H.264 NETWORK Embedded DVR

USER MANUAL

CONTENT

1 INTRODUCTION

1.1 MAIN FEATURE

8 channel CIF resolution digital video recorder. It has local recording, playback, support treble code remote network surveillance, data backup, parameter setting, motion detection and USB mouse.

1.2 PRODUCT FEATURES

✧ H.264 compression

✧ Two USB interface, USB2.0 for data backup, USB1.1 for mouse operation.

✧ 3.5" SATA HDD.

✧ Special file system for security.

✧ 16 nature translucence GUI, note for menu selected

✧ Optimized four channel simultaneously playback

✧ Double level user management

✧ Support the live view, parameter setting and copy playback video via network.

1.2.1 PARAMETER

Item	Device Parameter	Specification
System	Language	Chinese/English
	GUI	Graphic menu(OSD Menu)
	password	user password, administrator password
Video	Video in	8ch composite video input 1.0Vp-p，impedance75Ω，BNC
	Video out	2ch composite video output 1.0Vp-p，impedance75Ω，BNC
	Video display	8ch:1/4/9channel switch
	Video standard	PAL，25f/s，CCIR625line，50scene NTSC，30f/s，CCIR525line，60scene

Audio	Audio input	8ch audio input，impedance600Ω，RCA
	Audio output	1ch audio output，impedance600Ω，RCA
	Basic electricity output	Linearity electricity
	Record style	Audio video recorded simultaneously
	Audio compression	ADPCM
Picture proceeding and store	Picture compression	H.264
	Picture resolution	CIF
	Streaming style	ISO14496-10
	Audio style	ADPCM
	Video code rate	CIF: 384~768 Kbps(optional)
	Audio code rate	32KB/s
	Data storage	SATA HDD storage(optional)
Connector	Network interface	RJ45，10M/100M
Alarm	Alarm input	8 alarm input
Connector	Alarm output	1 alarm output
	Serial interface	Support 1 RS232
	Serial interface	Support 1 RS485
	Network interface	RJ45，10M/100M
Software upgrade	Support USB firmware upgrade	

others	voltage input	AC:110~240V
	Voltage output	DC: 19V@3.42/(3A optional)
	Power	6W　without HDD
	Working temperature	-10----50℃

1.2.2 BASIC WORKING PARAMETER

Item	Parameter	description
Voltage input	19V	DC 19V
Video impedance input	75Ω	75Ωeach channel。
Video output	1Vp-p	1Vp-p CVBS signal
SATA HDD		One SATA with all capability
Working temperature	-10----50℃	Under normal conditions

1.3 ENTIRONMENT ADAPTABILITY

For the safely using DVR and prolong device life, please pay attention on following

1) When installing device, please comply all the electric product safety criterion；

2) Power and ground:

◆ Do not touch the power and DVR with a wet hand

◆ Do not drop liquid on DVR

◆ Do not put any object on DVR

◆ Please use soft dry cloth to clean DVR; do not use chemical impregnant.

◆ The Device will have voltage before startup if the power line is connected to power source.

◆ Please unplug power line from power source if the Device will not be used for a long time.

2. DEVICE OPERATION MANUAL

In device operation, the enter key on remote control has the same function as left click of the mouse.

2.1 REMOTE KEY INSTRUCTION

2.1.1 REMOTE CONTROL

Handheld IR Controller Key Functions:

【0－9】keys: During setup, number keys are used to input values. For viewing channels 1, 2, 3 and 4, use 1, 2, 3 and 4 on numeric keypad respectively.

▲, ▼: Up, Down directional keys: Move selection up and down in setup menu.

◄, ►: Left, Right directional keys: Move cursor left or right in setup menu.

【QUAD】: Switch 4 Channels；

【FWD】: Fast forward the video while playback. press 【PLAY】to return to normal speed；

【REV】: Reverse the video while playback, press REW to switch, press【PLAY】 to return to normal speed；

【POWER ON】: Reset the MDVR to Power on and Power off mode. (standby and start up)；

【LOGIN/LOCK】: If the security is enabled in the setup, use LOGIN/LOCK key to enter the user setup. It is important to remember the password due to without restoration function. Log in（to enter into "User ID select" and "Password" input interface）and lock functions（To exit setup and operation）

【OSD】: Press OSD for main menu；

【PTZ】: PTZ control，press this key to enter into PTZ control interface when at single live view；

【EXIT】: Exit to the preview or return to the last menu；

【RECORD】: Start manual record

【STOP】： Stop manual record

【ASISTANT】For future use

2.1.2 MOUSE OPERATION

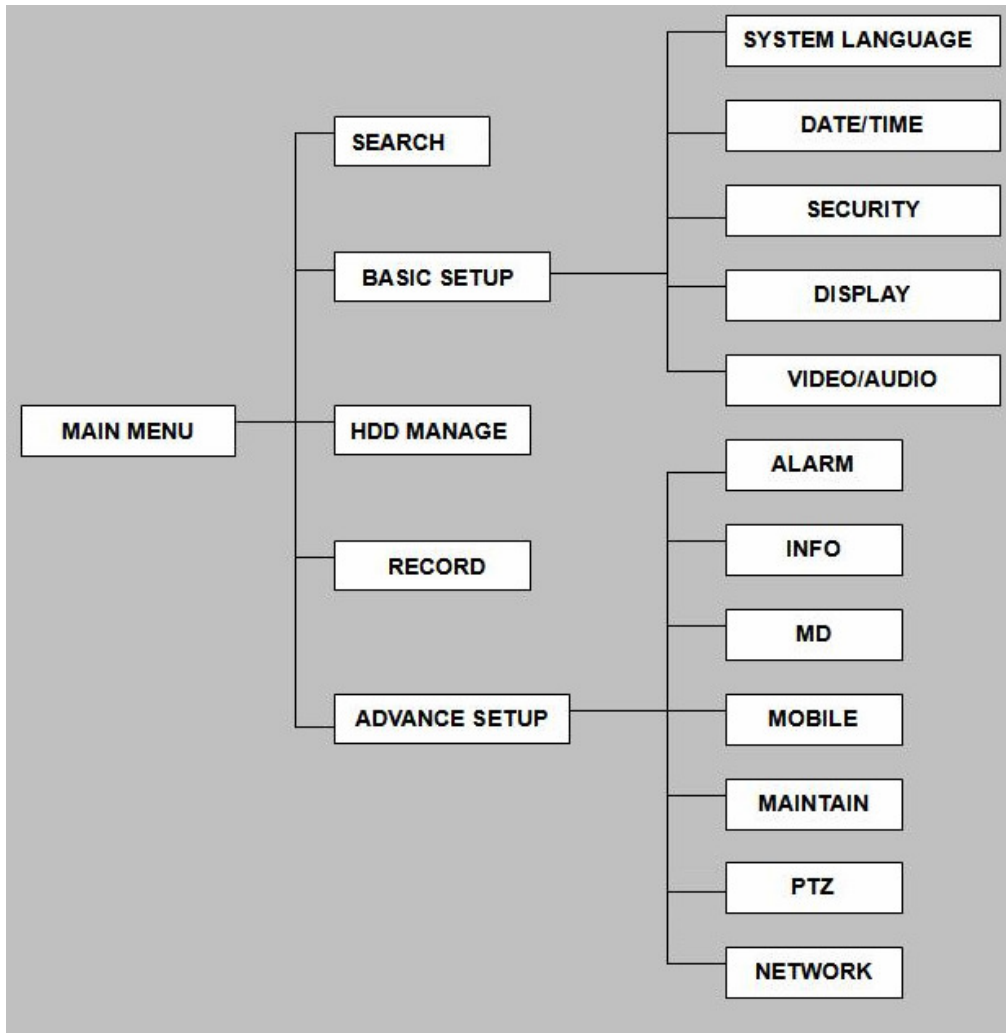You can use mouse to make operation of the menu besides IR remote controller.

(The operation is the same as PC Windows).Please inserts the mouse into USB 1.1.

Click right key	Enter into main menu: Click the right key on the live view.
	Exit the present menu: It will not save the settings if clicking the right key to exit.
	Exit the playback interface: Click the right key to exit during playback.
Click left key	Click the left key to enter into the setting interface.
	Click the left key to zoom in the window on the live view and playback video. Double click the left key will exit to the live view and playback multi-window interface.
	1. Volume adjustment, color adjustment setting. It is for setting the single channel for volume adjustment and color adjustment. If it is multi-window, please use the left key to select the single window. 2. The remark when click the left key for volume adjustment, color adjustment is as follow: a.There is a sticker to show the volume on the volume adjustment interface. Move the mouse to the corresponding position and click the left key. The right side of sticker will show the volume ,click "x" to exit. b.Color adjustment can refer to the volume adjustment interface operation.
	When there are many options in the option frame, click left key to see down-pull menu.

	Click the left key on the playback interface can make >> forward function, << rew function, >>I Slow play function, I> frame play function,> Play function, X exit function.
Click left key	1. In the input frame, click the left key can activate the keyboard. The number, symbol, English can be input by clicking the mouse. 2. Pinyin also can be input by the soft keyboard when enter Chinese, the method is the same as remote control. You can use the left/right key to turn over the page when check on Pinyin/Chinese word. 3. When input number, click the right key, the number soft keyboard will bob up firstly, and then use the left key to select the corresponding numerical value. Also click the left key to exit the number keyboard.
Mouse move	1. Press the left key to move the mouse can adjust the parameter on the volume, color interface. And the corresponding parameter will be display at the same time. 2. In the Motion Detection setting interface, you can use the left key to drag the frame to set the motion detection area.

2.1.3 MENU TREE

You can control the DVR by the menu operation. The following tree diagram shows the menu structure and more details will be shown in next chapter.

```
                                                          ┌─────────────────────┐
                                                          │   SYSTEM LANGUAGE   │
                                                          ├─────────────────────┤
                              ┌──────────────┐            │      DATE/TIME      │
                              │    SEARCH    │            ├─────────────────────┤
                              └──────────────┘            │      SECURITY       │
                                                          ├─────────────────────┤
                              ┌──────────────┐            │      DISPLAY        │
                              │ BASIC SETUP  │            ├─────────────────────┤
                              └──────────────┘            │    VIDEO/AUDIO      │
           ┌──────────────┐                               └─────────────────────┘
           │  MAIN MENU   │   ┌──────────────┐            ┌─────────────────────┐
           └──────────────┘   │ HDD MANAGE   │            │       ALARM         │
                              └──────────────┘            ├─────────────────────┤
                                                          │        INFO         │
                              ┌──────────────┐            ├─────────────────────┤
                              │    RECORD    │            │         MD          │
                              └──────────────┘            ├─────────────────────┤
                                                          │       MOBILE        │
                              ┌──────────────┐            ├─────────────────────┤
                              │ ADVANCE SETUP│            │      MAINTAIN       │
                              └──────────────┘            ├─────────────────────┤
                                                          │        PTZ          │
                                                          ├─────────────────────┤
                                                          │      NETWORK        │
                                                          └─────────────────────┘
```

2.2 SYSTEM OPERATION

2.2.1 USER LOGIN

1. START-UP

Connect the DC19V/3.42A(3A) adapter to DVR. When start up the DVR,【POW】LED will be on and 4 images will be display on the screen. If it has setup ignition recording or time recording, the system will record automatically and the corresponding LED will be on, and the system work normally.

Remark:

1) If there is no HDD in device, or the device didn't read the HDD, or the HDD didn't be formatted it will display an 【H】 in the video preview interface.

2) You must format the HDD in the DVR before first using. The steps as follows: menu >

HDD management > format. After formatting, the system will restart.

2. SYSTEM LOGIN

You can login from the USER LOGIN window as follow. Input device ID and user password via numeric key-board. You can access to main menu by pressing 【Apply】if the password is enabled.

Remark: Default device ID is: 00000, user password is 000000 and Admin password is 020818. For your convenience and system safety, you can setup the user password and change the device ID in the Setup. Administrator has all authorities, while operator has limited authorities to only watch and playback.:

Device ID: You just need to enter the device ID as the right frame.

Password: enter the admin password or user password.

2.2.2 GUI OPERATION

The main menu include "SEARCH","RECORD","HDD","BASIC"，"ADVANCE", and "Exit".

Remark: To make the setting of submenu valid, you must press "APPLY". It will not be

workable if exit directly. This DVR has a special feature: Explanation and information will

be showed automatically when you move the cursor on the Menu.

1 RECORD SEARCH

Move the cursor to 【RECORD SEARCH】（Icon highlighted when selected）,press

【Enter】to enter into the setting interface.

There are three methods of searching record.

Method 1: playback by date

Date input: You can adjust the checking date and time, press【Enter】or input the

number directly to adjust the year, month, date. And then input time in the next box, click

"play" and then you can see the recording video.

Method 2: playback by recording status:

Input the date, click 【search】 and you can see the recording status on this date.

Instruction:

1.   **MONTH:** It will show all the recording status in this month. Green means normal

recording, Red means alarm recording, Grounding means no recording. Click any

date in this frame will search the recording status of that day, the searching result will

be showed in the below date frame..

DATE: I t will show all the recording status in this day, you can playback the recorded files
in any period by clicking the corresponding period.

Method 3: playback by file list:

Input the searching date, click "SERACH" and you can see the recording status. Click

an exact day and then click "detail file" and then you can see the interface of "detail file".

CHANNEL: There are CH1, CH2, CH3, CH4 and QUAD, totally 5 options. Press 【Enter】 and you can change the channel to be displayed.

TYPE: There are all, normal and alarm, totally 3 options. Press 【Enter】 and the content will be displayed in a list.

Instruction:

1. 【FILE LIST】, "CHANNEL" is the recording file belongs to the corresponding channel, "SIZE" is the displaying size of this file（Unit：MB）, "TYPE" is the displaying type of the recording file : there are two types: normal and alarm. Pressing "BACKUP" button will export the selected files to USB storage；

2. After moving the cursor up and down and selecting the files, press 【APPLY】 to enter into playback interface。 f all channels have recording files, it will playback all windows at the same time；

3. If setup as "on" in the 【RECORD TIME】 in 【BASIC SETUP】, it will show the date/time when playing back recorded file；If setup as "off" it will not display time；

4. During playback， press 【SLOW】 to play slowly；press 【FORWARD】、【REVERSE】 to speed、reverse play； press 【PAUSE/STEP】 to pause and frame by frame play；press 【Exit】 to exit from playback and return to the former menu；

5. When playback files finish, it will return to the file list interface

2 BACKUP

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

You can select the recording file by direction keys, press 【Enter】 means

the selected is confirmed（There is a "√" at the end of the selected recording files）, press

【Enter】again the "√" will disappear which means the selected is cancelled. You can start

export the selected recording files by pressing【BACKUP】, as follow:

Instruction:

1．When the space in backup device is less than recording file, the system will prompt

"Space not enough"..

2．You can remove USB device directly when backup is finished

3 RECORD MODE

Move the cursor to 【RECORD】（Icon highlighted when selected）. Press【Enter】

to enter the setting interface. Press【Confirm】and enter the setup interface. You can use

direction keys and cursor to change the options.

CHANNEL: ON: Means the channel enabled for record

RESOLUTION: Setup resolution and code rate for recording, there are three options:

HIGHEST,HIGH, NORMAL, corresponding to D1、HD1、CIF resolution.

QUALITY : There are three options: BEST, FINE AND NORMAL, corresponding to HIGHEST,HIGH AND NORMAL data stream standard

AUDIO: ON: Means enable the audio recording for all channels, OFF: Means audio recording is disabled

REC.MODE

POWER UP: Means the device will start recording when it starts up

TIME: Recording as scheduled; you can setup schedule as you want as follow.
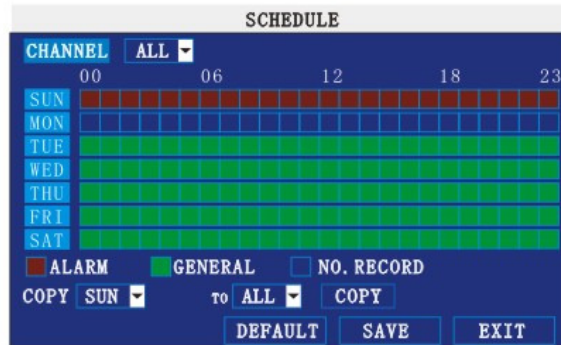
CHANNEL: You can select all channels or just one channel（Blue means selected）

DAILY： There are three modes: ALARM, NORMAL, NO REC. If you select one mode, the whole day will be recorded at that mode. You can cancel recording by pressing【Enter】button; grounding means do not record, different color means different record mode: Red means alarm record, Green means normal record, grounding means no record**.**

RECORD SIZE： There are 15min, 30min, 45min, 60min four options; it will pack as the mode you selected.

Scroll to **APPLY** and press **ENTER t**o save the new settings.

4 HDD MANAGEMENT.

Move the cursor to 【HDD】（Icon highlighted when selected）, press【Enter】to enter into the setting interface, and you can use direction keys or cursor to change the options.

HDD STATUS：There are three status available, normal, un-format, No HDD. If HDD cannot run normally（including unformat and no HDD）, there will be a 【H】displayed on video live view.

OVERWRITE：ENABLE: when HDD space is less than 4G, it will delete earliest recording files, and it will stop deleting when the space is 10G; DISABLE：when HDD space is less than 500M it will stop recording, and a prompt will display in live view: "please shutdown and replace HDD".

FORMAT：Move cursor to select device and press【APPLY】 to start formatting.

5 BASIC SETUP

Move cursor to select "BASIC SETUP" (The big icon means select ok)and press 【ENTER】to enter into the system language setup interface.

Basic setup includes system language, time/date, password security, display, video/audio and exit.

6 SYSTEM LANGUAGE SETUP

Move cursor to select "system language" (The big icon means select ok)and press 【ENTER】to enter into the system language setup interface.

System language is optional, including Chinese and English. You can choose the language you want.

Remark: The device will restart when you finish system language setup.

7 DATA/TIME SETUP

Move cursor to select "date/time" (The big icon means select ok)and press 【ENTER】 to enter into the date/time setup interface.
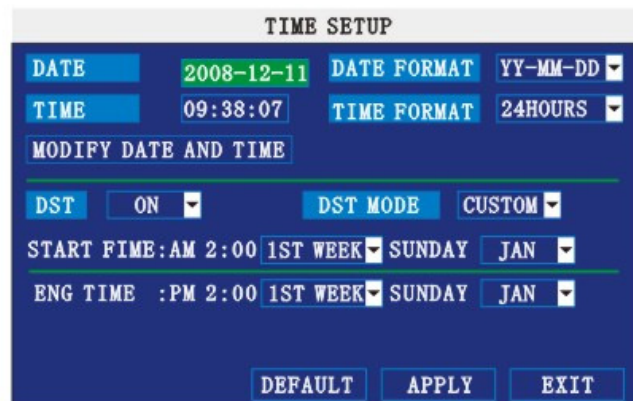
DATE: Setup system date via numeric key.

DATE FORMAT: Press ENTER to switch the date patterns: there are YY-MM-DD and MM/DD/YY for your selection.

TIME: Setup system time via numeric key.

TIME FORMAT: Press ENTER to switch the time patterns; there are 12 HOURS and 24 HOURS for your selection.

Remark: You must press 【APPLY】 to save after you modify the time and date, modification will not be saved if you exit directly.

DST: Still under construction.

8 PASSWORD

Move the cursor to【PASSWORD】（Icon highlighted when selected）, press【Enter】 to enter into the setting interface.

DEVICE ID: Press number key to setup the ID

PASSWORD: Press【APPLY】 to start or close the user password. If it is "ENABLE", you have to input password when login, otherwise, you can access main menu directly.

USER PASSWORD: Press number key to setup.

ADMIN PASSWORD: Press number key to setup.

NETWORK PW CLEAN：select and apply will initialize the IE browser password .

9 DISPLAY SETUP

Move the cursor to【BASIC SETUP】（Icon highlighted when selected）, press【Enter】 to enter into the setting interface.
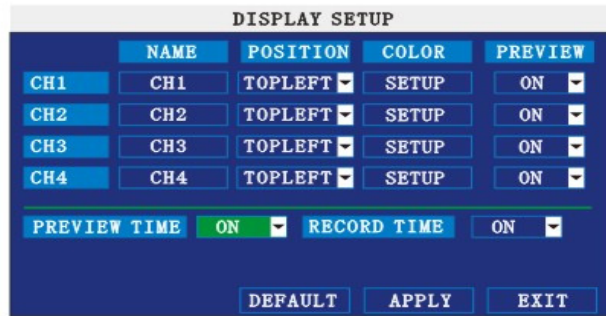
NAME: press【Enter】to enter into the setting interface.

POSITION: Name location is optional. You can press 【Enter】to switch from bottom left, top left, bottom right, top right and OFF.

COLOR: press【Enter】to enter into setting interface as follow:
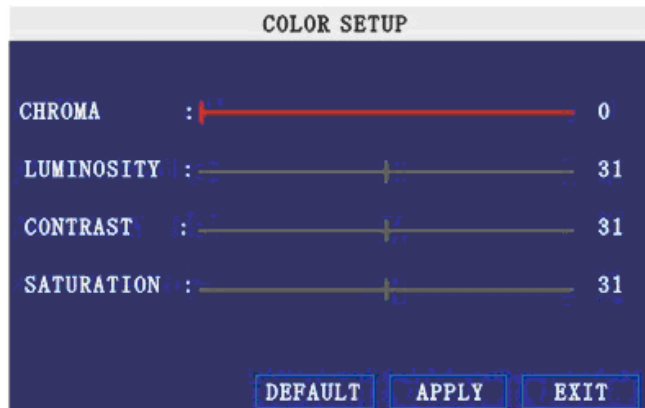
Press【Enter】or【+】【-】key or directly drag the cursor to setup colors, including chroma, brightness, contrast and saturation, press【APPLY】to save the parameters once the setup is completed.

PREVIEW：ON: Means the channel is allowed to view the live mode, OFF means not.

PREVIEW TIME: ON: Means insert clock in live view, OFF means not.

RECORD TIME ：ON: Means insert clock in record file, OFF means not.

10 VIDEO/AUDIO SETUP

Move the cursor to【VIDEO/AUDIO SETUP】（Icon highlighted when selected），press【Enter】to enter into setting interface.

VGA RESOLUTION：1024*768，800*600

CAMERA SYSTEM: press【Enter】to select camera system: PAL or NTSC .

VOLUME SETUP： move cursor to【VOLUME SETUP】，then press【Enter】to access

volume setup interface, press【+】【-】or number keys or directly drag the cursor to adjust

the volume.

11 ADVANCE SETUP

Move the cursor to【ADVANCE SETUP】（Icon highlighted when selected），press

【Enter】to enter into setting interface. Picture is below:

Advanced Function includes Alarm settings, system information, Motion detection,

mobile phone monitoring, system maintenance,PTZ and network setting.

12 ALARM SETUP

Move the cursor to【ALARM SETUP】 （Icon highlighted when selected），press

19

【Enter】to access setting interface.

ALARM SETUP				
I/O CHANNEL	CH1	CH2	CH3	CH4
I/O ALARM	OFF ▾	NO ▾	OFF ▾	NO ▾
HDD LOSS	ON ▾	HDD SPACE		OFF ▾
VIDEO LOSS	OFF ▾			
ALARM MANAGE	OUTPUT	10S ▾	BUZZER	0S ▾
	POST REC	1MIN ▾		
EMAIL SETUP				

🗩 Buzzer duration time setup

| DEFAULT | APPLY | EXIT |
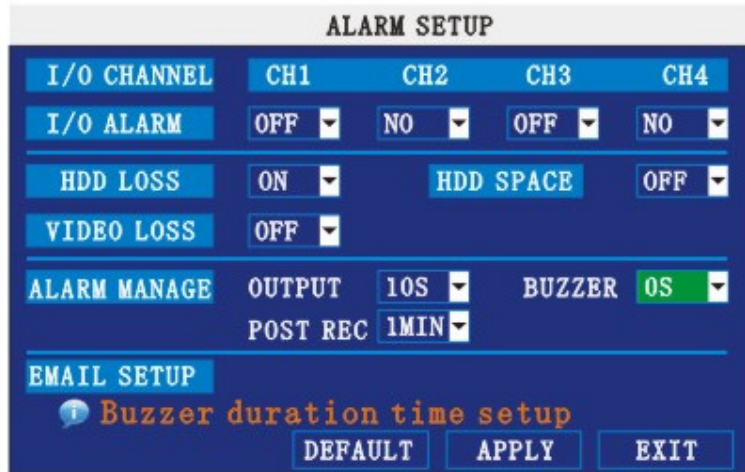
I/O CHANNEL： Each channel corresponds an I/O status, which means when an alarm is triggered, it will activate the corresponding channel to start alarm recording.

N.O：indicate I / O input level from high to low

N.C：indicate I / O input level from low to high

HDD LOSS：ON: means it will trigger an alarm if there is no HDD, and a 【H】will be displayed on the left bottom of channel 1 in the live view

HDD SPACE：ON：If the space is less than 500M, a remark will appear in live view：Not enough space, please change HDD after shutdown.

VIDEO LOSS：ON： when one channel has no video input, it will display "video loss" in live view.

ALARM MANAGE：

Includes three options, alarm output, buzzer and post REC.OUTPUT：When an alarm is triggered, the alarm output time will be:0 second、10 seconds, 20 seconds, 40 seconds and 60 seconds

BUZZER：Buzzer calling time setup when alarm is triggered: 0 second,10 seconds,20 seconds,40 seconds and 60 seconds

POST REC.：Post recording time setup: 30 seconds,1 minute,2 minutes and 5 minutes

PRE REC：Pre-recording time is fixed as10 seconds

13 SYSTEM INFO

Move the cursor to【SYSTEM INFO】（Icon highlighted when selected），press【Enter】
to access setting interface. This interface includes : firmware version, MAC address, serial
number.
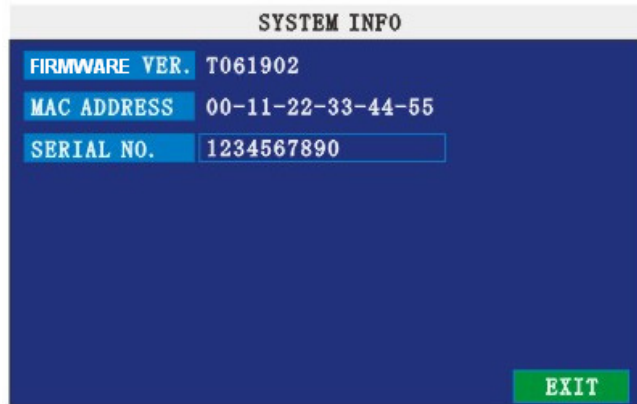
14 MOTION DETECT

Move the cursor to【MOTION DETECT】（Icon highlighted when selected），press【Enter】
to access setting interface.
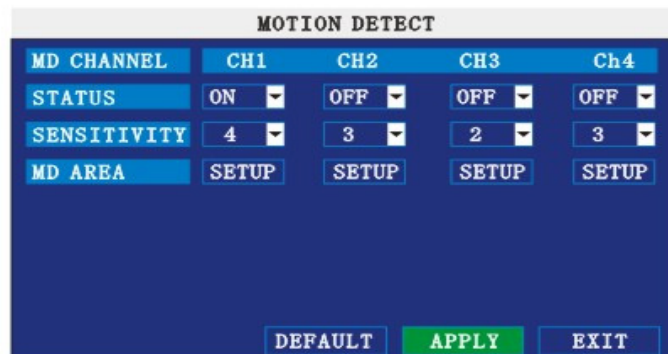
STATUS：Each channel has corresponding channel switch, press 【Enter】to turn on or
turn off the motion detection for each channel.

SENSITIVITY：each channel has corresponding sensitivity setting; including four
standards: higher, high, medium and low, press【Enter】to switch.

MD AREA： each channel has corresponding regional motion detecting setting, move the
cursor to corresponding【setting】，press【Enter】to enter regional setting interface, red
area means motion detection is activated, transparent block means motion detection is

not activated.
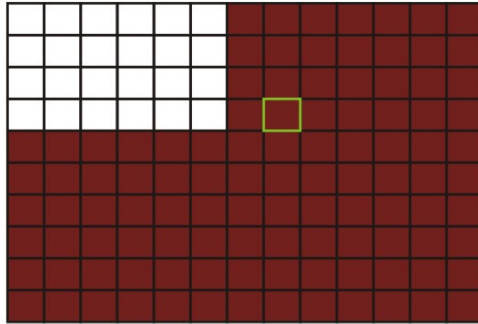
Press the direction key on remote control to move cursor along the small pane: position of cursor is indicated by green frame. Press【Enter】to select or cancel motion detection of this small pane. When setup is finished, press【exit】to go back to MD setup interface and settings will be saved automatically

Remark:

IR Operation: press [Menu] key to select or cancel full screen.

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

15 MOBILE

Move the cursor to【MOBLE】（Icon highlighted when selected）, press【Enter】 to enter into setting interface. Picture is below:
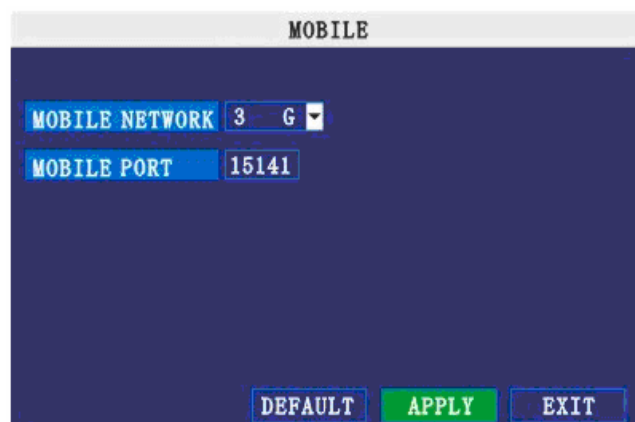
MOBILE NETWORK: Select different mobile network from the options of 3G, 2.5G and 2.75G; press [APPLY] to choose different network.

MOBILE PORT: Input the correct mobile port; press [APPLY] to confirm

16 SYSTEM MAINTAIN

Move the cursor to 【SYSTEM MAINTAIN】(Frame turns red means selected), press 【Enter】to enter into system maintain setup interface.
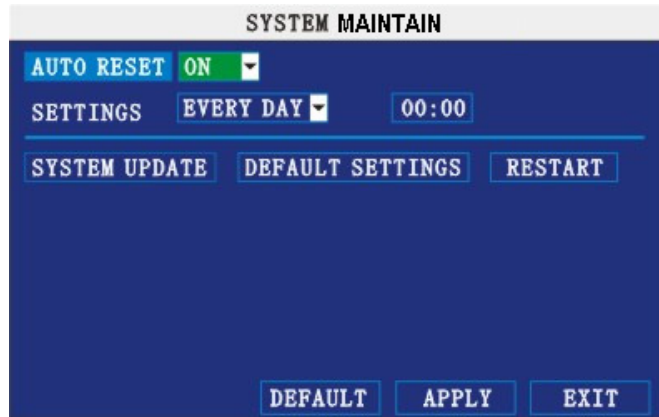
AUTO RESET: When it is on, you can setup the time for device to restart.

SYSTEM UPDATE: Copy the update file to the root directory of a thumb driver, then insert it. into USB 1.0. Press [Enter] to upgrade the firmware and it will display the process of the system upgrade as follow:
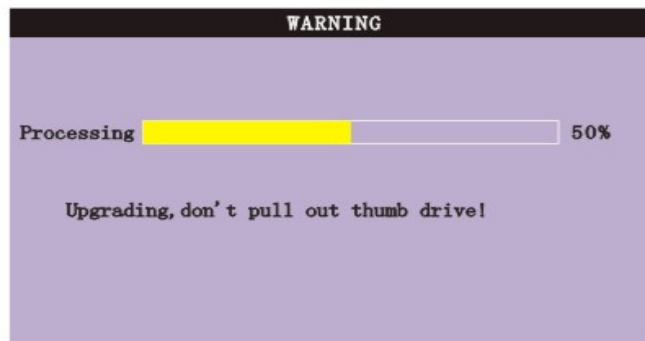
DEFAULT SETTINGS: Restore all the settings to factory settings.

17 PTZ SETUP

Move the cursor to【PTZ SETUP】（Icon highlighted when selected），press【Enter】 to access setting interface. You can setup the parameters for each channel separately.

CHANNEL: The channel with PTZ connected.

PROTOCOL: select the protocol of different PTZ: two protocols for your selection. Default is Pelco-D

BAUD RATE: select the different baud rate for your PTZ, there are 1200, 2400, 4800, and 9600

DATA BIT: there are 5,6,7,8 options to select, default setting is 8.

STOP BIT: Two options: 1 and 2 for you selection. Default setting is 1

VERIFY: Options: None/Odd/Even/Mark/Space are available. Default setting is none

ADDRESS: Fill in the code of respective PTZ.

PTZ SETUP				
CHANNEL	CH1	CH2	CH3	CH4
PROTOCOL	Pelco-D	Pelco-D	Pelco-D	Pelco-D
BAUD RATE	9600	9600	9600	9600
DATA BIT	8	8	8	8
STOP BIT	1	1	1	1
VERIFY	ODD	ODD	ODD	ODD
ADDRESS	001	001	001	001

DEFAULT APPLY EXIT

18 NETWORK SETUP

Move the cursor to [NETWORK SETUP] (icon highlighted when selected), press

【Enter】 to access setting interface.

TYPE: Options in Type include PPPOE, DHCP & Static.

◆ **1 Static**

Select [Static] in the type, press [Enter] to access the interface as below:

NETWORK SETUP	
TYPE	STATIC
MEDIA PORT	09000
WEB PORT	00080
IP ADDRESS	192.168.015.141
NETMASK	255.255.255.000
GATEWAY	192.168.015.001
DNS	202.096.134.133

DDNS SETTINGS

DEFAULT APPLY EXIT

MEDIA PORT: transfers video data between client and device.

WEB PORT: setup the port of IE browser via HTTP.

IP ADDRESS: setup the IP address, and press [Enter]   input numbers to fill IP

address.

NET MASK:. press [Enter] input numbers to fill net mask.

GATEWAY: press [Enter] input numbers to fill default gateway.

◆ **2 DHCP**

Select the DHCP, and enter into the interface as follow.

NETWORK SETUP	
TYPE	DHCP ▼
MEDIA PORT	09000
WEB PORT	00080
DNS	202.096.134.133
DDNS SETTINGS	
	DEFAULT APPLY EXIT

MEDIA PORT: same as static setup

WEB PORT: same as static setup.

NOTE: restart system when select DHCP, and it will automatically connect with

DHCP server. Will allot IP address when connect ok and the address will showed on

the interface.

◆ **3 PPPOE**

Select the PPPOE, and enter the interface as follow.

NETWORK SETUP	
TYPE	PPPOE ▼
MEDIA PORT	09000
WEB PORT	00080
PPPOE NAME	
PASSWORD	
DNS	202.096.134.133
DDNS SETTINGS	
	DEFAULT APPLY EXIT
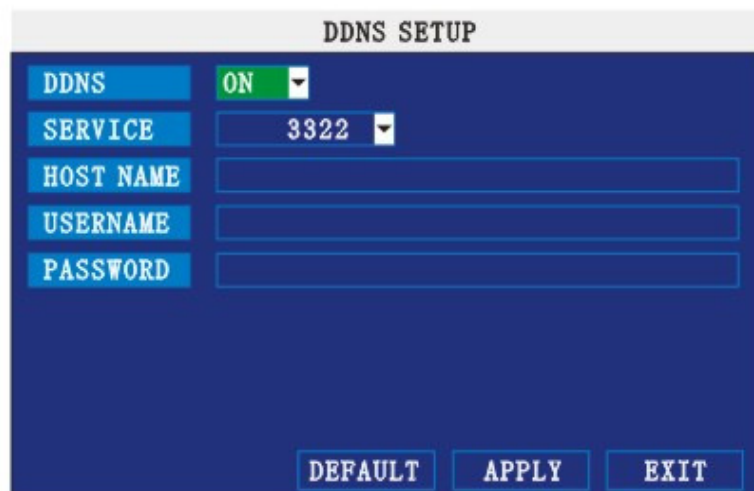
MEDIA PORT: Port for private protocol of DVR and PC, default : 9000. If this port of

computer is applied by other server, please change to other free port.

WEB PORT: Http port. Default: 80. 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 username and password: enter the username and password provided by

the internet service. Apply and reboot the system. After rebooting, the device will

save it and set the PPPOE as default network type. The IP address will be

automatically config as dynamic IP of WAN.

◆ **4 DDNS:** move the cursor to it and press [Enter] to enter into the interface as

followings.

DDNS: There are [ON/OFF], and if there is a DDNS service, please setup it as ON.

SERVICE: There are 3 services to select, 3322, dyndns, perfecteyes.

HOST NAME: Input the name of the host server.

USERNAME: Input in the name of the user.

PASSWORD: Input the password.

● **Application of DDNS**

You should Register a host name, user name and password from DDNS

manufacture, now we are take dyndns for example, to show you how to register.

Please type in the IE address as follow: to Register a new user.

(https://www.dyndns.com/account/create.html).

1) Fill out all the information then submit.
2) Minutes later, you will get a mail from dyndns, which include the primary password for the user you just register.
3) Then please login http://www.dyndns.com/ with the new user and password, click "domain name management" to enter into the operating interface, then select "new" under the Dynamic DDNS.
4) Create a mane you need, then press apply; now you have Registered a host name success.

An example:

Network: ADSL, only one DVR need to connect to internet.

1) Make sure the DVR has connected to ADSL modem success; the LED is flashing means success.
2) Network type: PPPoE
3) Input media port and web port, default value is 9000 and 0080
4) Type in the PPPoE user name and password from internet manufacture.

Fill in the IP of DNS sever, such as：202.96.128.166

5) Since the public IP will change after restart, please use DDNS function, and mapping the public IP to a fixed domain name, as the picture.

6) Save and restart device, it will connect to internet via PPPoE mode automatically, if success, it will got a dynamic public IP.

7) ping xxx.xxx.xxx.xxx(The public IP of DVR) to check whether the network is ok, and ping xxx.xxx.xxx（the domain name of DVR）to check whether the DDNS settings is ok.

8) Open IE browser, and type in the domain name of DDNS (if WEB port is not 80, you should add a port, such as:http://members.dydns.com:8088)

Please download the IE control, then enter into login interface, the default setting has no

password.

3. IE OPERATION

3.1 FEATURE

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

RESTRICTION CONDITION：

To ensure PC's stable visiting of DVR, recommend Windows XP, Windows Vista operation system, recommend browser as IE 6.0, IE 7.0.

3.2 USER LOGIN

Input the DVR local IP in IE browser, if the web port number is set as 80, directly input IP address into IE address column; If not 80, port number should add behind IP. E.g. when IP is 192.168.0.102, set port is 8088, http://192.168.0.102:8088 should input. When the net is connected, IE will automatically download the file to PC as following,
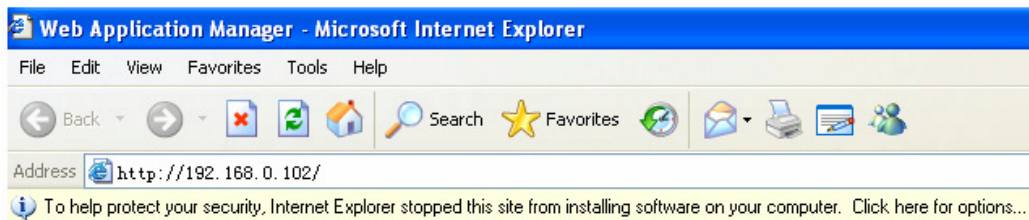
The process will last for 1~2 minutes.

Please click "If your browser does not support the ActiveX to download, please click here" when downloading not successful.

System will automatically enter GUI as follows:
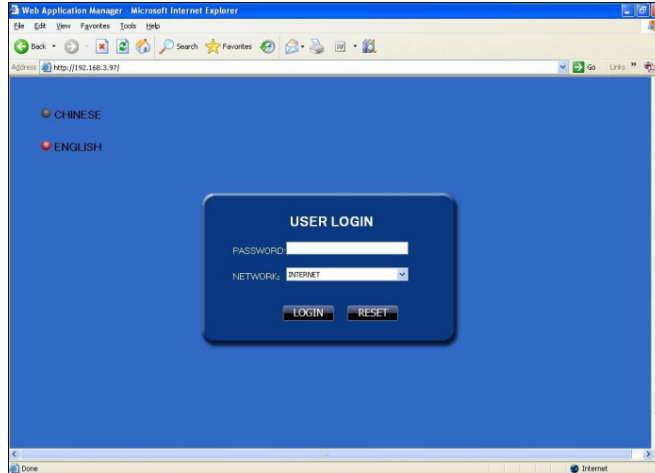
Select English interface from the top left side. Input username and password to enter the system. The username and passport are the same as the ones set in DVR.

PASSWORD: Administrator has all authorities, operator has limited authorities who they can only watch, playback, please change the unit No. and default password in time for system security.

NETWORK: LAN/WAN

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

3.3 OPERATION INTERFACE

Options in the main interface include Live View, Playback and Setup. Click any option to access.

3.3.1 LIVE

Click [LIVE] to enter into the interface as follow
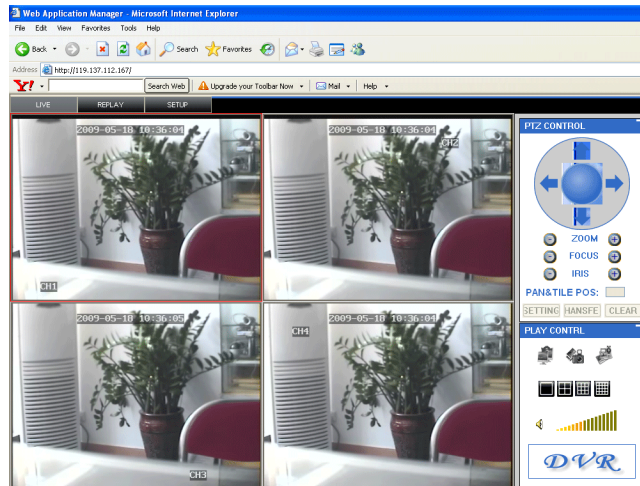
3.3.1.6 PLAY

Move cursor to the icons, it will highlighted when selected

Open all windows

Capture picture, save in local disk, system save default route is C:/DVR

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

has normal recording video symbol 【R 】; click icon to switch between single

screen /quad /nine /16 split .

Volume adjust button

3.3.1.7 OTHER OPERATION

1. Select one channel at preview screen (the selected channel's frame will be change to

   RED), double click left key, enter to the selected channel single screen display.

2. Click one Chanel via left key at preview screen, then click right key, will occur window

   shortcut Menu, see below picture
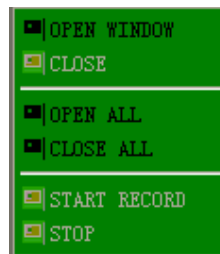
You can open, shut down and start this channel's record via shortcut menu.

3. Click right key at one live view screen, click" open all windows" or " close all windows",

   will quickly open/close all windows.

3.3.2 REPALY

Click" REPLAY" to enter into playback interface.
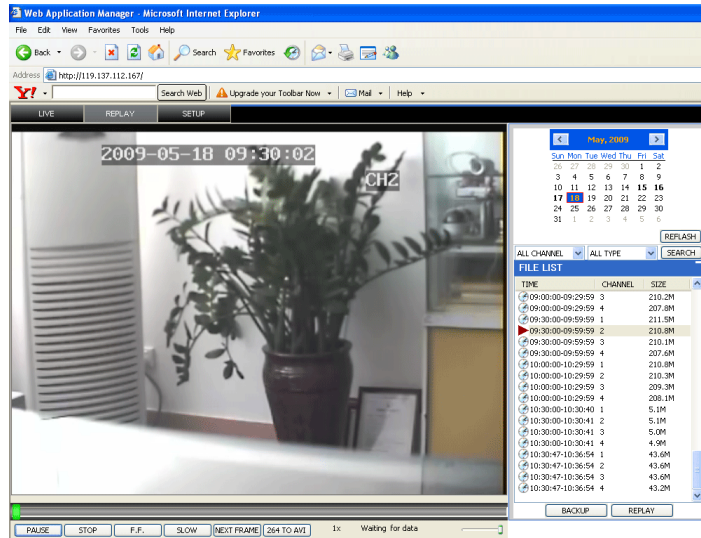
Click right up of calendar interface and , to setup the month for searching; click "REFRESH" at the calendar interface will display the recording information of current month.
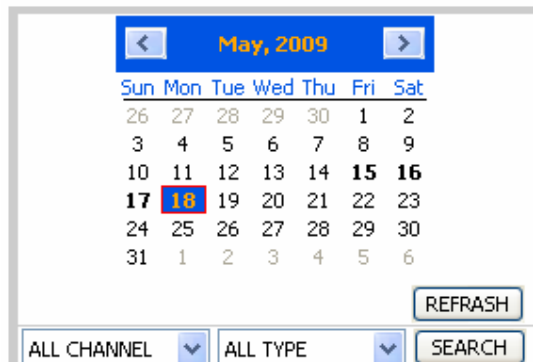

The highlighted date indicates video was recorded on that day. RED FRAME means the date is system date, click the date will search that days' recording file list. For example, the above picture display 2008, Dec. 3rd,4th,5th,6th,8th,9th,10th,11th,12th,17th,18th have recorded video, and system date is 18th, Dec, 2008, current search date is 17th, Dec.

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

```
FILE LIST

TIME                    CHANNEL   SIZE
  08:04:36-08:05:36   2          7.7M
  08:04:36-08:05:36   3          7.7M
  08:05:36-09:05:36   2          452.4M
  08:05:36-09:05:36   3          455.6M
  08:22:58-08:26:54   4          26.2M
  08:26:54-09:18:59   4          357.6M
  09:01:26-09:18:59   1          129.6M
  09:05:36-09:18:59   2          101.4M
  09:05:36-09:18:59   3          102.4M
  09:19:39-09:26:52   1          53.1M
  09:19:39-09:26:52   2          54.9M
  09:19:39-09:26:52   3          54.9M
  09:19:40-09:20:41   4          7.2M
  09:20:41-09:26:52   4          43.1M
  09:27:30-09:40:55   1          97.8M
  09:27:30-09:40:55   2          101.4M
  09:27:30-09:40:55   3          102.3M
  09:27:30-09:40:55   4          92.3M

          BACKUP          REPLAY
```

Double click one of the listed recorded video to playback. The file icon will change to
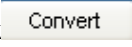
, and the following picture will appear:
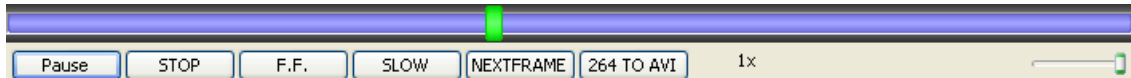
The above purple progress bar shows download progress, green progress bar shows

playback progress

Pause   Switch between pause/play

STOP   Stop play

F.F.   Fast play

SLOW   Slow play

NEXTFRAME   Pause at next frame

264 TO AVI   Convert H.264 file to AVI file, click this button access into file convert setting

interface, as follow.

33
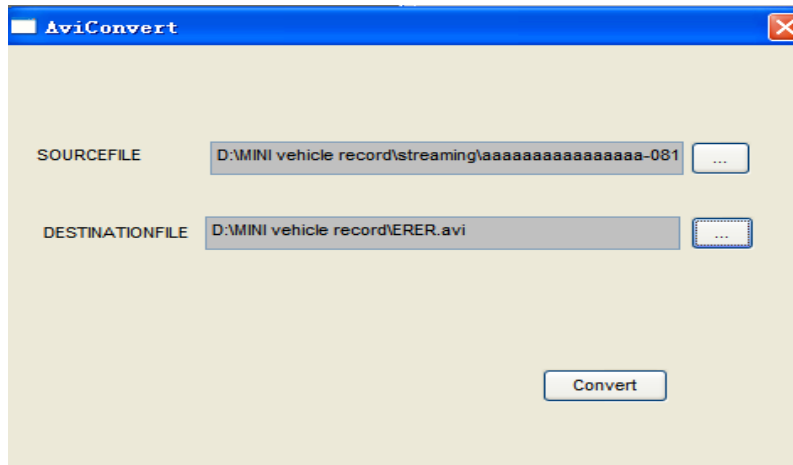
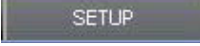SOURCE FILE: Click [...] to setup the H.264 file to convert

DESTINATION FILE: Click [...] to choose the directory for saving the AVI file

Click [Convert] , after the setting and the file convert will start. The convert progress

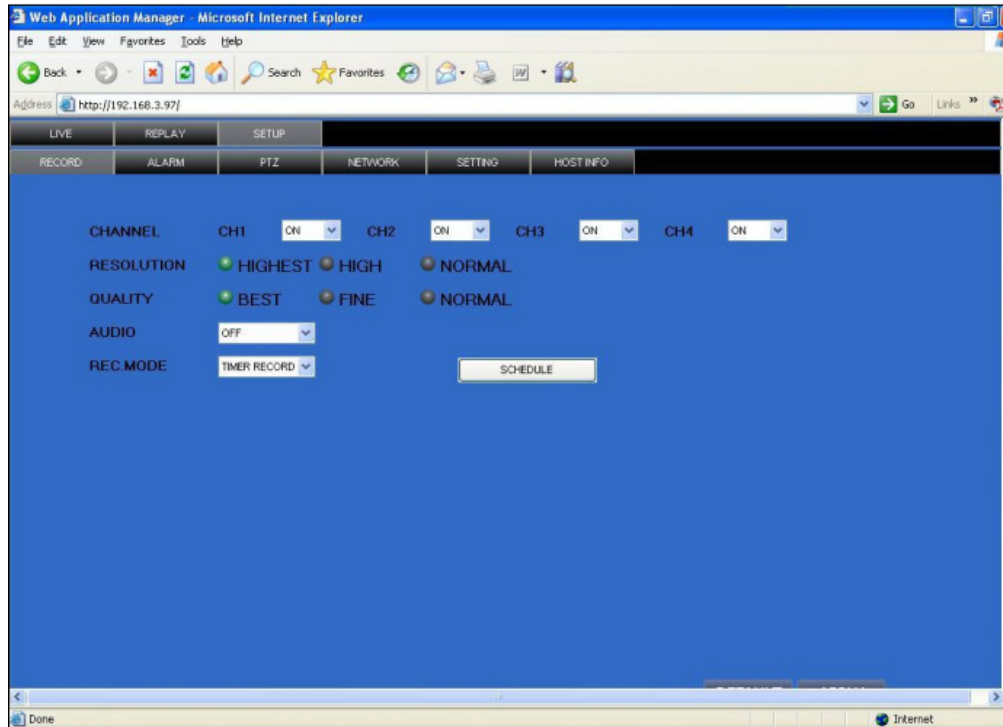bar shown below will show the progress of convert

3.3.3 SETUP

Click [SETUP] to enter into setup interface, this interface include record,

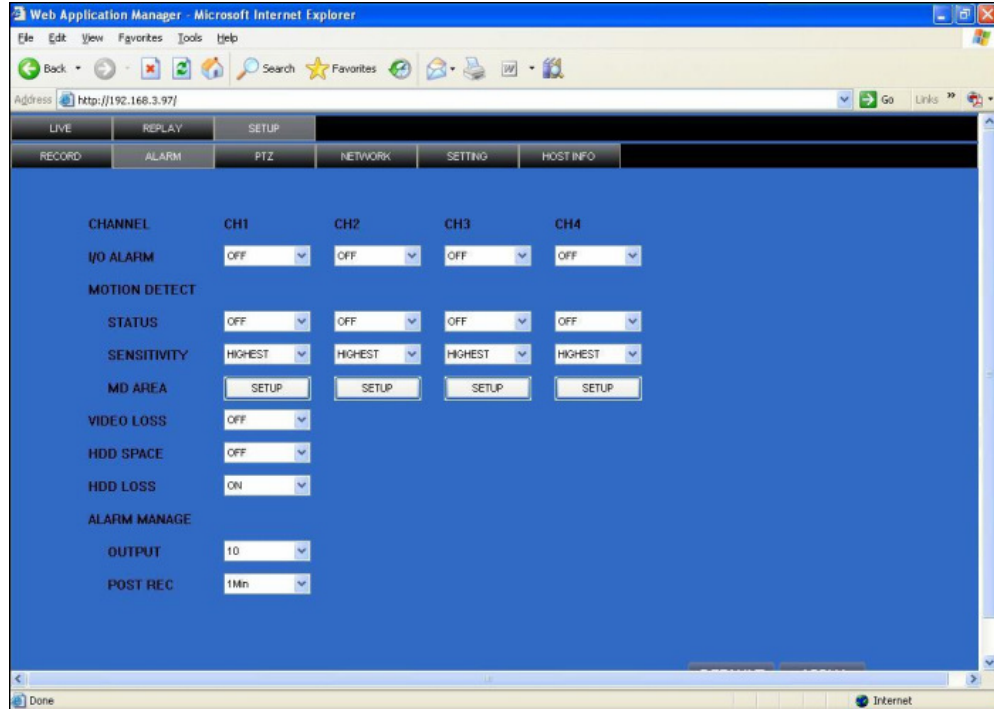alarm, PTZ, network, setting and system information six menus.

3.3.3.1 RECORD

Click [RECORD] to enter into setup interface; you can check the parameter settings as in GUI of DVR.
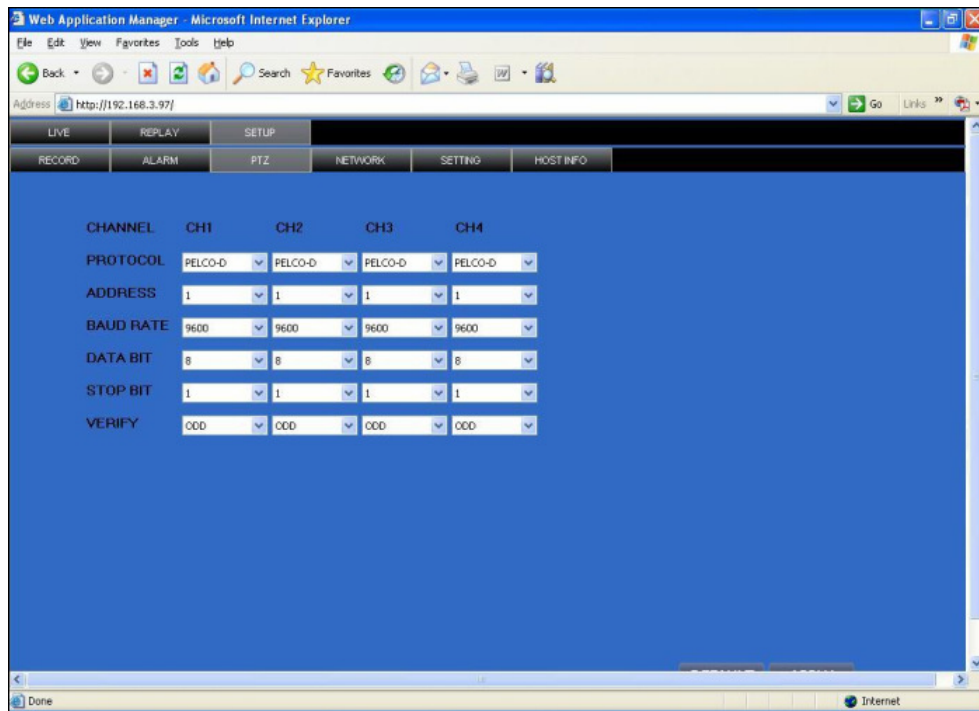

3.3.3.2 ALARM SETTING

Click "ALARM" to enter into setup interface; you can check the parameter settings as in GUI of DVR.
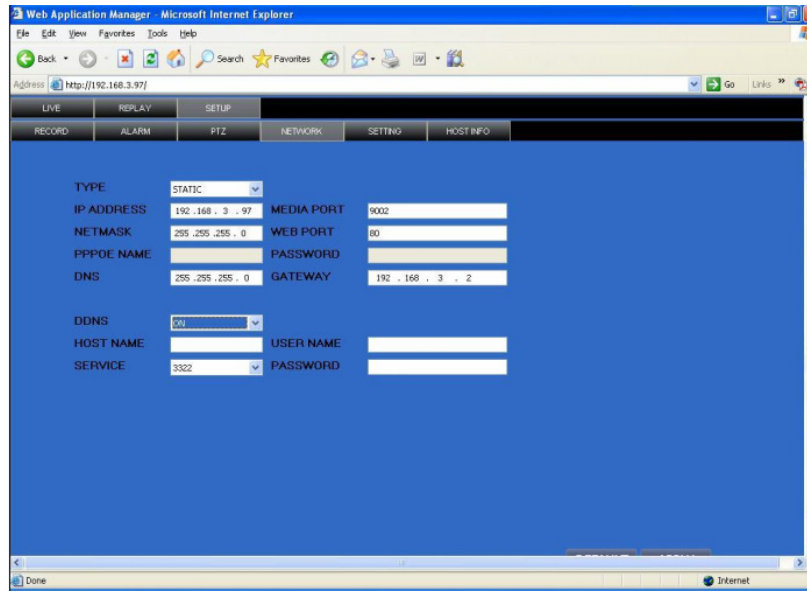
3.3.3.3 PTZ

Click [PTZ] to access setup interface; you can check the parameter settings in

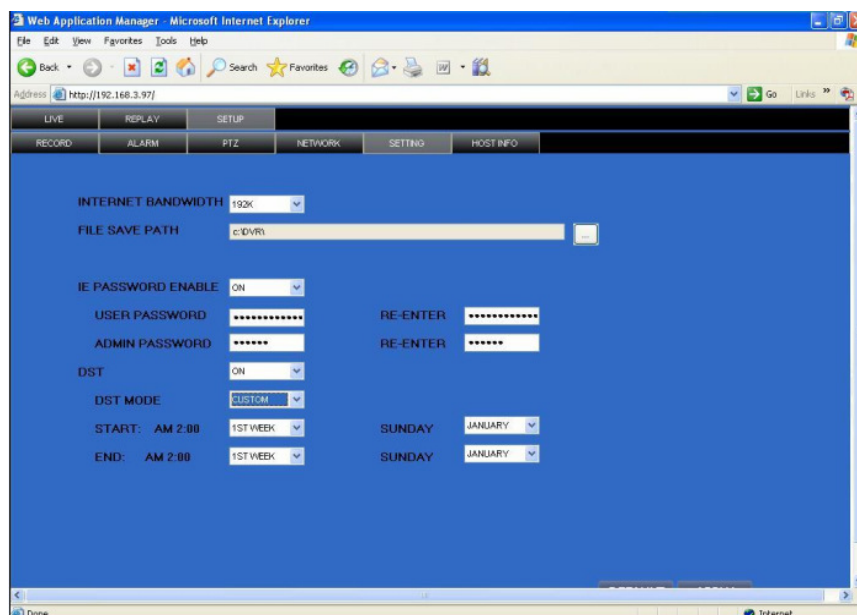GUI of DVR.

3.3.3.4 NETWORK

Click ![NETWORK] to access setup interface; you can check the parameter

settings in GUI of DVR.

3.3.3.5 SETTING

Click ![SETTING] to access setup interface; you can check the parameter

settings in GUI of DVR

BANDWIDTH: Set the bandwidth in kbps (128k、192k、256k、384k、512k、1024k) that you want to allocate for traffic that matches the internet. This bandwidth does not include audio.

FILE SAVE PATH: the save path of captured picture and recording video.IE login password and DST settings you can set as DVR setting.

3.3.3.6 HOST INFO

Click [HOST INFO] to access system information interface (see below picture). This interface includes HDD status, remain record time, firmware version and MAC Address. All the information is fixed.
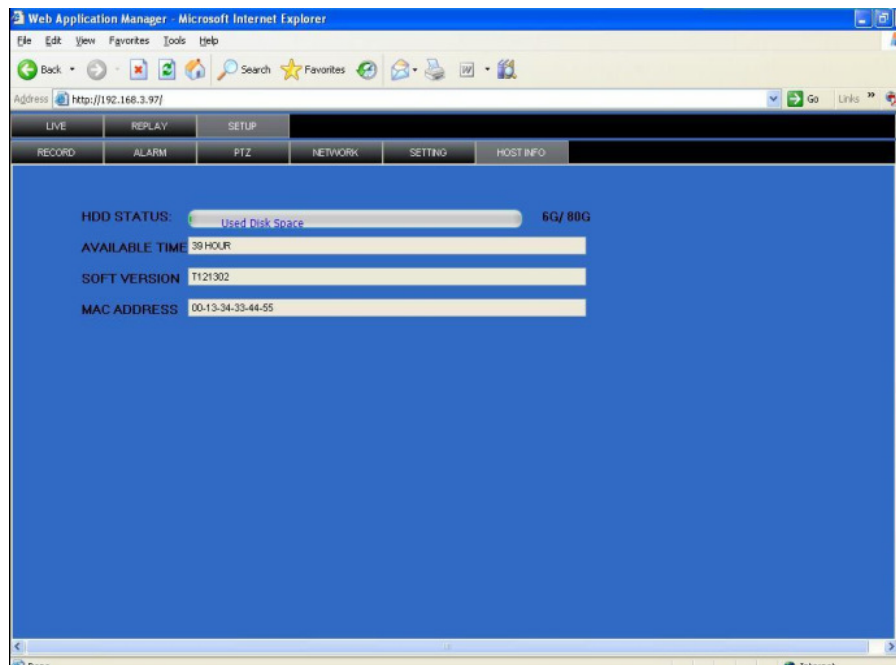
4. DVR INSTALLATION GUIDELINE

4.1 PRODUCT OVERVIEW

1. THE DEFINITION OF BOTTOMS AND CONNECTORS ON FRONT PANEL


Buttons on Front Panel

| NO	TYPE	NAME	Instruction
1	Standby	STANDBY	System standby button
2	Control button	Direction key	direction key include: up 【 ⬆ 】、down 【 ⬇ 】、left 【 ⬅ 】、 right 【 ➡ 】 four buttons, which can move cursor to setup and control PTZ.
		OK	Confirm operation/into PTZ control panel under live view
		MUNE/EXIT	Enter into main menu under live view, or exit sub menu
3	Status indicator	REC	Recording
		ALM	Alarm
		ERR	Error
		FULL	On means the HDD is full.
		HDD	HDD Status
		100M	On means network is 100M
		LINK	On means network has connected
		POW	Power
	IR receiver	IR	Remote control receiver
4	USB2.0	USB2.0	USB2.0 for thumb drive to backup
5	USBMOUSE	USB1.0	For USB mouse

2. THE DEFINITION OF BUTTONS AND CONNECTORS ON REAR PANEL
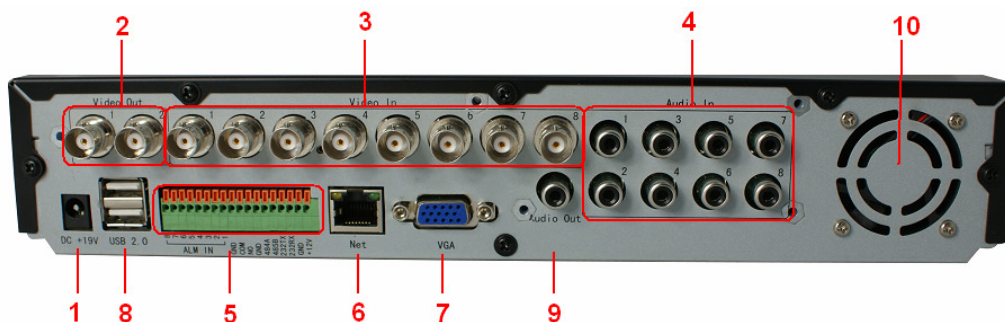
Connectors on Rear Panel

Item	Physical connector	Connector description
1	POWER input	DC 19V/3.42A
2	Video output	Two video output for connecting TV or monitor (BNC)
3	Video input	For connecting analog video signal input (BNC)
4	Audio Input	For connecting audio signal
5	Alarm Input	I/O alarm input, 4 for 4CH DVR and 8 for 8CH DVR
	Alarm Output	I/O output for alarm
	RS485	RS 485 for connecting PTZ
	RS232	For connecting PC
	+12V	Power supply for DC relay and the current is 100MA (make sure short circuit can not happen)
6	Network	For connecting Ethernet
7	VGA output	Unavailable
8	USB2.0	Copy video record via USB2.0
9	Audio output	For connection audio output
10	Fan	Please check the fan function for diary maintained and change new one if the fan has some problems

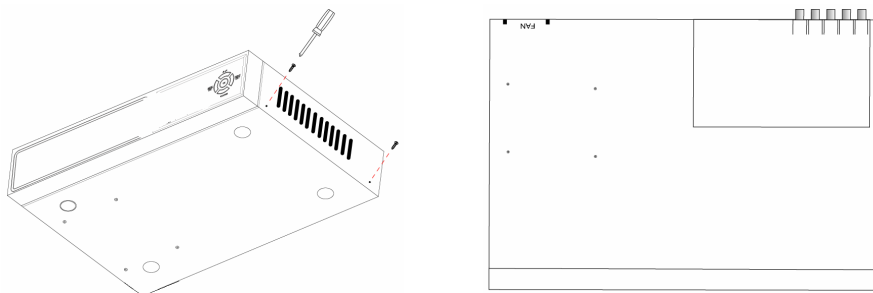## 5 SYSTEM NETWORK DIAGRAM
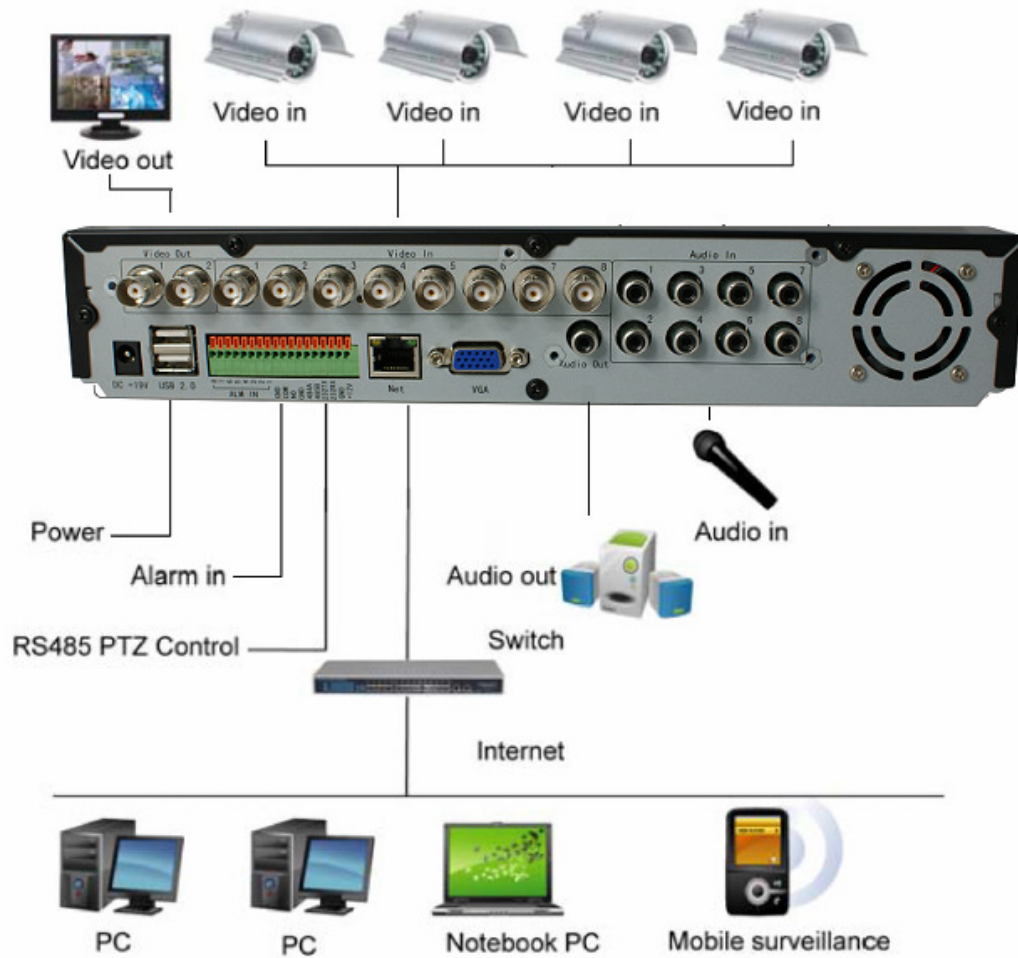
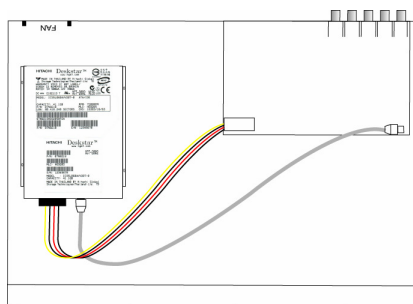## 4.2 HDD INSTALLATION
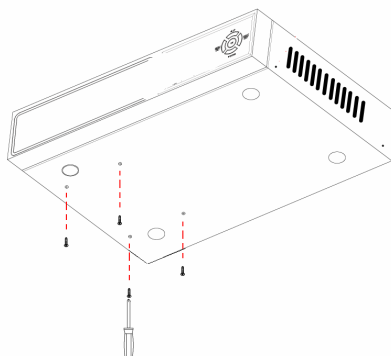
Please installation the HDD as the following steps:

1）Open the cover of the DVR and then you will see one HDD plate as follow.

2）Connect HDD line as follow

3）Affix HDD on HDD plate as indicated below with the screws around.

4）Install the HDD plate back into DVR and close cover .

Notice: Newly installed HDD should format before recording.

5.FAQ

If your problem is not listed below, please call our toll-free number for more support.

1. **Question: DVR is not working after starting?**

   Answer:

   - ✧ 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. **Question: DVR is rebooting automatically or stopped after starting the DVR for several minutes?**

   Answer:

   - ✧ Instability or low input voltage
   - ✧ Bad track hard drive or the line of hard drive is bad
   - ✧ On-off power supply is not enough
   - ✧ The front-end video signal instability
   - ✧ High temperature, too much dust, too bad the DVR operating environment
   - ✧ The main board is not well-connected with other boards
   - ✧ The hardware of DVR is defective

3. **Question: No output of single channel, multi channel or all channel video?**

   Answer:

   - ✧ Please check the adaptor of camera whether to see if it is well-connected
   - ✧ Please check the cable for connecting video input/output in the back panel of DVR
   - ✧ Please 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

◇ No video input signal or too weak

◇ Display settings in the preview set to be closed

◇ The hardware of DVR is defective

4.   Question: DVR cannot record after startup and the interface is showing "H"

Answer:

◇ Make sure power adaptor is DC 19V

◇ Make sure HDD is formatted

◇ Check the power and data connection cables of the HDD

◇ The HDD is defective

◇ The SATA port is not working

5.   Question: What is meaning of "R" "M" "I" "H" showed in interface?

Answer:

◇ "R" means the channel is recording

◇ "M" means the channel is on motion detection

◇ "I" means the channel is on alarm

◇ "H" means there is either no HDD. the HDD is bad or the HDD is full

6.   Question: DVR is having problem with real-time images, such as bad image color or serious brightness distortion

Answer:

◇ If PAL and NTSC is not correctly selected on the BNC output, the images will be in black and white

◇ DVR is not compatible with monitor

◇ The video transmission distance is too far

◇ The setting of DVR color, brightness and so on are wrong

7.   Question: No audio sound when monitoring?

Answer:

◇ Check sound box or speaker functions. Also check possible short circuit.

◇ Audio source may be connected to the video channel. You can click to full-screen to check.

◇ The hardware of DVR is defective

8. **Question: No audio sound when playing back?**

    Answer:

    ✧ Setting problem: open audio-video item

    ✧ Check the audio to see if it is closed in playback interface

9. **Question: System time is not correct?**

    Answer:

    ✧ Wrong setting or user did not click "Edit" to confirm

    ✧ Battery is not connected properly

    ✧ Battery is dead.　Please change.

10. **Question: Why the "Stop recording" by the right mouse button does not work, how to stop recording?**

    Answer: :

    ✧ 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.

11. **Question: "Stop recording" function by the right mouse button does not work. How to stop recording?**

    Answer:

    The "Stop recording" by the right mouse button is for Manual Recording only. It can not stop recording when it is in "start recording" or the video is in video plan. If you want to stop recording, please set the time to not recoding.

12. **Question: Motion detection is not working?**

    Answer: :

    ✧ The setting of motion detection area is not correct

    ✧ Sensitivity is too low

13. **Question: CD-writer /USB backup error**

    Answer:

    ✧ The data exceeds the capacity of backup device

    ✧ The backup device is incompatible

◇ The backup device is damaged

14. Question: Remote control cannot work?

Answer: :

◇ The address of remote control is not correct

◇ The distance of remote control is too far or the angle is too biased

◇ Remote control batteries run out

◇ Remote control is damaged or the front panel of DVR is damaged

15. Question: WEB cannot login?

Answer:

◇ 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 install ActiveX control

again.

◇ Please install DX8.1 and upgrade your video card driver

16. Question: There is no picture or picture is not clear when you preview the

recording or playback the recording via IE

Answer:

◇ If you access DVR by IE, please choose "Wan" in "web environment"

◇ Please try "Close windows" by the right mouse button, and try "Open

windows" again

17. Question: It displays "other members are setting......" while setting DVR by IE

Answer:

◇ It probably means someone else is setting the DVR. Please check the DVR

configuration interface or exit DVR.