Mark Space), Address Code and Cruise status respectively. Please note the above mentioned channel settings must match the settings of the PTZ camera.

5.2.6.4 Mobile



Picture 5-37

Click [Main menu→Device→Mobile] to enter into [Mobile] menu.

User Name: indicate user name of DVR.

User password: indicate user password of DVR

Server port: Mobile monitoring port. Setting range is between 1024 and 65535. Please note that

Explanation: Please connect DVR to Internet before setting DVR port number and the server port no is not equal to network menus.

5.2.6.5 Motion Detect



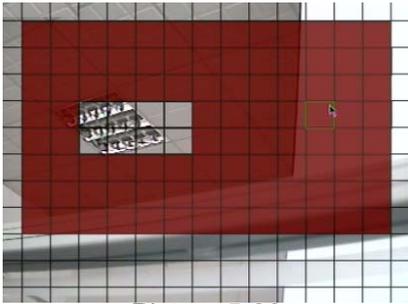
Picture 5-38

Click [Main→Device→Motion] to enter into the [Motion Detection] menu to setup motion detection recording.

The [Motion detection] Menu has three sections, including Channel Status, Sensitivity and Motion area.

Channel STATUS: This option allow you enable motion detection on any channel.

SENSITIVITY: This option allows you to set sensitivity level of motion detection from 1 to 4 with 4 being the most sensitive.



Picture 5-39

MD AREA: This option allows you select the area you want to be sensitive to motion. The channel is separated into a 13*10 area. When any object moves into the motion detection area, and the area where the object is located is displayed in red recording will be triggered. In the semi-transparent area the motion detection is off.

5.2.7 System Function



Picture 5-40

The [System] Menu includes the below sub-menus: Time Set, User Password, Audio/Video Setting, Language select, System Info and System Maintenance.

After entering into the [System], you can configure the system to meet your needs.

5.2.7.1 Time Set



Picture 5-41

Click the [Main menu→System→Date/Time] in turn to Enter into the time setup menu shown as Picture 5-41 to not only modify system date, time, date/time format and time zone, but also setup DST (day saving time) status and mode.

5.2.7.2 Password



Picture 5-42

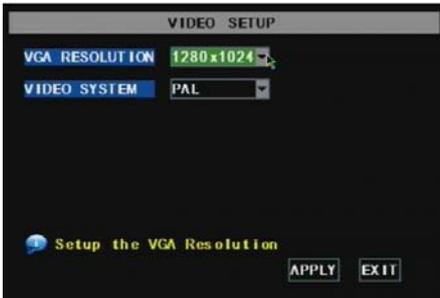
This option allows you set the device ID for the DVR and set the system password if you want to use one. The new passwords will be available after clicking [APPLY] button.



Picture 5-43

When you set Password Enabled to “ON” (shown as Picture 5-43), you can setup a user password and administrator password respectively. The password supports up to 6 characters.

5.2.7.3 Video Setup



Picture 5-44

Click [Main Menu→System→VIDEO] to setup Video, here you can set Camera system (PAL, NTSC) In the USA we use NTSC. You can also set the resolution for the VGA video out port. Your options are 600x480, 800x600, or 1024x768, or 1280x1024.

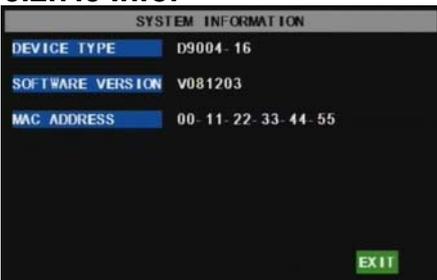
5.2.7.4 Language



Picture 5-45

Enter into [System Language] menu to select the language you want to use on the DVR (shown as Picture 5-45) and click [APPLY] button. The selection will be available after system Auto restarts.

5.2.7.5 Info.



Picture 5-46

Click [Main Menu→ System→Info] to enter into [System Information] menu to view system info, including Device type, Software (firmware) version and MAC address etc.

5.2.7.6 System Maintenance

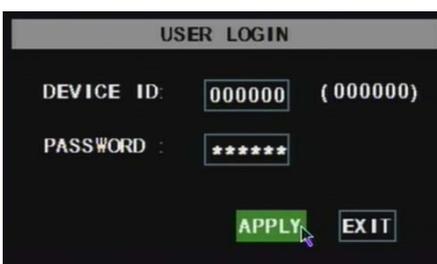


Picture 5-47

This option allows you reset the DVR to factory default settings, update system software (firmware), and set system auto-maintenance. Click [Main menu→System→Maintain] to enter into the [System Maintain] menu (shown as Picture 5-47).

When opening auto-maintain function, you can setup system to restart regularly.

5.3 Menu Lock



Picture 5-48

As a system safety feature you can click [Menu Lock] menu to lock menu when leaving the DVR. If you want to login to the DVR, you would input device code and password (refer to the Menu Locking interface- Picture 5-48).

Explanation: User only has the authority to search recordings, but Administrator has full authority over Main Menu operations

5.4 Video Search

Click pop-up menu video search to enter into [Video Search] menu you search files and playback recordings. For more information on this operation refer to the previous section 5.24.

5.5 PTZ Control



Picture 5-49

We introduced setting PTZ parameters previously in chapter 5.2.5.3. Here we will discuss how to operate PTZ controls.

Click pop-up menu to show PTZ option and enter into PTZ control interface (shown as Picture 5-49). You can now click Z+&Z- keys to zoom In or out, click F+&F- keys to control camera focus and click I+&I- to adjust iris.

Cruise Set

Open auto cruise function on PTZ setting menu if you want to setup cruise function (system default: on), and set up cruise channel, cur point and total quantity and stop time etc.



Channel select: select the channel with the PTZ camera

Total: set up presetting bit quantity

Cur Point: System has default starting (current) cruise point as 01. You can use this option to set additional cruise points.

Stop time: sets the pause time at each stop.

GOTO : select this option to go to specific preset points

Set: save the preset point. After setting channel and setting the position by adjusting PTZ direction key you click [Set] button to setup the pre-set point. Please note you will click the [Save] button to finish the setting successfully. If you want to combine Zoom, Iris, Focus and direction keys into the pre-set setting, please return to previous menu (shown as Picture 5-56) to add additional settings, and then enter into Cruise Set again and click [Set] and [Save] to make sure your setting is setup successfully.

Clean: remove settings.

Note: this DVR model supports up to 100 pre-set points. But actual quantities may be restricted by the PTZ camera you are using.

5.6 Record

When you want the system to start recording click [Rec] button to start manual recording.

5.7 Stop recording

If you want to stop manual recording click [Stop Record.] menu or [Stop] button

Chapter 6: Net-Viewer Program

6.1 Plug-ins download and installation

Open IE browser and input IP address and web port of DVR, such as <http://172.18.6.202:80/> and confirm to download and install webcam. If your computer is connected to internet, computer will auto download and install the webcam.

Reminder: If the webcam is not downloaded successfully, please check if your browser's safety level or firewall setting is too advanced. Also refer to section 5.2.3 Network Setup to make sure network configuration is correct, ports are forwarded correctly, and ActiveX is enabled.

6.2 Log-in to NetViewer



Picture 6-1

After webcam installs plug-ins, please select log-in language (Chinese or English) and enter password and click [Log-in] button, and now you can view DVR remotely through NetViewer.

Please note default password is empty. System allows Administrator to set new password as per instructions in section 5.2.6.2 - [Password set] menu.

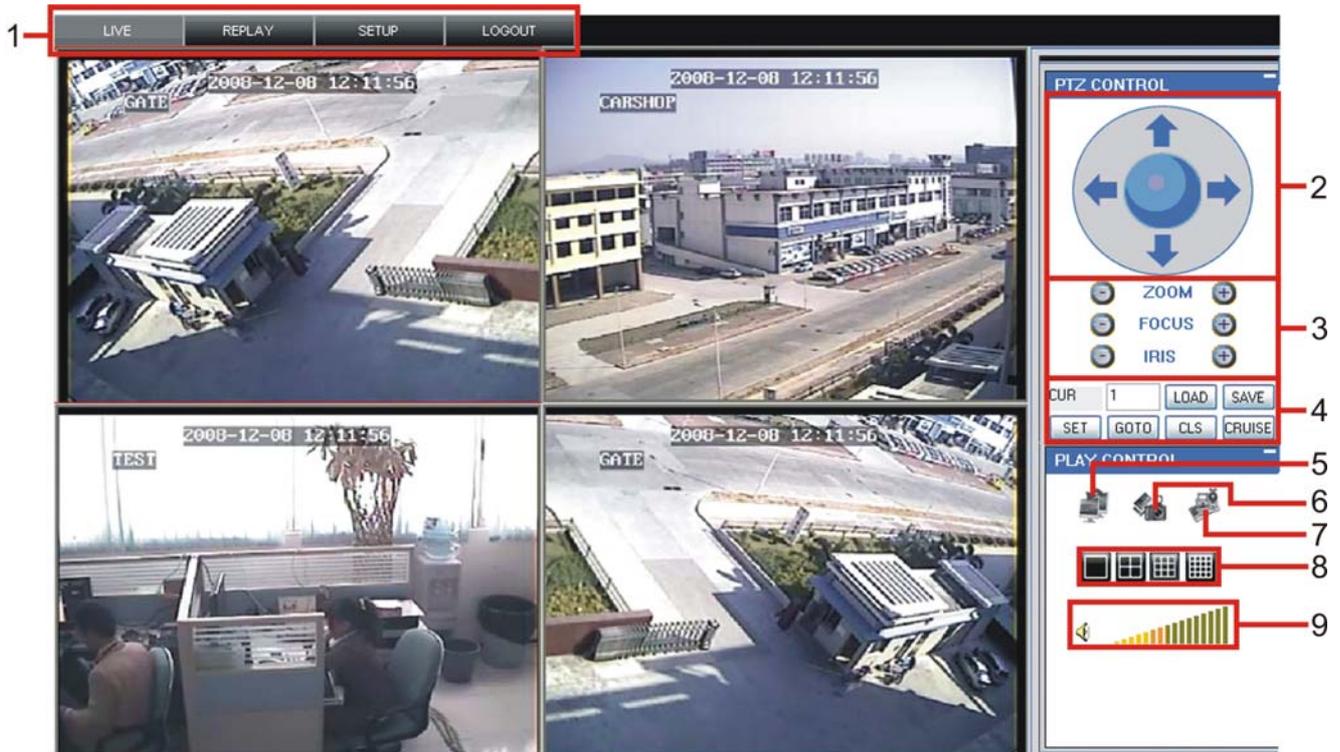
Note: If you want to delete old IE webcam at DVR system update, run the command characters: "regsvr32/u dvrocx.ocx"



Picture 6-2

After successful Log-in to Net-viewer, system will enter into live display interface and connect to audio/video feed automatically (shown as Picture 6-2).

6.3 Main Interface of Net-viewer



Picture 6.3

Log in Net-viewer and show the interface as follows

6.3.1 Menu column (Section 1 on Picture 6-3)

6.3.2 PTZ Control (Numbers 2, 3, 4 on Picture 6-3)

6.3.3 Live Play Control (Numbers 6 through 10 on Picture 6-3)

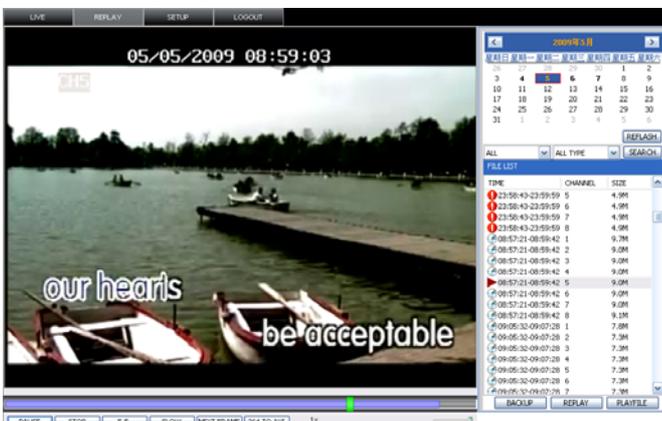
6.3.1 Menu column (Section 1 on Picture 6-3)

Menu column include [Live] menu, [Replay] menu and [Setup] menu and [Logout] menu.

6.3.1.1 Live

After Logging-in to system, system will enter into Live display (shown as Picture 6-3).

6.3.1.2 Replay



Picture 6-4

Play button: [Play]/[Pause]

Stop button: stop playing recording.

This option allows you to playback recordings remotely.

First select the day, channel and type and proceed searching and refreshing; second select any event from search result list to playback.

Please note you can control playing speed by sliding the playing-control bar on the bottom of the interface (shown as Picture 6-4).

F.F. button: fast forward playback recording

Slow button: slow playback recording.

Next Frame: play frame by frame.

264 TO AVI button: convert file from H.264 format to AVI format



The native format of the backup files is H.264, you can convert H.264 format into more familiar AVI format by clicking the key of 264 to AVI.

6.3.1.3. Setup

Click [Setup] menu to enter into its sub menu, including [Recording Mode] menu, [Alarm Mode] menu, [PTZ Control] Menu, [Network Setting] menu, [System Setting] menu and [Host Info] menu.

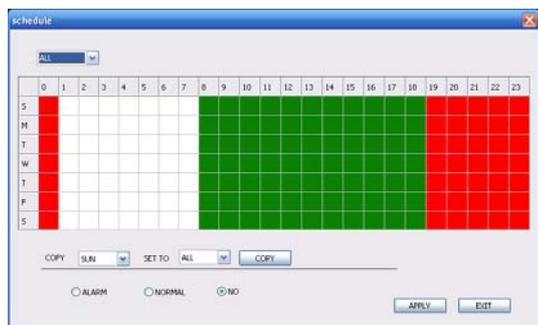
Explanation: Only when DVR is on the status of live display, you could modify and save its parameters remotely at this moment, the settings are available. The modification method to DVR via Net-viewer is the same as local adjustment of DVR.

① Record



Picture 6-5

Enter into sub menu – [Recording Mode] menu, you can select on/off for every channel, and adjust recording parameters (resolution, quality, audio, REC mode and Schedule) remotely via Net-viewer.



Picture 6-6

Click the [Schedule] menu to enter into its sub menu (shown as Picture 6-6).

Remote setup methods are the same as local DVR setup. Please refer to Section 5.2.2 Record Setup

② Alarm

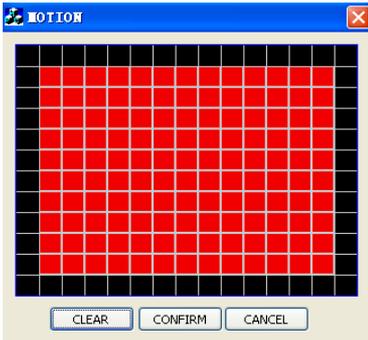


Picture 6-7

Click [Alarm] menu to enter into its sub menu (shown as Picture 6-7).

You can set I/O alarm for every channel, motion detection alarm, motion recording, motion trace, motion sensitivity, video loss alarm, HDD not enough space alarm, HDD not found alarm and alarm output time etc.

For details on setup method please refer to section 5.2.5.2.



Picture 6-8

System allows you setup motion detection settings for each channel of DVR remotely (shown as Picture 6-8)

③ PTZ Control



Picture 6-9

Click [PTZ control] to setup PTZ cameras. Remote setup methods are the same as local DVR setup.

Please refer to Section 5.2.5.3 (shown as Picture 6-9).

④ Network



Picture 6-10

Click [Network] to enter into [Network] menu. Remote setup methods are the same as local DVR setup.

Please refer to Section 5.2.3. – Network Set.

⑤ Setting



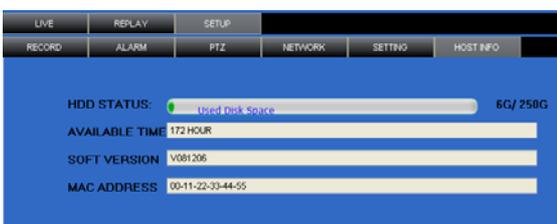
Picture 6-11

Click [setting] menu to enter into the menu interface (shown as Picture 6-11);

Click [...] button to preview net-viewer recording saving path and screen capture saving path.

The menu also allows you to set a lower bandwidth for Internet video transmission, set user password, turn daylight saving time on/off, etc.

⑥ Host Info



Picture 6-12

Click [Host Info.] to enter into the sub menu (shown as Picture 6-12). Here you can check Usage rate of HDD, available recording time, software version and MAC address.

6.3.1.4 Log out

Log out of the system.

6.3.2 PTZ Control (Numbers 2, 3, 4 on Picture 6-3)

Note: below-mentioned series no will be consistent with the remark no shown as Picture 6-2.

②.**PTZ direction control:** Control PTZ moving direction

③.**Zoom, Focus and Iris Control:** control direction, zoom, focus and iris of PTZ.

④.**Presetting bit Control**

CUR : display current presetting bit or input a presetting bit you want to fix at according edit box

Load : Load one presetting bit setting you have saved last time.

Save: Save presetting bit.

Set: set presetting bit parameter (Details setting method please refer to section 5.5- cruise set.

GOTO: on the preview mode, please input one presetting bit no and click [GOTO] button, you could fix the presetting bit quickly.

Clean: clean presetting bit setting

Cruise: control cruise status (including on and off).

6.3.3 Live Play Control (Numbers 6 through 10 on Picture 6-3)

⑤ On / Off Live display []: When Live display status is “On”, Clicking the button closes Live display. When “Off” clicking the button opens the Live display.

⑥ Capture []: Capture Screen image and save to PC as *.bmp image.

⑦ Recording []: Operate DVR recording remotely

⑧ Channel display []: The icons stand for Single Channel display, Quad Channel display, 3x3 Channel display and 4x4 Channel display respectively.

⑨ Volume control [] Click or slide the control bar to adjust sound volume.

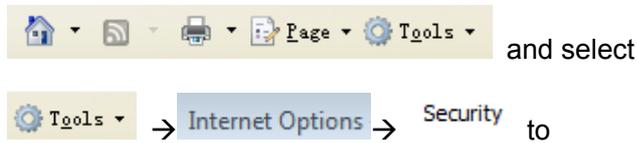
Chapter 7: Specifications

Model	4CH	8CH
Video System	NTSC / PAL(Optional)	
Compression Format	Video: H.264 / Audio: 8kHz*16bit ADPCM	
Video Output	4-CH BNC Input/ 2-CH BNC Output / 1-VGA output (Optional)	8-CH BNC input/2-CH BNC output / 1-VGA output (Optional)
Audio I/O	1-CH RCA audio input/ 1-CH RCA audio output	
Display Resolution	D1: 704×576(PAL) 704×480 (NTSC)	
Frame rate	Single CH PAL: 25 fps , NTSC: 30 fps	
Recording Resolution	PAL: CIF(352*288), HD1(704*288) D1 (704*576) NTSC:CIF(352*240),HD1(704*240) D1 (704*480)	PAL: CIF(352*288) NTSC: CIF(352*240)
Recording Frame Rate (shared)	PAL: 25 fps@D1, 50 fps@HD1, 100 fps@CIF NTSC: 30 fps@D1, 60 fps@HD1,120 fps@CIF)	PAL: 200 fps@CIF NTSC: 240 fps@CIF
HDD	1 SATA HDD, up to 1024GB; USB removable HDD	
Video Mode	Always / schedule / manual /motion detection	
Record Pack Time	15/30/45/60min	
Video backup	USB flash disk / removable HDD, USB Burner, Network backup to AVI File Format	
Playback Mode	PLAY /SLOW /FWD/Frame by Frame	
Alarm Type	Motion/Video loss/HDD Space/HDD Loss	
PTZ Control	Built-in RS-485 port, supports PELCO-P & PELCO-D	
USB 2.0 Port	Supports USB mouse, removable HDD, USB flash drive to backup to AVI file and upgrade system	
Ethernet	One RJ-45 10M/100M self-adaptable Ethernet interface	
Network Protocol	Supports TCP/IP, DHCP, UDP, DDNS, PPPOE network Protocol	
Network Function	Support preview live display remotely via mobile phone and real time monitoring via IE-based browser and/or network, and support parameter setting of DVR remotely.	
Power consumption	10~15W (exclude HDD)	
Power Adapter	DC 12V / 3A	DC 12V / 3A
Working Temperature	50°F to 104°F (10°C to 40°C)	
Working humidity	10%~90%	
Dimension (W x D x H)	12.40 x 9.3 x 2.4 in (315× 236 × 60 mm)	

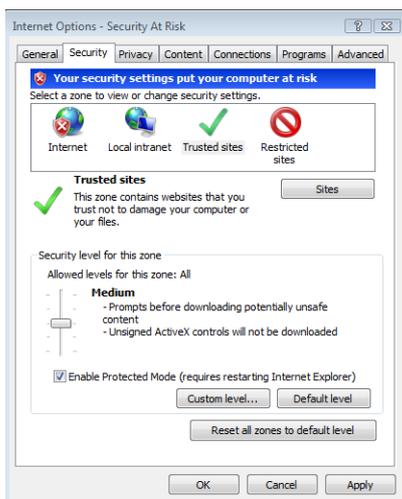
List 7-1

Chapter 8: Windows Vista User

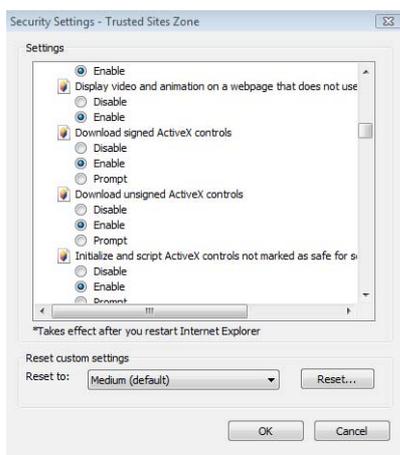
1、Open IE browse firstly, then enter into Tool bar-



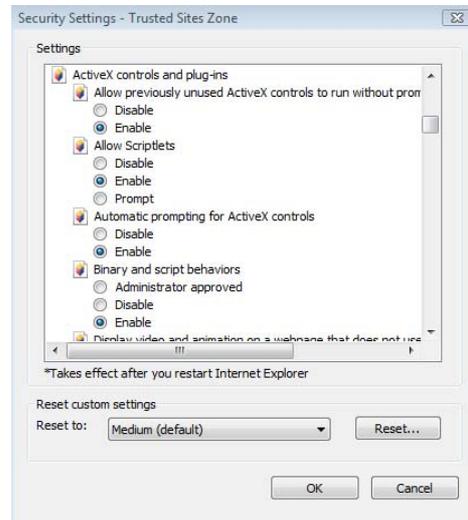
appear the below picture:



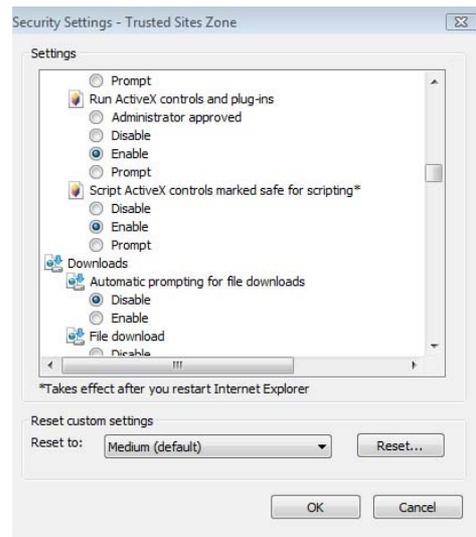
2、Second, select **Custom level...** icon and tick the settings of “ActiveX controls and plug-ins” to Enable, details as follows:



3.



4.



Lastly after tick all the “Enable”, please click **OK** to exit. At this moment, you could input IP address to run your programme.

Open IE browser and input IP address and web port of DVR...computer will auto download and install the widget.

We suggest Vista user set user access authority in order to make your PC safer. Setting processing as follows:

Click [Start→Set→Control panel→User account] to set user access authority shown as below picture.



Remind: If the widgets are not downloaded successfully, please check if your browser's safety level or firewall setting is too advanced.

Open IE browser to enter into [tool→ Internet Option→Internet user-defined level→enable widgets.

Downloading and auto running install widgets need one minute, please wait...patiently.

Chapter 9: Appendix

9.1 Recording Alarm setting

Please refer the below matrix: “⊥” stand for “only alarm but no recording”; “AMR” stand for “alarm recording”; “NLR” stand for “normal recording”; and “NOR” stand for “ no recording”. Once alarm is triggered, alarm icon will occur, and when many alarms are triggered, alarm remarks will occur on the screen.

Recording alarm setting	Alarm icon	Recording after power on	Recording Mode			Manuel Recording
			Timing recording			
			AMR	NLR	NOR	
MD alarm	M	AMR	AMR	NLR	⊥	NLR
I/O triggered alarm	I	AMR	AMR	NLR	⊥	NLR
HDD loss, HDD space full	H	⊥	⊥	⊥	⊥	⊥
Video Loss	Video Loss	⊥	⊥	⊥	⊥	⊥

List 9-2

When DVR is in recording mode, **[R]** icon or **[M]** icon will appear on the screen. But when there are **[I]** icon and **[M]** icons on the screen it indicates a motion alarm was triggered. When **[H]** icon appears on the screen, that mean a hard drive alarm has occurred.

9.2 Troubleshooting

1. Q: What can I do if the system does not detect the HDD?

A: Check the data and power cables and make sure they are securely connected.

2. Q: We have changed the password but do not remember the new password, how can we access the system?

A: If you forget system password, enter 0800808 into the password field to reset the password

3. Q: We are not getting any video signal on the DVR, what is wrong?

A: Check to make sure the cables are securely connected to the BNC ports on the DVR. You can also try another cable to make sure there is not a problem with the cable. Make sure you have selected the correct video format for your country (NTSC or PAL), is the USA we use NTSC.

4. Q: Can the DVR have problems if it gets too hot, how can I prevent this?

A: The DVR has a fan to help it dissipate heat while it is working. Please place the DVR in a place where there is good air circulation and away from high temperatures to increase stability and life of the DVR.

5. Q: My remote control does not work when the DVR is in Live mode but the front panel buttons are working, what is wrong?

A: Make sure nothing is blocking the LED on the remote, or the receiver on the DVR, if both are ok, check the batteries.

6. Q: Can I use the hard drive from my PC in the DVR?

A: You can if the hard drive is the same type and the size is supported by the DVR. If you install it in the DVR it will be formatted for use in the DVR and the PC will not be able to read it.

7. Q: Do I have to stop recording to playback files on the DVR?

A: No you do not have to stop recording, the DVR will support both functions at the same time.

8. Q: Can I erase files from the hard drive of the DVR?

A: You can not erase individual files, you would need to format the hard drive which will erase all of the files

9.Q: Why can't I log-in to the Net-viewer program?

A: Please verify that the Net mode is correct, The cable to the RJ-45 port is well connected to the DVR and the router, and that you are using the correct password.

10. Q: We have attached a PTZ camera but can not control it, what is wrong?

A: Verify that the Protocol, baud rate, address, and other settings on the PTZ camera match the settings you have

put into the DVR. Make sure the data cables are attached firmly to the RS485 port on the DVR.

11. Q: Why does the Buzzer keep sounding?

A: Please check to see if motion detection is on and the system has detected motion, make sure the hard drive is being detected and has sufficient space available, and that none of your cameras have lost video. You can turn off the buzzer in the Alarm setup option.

9.3 Email server check list (The below info only for your ref.)

(Web site)	Email address	Sender server (25)	Receiver server (110)
	@163.com	smtp.163.com	pop3.163.com
	@vip.163.com	smtp.vip.163.com	pop.vip.163.com
www.163.com	@188.com	smtp.188.com	pop.188.com
	@126.com	smtp.126.com	pop3.126.com
	@netease.com	smtp.netease.com	pop.netease.com
	@yeah.net	smtp.yeah.net	pop.netease.com
www.163.net		smtp.163vip.net	popx.163vip.net
www.sina.com	@sina.com.cn	smtp.sina.com.cn	pop3.sina.com.cn
www.yahoo.com	@yahoo.com.cn	smtp.mail.yahoo.com.cn	pop.mail.yahoo.com.cn
	@yahoo.com	smtp.mail.yahoo.com	pop.mail.yahoo.com
www.google.com	@gmail.com	smtp.gmail.com(465/587)	pop.gmail.com(995)
www.china.com	@china.com	smtp.china.com	pop.china.com
www.sohu.com	@sohu.com	smtp.sohu.com	pop.sohu.com
www.163.net		smtp.163.net	pop.163.net
www.163vip.net		smtp.163vip.net	pop.163vip.net
www.tom.com	@tom.com	smtp.tom.com	pop.tom.com
www.263.net	@263.net	smtp.263.net	pop3.263.net
x263.net		smtp.x263.net	pop.x263.net
263.net.cn		smtp.263.net.cn	pop.263.net.cn
www.qq.com	@qq.com	smtp.qq.com	pop.qq.com
www.139.com	@139.com	smtp.139.com	pop.139.com
www.21cn.com		smtp.21cn.com	pop.21cn.com
21cn VIP mail		vip.21cn.com	vip.21cn.com
etang.com		smtp.etang.com	pop.etang.com
elong.com:		smtp.elong.com	pop3.elong.com

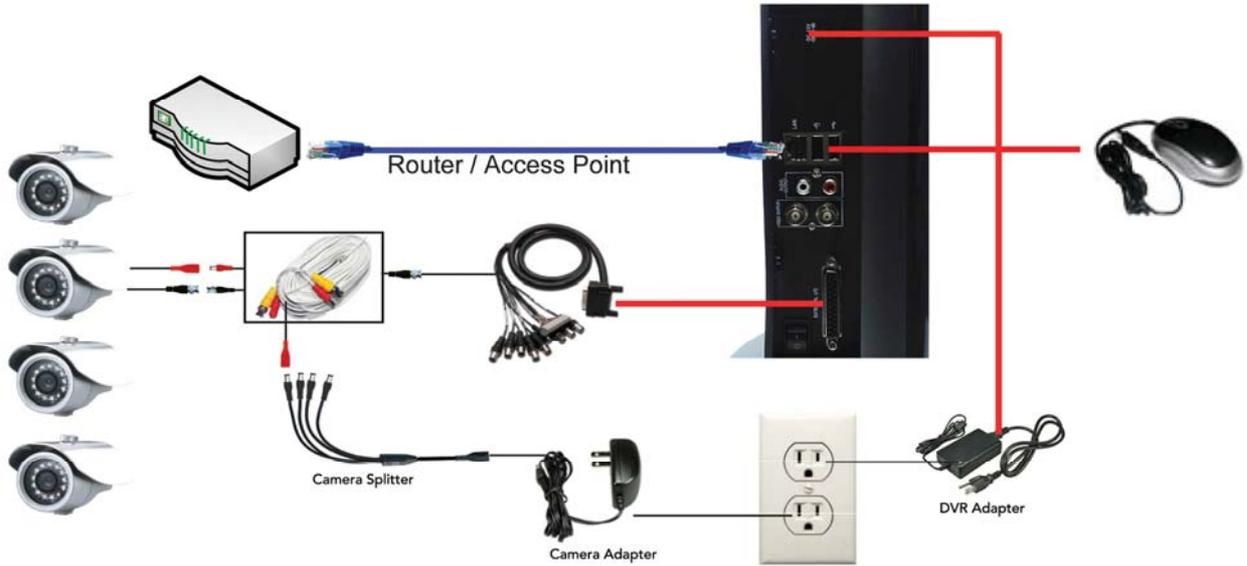
List 9-3

9.4 Usage Maintenance

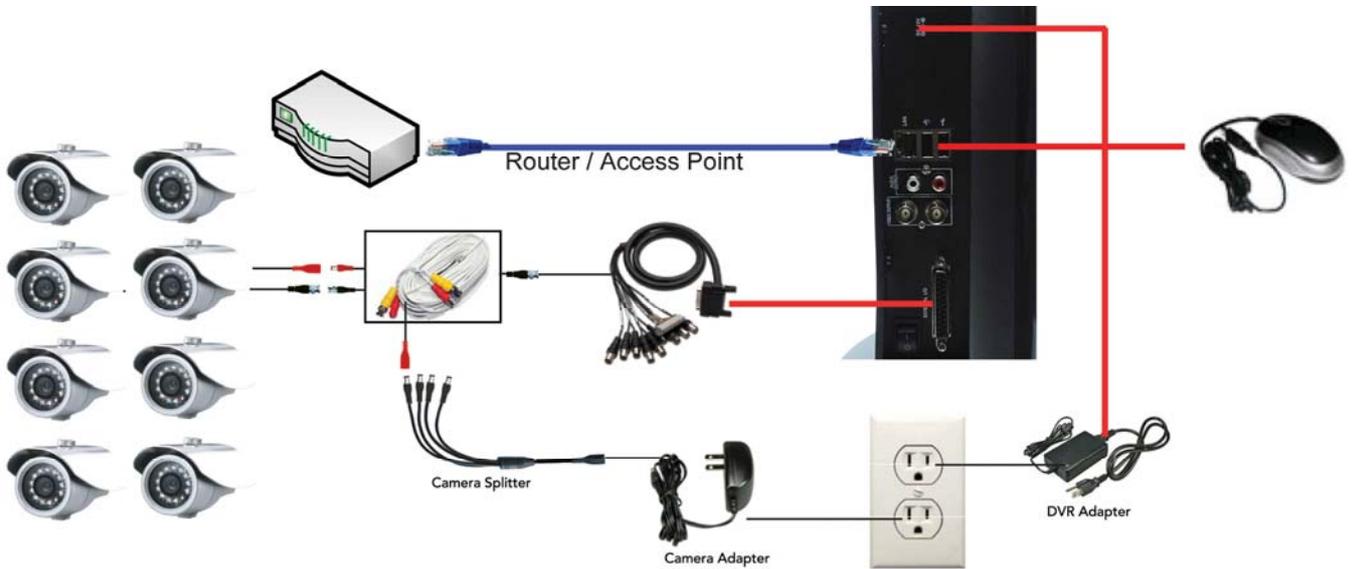
1. Please make sure DVR keep away from heating source.
2. Clean the internal dust regularly, keep DVR aeration well and be easy to heat dissipate.
3. Please not plug in RS-232 and RS-485 when power is on to avoid any damage to the port.
4. Please check the HDD cable and data cable to avoid the cable aging.
5. Please avoid other electronics device interfere video/audio signal of DVR a.s.a.p., or static electricity and induced voltage damage to DVR.
6. Suggest user replace BNC cable regularly to keep signal input stable.

9.5 System connection Configuration

4-CH.



8-CH



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