USER MANUAL

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SAFETY INSTRUCTION

Please carefully read the following safety instruction so as to avoid personal injuries and prevent the equipment and other connection devices from being damaged.

1. Power sources (note: please use the power supply attached or specified by the manufacturer)

Never operate the equipment by unspecified power supply.

2. Never push objects of any kind through openings of NVR;

Never push objects of any kind through openings of NVR so as to avoid electric shock or other accidents.

3. Do not put the equipment in the dusty field;

Do not put the equipment in the dusty field.

4. Do not place the equipment under rain or humid environment

Do not place the equipment under humid environment like basement. If the equipment is in contact with water, please unplug the power cable and immediately contact your local dealer.

5. Keep the surface of the equipment clean and dry

Use soft damp cloth to clean the outer case of NVR (do not use liquid aerosol cleaners)

6. Do not operate if any problems are found

If there are any strange smell or sound, unplug the power cable and contact the authorized dealer or service center.

7. Do not try to remove the upper cover

Warning: Do not remove the cap of NVR so as to avoid electric shock.

8. Handle with care

If NVR does not work normally because of hitting on the hard object, please contact the authorized dealer for repair or replacement.

9. Use standard lithium battery (Note: Use the batteries attached or specified by the manufacturer)

After cutting off the power supply, if the system clock cannot continue to work, please replace the standard 3V lithium battery on the main board.

Warning: Turn off NVR before replacing the batteries, or you may be suffered from serious electric shock. Please properly dispose of the used batteries.

10. Put the equipment in a place with good ventilation.

The NVR system includes HDD, which produces large amount of heat during operation. As a result, do not block the ventilation openings (on the top, bottom, both sides and the reverse side) for cooling the system during operation. Install or put the equipment in the place with good ventilation.

11. The attached power adapter can only be used for 1 set of NVR. Do not connect more equipment, or NVR may be restarted repeatedly because of insufficient power.

12. Prevent the equipment from water dropping or splashing. Do not place objects containing water, such as flower vase, on the equipment.

Chapter 1 Overview of NVR

1.1Front Panel

P.S：NVR is short for Network Video Recorder.

NVR Front Panel（For reference only）

Item	Key Title or Indicator	Remark	Function & Description
1	Power Indicator	PWR	If the “Green” indicator is on, NVR is getting power normally.
2	IR Receiver	●	Receive IR signal from Remote Controller.
3	HDD Indicator	HDD	If the “Red” indicator flashes, the hard drive is being read or written to. If the indicator is always on, it means the hard disk is abnormal, unformatted or has no recording files.
4	Channel Select: CH1 CH2 CH3 CH4 ALL	CH1 CH2 CH3 CH4 ALL	Select channel(s)
5	REC	●	Press the button to start manual record.
6	MENU/ ESC	MENU ESC	Enter into Main menu, exit or stop playing
7	PLAY/ PAUSE	▶II	In playback mode, press to pause/ resume playback. In live view, press to open the Search Menu to select playback time.
8	REW	◀ ◀◀	In PTZ, move the cursor left. In playback, rewind/ increase rewind speed.
9	Down Key	▼	Move the cursor down
10	FWD	▶ ▶▶	In PTZ, move the cursor right. In playback, fast forward/ increase fast forward speed.
11	Up Key	▲	Move the cursor up
11	PTZ	PTZ	In live view, open PTZ control. In system menu, confirm a selection.
13	USB	⇐	USB port

Table 1-1

1.2 Rear Panel

NVR Rear Panel（For reference only）

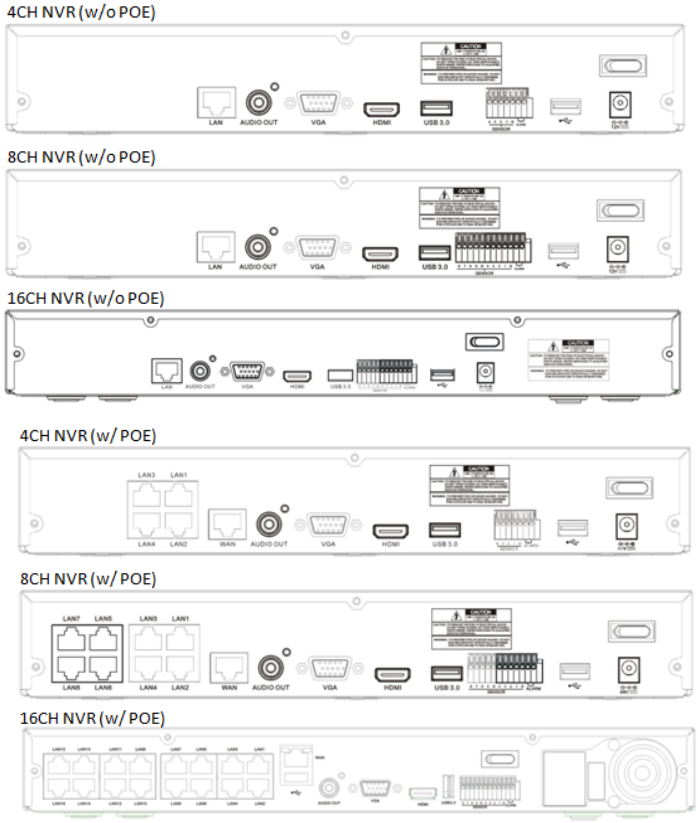


Table 1-2

1.3 Remote Controller (For reference only)

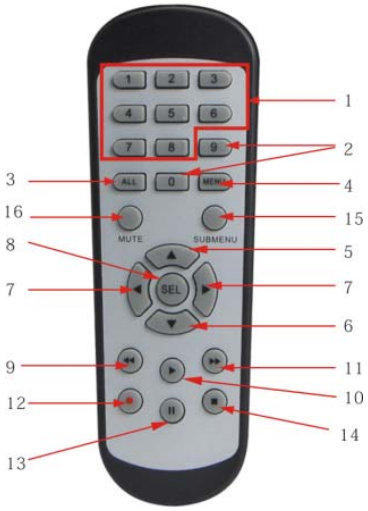


Table 1-3

Item	Key title	Key function
1	1-8	Channel select 1-8; Numeric key
2	9、0	Numeric key
3	ALL	Multiple display mode
4	Menu	Enter into Main menu/Exit
5	▲	Up arrow key, Volume adjust
6	▼	Down arrow key, Volume adjust
7	◀/▶	Left/Right key; Decrease/increase parameter value of control bar.
8	SEL	Select key/Edit key; selected operation.
9	◀◀	Rewind key
10	▶	Enter into record search menu; Play key
11	▶▶	Forward key
12	●	Record key
13	▌▌	Pause
14	■	Stop manual record; stop playing
15	Submenu	Go to main menu
16	Mute	Mute On/off

Chapter 2 NVR Connection

2.1HDD Installation

Caution: Please do not take out hard drive when NVR is running!
HDD Installation:
(1) Cut power firstly, and then remove screws on both sides and rear panel and open NVR upper cover.
(2) Connect HDD data cable and power cable to the main board. Install the HDD and fix it on the bracket and then connect the HDD power cable and data cable.
(3) Put the upper cover back carefully
Note: If user requires higher performance HDD, it is strongly recommended to use hard drive for security.

2.2Web Camera and Monitor Connection

Transmit signals of web camera to NVR by the network cable and connect VGA port and HDMI port for output (Refer to section 2.2 Rear Panel). Refer to Chapter 7 System Connection Diagram.

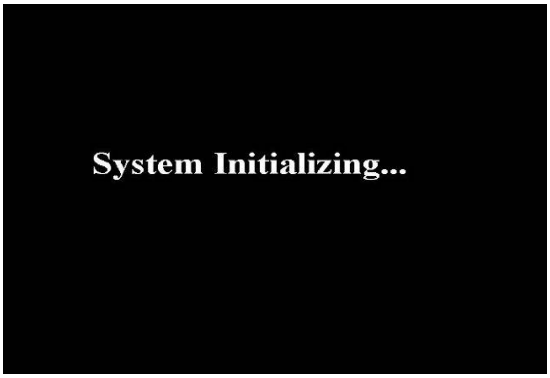
2.3Power Supply Connection

Please use attached power adapter to connect NVR. Before power on, make sure network port is well connected.

Chapter 3 NVR Boot up

3.1 System Initialization

After connecting the power cable of NVR to wall outlet and pressing the power button, you will enter into the NVR system initializing screen shown as Picture3-1.



Picture3-1

Note：The illustration in the user manual may not be the same as the menu interface in your monitor. All the illustrations are for users' reference.

3.2 Startup Wizard

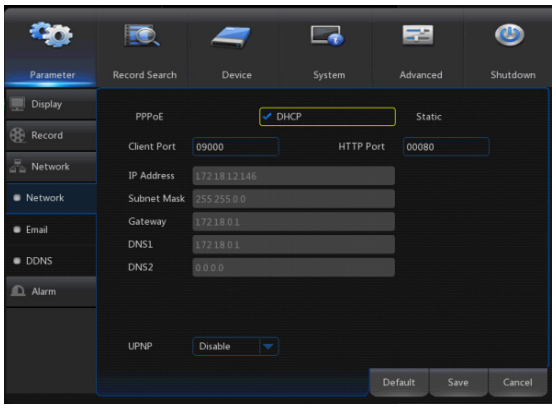
After NVR startup is completed, the startup wizard will be displayed. If you do not want to make any setting, you may click "Don't show this window next time" to cancel, as

shown in Picture3-2.

Wizard setting menu includes：Homepage, Network setup, IPC setup, Record Schedule and hard disk maintenance..

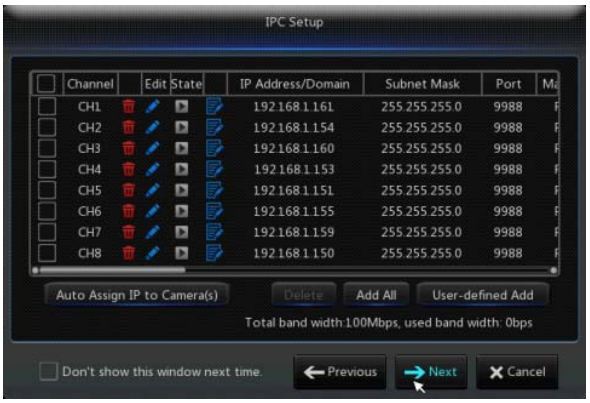
1. Homepage and network setup. In network setup page, user may set the network of NVR.

Picture3-2



Picture3-3

2、IPC Setup（Picture3-4）. In this page, user may add and delete IPC; Record Schedule (Picture3-4). In this page, user may set recording time and scheduled recording of NVR.



Picture3-4

Picture3-5

3. HDD (Picture3-6). It supports HDD formatting and overwriting type.

Picture3-6

3.2Main Interface

Picture3.2-1

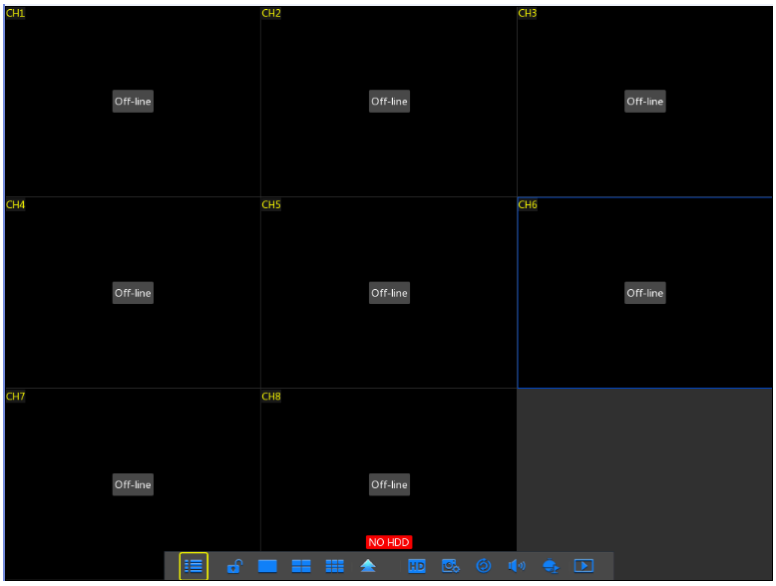
Note: When internal HDD is not connected to NVR or the HDD is not formatted, first channel of the live screen and accompany buzzer alarm. If you want to close the buzzer alarm, please enter into [Event→Alarm] to set HDD loss, HDD space not enough and alarm output to "off"**.**

Chapter 4 NVR Menu

Popup Menu

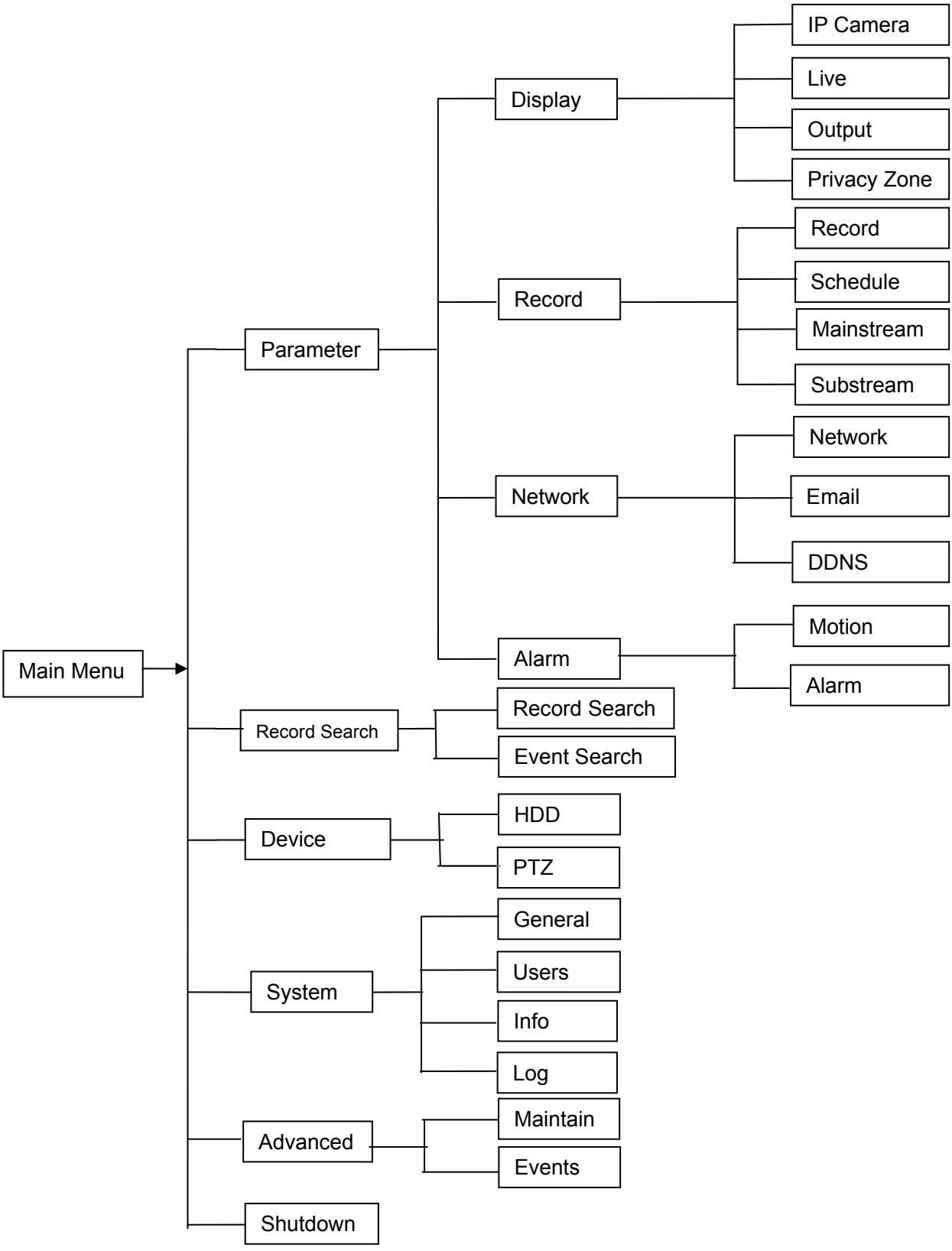
After finishing system initialization, click right key of mouse on preview interface or slide the mouse to the bottom of screen to enter into Pop-up Menu. Now you could perform parameter setting and operate on Main Menu, Multi-Pics, Auto Cruise, Record Search, Sequence, Volume setting and Stream switching, shown as Picture 4-1.

The options in the pop-up menu may be varied slightly according to different parameter settings. The options in the menu will be explained in detail in the following chapters.

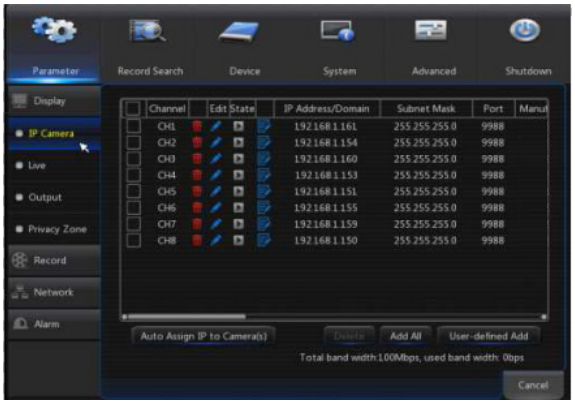


Picture4-1

4.1 Main Menu Guide



4.2Main Menu



Picture 4-2

On LIVE mode, click the mouse button, or [Menu] button on the remote controller, or click [ ] icon on the toolbar to enter the main menu screen, as shown in Picture 4-2.

If system interface is locked, refer to section 4.3 to unlock by inputting password.

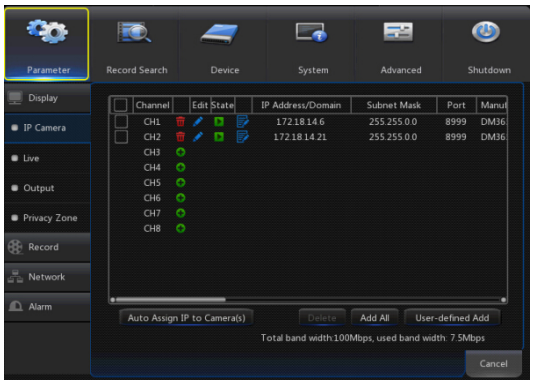
In Main Menu mode, you can make settings for Parameter, Record Search, Device, System, Advanced and Shutdown.

4.2.1 Parameter

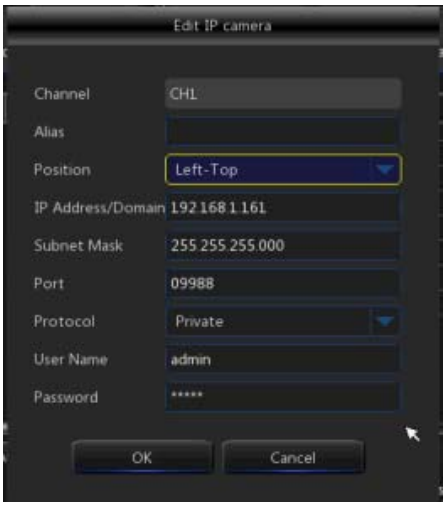
4.2.1.1 Display

4.2.1.1.1 IP Camera

Go to “Main Menu”→“Display”→“IP Camera” to enter into the interface shown as Picture4-3.



Picture4-3

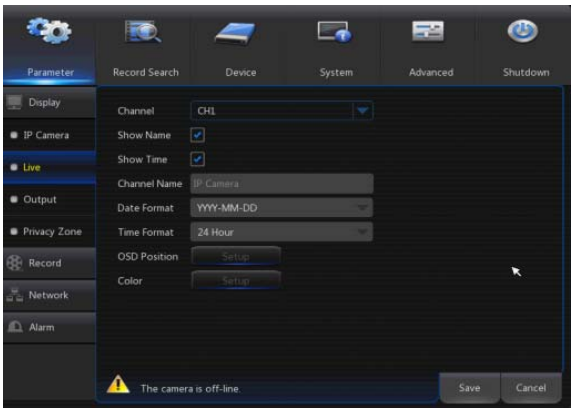


Picture4-4

- **Channel**：IPC camera channel
- **Edit**：Modify the name and location of channels, change other IPC or protocols, etc, as shown in Picture 4-4.
- **State**：Display IPC on-line state
- **IP address**：Modify IP address of IPC camera.
- **IP Address/Domain**：IP address of the IPC connected of the channel
- **Subnet Mask**：IPC camera subnet mask
- **Port**：Connection port number of the currently set IPC.
- **Manufacturer**：Manufacturer for different IPC
- **Device type**：Add IPC with different protocols.
- **Protocol**： The selected access protocol for IPC to connect to NVR
- **MAC Address**：Physical address for device
- **Software**：Display current version of IPC.

4.2.1.1.2 Live

Go to “Main Menu”→“Display”→“Live” to enter into the interface shown as Picture4-5.



Picture4-5

- **Channel**：Select channel number.
- **Show Time**：Tick the checkbox to display time.
- **Channel Name**：Name marked on IPC
- **Date Format**：Set date format such as m/d/y or y/m/d
- **Time Format**：12 hour or 24 hour
- **OSD Position**：Freely set the position of IPC name and time
- **Color**：Adjust the chroma, brightness, contrast and saturation of the IPC of the channel.（Refer to Picture 4-6）

Picture4-6

4.2.1.1.3 Output

Go to “Main Menu”→“Display”→“Output” to enter into the interface shown as Picture4-7.

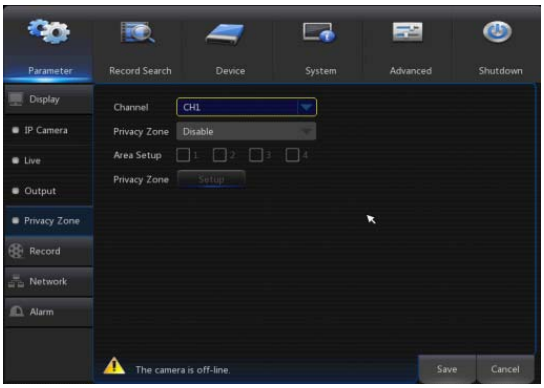
Picture4-7

- **Video Output**：Live Output
- **Seq Mode**：Set sequence mode
- **SEQ Dwell Time**：Sequence dwell time is set 5 seconds by default. User may set it as required.
- **VGA/HDMI Resolution**：VGA output or HDMI output. Including 1024×768，1280×1024，1440×900，1280×720，1920×1080
- **Transparency**：Set the transparency of the menu in the range of 0—128.

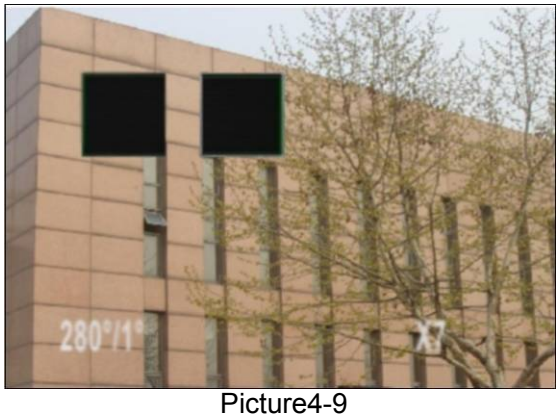
4.2.1.1.4 Privacy Zone

Privacy Zone is for setting some invisible parts in the selected channel, as shown in Picture4-8 and Picture4-9.

1. Select the number of the zone to be set (maximum 4 zones can be set for single channel)
2. Click “Setup” to adjust the position of the zone.
3. After finish setting, right click the mouse to return to the **“Privacy Zone”** page.
4. Click “Save” to save the setting.



Picture4-8



Picture4-9

4.2.1.2 Record

4.2.1.2.1 Record

Go to “Main Menu”→“Record”→“Record” to enter into the interface shown as Picture4-10.

Picture4-10

- **Channel**：Set the desired channel in the drop-down menu
- **Record**：Set up the record status(Enable/Disable) of each channel.
- **Stream Mode**：Select Mainstream or Substream.
- **PreRecord**：“Enable” status supports pre-record for motion detection record or I/O trigger record.

4.2.1.2.2 Schedule

Go to “Main Menu”→“Record”→“Schedule” to enter into the Schedule interface shown as Picture4-11 and set the record schedule of NVR.

Picture4-11

Select the channel and the date to be set. One week’s schedule can be set.

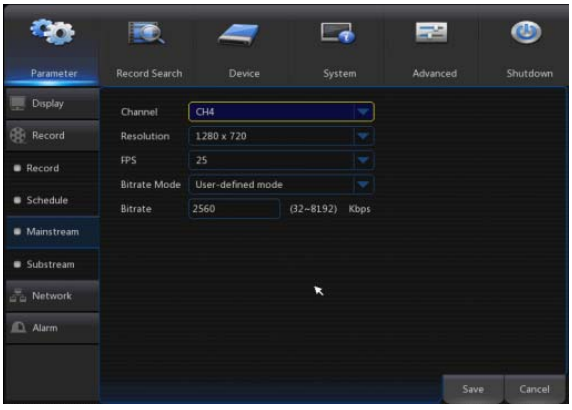
The record schedule of the current channel can be copied to any other channel or all channels.

Note：

1. In the Record menu and Record Search menu, No Color stands for no record;
2. “Green” stands for normal record and “yellow” stands for motion record
3. “Red” stands for alarm record,

4.2.1.2.3 Mainstream/Substream

Go to “Main Menu”→“Record”→“Mainstream/Substream” to enter into the menu interface as shown in Picture 4-12.



Picture 4-12

Mainstream and substream are the two video bitstream of IPC. Mainstream is mostly used for recording and the substream is mostly used for remote network monitoring.

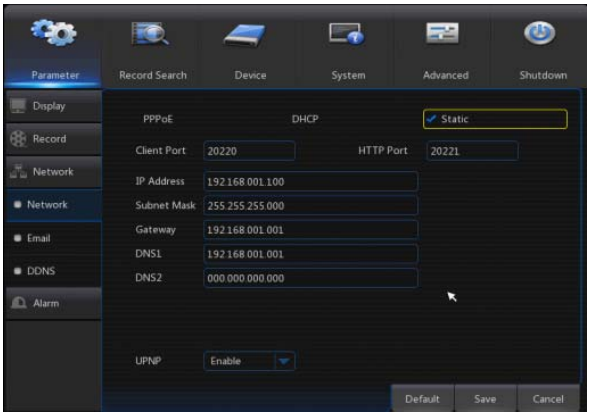
- **Channel**：Select a channel
- **Resolution**：Set IPC resolution as required
- **FPS**：Min 1 and max 30
- **Bitrate Mode**：Preview Mode and User-defined Mode
- **Bitrate**：Set IPC bitrate

4.2.1.3 Network

4.2.1.3.1 Network

Go to “Main Menu”→“Parameter”→“Network” to enter into the interface shown as Picture 4-13.

Select a kind of network connection (PPPOE, DHCP, Static) and set Port, then user may remotely control the monitoring, recording, playback or backup of NVR through network, as shown in Picture 4-13.



Picture 4-13

For PPPoE, Static and DHCP, after setting IP address of NVR, the extranet port shall be mapped on the router before visiting NVR through public network.

Note: Save after setting to make effective. If there are multiple NVR in a LAN, make sure their MAC addresses are different (Refer to System).

Take DHCP as an example. In this mode, the router automatically assigns IP address for NVR. After restarting NVR or DHCP server, the IP address obtained by NVR may be different. As a result, user shall check IP address and port number for each remote access of NVR. The operation procedure is as follows:

1. Select DHCP, click Save and refresh NVR. Input Client Port and HTTP Port (the two values must not be the same).
2. Set obtained IP address of NVR and the mapping port. Refer to section4.2.4.2.
3. Remotely visit NVR by IP address：

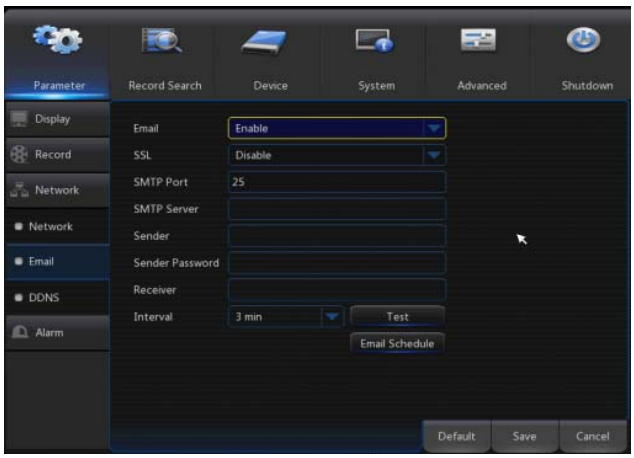
http://Public network IP: Web port number（such as 00080）

http:// Intranet IP: Web port number（such as 00080）（Only available in the same LAN）

4.2.1.3.2 E-mail

Go to “Main Menu”→“Parameter”→“Network”→“Email” to enter into the menu interface.

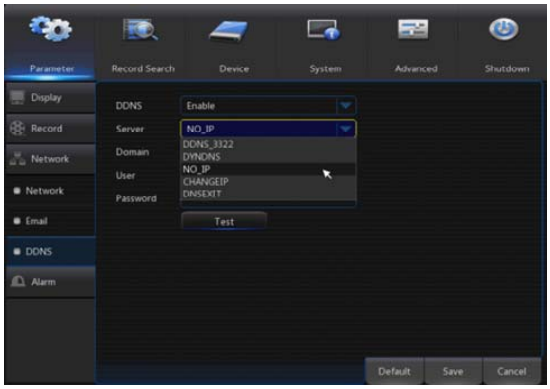
Receive or Send NVR alarm Email and set parameters like Email address, SSL, Email Enable, Interval and Email Schedule. The related parameter setting should be consistent with NVR local setting. Refer to Picture 4-14.



Picture 4-14

4.2.1.3.3DDNS

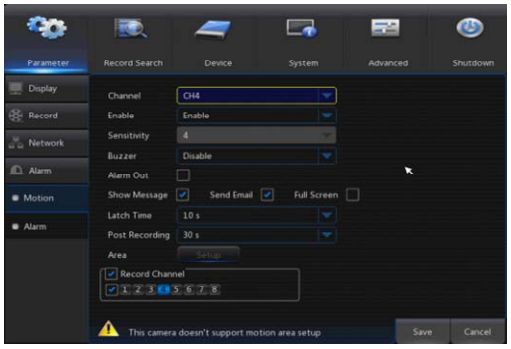
Go to “Main Menu”→“Parameter”→“Network”→“DDNS” to enter into the menu interface. User may set DDNS in any one of the above network connection after applying dynamic domain service. User may remotely access NVR through domain by using browser in the form of http://applied domain: mapped Web port number. When using DDNS domain name to access NVR, user shall confirm that the port can be normally connected to current IP on the public network and the settings for server address/host name/user/password/setting should be consistent with NVR local setting. See Picture 4-15.



Picture 4-15

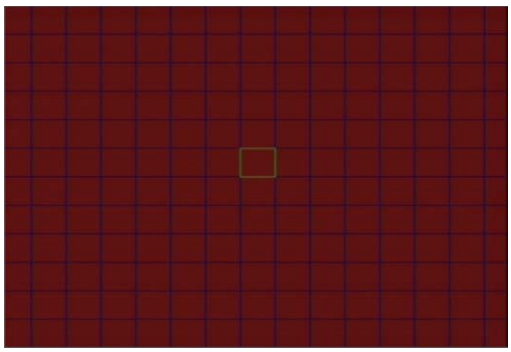
4.2.1Alarm

Go to “Main Menu”→“Parameter ”→ “Alarm” → “Motion” to enter into the interface shown as picture 4-16-1.



Picture 4-16-1

4.2.1.1 Motion



Picture 4-16-2

- **Channel:**Enable or disable Motion function.
- **Sensitivity:**Support 1-8 level, 8 is the highest level.
- **Buzzer:**When detecting object moving, buzzer makes alarms (disable, 10 seconds, 20 seconds, 40 seconds and 60 seconds).
- **Alarm Out:**Connect to the alarm switch of the alarm apparatus.
- **Show Message:** Messages will be displayed on the screen when moving object is detected and alarms are made.
- **Send Email:**When moving object is detected, send Email to the specified Email address.
- **Full Screen:**When moving object is detected, messages will be displayed in full screen.
- **Latch Time:**When moving object is detected, the alarm time can be set as 10 seconds, 20 seconds, 40 seconds and 60 seconds.
- **Post Recording:**After the alarm finishes, the duration time of the alarm recording can be set as 30 seconds, 1 minute, 2 minutes and 5 minutes.

- **Area**：Click it to enter into the interface shown as Picture 4-16-2 to set the motion detection area to be monitored intensively.

A single channel is divided into 15 x 12（PAL）or 15 x 10（NTSC）configurable grids. The red grids indicate that the motion detection in the area is enabled, white semitransparent ones indicates that the motion detection in the area is disabled. After setting is completed, right click the mouse button to return and click Save to make the parameter setting effective.

- **Record Channel**：When object motion is detected, the record channel setting will be activated.

4.2.4.1 Alarm

Go to "Main Menu"→"Alarm"→"Alarm" to enter into the interface shown as Picture 4-17.

Picture 4-17

It is the alarm management and setting of the machine. User may set alarms under different status in the interface. Please refer to Table 2-4

- **Alarm In:**User may set four groups of alarm input.
- **Alarm Type:**There are three kinds of status, i.e. Always ON, Always OFF, and OFF. Always ON: When the trigger is on, I/O alarm appears; Always OFF: When the trigger is off, I/O alarm appears; OFF: Do not receive I/O alarm from trigger.
- **Buzzer Time:** You can set how long the buzzer will sound when motion is detected(off, 10s, 20s, 40s, 60s)
- **Alarm out:** Connect the external alarm switch.

- **Show Message:** Display the alarm messages on the screen when motion alarm is detected.
- **Send Email:** Set to send email to specified email when motion alarm is detected.
- **Full Screen Alarm:** When the motion is detected, the corresponding channel will be switched to the full screen mode.
- **Latch time:** you can set how long the buzzer will sound when object move is detected by external sensor(10s, 20s, 40s, 60s)
- **Post Recording:** You can set how long alarm record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes).
- **Record Channel:** The record channel will be activated when the object move is detected.
- **Copy:** Allow you copy current channel parameters to any other channel (setting of record channel can not be copied).

Alarm Type	Functions & Descriptions
Video Loss	When NVR fails to receive video signals due to some problems (camera damage, line dropout or damage, power failure), the alarm will appear.
Motion Detection	When IP camera detects object moving, alarm will be activated. Sensitivity is subject to the actual application environment test. **Sensitivity** is adjusted according to the sensitivity of moving object detection and parameters are modified by combining the **area setting**.
I/O Status	Communicate with alarm device through I/O port. Alarm signals sent by IR sensor or other devices will be transformed to the system recognized signal and activate relevant channel to record or control the device output.
HDD Status	Alarm will appear when HDD does not work due to damage, power failure, HDD auto-overwrite off and insufficient space.

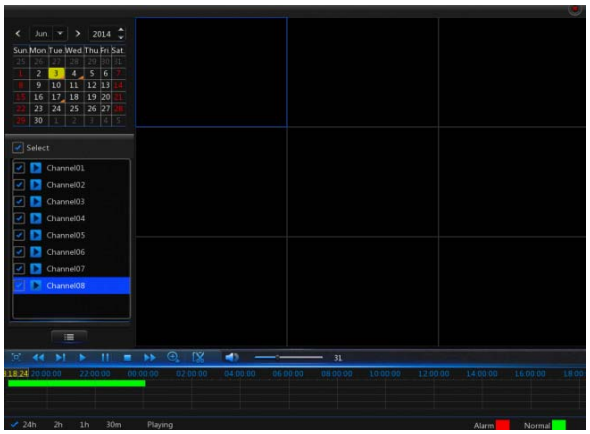
Table 2-4

4.2.2 Record Search

4.2.2.1Record Search

Go to “Main Menu”→“Record Search”→“Record Search” to enter into the interface shown as Picture 4-18

Picture 4-18



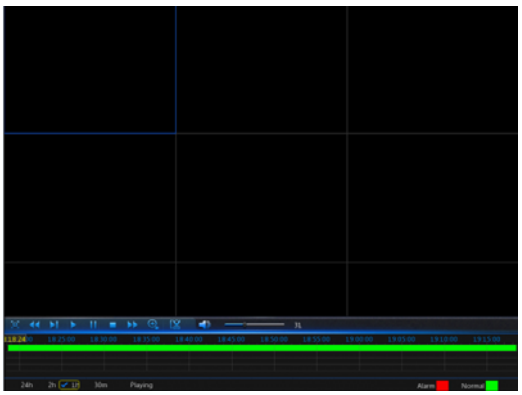
Picture 4-19

- **Channel:**Select the channel you want to search.
- **Type:**Select the type the playback record. There are two options, i.e. Normal and Alarm.
- **Start Time/End Time:**Select the specific period of time. The default setting is from 0:00 to 24:00.
- **Playback Channel:**Click a date and select corresponding channel in Playback Channel. The selected channels shall not be more than 16, as shown in Picture 4-19.
- **Playback:**Select the desired year and month and click “Search”. If there are any records, a yellow corner mark which shows the recording at specific date will appear at the down-right corner of the date sheet. Select the date checkbox and select playback channel and click Playback to enter into the interface.
- **Playback interface:**You can use the Playback Control bar to operate the Fast Forward (X2, X4, X8 and X16), Rewind (X2, X4, X8 and X16), Slow play (1/2, 1/4 and 1/8 speed), Play, Pause/Frame. You can click or drag the volume control bar to adjust volume. When playback ends, NVR will remain in the playback interface, as shown in Picture 4-19.

Time Axis setup, file clip and zoom in/out

1) The NVR supports the processing control bar function when playing back record files

Picture 4-20-1



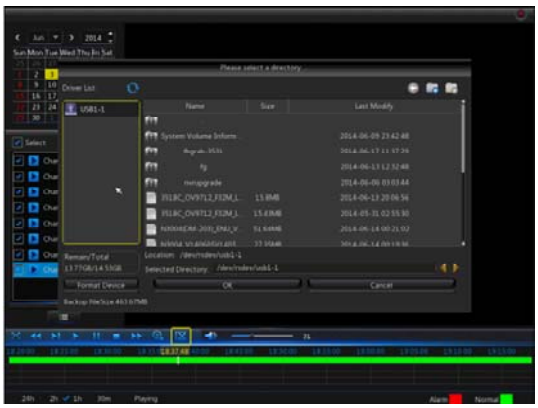
Picture 4-20-2

Time Axis zoom: Default value is 24hours. Allow user to select 2 hours, 1 hour, 30 minutes or user-defined.

➢ **Detailed operation：**

Fixed time axis: If you select [2h] option, that means the processing control bar cover two-hours video content. The time range refers to 1 hour before and after the middle point.

2）Record clip and backup function and playback zoom in/out function.



Picture 4-21-1

Picture 4-21-2

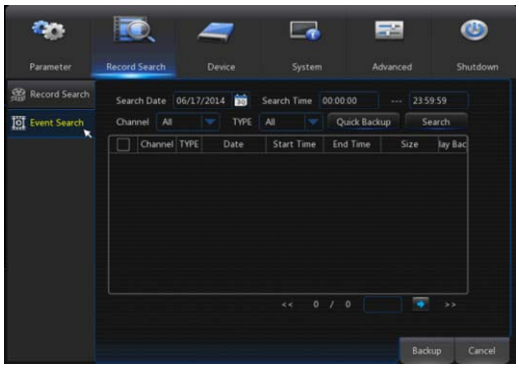
➢ **Clip and backup:**When it is under single channel playback, the [ ] icon will appear in the Play Control bar shown as Picture 4-21-1. Click the icon to start video clip function, click the icon again to end the function and pop up the dialog shown as Picture 4-21-1. Now, you may save the clipped video file.

➢ **Zoom out：** When it is under single channel playback, the icon will appear in the Play Control bar. Click the icon to zoom in certain area of the playback screen and right click mouse to return the Playback page.

4.2.2.2 Event Search

Go to “Main Menu”→“Record Search”→“Event Search” to enter into the interface shown as Picture 4-22.

In this page, user may search details by date, time, channel and record type. The relevant operations are as follows:



Picture 4-22

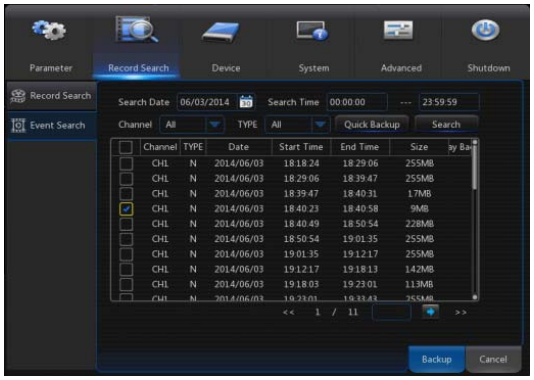
：Previous page; Click the button to go to previous page when viewing events (except the first page). When viewing the first page, click this button to display the event list in the first page.

： Next page; Click the button to go to next page when viewing events (except the last page). When viewing the last page, click this button to display the event list in the last page.

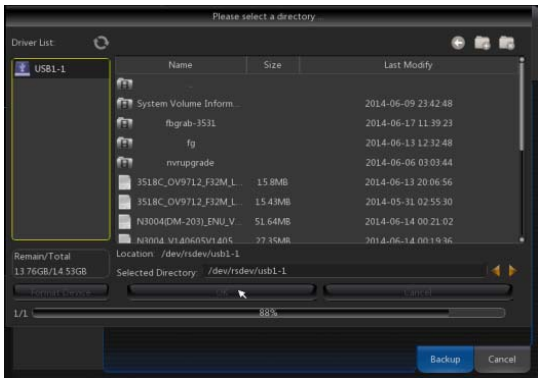
： Jump; Input the desired record event page in the input box and click arrow button to jump to the input page.

Two types of backup：Quick Backup and Backup

If you want to back up a record in the detailed file list, you may tick the checkbox at the left of the record (“√”means it has been selected) and click “Backup” to enter into “Select backup type” (Make sure U disk or other portable storage device are connected), as shown in Picture 4-23.



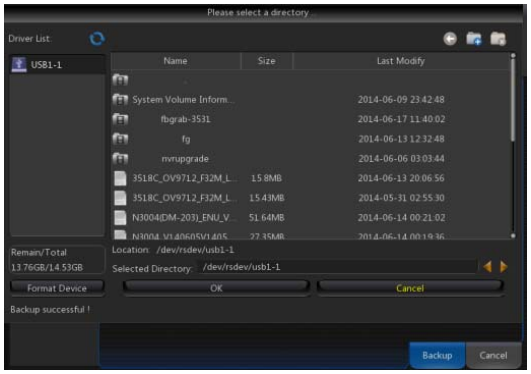
Picture 4-23



Picture 4-24

If you want to back up with USB, select USB and click OK to start processing and you may see the backup progress shown as Picture 4-23.

If you want to back up with DVD, select DVD and click OK to start processing and you may see the backup progress shown as Picture 4-24.



Picture 4-25

After backup finishes, message Backup Finishes will appear at down-right corner, as shown in Picture 4-25.

If the file is backed up with format of .264， it can be played back by NVRClient player in the CD attached with NVR(the player will be automatically installed during installing NVRClient. CD backup file is in format of *.nvr).

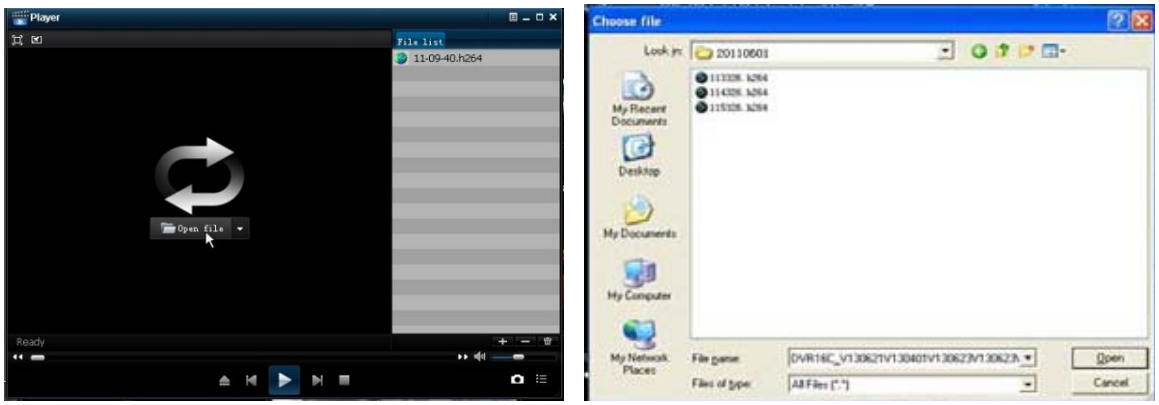
Note: Before backup, connect devices for backup (U flash disk or other devices with USB interface)

4.2.2.3 Play Backup Files

1. Copy backup files to the computer.

2.Open playback player and click “+” or“

”. For example, if you want to choose *.264, add backup file and select a file to play, as shown in Picture 4-26.



Picture 4-26

: Play: Click to play file

: Pause: Click to pause.

: Stop: Click to stop playback.

: Next: Click to play next file.

: Previous: Click to play previous file

: Slow Playing: click to play at 1/2,1/4,1/8,1/16 speed.

: Fast Playing: click to play at 2×, 4×,8×, 16× speed.

: Open file

: Full screen display

: Never on top

: Always on top

: On top during playing

: Screenshot: Save path: installation directory\Video Client\Capture

: Adjust volume

: Add folder or file.

: Delete file in the list.

: Delete all files in the list.

: Expand/pack up the list.

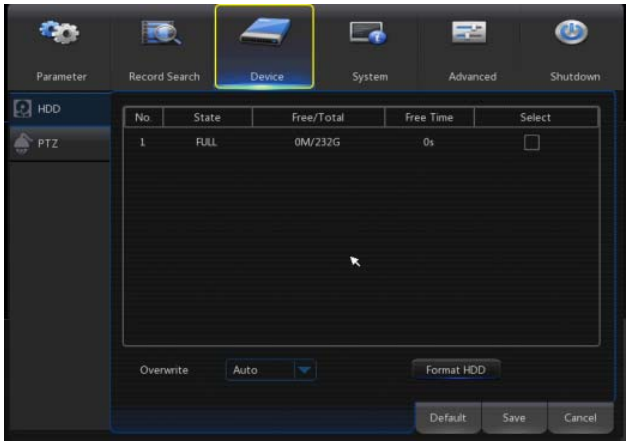
: Advanced configuration: Set the save path for the captured pictures and set the display language of player, as shown in picture 4-27.

Picture 4-27

4.2.3 **Device**

HDD

Go to “Main Menu”→“Device”→“HDD” to enter into the interface shown as Picture 4-28.



Picture 4-28

Picture 4-29

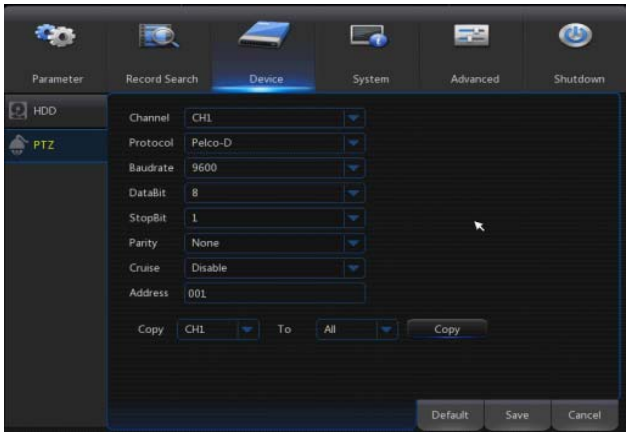
When NVR is connected to a HDD, the system will automatically detect if HDD is normal or not; if HDD need to be formatted, status will be shown as “Not formatted”. Select the HDD and format the HDD. If the system detects HDD is normal state, the HDD status will be shown as “Normal”. See Picture 4-29

- **No.**: Number of HDD connected to system.
- **Status:** It shows the current status of HDD. It will be available only when HDD is “Normal”.
- **Free/Total Space:** Remaining or total space of HDD
- **Free Time:** Remaining time for HDD recording according to currently set “Resolution”, “Encoding Rate” and “Frame Rate” of image.
- **Auto-overwrite:**When set to ENABLE, the NVR will overwrite the oldest files on the hard drive if hard drive space is full. When set to DISABLE, the NVR will stop recording if hard drive space is full. Overwrite time: 1 day, 3 days, 7 days, 14 days, 30 days and 90 days. It means the longest storage time of records in HDD. If the time is over, the records will be deleted. For example, if the time is set as 3 hours and the data in HDD include 12, 13, 14, 15, 16, 17, 18, 19 and 20 o’clock, then data 18, 19 and 20 will be saved and data 12, 13, 14, 15, 16 and 17 will be deleted.
- **Format HDD:** Format HDD for the first use.

Note: Recording can only be performed when HDD is in “Normal” state.

4.2.4 PTZ（If available for NVR）

Go to “Main Menu”→“Device”→“PTZ” to enter into the interface shown as Picture 4-30.



Picture 4-30

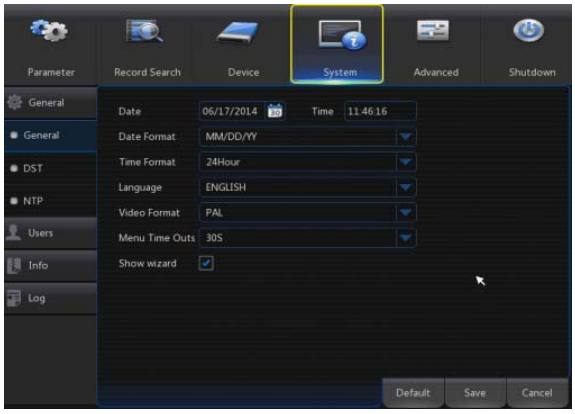
Select a PTZ channel and set PTZ protocol（Pelco-D, Pelco-P），Baudrate（1200，2400，4800，9600）, DataBit（8，7，6，5）, StopBit（1，2），Parity（None，Odd，Even Mark Space）, Address and Cruise.

Parameter setting for above channels must be the same as that of PTZ so that PTZ can be controlled. The protocol, baudrate and PTZ address must be set.

4.2.4 .1System

4.2.4.1.1 General

Go to “Main Menu”→“System”→“General” to enter into the interface shown as Picture 4-31.

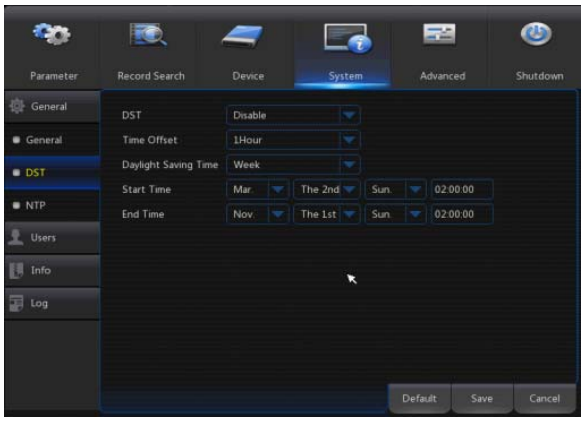


Picture 4-31

User may set Date, Time, Date Format, Time Format, Language, Video Format, Menu Timeouts and Show Wizard in this page.

4.2.4.1.2DST

Go to “Main Menu”→“System”→“General”→“DST” to enter into the interface shown as Picture 4-32.

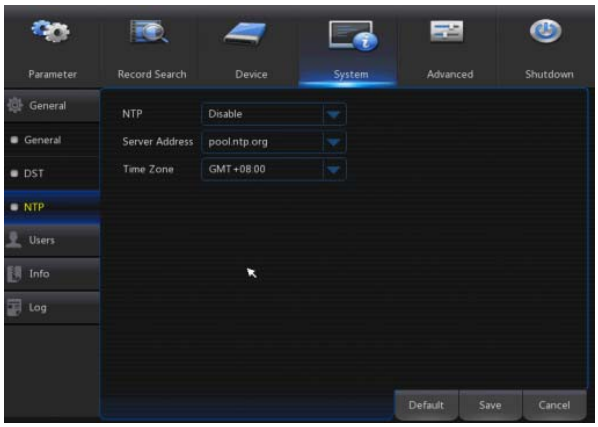


Picture 4-32

Enter into the interface shown as Picture 4-32 to set DST, Time Offset, Start Time and End Time.

4.2.4.1.3NTP

Go to “Main Menu”→“System”→“General”→“NTP” to enter into the interface shown as Picture 4-33.

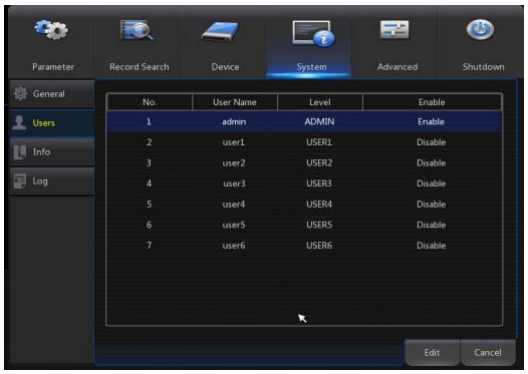


Picture 4-33

- **NTP service**: Enable/Disable NTP function.
- **Server Address**: Select NTP server （ time.windows.com, time.nist.gov, pool.ntp.org）.
- **Time Zone:** Corresponding time zones for various nations or regions.
- **Update Time:** Enable NTP function and save parameters and click Update Time to calibrate the system time.
- **Note:** When NTP function is set to “Enable”, system will calibrate the system time at every 00:07:50 and every start-up.

4.2.4.2 Users

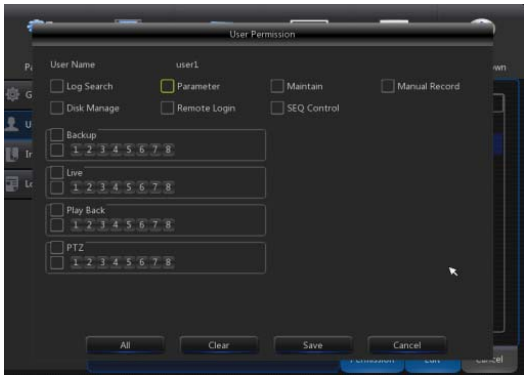
Go to “Main Menu”→“System”→“Users” to enter into the User interface shown as Picture 4-34.



Picture4-34

It supports up to seven users, including one administrator and six users. Click [Edit] button to enter into the [User Edit] interface to input user name and password, as shown in Picture 4-35.

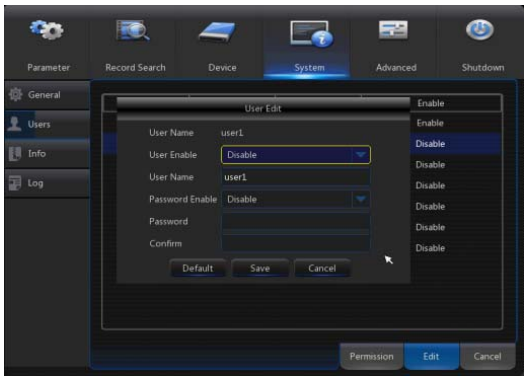
User Name consists of 8 characters and password is composed by number 0-9 with max length of 8 numbers



Picture4-35

Set user password. Administer is authorized to set user common user’s authority.

- **Log Search:** allow you check all the system logs.
- **Parameter:** allow you set all the parameters.
- **Maintain:** allow you update version, recover ex-factory value, device reboot and shut down.
- **Disk Management:** allow you manage and control the HDD and USB drive.
- **Remote Login:** allow you remotely login NVR.
- **SEQ Control:** allow you sequence live screens for all the channels.
- **Manual Record:** allow you manually start/stop record.
- **Backup:** Tick-select the ENABLE option and select channel for backup, the user is allowed to backup the record in the selected channel.
- **Live:** Tick-select the ENABLE option and select a channel and the user is allowed to view all the live images in the selected channel.
- **Playback:** Tick-select the ENABLE option and the user is allowed to playback the selected record in the channel.



Picture4-36

4.2.4.3 Info

4.2.4.3.1Info

Go to “Main Menu”→“System”→“Info” to enter into the interface shown as Picture 4-37.

Picture 4-37

User can view system information, including Device ID, Device Name, Device Type, Hardware Version, Firmware Version, IE Client Version, IP Address/Domain, MAC Address, HDD Capacity, Video Format, Media Port, Web Port, etc.

4.2.4.3.2 Channel Info

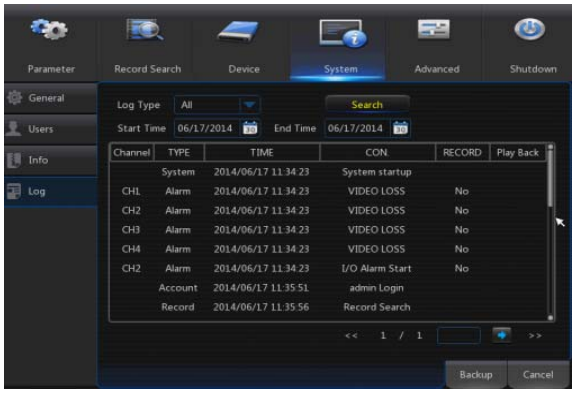
Go to “Main Menu”→“System”→“Info”→“Channel Info”， as shown in Picture 4-38

Picture 4-38

User may view the information of various connected IPC, including state, mainstream, substream, motion detection, privacy zone, cruise, etc.

4.2.4.4 Log

Go to “Main Menu”→“System”→“Log”, as shown in Picture 4-39.



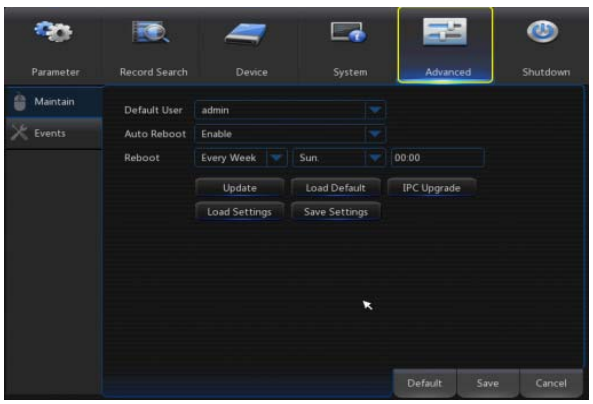
Picture 4-39

User may search log information in different period of time. Click “Backup” to save all the log information, as shown in Picture 4-39.

4.2.5 Advanced

4.2.5.1 Maintain

Go to “Main Menu”→“Advanced”→ “Maintain” to enter into the interface shown as Picture 4-40.



Picture 4-40

- **Auto Reboot:** Enable the auto maintenance function to reboot system regularly at every day/week/month. When Auto Reboot is enabled, NVR should be in the main interface and no user operation.
- **Upgrade:** Decompress update file package and copy the upgrade file folder named “nvrupgrade”(see Picture 4-41, the upgrade program is inside) to root directory of U flash disk; Insert the U flash disk into USB port of NVR; Click <Upgrade>.

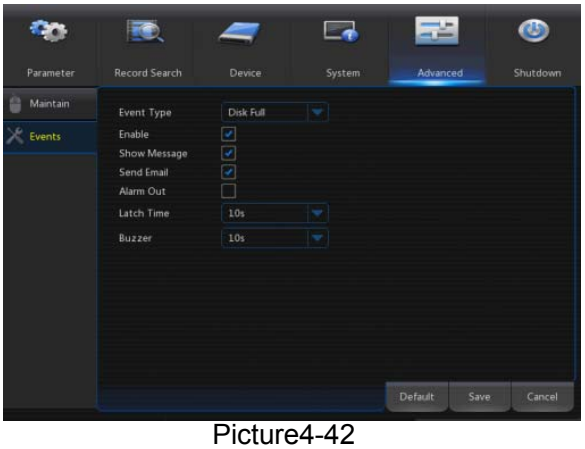
- **Load Default:** If [Load Default] is selected, you can initialize the system to the ex-factory default. Click “Load Default” and select items to be restored
- **Load Settings:** Load parameters in the removable storage device to NVR.
- **Save Settings:** Save the set parameters of user’s NVR to the removable storage device.
- **IPC Upgrade：** IPC can be upgraded by the connected NVR. Decompress IPC upgrading file and copy *.sw file to nvrupgrade directory and copy to the root directory of U flash disk, as shown in Picture 4-41—>Insert the U flash disk into USB port of NVR—>Select the IPC you want to upgrade—>Click Upgrade to start upgrading IPC.

Note： Do not take out the USB memory or cut off the power during upgrading. When the update is done, system will be automatically restarted. After about 5 minutes, the upgrading will be finished. It is recommended to **load ex-factory default** after upgrading. The auto maintain function can be effective only when NVR returns back to Preview mode with no any operation within the set auto maintain time.

Picture 4-41

4.2.5.1 Events

Go to “Main Menu”→“Advance”→ “Events” to enter into the interface shown as Picture 4-42.



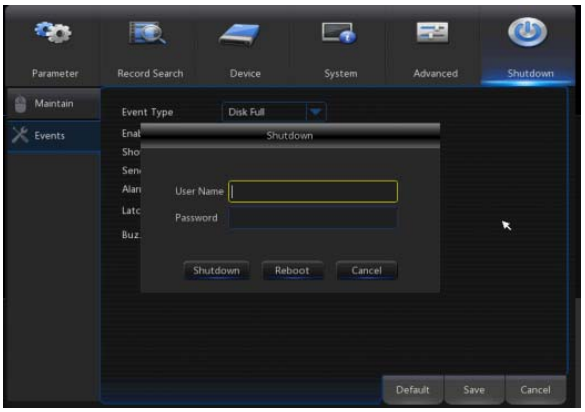
Picture4-42

- **Event Type:** Support three abnormal types: Disk Full, Disk Error and Video Loss.
- **Enable:** Active alarms for abnormal situations.
- **Alarm Out:** Enable or disable alarms
- **Latch Time:** How long the buzzer will sound when external sensor alarm is detected (10s, 20s, 40s, 60s).
- **Show Message:** You can set show message on the screen when sensor alarm is detected.
- **Buzzer:** How long the buzzer will sound (10s, 20s, 40s, 60s).
- **Send Email:** Select to send Email to specified Email address when abnormal events appear..

4.2.6 Shutdown

Go to “Main Menu”→“Shutdown” to enter into the menu interface shown as Picture 4-43.

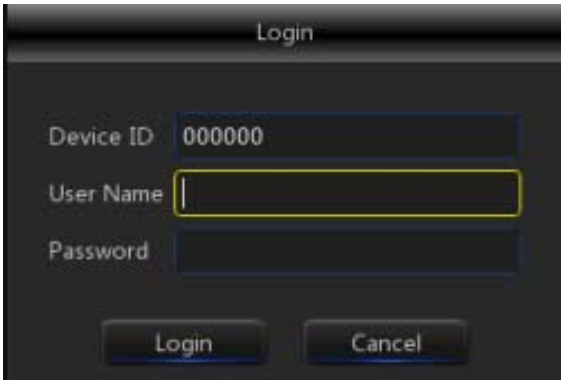
Shutdown function requires user to login by inputting User Name and Password so as to shut down or reboot system.



Picture 4-43

4.3Menu Lock

In consideration of system safety, user may click the icon on the toolbar when he leaves away from NVR and the system interface will be locked. User has to input Device ID, User Name and Password on the login interface to unlock(**Default: User Name: admin, Password: blank**). The login interface is as shown in Picture 4-44.



Picture 4-44

Note：Administrator has all authorization of menu operation and users have limitations for authorization and have to get authorization from administrator.

4.4Split Mode

There are many display modes in video channel, including single channel display, SEQ display and split mode.

4.5 Record Search

Click icon on the toolbar to enter into the Record Search interface to search and playback. Refer to former section 4.2.2 for specific operating method.

4.6 Mute

Click icon on the toolbar or Mute button on the panel or remote controller to control the mute of NVR.

4.7 Start Sequence

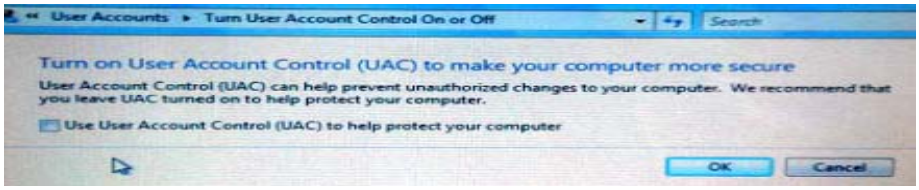
After set channel sequence time (Refer to Section 4.2.1.1.3), click Start Sequence icon on the toolbar to start sequence.

Chapter 5 Web Application Manager

5.1 ActiveX control download and installation

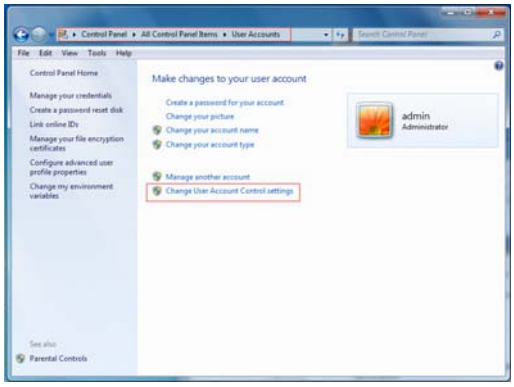
Open your web browser and input the IP address of NVR, such as: http://192.168.1.168 . If your computer is connected to internet, it will download and install "ActiveX" plug-in automatically. If your computer system is Windows Vista or Windows 7, you may need to setup the user authority for remote control, or you may be unable to backup or record.

Vista System: Start→Setup→Control Panel. Set user authority in control panel (as shown in picture below). Remove the Tick "√" in front of the option "Use UAC to help protect your computer" and confirm OK.

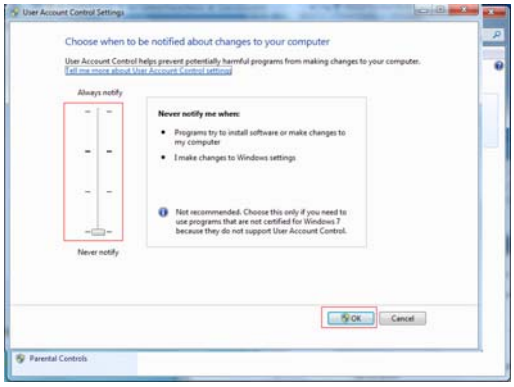


Vista

WIN7:



WIN7-1



WIN7-2

Note: If the ActiveX control is not downloaded successfully, please check if your browser's safety level or firewall setting is set too high. Please open IE browser→ [Menu Bar]Tools→Internetoptions→ Security → Internet →Custom level→Enable the options (Refer to the Picture 5-1).

Picture 5-1

If the web application runs for the first time, please wait for about one minute to finish downloading.

If you want to use the undated ActiveX control at a computer which you have already logged in before, please delete the original control and click [Start→Run] and then input the command characters: "regsvr32/u HiDvrOcx.ocx". Press OK. When you log in at the next time, new ActiveX control will be automatically downloaded. Please wait.

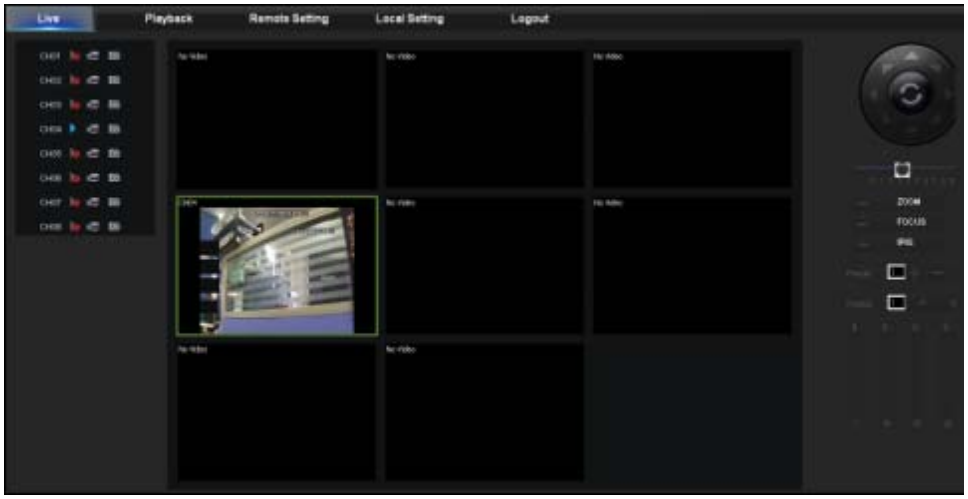
5.2 Web Application Manager Login

After ActiveX controls installation, please input user name and password, select Main Stream or Sub Stream (In general, select main stream for intranet and sub stream for outer net), and select language in the interface shown as picture 5-2. There is an option for opening all channel preview, select it to open all live pictures. Press Login to log in client and remotely visit NVR. The default password is admin and administer is authorized to modify the password. Set password as per introductions of user management in system setting.

Picture 5-2

5.3 Live Interface

Log in and enter into the live interface to establish video link, as shown in Picture 5-3.



Picture 5-3

5.3.1Menu Bar

Menu Bar: Live, Playback, Configuration, Local Setting and Logout

5.3.1.1Live Display

Log in the Web Application Manager, system will be defaulted to enter into <Live> interface shown as Picture 5-3. You can click [Play] button to Open/close live images, on-spot record, capture, and many live display modes.

Buttons on a single live interface：

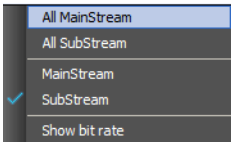
：Volume switch

：Record switch: the remote record switch of client. Record will be automatically saved to a specified position on PC after the function is enabled.

：Snapshot: Capture the selected live image and save it to a specified position on PC. The image is saved as *.bmp format.

: Open or close the images on Live window.

Or **click the right key of mouse on each <Live> window** to pop up channel operation menu as shown in Picture 5-4



Picture 5-4

Show bit rate: Tick Show Bit rate to show IPC bit rate in current window.

：Switch display mode in channel window

：Open all the Live channels.

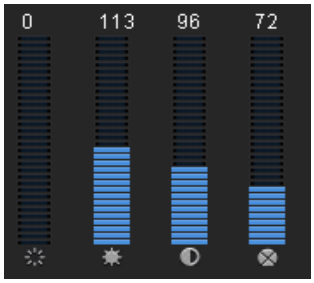
：Close all the Live channels

：Display previous group of channels

：Display next group of channels

: Click to maximize the current window to full screen. Right click to pop up menu option and select Exit Full Screen.

5.3.1.2 Video Control



Picture 5-5

: Adjust the chromaticity of video

: Adjust the brightness of video

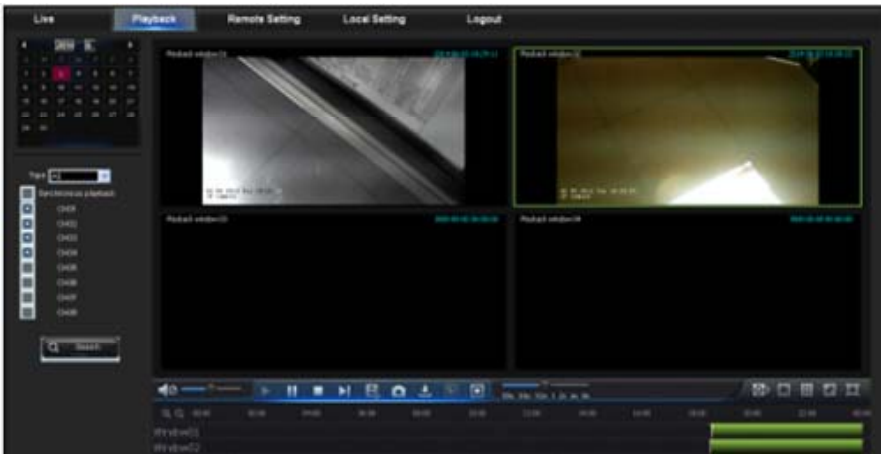
: Adjust the contrast of video

: Adjust the saturation of video

5.3.2 Playback

Click

to enter into Playback interface to remotely view the records in NVR HDD, as shown in Picture 5-6.



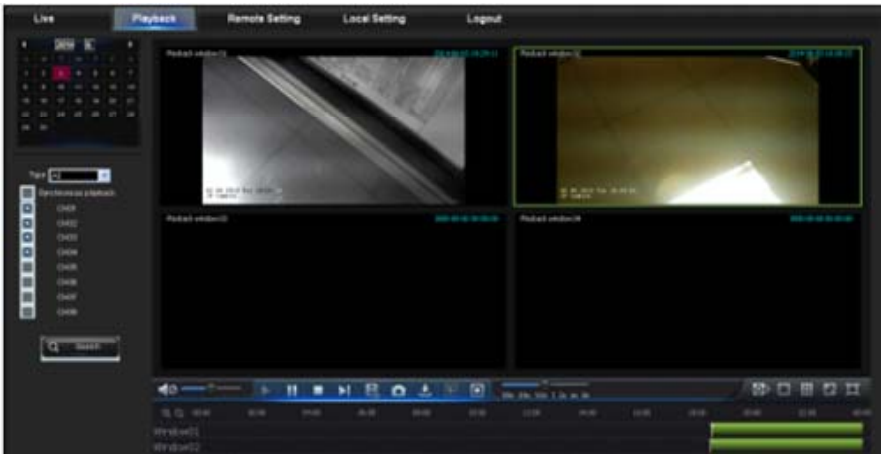
Picture5-6

It supports 4 channels playback.

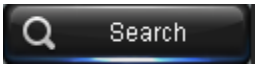
5.3.2.1Record Search

Record playback procedure

Firstly, select the date you want to check and select 4 channels. Any record files in current channel at current date will be displayed in the status bar of the interface.



Picture 5-7

Secondly, select record type (Normal record, Alarm record and All) and channels, and then click “ 

”，and time axis panel will display specific time quantum,

as shown in Picture 5-7. On the time axis, red part stands for alarm record, yellow stands for normal record and original part stands for no record during this period.

Picture 5-8

Before playback, choose to enable playback 4 channels synchronously. If you tick-select "

" , that means the selected channel will playback synchronously; otherwise, you could separately control the channels playback. Thirdly, start playback. Click to start record playback. When mouse curse is moving on the time axis, the time point of current position will be displayed on the time axis screen. Click the icon or to zoom in/out the time bar display ratio, as shown in Picture 5-8.

5.3.2.2Playback Control

Playback control bar, as shown in picture 5-9.

Picture 5-9

Detailed brief description is shown as below list

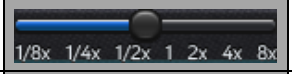
Key	Description	Key	Description
	Play		Enable the volume switch
	Pause		Volume adjustment bar
	Stop		Slow playing 1/2,1/4.1/8, Fast playing 1/2/4/8
	By frame		Stop playing all the files
	Record Clip		Single channel mode
	Snap		Quad mode
	Download		Full Screen
	Open all the playback channels		Stop playing all the playback

Table 5-1

Record file clip

After opening playback, click icon to clip the selected file; and click again to stop the clip function. Then playback clip is successfully done. Record clip file will be

saved as *.264 format.

Snapshot function

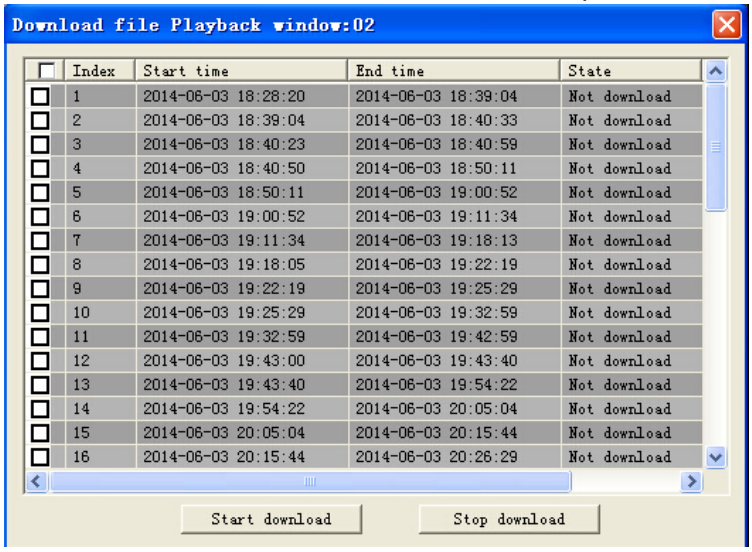
Move the mouse curse to the channel you want to capture, and click [ ] icon to capture the live images remotely. After capturing the images successfully, a path prompt box will be popped up, as shown in Picture 5-10.

Picture 5-10

The captured file will be saved as .bmp format.

Record file download

Click download icon " " on the control bar to display all the matched record file according to the search conditions of channels, as shown in picture 5-11.



Picture 5-11

Tick-select the record file you want to download and click [Start download] .System will download the record file in sequence and save to local PC. The downloading file will be displayed in percentage form. After downloading finishes, "Complete" will be displayed on the status bar.

5.3.3Parameter Setting

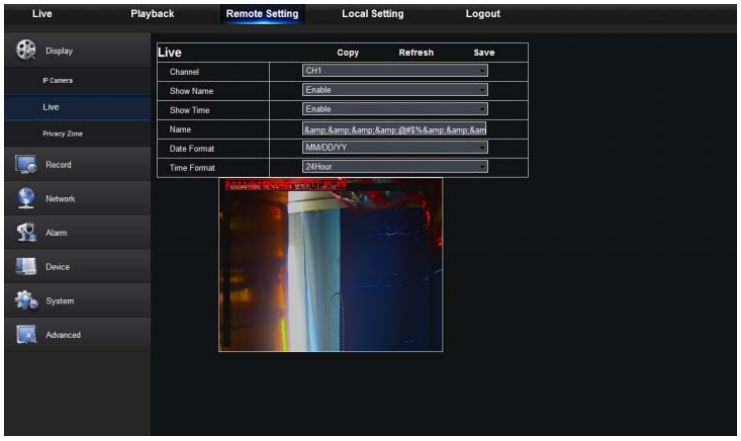
Click Parameter Setting to enter into the interface shown as Picture 5-12, including Display, Record, Network, Alarm, Device, System and Advance.

5.3.3.1 Display

Unfold [Display] option to find its sub-options: IP Camera, Live and Privacy zone.

1. Live: You may change channel name, position, channel preview and relevant parameters. If show time is set as <disable>, current NVR system time will not appear

on the screen on Live mode.

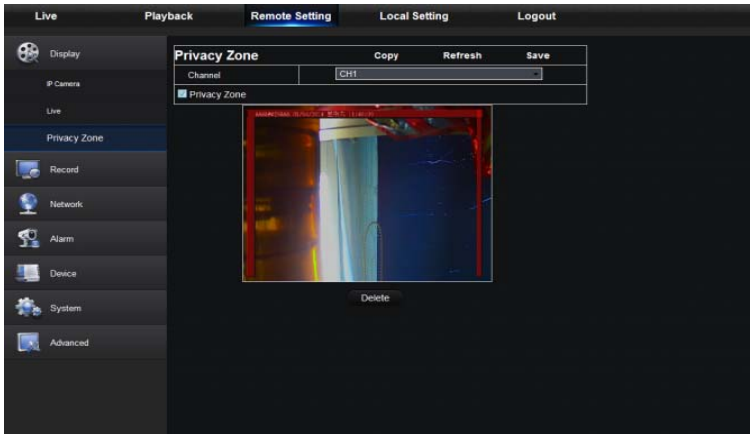


Picture 5-12

2.IP Camera：Display the information of added IPC. It can quickly add the on-line IPC and delete the added IPC, as shown in Picture 5-13.

Picture 5-13

3. Privacy Zone: Each channel can set 4 privacy zones, as shown in Picture 5-14. The relevant parameters should be consistent with NVR local setting. Select zones to be deleted and click “Delete” and click “Save” at up-right corner.



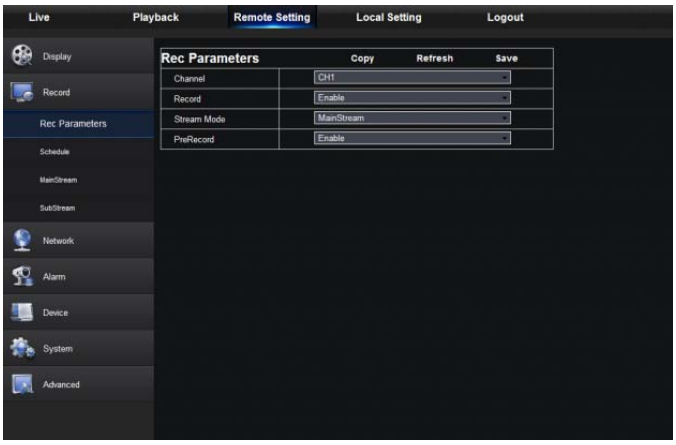
Picture 5-14

5.3.3.2 Record

Click <Record> option to unfold its sub-options: Record parameter, Schedule and Stream configuration.

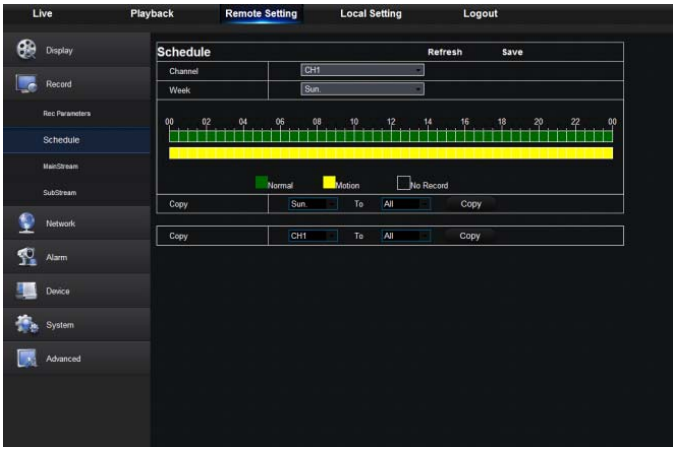
1. Record Parameters. The parameters should be consistent with NVR local setting, as

shown in Picture 5-15.



Picture 5-15

2. Record Schedule. The parameters should be consistent with NVR local setting, as shown in Picture 5-16.



Picture 5-16

Green stands for Normal record; Yellow stands for Motion detection; Red stands for I/O trigger record.

3. Stream setting. User may set Mainstream and Substream, as shown in Picture 5-17-1 and 5-17-2. The relevant parameters should be consistent with NVR local setting.

Picture 5-17-1

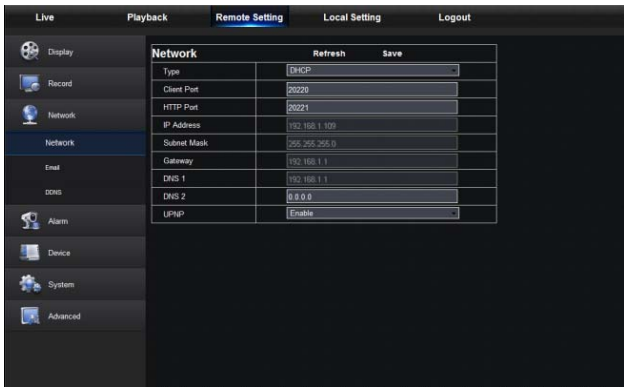
Picture 5-17-2

6.3.3.3 Network

Unfold <Network> to show its sub-options: Network, Email, and DDNS configuration, as shown in Picture 5-18.

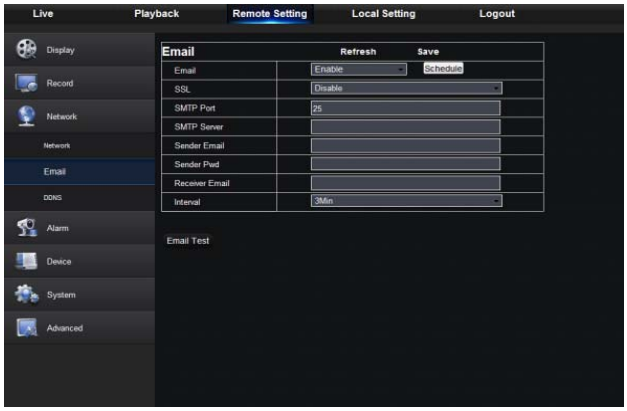
1. LAN setting: NVR supports Static/DHCP/PPPOE modes. System default network type is <Static>. User can set parameters as required. After the network parameters are

modified successfully, NVR will automatically restart.



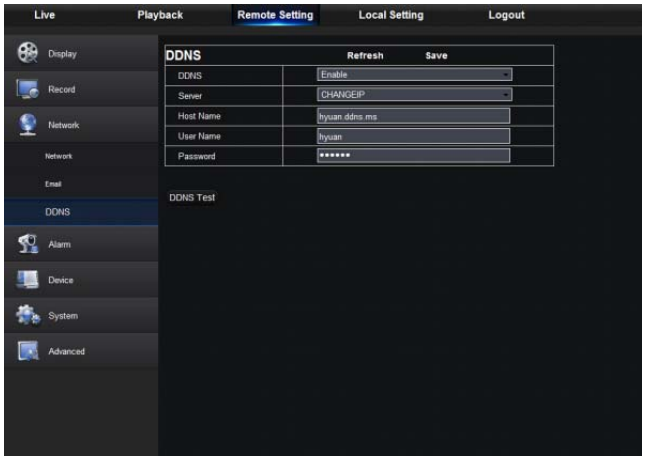
Picture 5-18

2. Email: Set NVR alarm Email configuration parameters, including Email address, SSL, Email Enable, Interval and Email Schedule, etc. Detailed parameters should be consistent with NVR local setting. Refer to Picture5-19.



Picture5-19

3. DDNS: After user applies for DDNS service, you could enable <DDNS> function under any one network type mode (Static, DHCP and PPPoE). And you may remotely visit the NVR through domain name (http://domain name: Web port No.). When visiting NVR by using DDNS, user should make sure port and current IP can be normally connected in public network. Details settings, including server address, host, user, and password, should be consistent with NVR local setting. Please refer to Picture 5-20.

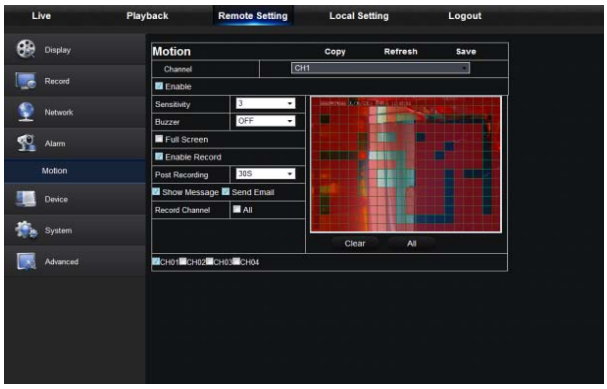


Picture5-20

5.3.3.4 Alarm

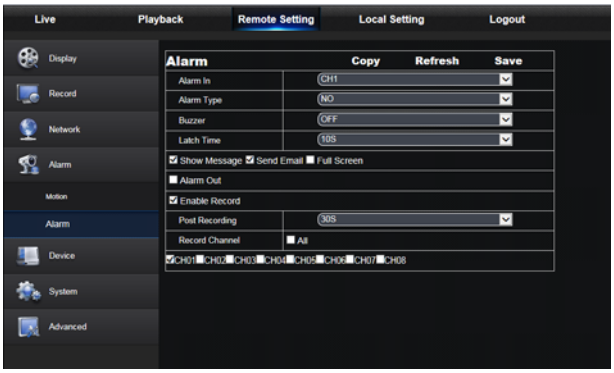
Alarm setting includes Motion Detection and I/O Alarm Parameters.

1. Motion Detection: Configure Sensitivity, Alarm out, Alarm Record and Alarm Capture, etc. Detailed setting should be consistent with NVR local setting (Shown as Picture 5-21).



Picture 5-21

2. I/O alarm setting (If available): Set parameters for I/O Alarm, Alarm Out, Alarm Record, Send Email, etc. Detailed setting should be consistent with NVR local setting (Shown as Picture 5-22).



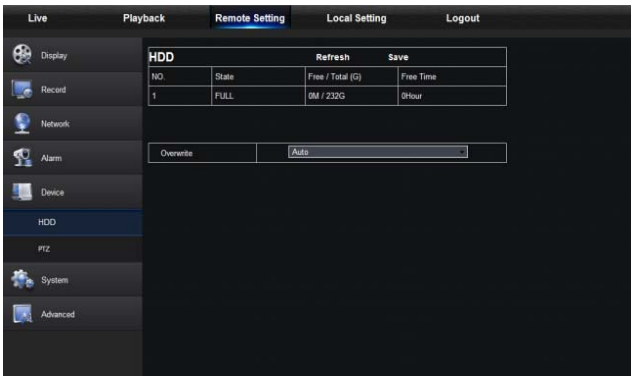
Picture 5-22

5.3.3.5 Device

Click <Device> to unfold its sub-options: HDD and PTZ

1. HDD

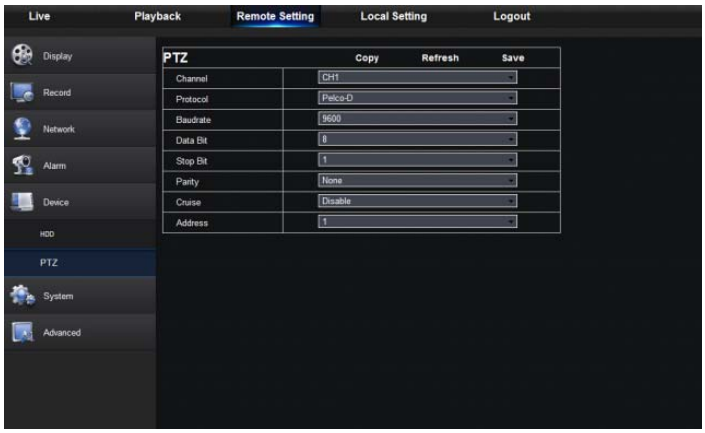
User may check HDD status of NVR and overwritten time. Detail setting should be consistent with NVR local setting. Please refer to Picture 5-23.



Picture 5-23

2. PTZ

User may set the relevant parameters of PTZ. Detail setting should be consistent with NVR local setting. Please refer to Picture 5-24.



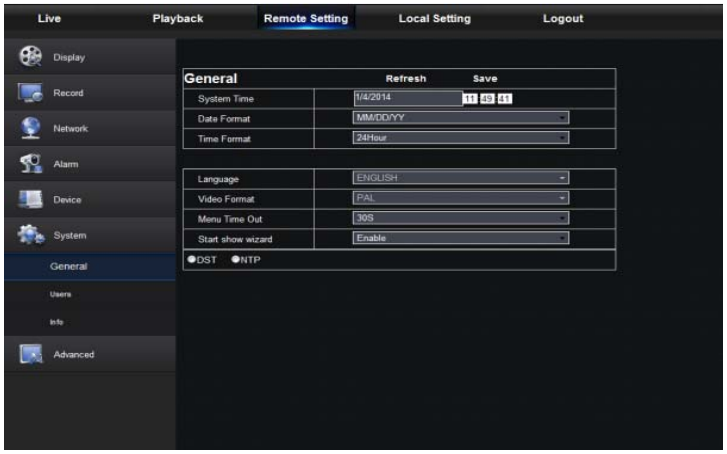
Picture 5-24

5.3.3.6 System

Click <System> option to unfold its sub-options: General, Users and information.

1. General

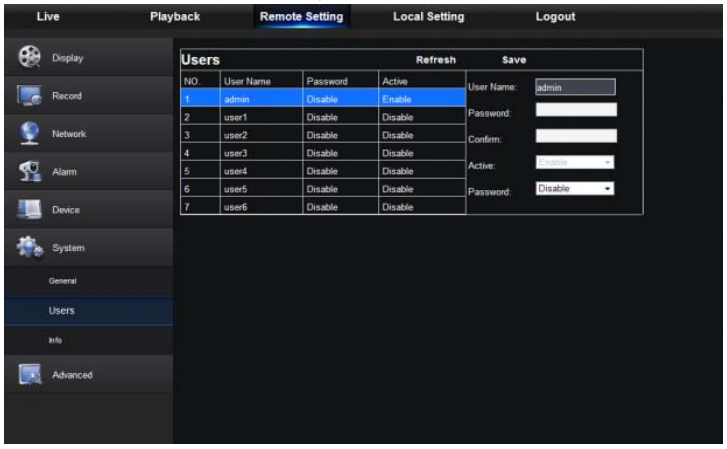
User may check NVR language and video system and set system time, date/time format, menu display time, DST and NTP parameters shown as Picture 5-25. Detailed setting should be consistent with NVR local setting.



Picture 5-25

2. Users

User may configure user name and password shown as Picture 5-26. Detailed setting should be consistent with NVR local setting.



Picture 5-26

3. Information

User may search device name, device number, device type, MAC address, software version, IE version and hardware version of NVR shown as Picture 5-27.

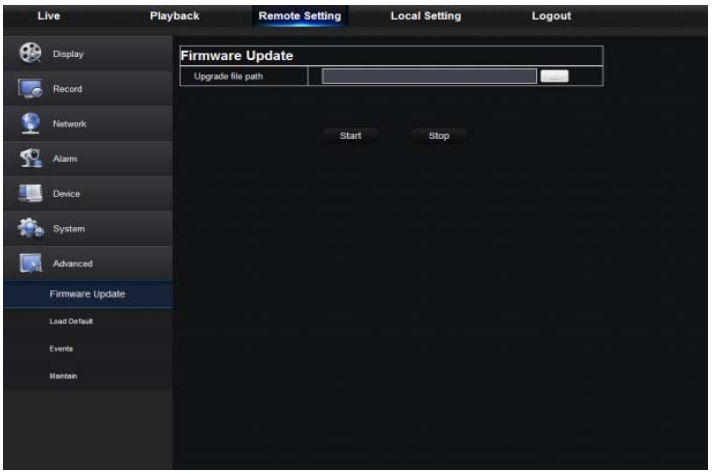
Picture 5-27

5.3.3.7 Advanced

Click Advance to unfold its sub-options: Firmware Update, Load default, Events and Maintain.

1. Firmware Update

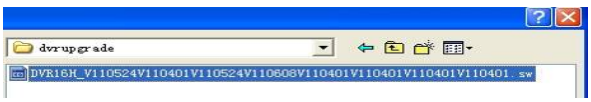
User may remotely update NVR system, as shown in Picture 5-28.



Picture 5-28

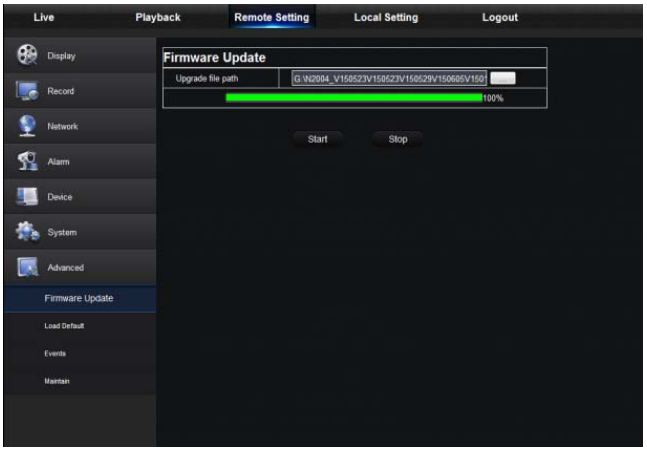
Updating procedure：

Firstly, select the update file path. The file format is .sw. Please refer to Picture 5-29.



Picture 5-29

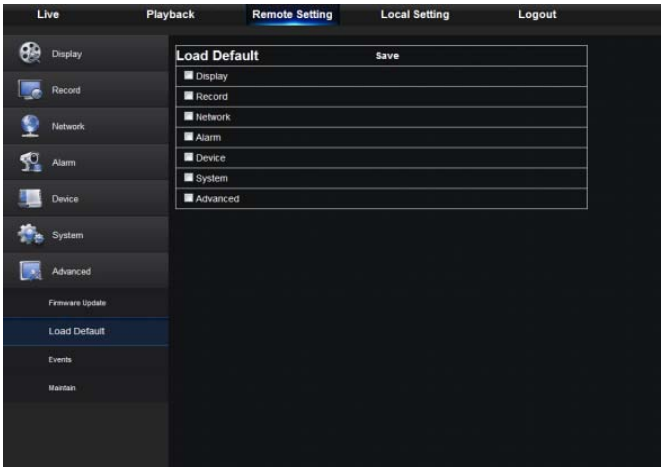
Secondly, click “Start” to start updating. The updating progress can be seen on the screen, as shown in Picture 5-30.



Picture 5-30

2. Load Default

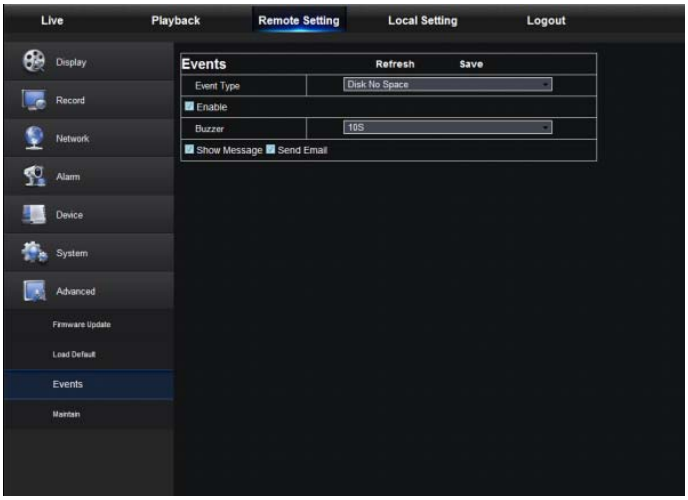
User may remotely restore default parameters of NVR, with same setting method as that of NVR, shown as Picture 5-31.



Picture 5-31

3. Events

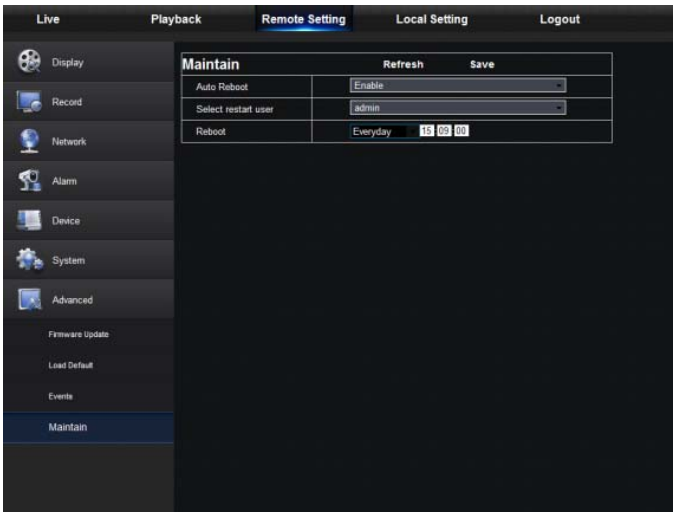
User may configure Event Type, Buzzer, Send Email, Show Message and other parameters shown as Picture 5-32. Detailed setting should be consistent with NVR local setting.



Picture 5-32

4. Maintain

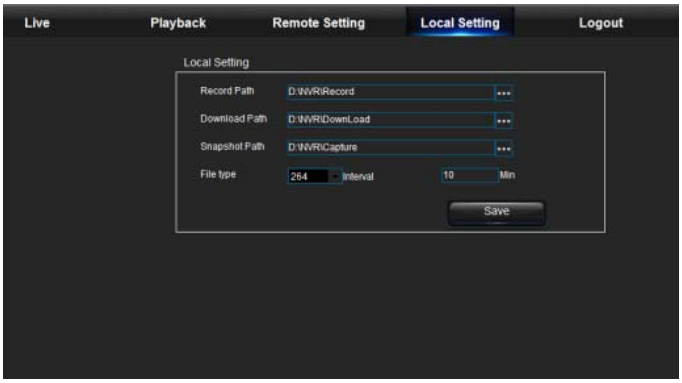
Allow you remotely set auto maintain time for NVR shown as Picture 5-33. Detailed setting should be consistent with NVR local setting.



Picture 5-33

5.3.4 Local Setting

User may set Record Path (save Live record and Playback clip file), Download Path for remote file, SnapshotPath for captured pictures, Interval for switching record files (Packaging time), and File type (H264 and AVI) shown as Picture 5-34.



Picture 5-34

5.3.5 Logout

Click to log out and return to the Login interface.

Chapter 6 Appendix

6.1Troubleshooting

1. Q: What can I do if the system does not detect the HDD?
   A: Check if the power supply system is properly connected and data cord and power cables are securely connected, and if something wrong with the HDD interface. Or you may check if your HDD is supported by referring to the specifications or descriptions.
2. Q: I have changed the password but forget the new password, how can I access the system?
   A: If you forget system password, please consult with our technical personnel. We strongly suggest user to set password easy to be remembered and relatively safe. If you have safety requirement, please do not set very simply password, such as 000000.
3. Q: We see abnormal video signal or even no video signal by connecting the NVR and camera together. Power supply for both devices is OK. What is wrong?
   A: Check network cable at NVR side to see if the cable is firmly connected and if it is worn out and needs to be replaced.
4. Q: How to prevent NVR from being influenced by heat?
   A: The NVR needs to dissipate heat while it is running. Please place the NVR in a place with good air circulation and away from heat sources to ensure stability and life of the NVR.
5. Q: The remote controller doesn't work while the monitor screen is OK and panel keys are functional. Why?
   A: Operate again by aiming the remote controller at the IR receiver on front panel. If it still doesn't work, please check if the batteries in the remote controller are dying. If not, check if the remote controller is broken.
6. Q: I want to take out HDD from my PC and install it in NVR. Can it work?
   A: All HDDs supported by the system can be used. But remember, once NVR runs, the data on your HDD will be lost.
7. Q: Can I playback while recording?
   A: Yes. The system supports the function of playing while recording.
8. Q: Can I clear some records on HDD of NVR?
   A: In consideration of the file security, you may not clear part of records. If you want to remove all the records, you can format HDD.
9. Q: Why can't I log in NVR client?
   A: Please check if the network connection settings are correct and RJ-45 port is with good contact. And check if your account and password are correctly input.
10. Q: Why can't I find any records during playback?
    A: Please check if the data line connection for HDD is OK and system time is properly adjusted. Try a few times and restart. If it still doesn't work, check if the HDD is broken.
11. Q: Why doesn't dynamic detection work?
    A: Please check if the motion detection alarm setting at IPC side is correct and if the sensitivity is set too low.
12. Q: Why doesn't alarm work?
    A: Please check if the alarm setting, alarm connection and alarm input signals are correct.

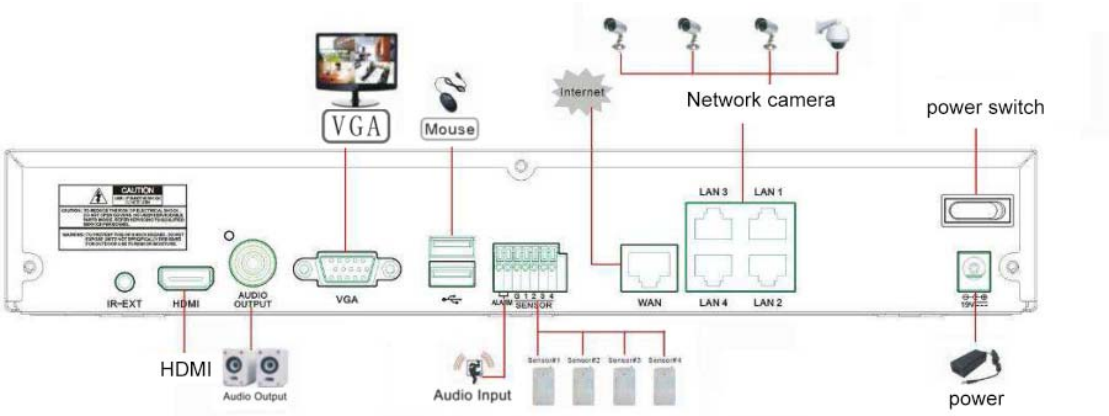
13. Q: Why does buzzer keep alarming?
    A: Please check the alarm setting, check if motion detection function is enabled and object motion is detected all the time and if I/O alarm is set as Always Off. Besides, refer to corresponding HDD alarm setting.
14. Q: Why can't I stop recording by pressing "STOP" button or click "Stop Recording" in context menu?
    A: Pressing Stop button can only stop manual record. If you want to stop Scheduled recording in certain time quantum, please change the setting to No Record. To stop Startup recording, please change record mode to scheduled recording or manual recording. Then you may stop recording by the prescribed methods. And another way of stopping recording is to set channel in record setting as Off.

6.2 Usage Maintenance

1. To shut down NVR, please firstly shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.
2. Please keep NVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure the good ventilation of NVR so as to ensure the good heat dissipation.
4. Please do not hot plugging cables at ports, or the ports may be damaged.
5. Please check the HDD cable and data cable regularly to see if they are ageing.
6. Please prevent the audio and video signals of NVR from being intervened by other electronic devices, and prevent the HDD from being damaged by static electricity and induced voltage.
7. If the network cable is frequently plugged, it is suggested to replace connecting line regularly, or the input signal may be unstable.

7.1 System Connection Diagram

NVR



7.2 Accessories

Remote Controller

Power Adapter

USB Mouse

CD