



Network Video Recorder **User manual**



Declaration:

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Product in kind prevail, final interpretations are owned by manufacturer.

Safety Precautions

Notice:

Please do not place and install equipment directly under the sunlight or near heating device.

Please do not install equipment at moist place or place with dust or soot.

Please keep equipment installed horizontally, or install equipment in a stable place, avoid the equipment falling down.

Please avoid liquid dropping on the equipment, make sure no objects filled with liquid on the equipment and prevent liquid from leaking.

Please install the device in a well ventilated place, do not block the vents of the equipment.

Please only use equipment within rated input/output.

Please do not disassembly at liberty.

Please transport, use and reserve the equipment within allowing humidity and temperature.

Warning:

Please do use the battery as requested, or it may lead to a battery fire, explosion or risk of burning!

Please use the same type of battery when changing it.

Please do use recommended cord sets(power cords), do use within the rated specifications.

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1 Outline and Feature

1.1 Outline

The item is a high-performance network DVR, characterizing local previewing, multi-picture division displaying & local real-time storage of recorded files. It supports shortcut operating of mouse and remote managing and controlling. It has two ways of storage--Front storage & client-side storage. Front-end monitoring points can be located anywhere on the network without geographical restrictions. Combined with other front-end equipment such as network cameras, network video server network, professional video surveillance system software to form a powerful safety monitoring network, in its network deployment system, focal point and monitoring points simply connect a network cable, no need to lay monitor video cable, audio cable etc from center to monitoring points, easy construction, low cabling costs and low maintenance costs.

1.2 Function Features

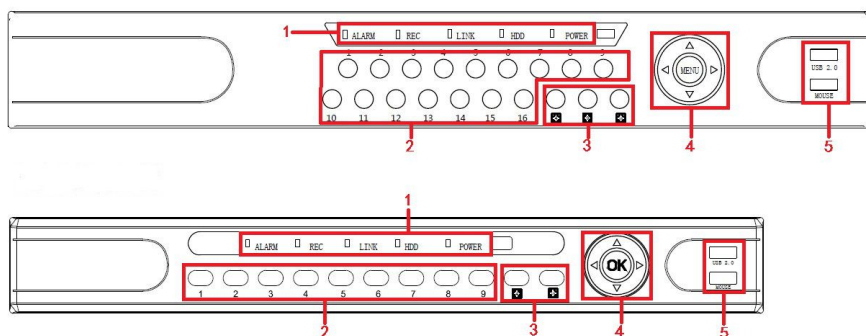
- H.264 video condense format, Support 1080P/720P/D1 resolution network camera input.
- G.711U audio condense format.
- Windows-style user interface, embedded real-time Linux3.0 operating system.
- Support preview, recording, play back, backup.
- Supports dual stream.
- USB2.0, support backup, software upgrading & mouse operating.
- Supports Chinese and English switch.

Function	Function Brief Introduction
Real-time	Two video output, VGA & 1080P output.
Record	H.264 standard compression, timing recording.
Storage	Support SATA Hard Disk interface, video hard drive storage .
Paly back	Support 1~4 channel playback and network mutil-channel play back.
Backup	Support NVR backup to USB memory sticks, portable hard drive or a network backup to hard drive.
Network Operating	Support for remote client access, improve system safety.
Mouse Operating	Support USB mouse operating, easily and quickly set system parameters.
Pan-tilt Control	Though Onvif protocol, fulfill control functions of network dome camera. PTZ preset point, automatic cruise.

2 NVR Appearance

2.1 The Front Panel

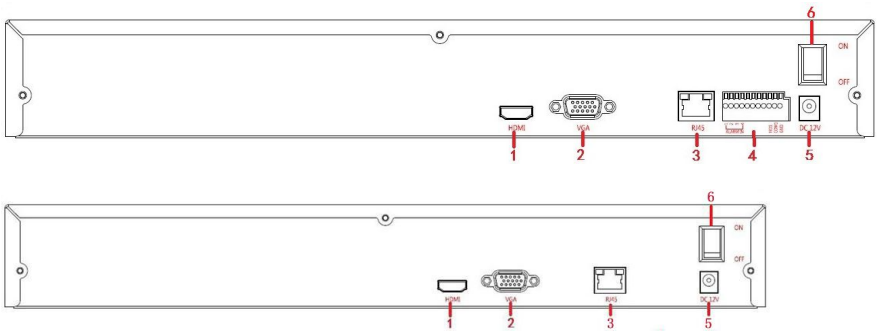
2.1.1 The Front Panel (For informational purposes only, subject to object)



No.	Button or indicator light	Function
1	Indicator light	Normal working hours, the corresponding indicator light turns
2	Channel button	Select single channel full screen display
3	Multi-channel preview	Switch and display 4,9,16 channel
4	Direction button	Move the button up or down, right or left to select menu
5	USB2.0	Connect mouse or USB memory stick backup

2.2 Rear Panel

2.2.1 Rear Panel (For informational purposes only, subject to object)



No.	Interface	Connection instruction
1	1080P	Connect 1080P display device
2	VGA	Connect VGA display device, like computer
3	RJ-45	Ethernet interface, connect network cable
4	Alarm terminals	Three sets of alarm input, a set of alarm output
5	Power supply interface	DC12V, NVR with power supply
6	Power switch	On/off power

2.3 Mouse Instructions

Mouse instruction

Operate NVR through mouse left button, right button & scroll wheel.

Mouse actions	Function
Click left mouse button	1. Select one of the options; 2. insertion cursor, enter or modify the value of a parameter.
Click right mouse button	1. When interface not locking , click right mouse button, system menu pops up; 2. When interface locking, click right button on real-time preview interface, login interface pop up ; 3. Entered to main menu, to a submenu of PTZ control, click right mouse button on the menu interface, return to previous menu (except video playback interface); 4.

	Entered to close system interface, click mouse right button on the interface, return to preview interface.
Double-click the mouse left button	1. When real-time preview multiple channels interface, double-click maximized channel display of one channel and return to the original state; 2. Double click the password input field on the login interface; 3. setting parameters (date, time, IP address, port number, bit stream value and user password) or user names
mouse movements	Select the menu or menu item.
Mouse drag	Drag progress bar to playback video.
Slide mouse scroll wheel	1.Time setting; 2.Select the drop-down menu values;

2.4 Input Method Introduction

Input method includes lowercase and uppercase English letters. Clicking the Shift button on the left can switch the input method and the symbol“←”represents deleting incorrect input.



Uppercase English input



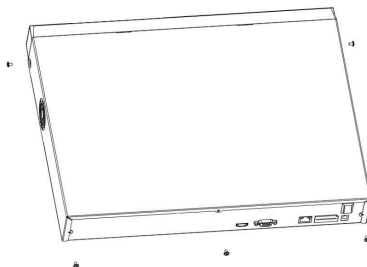
Lowercase English input

3 Connecting NVR

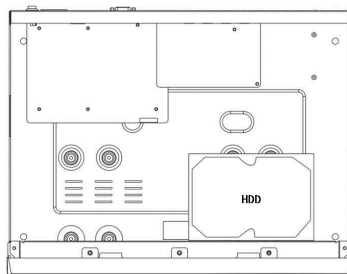
3.1 Hard Disk Installation

Hard Disk Installation:

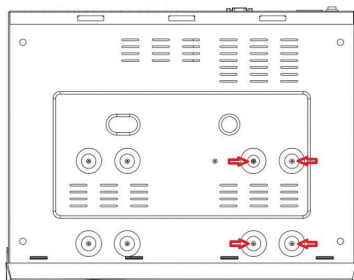
- (1) Loosen the fixing screw on the cover, open the cover.



- (2) Align the four holes of hard disk button with hard disk mounting hole at the button of chassis.

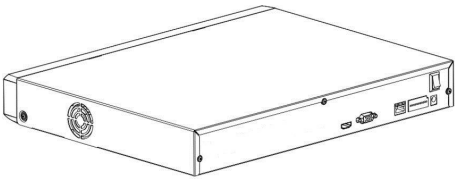


- (3) Hold the hard disk with hand, turn over the chassis, fix the hard disk with screw at the indicated position.



- (4) After hard disk installed, turn over the chassis, fix the cover with

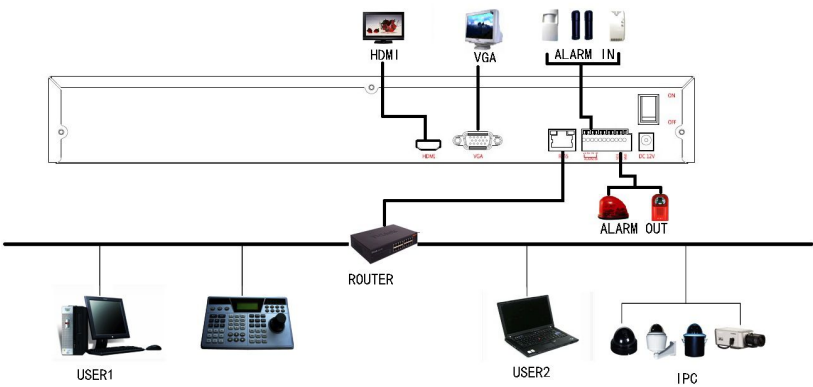
screw.



- Note:** 1. If user requires high performance of hard disk, we recommend the dedicated security hard disk.
2. Before replacing the hard disk, please shut off the power first and then open the case.

3.2 Device Connection

Use VGA cable or 1080P cable to transmit the NVR signal to the display. If it is a controllable PTZ, use wire to connect RS485 A cable and RS485 B cable to the corresponding RS485 interface on NVR.



4 NVR Startup

4.1 System Initialization

After connecting the device to the display, plug in the mouse, power cable and turn on the power switch on the rear panel, then start up the NVR. The system initialization interface is as shown in Figure 4-1.



Figure 4-1

Notes: The insert figures in this user manual may not be the same as what you see on display. All figures here are just for reference.

4.2 Boot wizard

After device successfully booted up, it goes to startup wizard, see Figure 4-2. Click Cancel/Next button, you can see system goes to login interface, see Figure 4-3.

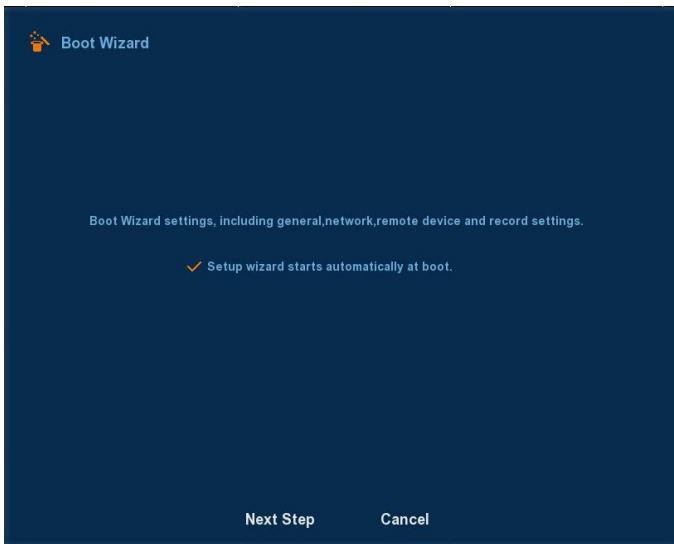


Figure 4-2

Click Next button, system goes to login interface. Then select a user name, enter the user password, select the system language and click on the login button to login the system (the default username is admin, password is 12345). See Figure 4-3.

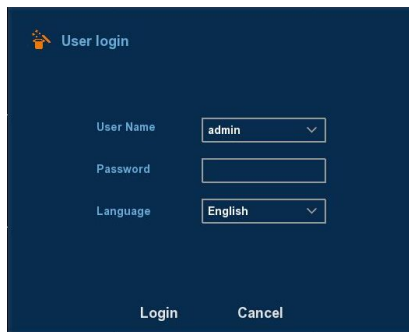


Figure 4-3

After logging in, you can go to Common interface, the basic configuration of the device can be set. See Figure 4-4. For detailed information, please refer to chapter 5.3.3.1.

General

Device setting **Date**

Language: English

Record mode: Overwrite

Device ID: No limit

Video standard: NTSC

Standby time(min): 30

Device name: NVR

Defaults Next step

Figure 4-4

Click Next button, you can go to Network interface, You can configure the network parameters of the device. See Figure 4-5. For detailed information, please refer to chapter 5.3.3.4.

General

Device setting **Date**

✓ Set date/time manually

Date/time: 2015 - 07 - 10 12 : 56 : 44

✓ Receive date/time from NTP

NTP Server: clock.via.net

Time Zone: GMT+00:00

NTP Port: 123

NTP Interval(Min): 60

Date Format: Year Month Day

Date Separator: .

Time Format: 24 hours

Next step Cancel

Figure 4-5

Click Next button, you can go to Mode Selection interface, and you

can choose Automatic network mode or Manual mode. See Figure 4-6.

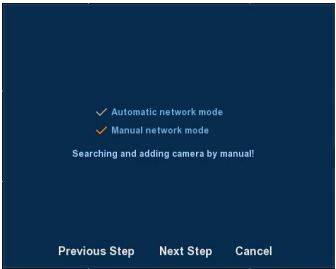


Figure 4-6

Click Next button, you can go to Remote Device interface, You can search for and add the IPC devices. See Figure 4-7. For detailed information, please refer to chapter 5.3.4.



Figure 4-7

Click Next button, you can go to Rec Setup interface, You can configure the record schedule. See Figure 4-8. For detailed information, please refer to chapter 5.3.3.3.

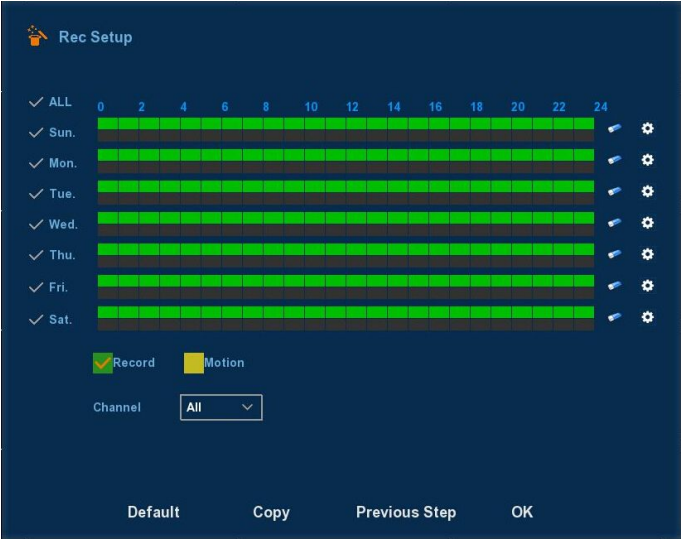


Figure 4-8

Click the OK button, the boot wizard is complete.

4.3 Preview Interface

After the system is fully booted, it will enter into the default preview interface, shown in Figure 4-9.

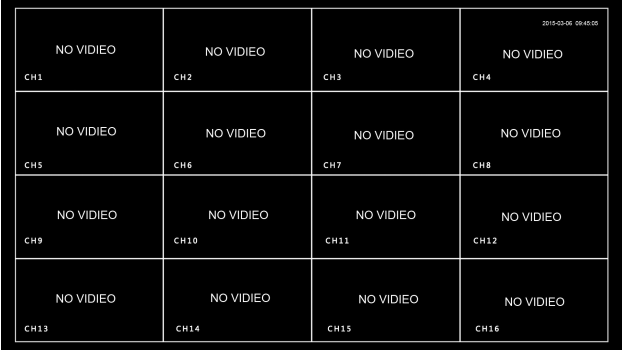




Figure 4-9

After the device normally starts up, the default setting is to preview in multi-screen display mode. Products with different channels has different amount of split screens to display. On the preview interface, you can set the appropriate date and time. On the bottom left of the screen, it shows the recording status of each video channel or alarm status icon.

- : this icon means monitoring channel is recording;
- : this icon means monitoring channel is in motion detection.

4.4 Quick adding function

At the preview menu, for the channel of unconnected IP Camera, you can quickly click the "+" icon to add the camera device when your mouse move to the middle of the channel menu. As shown in Figure 4-11 and 4-12.



Figure 4-10

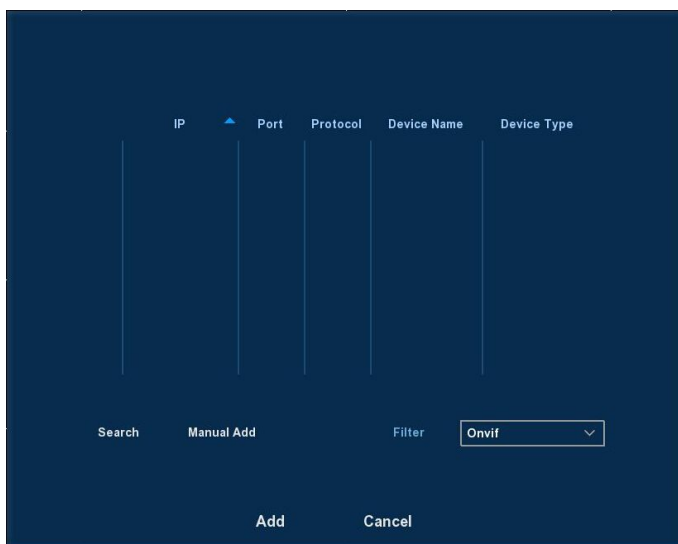


Figure 4-11

- **Device search:** Search the IP address of the IPC client device.
- **Manual Add:** please referring to Manual Add in section 5.3.4.1.
- **Filter:** Filter the display of the searched device list.
- **Add:** Click "search", the NVR can search the IPC device which support the onvif protocol in the same LAN(local area network), the searched IPC devices can be displayed at the list. And select any IPC device in the list, click "Add", the selected IPC information can be automated add to the particular channel, then click "Save" to complete.
- **Cancel:** Return to the previous menu.

5 NVR Menu

5.1 Right click mouse

After login the system and back on the preview interface, click the right mouse button and it will pop up the Menu Options, shown in Figure 5-1. Then you can select options of the Main Menu, the Main Screen Switching, Playback, PTZ Control and System Shutdown. In addition, you can set the channel display as follows: single-screen display, four-screen display, eight-screen display, night-screen display, sixteen-screen display. It needs to set a specific number of channels to achieve single-screen display, four-screen display, etc.. The corresponding operation of the Main Menu Options will be illustrated in details in later chapters.

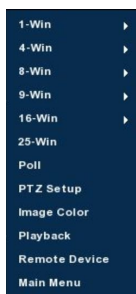


Figure 5-1

- **Single-screen Display:** Select one channel to display from CH1~CH16 .
- **Four-screen Display:** Divided into four groups to display (CH1~CH4、CH5~CH8、CH9 ~CH12、CH13~CH16).
- **Eight-screen Display:** Divided into two groups to display (CH1~CH8、CH9 ~CH16).
- **Night-screen Display:** Divided into two groups to display (CH1~CH9、CH10~CH16).
- **Sixteen-screen Display:** Display all channels CH1 ~CH16.
- **Twenty five-screen Display:** Display all channels CH1 ~CH25.
- **Poll:** NVR supports polling decoded output, in accordance with a preset time interval, the polling scheme for automatic switching display.
- **PTZ Setup:** NVR supports PTZ control, allowing users to remotely control the camera.(Detailed operation as 5.1.1)
- **Image Color:** Click into the image color configuration interface. (Detailed operation as 5.1.2)

- **Playback:** Click into the Playback interface.(Detailed operation as 5.3.1)
- **Remote Device:** Click and enter the remote device configuration menu.(Detailed operation as 5.5.1.1)
- **Main Menu:** Click and enter the main menu.

5.1.1 PTZ Setup

In the preview channel, right click mouse, select "PTZ", the preview will switch to the corresponding channel single-screen display, and the emergence of PTZ control interface, shown in Figure 5-2:

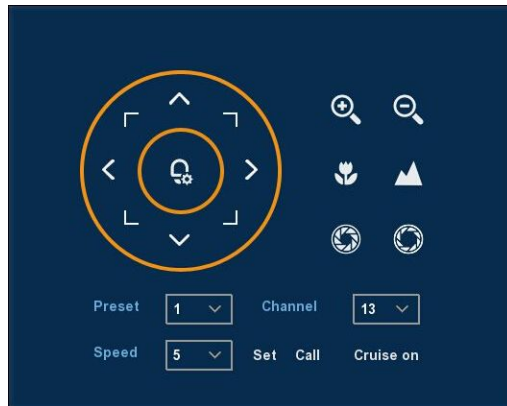


Figure 5-2

Adjusts the movement speed of the PTZ, Directional Buttons controls the movements and directions of the PTZ.

- **Zoom:** You can click / to adjust camera zoom in/out.
- **Focus:** You can click / to adjust camera focusing.
- **Iris:** You can click / to adjust camera brightness.
- **Presets point:** The presets box choose a certain preset point need go to, After click on the switch icon, PTZ will jump to that location.
- **Speed:** Speed is to control PTZ movement speed. The value ranges from 1 to 8.The speed 8 is faster than speed 1.
- **Patrol Setup:** Set the function of cruise, and related presets setting of cruise, including dwelling time and cruising speed. Shown in Figure 5-3 and Figure 5-4;

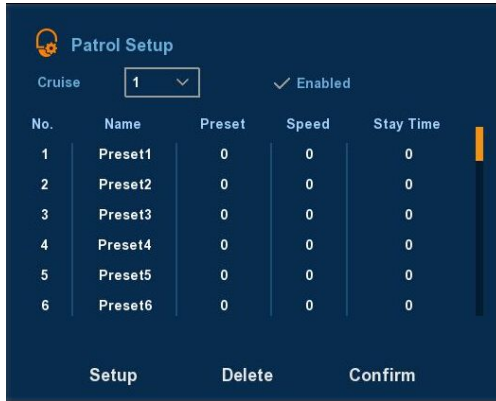


Figure 5-3

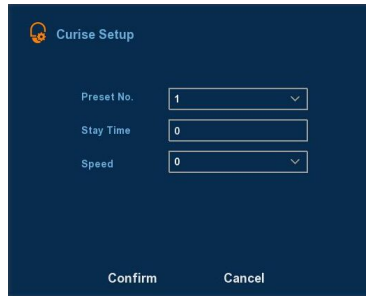



Figure 5-4

- **Set the preset position:** Turn the camera direction buttons to the desired location, and then click , select cruise group, double-click to set the preset in the pop-preset settings interface to select the preset number, Stay time (seconds) and cruising speed, return Patrol Setup interface and click "OK" again to save.
- **Enabled:** Start patrol, and patrol in fixed path.
- **Stay Time:** Stay time on the Preset.
- **Patrol speed:** Speed for Cruise.

Notice: the NVR supports maximum 128 preset point, however, it is also affected by the PTZ Camera itself, for different PTZ Camera, the number of preset point supported could vary a lot.

5.1.2 Image Color

On the preview interface, right click mouse, select the "Image Color", the SImage Color interface is displayed, then can configure the video properties of IPC. As shown in Figure 5-5.

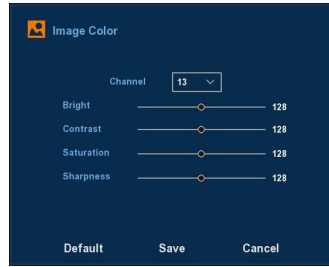


Figure 5-5

- **Channel:** Select the Channel number.
- **Bright:** It is to adjust monitor window bright.
- **Contrast:** It is to adjust monitor window contrast.
- **Saturation:** It is to adjust monitor window saturation.
- **Sharpness:** The value here is to adjust the edge of the video.
- **Default:** Recover all the Image Color parameters to default value.
- **Save:** Save configured parameters value on Image Color interface.
- **Cancel:** Return to last management menu.

5.2 Main Menu

Main Menu includes Record Playback, System Info, Camera, Network, Event, Storage, and System Setup, as shown in Figure 5-6. Select one and click the left mouse button to open the corresponding next menu options.



Figure 5-6

5.3 Operate

5.3.1 Playback

After entering the main menu, open the "Playback" menu or right-click to choose select "Playback" menu in the preview interface, switch to video playback interface, shown in Figure 5-7.

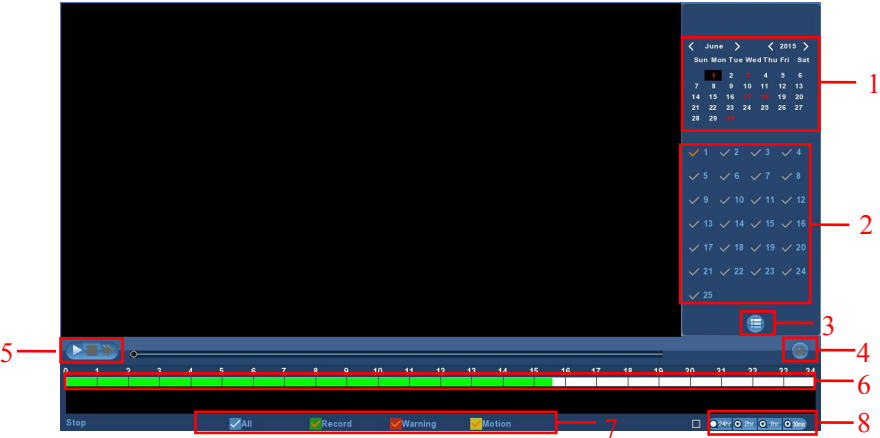


Figure 5-7

No.	Name	Function Specification
1	Calendar	<p>The red highlighted date means there is file. Otherwise, there is no file.</p> <p>In any play mode, click the date you want to see, you can see the corresponding record file trace in the time bar.</p>
2	Channel Selection Pane	<p>Select the channel number to query. (Up to four channels simultaneously selected)</p>
3	File List switch button	<p>Select the date, channel number and record type, click into the video file list. Select the desired video file, double-click the left mouse button to start playing the video file.</p>
4	Backup	<p>Select the file(s) you want to backup from the file list. Then click the backup button, now you can see the backup menu. Click the backup button to begin the backup operation. Check the file again you can cancel current selection.</p>
5	Playback Control Area	<p>On the playback control bar, you can normally play, pause, fast forward, fast forward playback mode, you can select 1×, 2×, 4×, 8×, 16×, 1× which is played at normal speed;</p>
6	Timeline	<p>Query to the video file, updated for the day that recording tracks on the timeline. Under the four-frame playback mode, display the selected four channels corresponding to four playback timeline, other playback mode displays only one playback timeline. Click on the green area to start from that point of time for playback.</p>
7	Select video type	<p>Select the type of video, you can choose the type for all types of video, timed recording, alarm recording and detection recording.</p>
8	Timeline unit selection	<p>Including 24h, 2h, 1h and 30min, the smaller units of time the greater the proportion of time zoom, you can adjust the exact point in time to play back video on the timeline.</p>

In the file list bar, you can see the start time of the video file, video type, select a video file, you can view the video of recording start time, end time and file size, as shown in Figure 5-8.

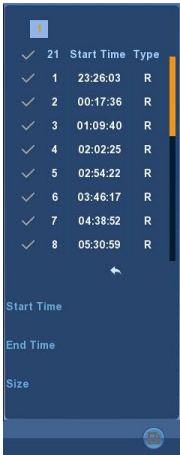



Figure 5-8

In the file list box, click to choose the video file showed icon “ ✓ ”, then click this icon  to backup the video files (external U disk), the files are “avi” format. You could also click to choose multiple video files selection box to backup those video files, users can also cancel this icon “ ✓ ” in the backup operation menu in the file list box, delete those video files that unwanted.

5.3.2 Shutdown

Click “Shutdown” icon in the main menu, switch to interface as . Therefore, the system can be logout, reboot, and shut down, as followed Figure 5-9 shows.

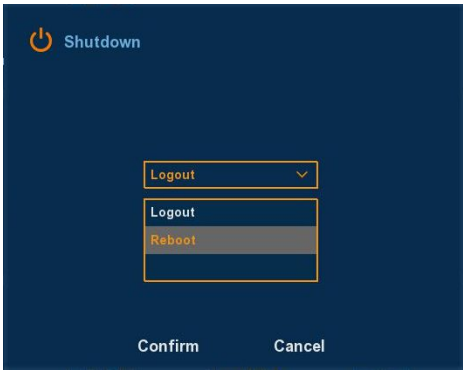


Figure 5-9

- **Logout:** Logout the current user, switch to user login interface.
- **Reboot:** Reboot the device.
- **Shut down:** Shut down the device, just like computer safe shutdown mode.

5.4 Information

5.4.1 Information

5.4.1.1 Stream Information

Choose "Menu → Info → System → Stream Information" in the Menu interface, the Stream Information interface is displayed, as Figure 5-10 shows.

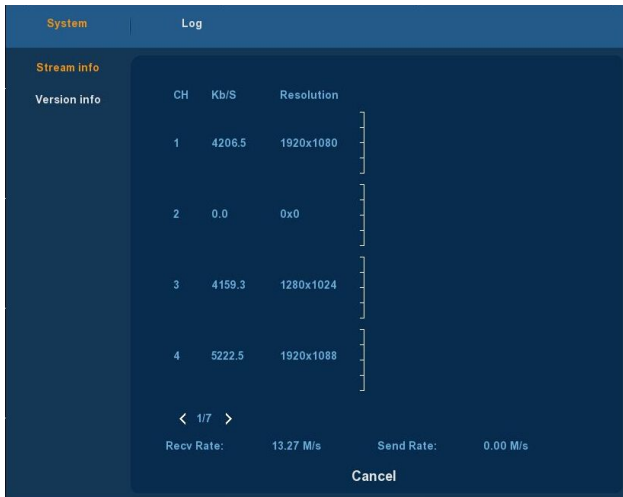


Figure 5-10

5.4.1.2 Version Information

Choose "Menu → Info → System → Version Information" in the Menu interface, the Version Information interface is displayed, as Figure 5-11 shows.

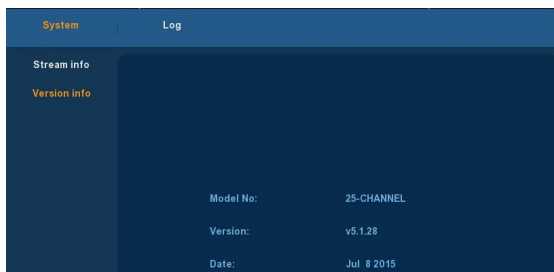


Figure 5-11

Users can find system version, including model number, system version, Version Date.

- **Model number:** Number of main board.
- **Version:** System version number.
- **Date:** Program created date.

5.4.2 Log

5.4.2.1 Log Information

Choose "Menu→Info→Log" in the Menu interface, the Channel Name interface is displayed. Here is for you to view system log file, as Figure 5-12 shows.

The screenshot shows the 'Log' interface of an NVR. At the top, there are two tabs: 'System' and 'Log'. Below the tabs, there are search filters: 'Type' (set to 'All logs'), 'Start Time' (2015 - 07 - 10 00 : 00 : 00), and 'End Time' (2015 - 07 - 10 23 : 59 : 59). To the right of the 'End Time' field is a 'Query' button. Below the filters is a table with four columns: 'No.', 'Time', 'Event', and 'User'. The table is currently empty. At the bottom of the interface, there are four buttons: 'PgUp', 'PgDn', 'Clear', and 'Cancel'.

Figure 5-12

Viewing System Logs to access the logs and search for these events on one day a certain period of time.

- **Type:** Select the type of information you request.
- **Start Time/End Time:** Enter the time to find the logs.
- **Search:** Search for logs according to criteria.
- **PgUp/PgDn:** You can view all logs through the PgUp/PgDn.
- **Clear:** Clear all information.
- **Cancel:** Return to the former menu.

Specific Steps: Enter the log search menu, set search parameters, click the Search button to begin search, If logs matching the search criteria are found, it will be displayed in a list, To view all logs through PgUp/PgDn button.

5.5 Setup

5.5.1 Camera

5.5.1.1 Camera Setup

Choose "Menu → Setup → Camera → Camera Setup" in the Menu interface, or right-click in live view mode and select Remote Device from the Shortcut Menu, the Camera Setup interface is displayed, as shown in Figure 5-13. Here you can add/delete remote device and view its corresponding information.

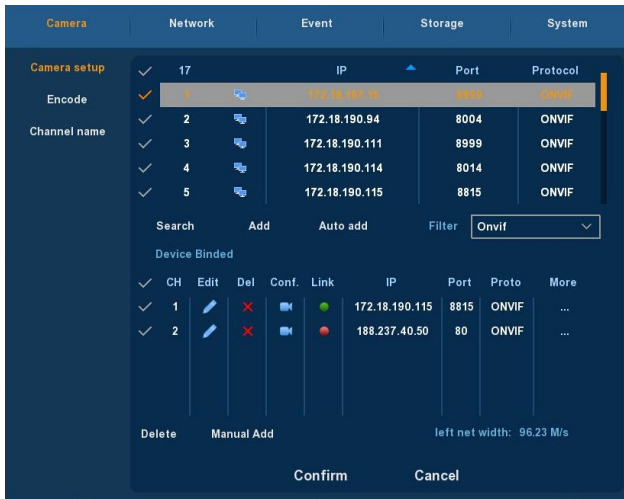


Figure 5-13

- **search:** Click it to search IP address. It includes device IP address, port, protocol. Use your mouse to click the item name, you can refresh display order. Click IP address, system displays IP address from small to large. Click IP address again, you can see icon, system displays IP address from large to small. You can click other items to view information conveniently.
- **Add:** Click it to connect to the selected device and add it to the Added device list. Support Batch add.
- **Filter:** You can use it to display the specified devices from the added device.
- **Delete:** Please select one device in the Added device list and then click "X" to remove.
- **Status:** means connection is ok and means connection failed.
- **Confirm:** Return to last menu.
- **Cancel:** Return to last menu.

Remark: Click on the title bar icon “√”, select all the available IPC device, click again to cancel all selected. Click the “×” icon can quickly delete the device at the “Device Added” list.

Click the “Manual Add” button to add the IPC manually, you can go to the following interface. See Figure 5-14.

Figure 5-14

- **Channel:** Users can type in the channel number that needs to be connected to the remote device according to their needs.
- **Enable:** The channel enable on/off, defaulting to be off. Tick “Enable” then the related channels can be previewed and recorded normally.
- **Protocol:** Onvif agreement.
- **Preview:** Sub-stream preview is defaulted and IPC port should be dual-stream. Both should be in the format of H264 code to be previewed normally and the resolution of the sub-stream can be D1 or CIF format.
- **User name:** The login user name of IPC (if the defaulted user name is not admin, please change it to be valid user name).
- **Password:** Login password of IPC (if the defaulted login password is not admin, please change it to be valid password).
- **IP:** IP address of IPC added to NVR.
- **Port:** Defaulting the IPC port to be 8999.
- **Save:** Saving the setup parameters of current channels
- **Cancel:** Going back to the former management interface.

5.5.1.2 Encoding

Choose "Menu→Setup→Camera→Encode" in the Menu interface, the Encoding Parameters interface is displayed, as Figure 5-15 shows. Resolution, Frame Rate, Stream Type, Bit Rate, Sub-stream can be set under "Param" Interface.

Figure 5-15

- **Channel:** Select the channel you want.
- **Codec:** System supports H.264.
- **Resolution:** System supports various resolutions , you can select from the dropdown list. Please note the option may vary due to different series.
- **Stream type:** Select video stream or audio stream..
- **Bit Rate:** Setting bit rate can change the picture quality, the larger the bit rate and the better the picture quality.
- **Frame Rate:** PAL type: 1 frames / sec-25 frames / sec; NTSC type: 1frames / sec-30frames / sec.
- **Save:** Save the parameters on Encode configuration menu.
- **Cancel:** Return to the former interface.

5.5.1.3 Channel Name

Choose "Menu → Setup → Camera → Channel Name" in the Menu interface, the Channel Name interface is displayed, it is to modify channels name, as shown in Figure 5-16.

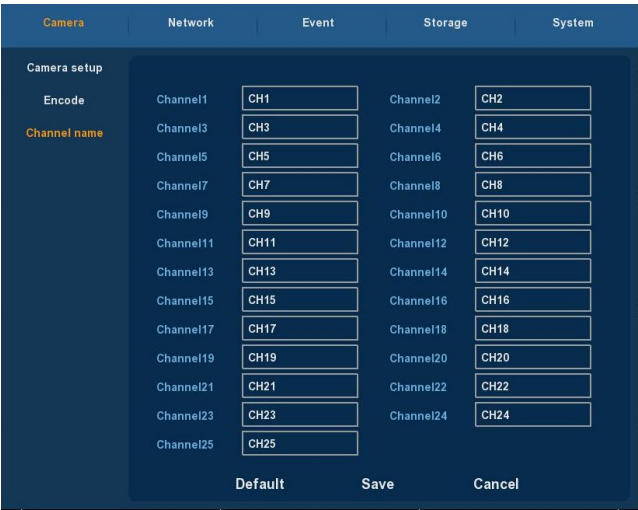


Figure 5-16

5.5.2 Network

5.5.2.1 Network

Choose "Menu→Setup→Network→IP/Port" in the Menu interface, the Channel Name interface is displayed, as Figure 5-17 shows.

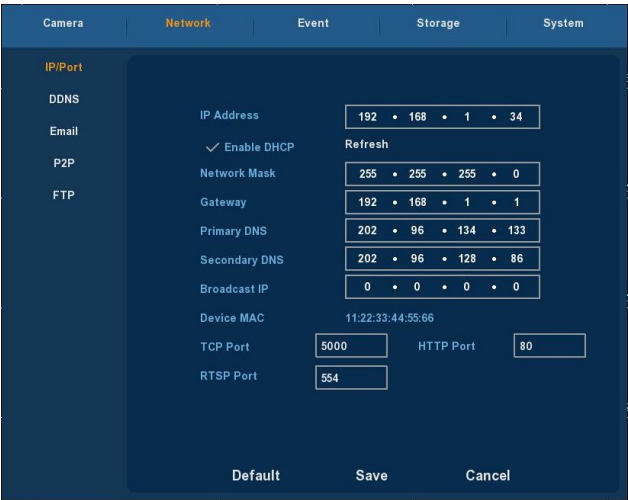


Figure 5-17

➤ **IP Address:** Here you can input IP address of NVR.

- **DHCP:** If the router allows DHCP functionality, select DHCP. The IP Camera will obtain IP address automatically from the router. If the router does not allow for DHCP functionality, then the IP address must be obtained manually.
- **Subnet Mask:** Subnet mask of NVR.
- **Default Gateway:** Default gateway of NVR.
- **Primary DNS:** It is usually offered by local ISP. Your IP address of domain name server is entered here.
- **Secondary DNS:** Start secondary DNS when the primary one does not work.
- **Broadcast:** Reserved.
- **MAC:** The host in the LAN can get a unique MAC address. It is for you to access in the LAN.
- **TCP Port:** Default value is 5000.
- **HTTP Port:** Default value is 80.
- **RTSP Port:** Default value is 554.
- **Default:** Restore all parameters of network setup to be defaulted ones.
- **Save:** Save parameters of network setup interface.
- **Cancel:** Cancel the set Network of current interface.

5.5.2.2 DDNS

Choose "Menu→Setup→Network→DDNS" in the Menu interface, the DDNS interface is displayed, as Figure 5-18 shows. You need a PC of fixed IP in the internet and there is the DDNS software running in this PC. In other words, this PC is a DNS (domain name server).

Camera	Network	Event	Storage	System
IP/Port				
DDNS				
Email				
P2P				
FTP				

☒ Enable DDNS

DDNS Type:

Refresh Time(sec):

UserName:

Password:

Domain:

Figure 5-18

- **DDNS Type:** DDNS Types can be chosen via DDNS. (currently the list supports various DDNS, including ORAY DDNS, 3322 DDNS, TZO DDNS and DYNDNS DDNS. These DDNS can be multiple operated according to users need and setup.)
- **Enable:** Enabling DDNS domain resolving function.
- **Refresh Time:** Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack.
- **User name:** The account registered in the DNS service provider.
- **Password:** The password to the account registered in the DNS service provider.
- **Domain:** The domain name registered in the DNS service provider.
- **Default:** Restore all parameters of DDNS setup to be defaulted ones.
- **Save:** Saving the parameters in the DDNS setup interface.
- **Cancel:** Going back to the former management interface.

When DDNS is successfully configured and enabled, you can type in the registered domain name in the IE address bar directly to link the Web page of the device.

5.5.2.3 Email

Choose "Menu → Setup → Network → Email" in the Menu interface, the Email interface is displayed, as Figure 5-19 shows. When warning information appears in the interface, one can send mails to the designated mail address.

Figure 5-19

- **Enable e-mail alarm notifications:** Enabling the mail sending function.

- **SMTP server:** the address of the mail server, which can be an IP address and a domain name (domain name needs the confirmation of the correct DNS setup to be resolved correctly).
- **SMTP Port:** Port number of the mail server.
- **Anonymify Logion:** Port number of the mail server..
- **Username:** User name of the sender's mail.
- **Password:** Password of the corresponding user name.
- **Sender:** Setting the EMAIL address of the mail sender.
- **Recipient:** The warning information can be sent to the designated receiver via mail.
- **Theme:** The theme of the mail can be set by yourself.
- **Message Interval:** Interval for sending the alarm mail.
- **Encryption:** Enabling SecureSocketLayer port when logging in the mail server.
- **Attach File:** When motion detection cooperation is enabled, picture file would be uploaded at the same time if warning information appears.
- **Default:** Setting all the parameters in the Email Setup interface to be default.
- **Apply:** Saving the parameters in the Email Setup interface.

5.5.2.4 P2P Config

Choose "Menu→Setup→Network→P2P" in the Menu interface, the P2P interface is displayed, as Figure 5-20 shows. P2P is used for remote monitoring of the mobile phone client, by scanning the two-dimensional code can add NVR to the mobile phone client, convenient monitoring.

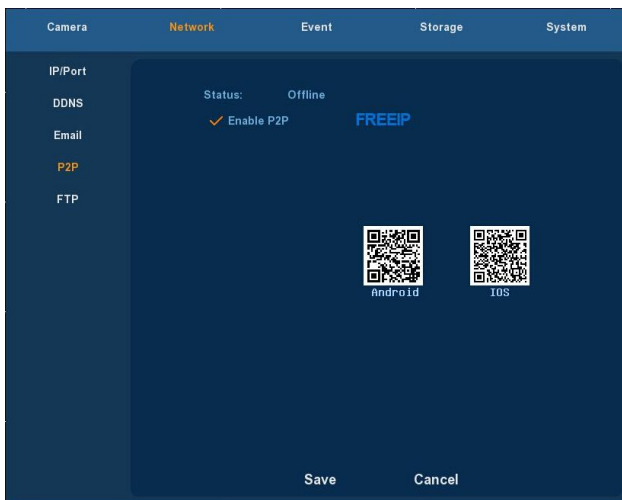


Figure 5-20

- **Android:** Download Link of P2P client for Android system.
 - **ISO:** Download Link of P2P client for Iso system.
 - **Save:** Save configured parameters value on video configuration menu.
 - **Cancel:** Return to last management menu.
- NVR devices support FREEIP client, check " ✓ " of Enable P2P to open the platform P2P functionality.

5.5.2.5 FTP

Choose "Menu→Setup→Network→FTP" in the Menu interface, the FTP interface is displayed, as Figure 5-21 shows. You need to download or buy FTP service tool (such as Ser-U FTP SERVER) to establish FTP service.

Figure 5-21

- **Enable FTP:** Enable to activate FTP function.
- **FTP Server:** IP address or HTTP network address of FTP server.
- **FTP Port:** : The default FTP port is 21, if your FTP server is different, you need to use the same port name with your FTP server.
- **User Name:** Your FTP account user name.
- **Password:** Your FTP account password.
- **File Upload:** You can use NVR FTP upload video file to FTP server.
- **Default:** setting all the parameters in the FTP Setup interface to be default.
- **Save:** Save configured parameters value on FTP configuration menu.
- **Cancel:** Return to last management menu.

5.5.3 Event

5.5.3.1 Motion Detection

Choose "Menu → Setup → Event" in the Menu interface, the Motion Detection interface is displayed, as Figure 5-22 shows. When the system detects a mobile signal reaches a preset sensitivity occurs, motion detection alarm and the linkage function will be initiated by analyzing the video image.

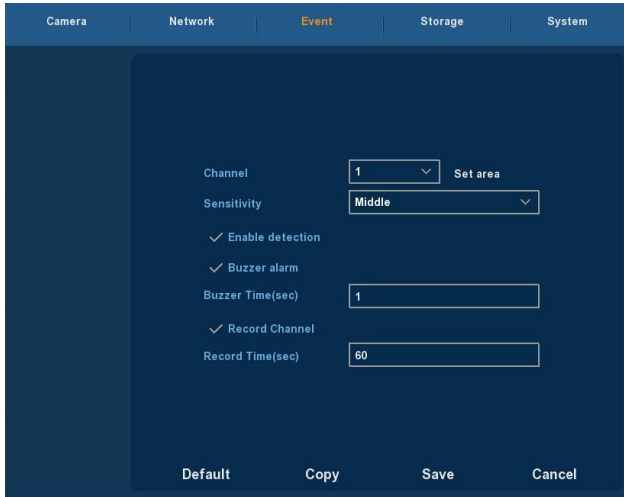


Figure 5-22

- **Channel:** Select the motion detection channel. 2 option: Single and All), for the Single channel, you need to choose the particular channel.
- **Set Area:** The video is blocked by the detection area, and an alarm according to the configuration
- **Sensitivity:** Six values can be set for the sensitivity.
- **Enable detection:** Click "√", turn on the motion detection function.
- **Buzzer alarm:** Select the check box, The system will trigger the buzzer alarm when motion detect.
- **Buzzer Time:** Set the buzzer alarm duration.
- **Record Channel:** Click "√", Select the wanted video channel, and the system will trigger the video signal of the selected channel.
- **Record Time:** Set the trigger recording duration.
- **Default:** Recover all the detect setting parameters to the default values.
- **Copy:** After you complete the setup, you can click Copy button to copy current setup to other channel(s).
- **Save:** Save the set parameters of current menu.
- **Cancel:** Don't save the set parameters of current menu.

5.5.4 Storage

5.5.4.1 Record

Choose "Menu→Setup→Storage→Recode" in the Menu interface, the Recode interface is displayed, as Figure 5-23 shows.

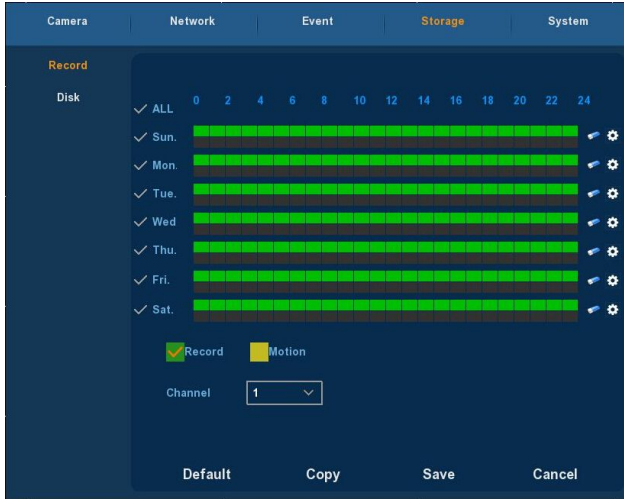



Figure 5-23

- **Channel:** Please select the channel number first. You can select "all" if you want to set for the whole channels.
- **Record Type:** Select check the box to select corresponding record type. There are normal Recording and Motion Detection Recording.
- **Week day:** Set the record schedule, and then the camera automatically starts/stops recording according to the configured Schedule. In the message box, you can choose the day to which you want to set schedule. If you need set schedule every day, choose "all". For the description of the color icon, Green icon stands for normal recording, yellow icon stands for recording triggered by motion.
- : Click it to delete a record type from one period.
- **Default:** Restore parameters of record setup to be default ones.
- **Copy:** After you complete the setup, you can click Copy button to copy current setup to other channel(s).
- **Save:** Save parameters of current interface.
- **Cancel:** Return to the former interface.

Drawing schedule record

Choose the channel and the record type "record" or "motion". Draw the schedule line on the panel of the day you choose. Up to 6 periods can

be configured for each day. And the time periods can't be overlapped each other. See Figure 5-24.

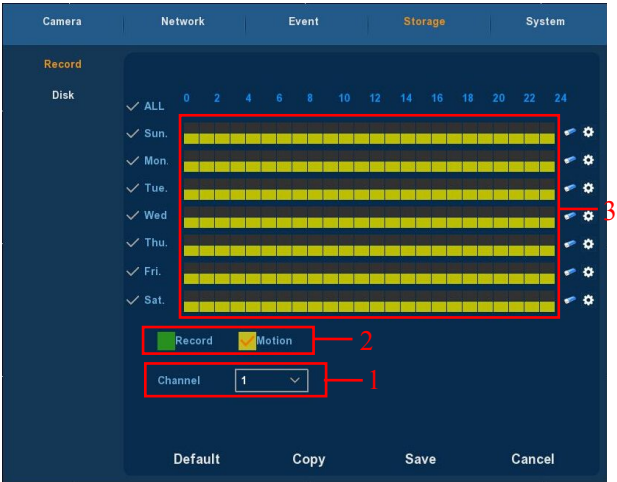



Figure 5-24

Input data to set the schedule record

You can click  button to set the accurate time of the schedule. Choose the record type you wanted and the start time and the end time, Up to 6 periods can be configured for each day. And the time periods can't be overlapped each other. Then can used to which day you wanted to use. See Figure 5-25.

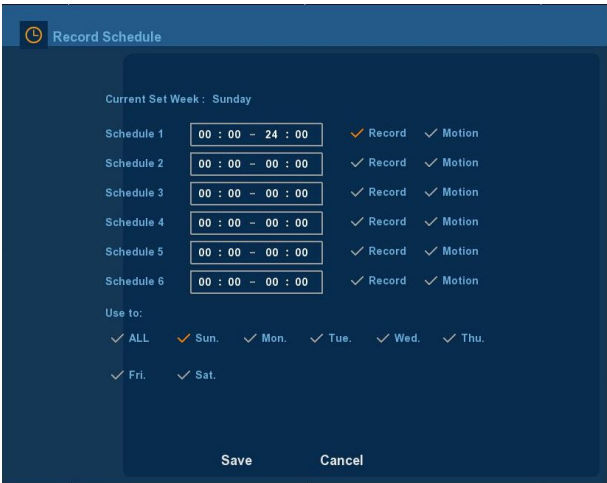


Figure 5-25

5.5.4.2 Disk

Choose "Menu→Setup→Storage→Disk" in the Menu interface, the Disk interface is displayed, as Figure 5-26 shows.

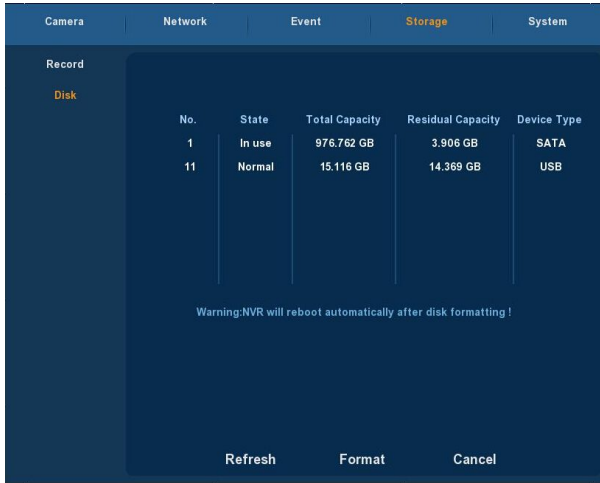


Figure 5-26

If the devices have connected the HDD successfully, the HDD manage list will show the information of HDD. You have to format the HDD if the HDD is the first time to connect; If the system detects that do not need to format the hard disk, the HDD status will displays "normal"; If do not connect successfully or could not detect hard disk, will displays the warning "Not connected the HDD".

- **HDD No.:** The number of HDD that connect the system.
- **State:** Detect the current working status of HDD, you could use only that displays "normal"; After formatting is completed, you need to restart NVR, the status displays "in use".
- **Total Capacity:** The total available HDD capacity, the single HDD capacity can not exceed the maximum capacity: 4TB.
- **Residual Capacity:** Display the residual capacity of the current HDD;
- **Device Type:** SATA.
- **Refresh:** Refresh HDD information in the list;
- **Format:** Formatting the HDD, select the HDD that needs to be formatted firstly, and then click the "Format" button, pop-up warning dialog "formatting will result in the selected HDD recording data loss, confirm that you want to continue?", If confirm to format then click on the "OK" button, otherwise click "Cancel".
- **Cancel:** Return to the former management interface.

Note: After formatting the HDD, you need to restart the device.

5.5.5 System

5.5.5.1 General

5.5.5.1.1 Device setting

Choose "Menu→Setup→System→General" in the Menu interface, the Device setting interface is displayed, as Figure 5-27 shows.

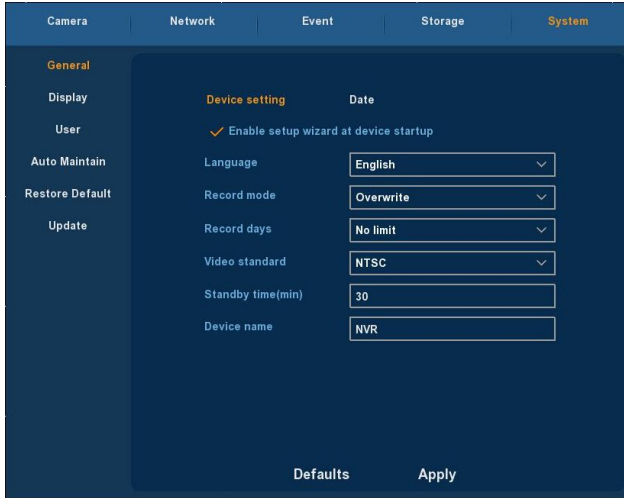


Figure 5-27

- **Enable setup Wizard at device startup:** Click the "✓", open boot wizards function .
- **Language :** the default language of the system boot, which is English, but, at present, also supports Chinese, Polish, Czech, Russian, Thai language, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Dutch and Korean.
- **Record Mode :** Overwrite automatically, ie., NVR will automatically cover the previous record if hard disk is full.
- **Record days:** Reserved.
- **Video Standard :** PAL or NTSC.
- **Standby Time:** It means standby time of system without operation for NVR. If time exceeds the standby time, then you should re-login in system so as to operate NVR. Default standby time is 30 minutes. And standby time range is: 1 to 120 minutes.
- **Device name:** Please input a corresponding device name here.
- **Default :** Restore all specifications or parameters of General setup to be factory default specifications.
- **Apply:** To save specifications or parameters of common setup.

5.5.5.1.2 Date

Choose "Menu → Setup → System → General → Date" in the Menu interface, the Date setting interface is displayed, as Figure 5-28 shows.

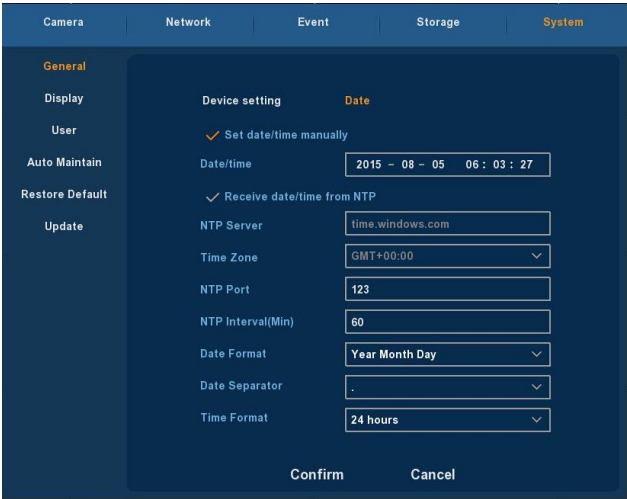


Figure 5-28

- **Set date/time manually:** When checked, manually set the machine time.
- **Receive date/time from NTP :** When checked, open the update time when NTP function of the school.
- **NTP Server:** IP address of NTP server.
- **Time Zone:** Select the Time Zone of your location from the drop-down menu.
- **NTP Port:** Port of NTP server.
- **NTP Interval:** The time interval between the two synchronizing actions with NTP server.
- **Date Format:** There are three types: YYYY-MM-DD: MM-DD-YYYY or D-MM-YYYY.
- **Date Separator:** There are three denotations to separate date: dot, beeline and solidus.
- **Time Format:** 24-hour and 12-hour clock.
- **Confirm:** Save parameters of current interface.
- **Cancel:** Return to the former interface.

5.5.5.2 Display

Choose "Menu → Setup → System → Display" in the Menu interface, the Display Setup interface is displayed, could modify the display resolution and channel names, as Figure 5-29 shows.

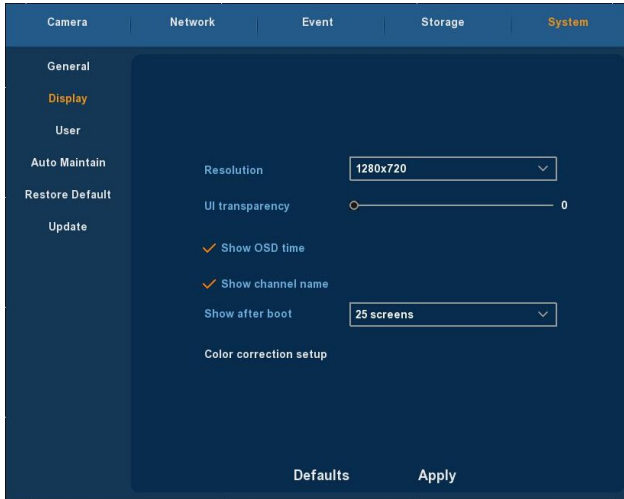


Figure 5-29

- **Resolution:** It means the resolution of video output of NVR. Optional resolution: 1024×768 、 1280×720 、 1280×1024 、 1920×1080. Default resolution is 1280×720. It will be valid only after NVR is re-started with all specifications saved.
- **UI Transparency:** The higher the percentage, the more transparent device local menu. The value ranges from 0 to 255.
- **Show OSD Tim:** select the "√" to display time or not when system is playback.
- **Show channel name:** select the "√" to display channel name or not when system is playback.
- **Show after boot:** Set the number of screens displayed after entering the system.
- **Color correction setup:** Set brightness and contrast and other attributes of the NVR.
- **Default :** Restore all specifications or parameters of Display setup to be factory default specifications.
- **Apply:** To save specifications or parameters of common setup.

5.5.5.3 User

Choose "Menu→Setup→System→User" in the Menu interface, the User Setup interface is displayed, as Figure 5-30 shows.

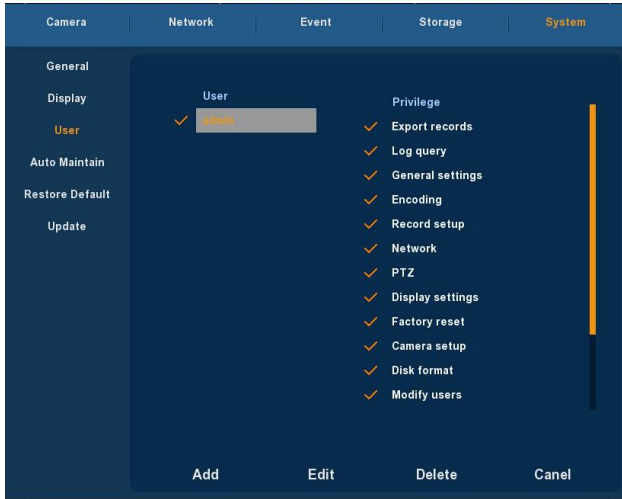


Figure 5-30

- **User:** List added users. "admin" is super user/administrator, and we cannot change its privilege, but only its password. Other general users have no privilege of adding, modifying or deleting.
- **Privilege:** Privilege list of users. It includes PTZ control, playback, parameter setup, query log, advanced configuration, channel management, query parameter, backup /shut down/ logout.
- **Add:** To add a new user, which can be only done by super administrator--admin. Click "Add", then enter user name and password, select privilege and save the parameters.
- **Edit:** To change information of users, which can be only done by super administrator--admin. First, choose a user, click "modify", then enter old password and new password, modify privilege, and finally save the parameters.
- **Delete:** To delete user, which can be only done by super administrator--admin.
- **Cancel:** Return to former interface.

5.5.5.4 Auto Maintain

Choose "Menu → Setup → System → Auto Maintain" in the Menu interface, the Auto Maintain interface is displayed, as Figure 5-31 shows.

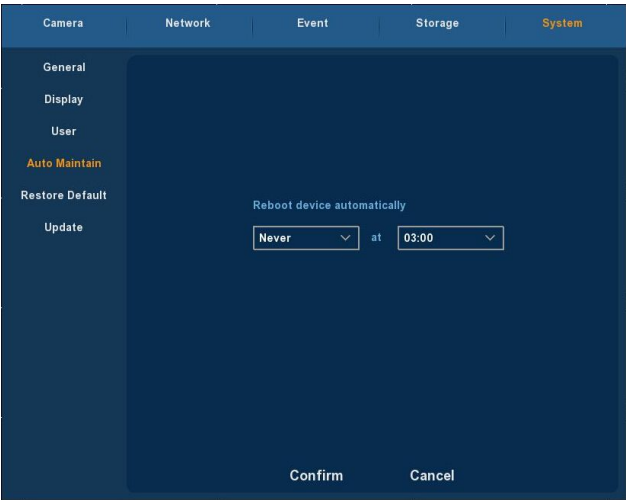


Figure 5-31

User can themselves set the system to be automatically rebooted. Automatically rebooting system can be set in a fixed time periodically. Click OK to save after finishing the setup or click Cancel otherwise.

5.5.5.5 Restore Default

Choose "Menu→Setup→System→Default" in the Menu interface, the Default Setup interface is displayed, as Figure 5-32 shows.

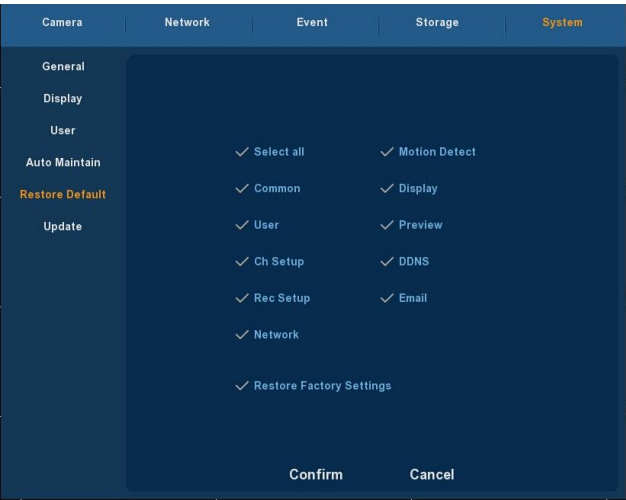


Figure 5-32

According to user selection, you can set the parameters of restore

default for “General Settings”, “User manage”, “Channel configuration”, “Record Setup” and “NetWork” and other parameters.

5.5.5.6 Upgrade

Choose “Menu→Setup→System→Upgrade” in the Menu interface, the Upgrade Setup interface is displayed, as Figure 5-33 shows.

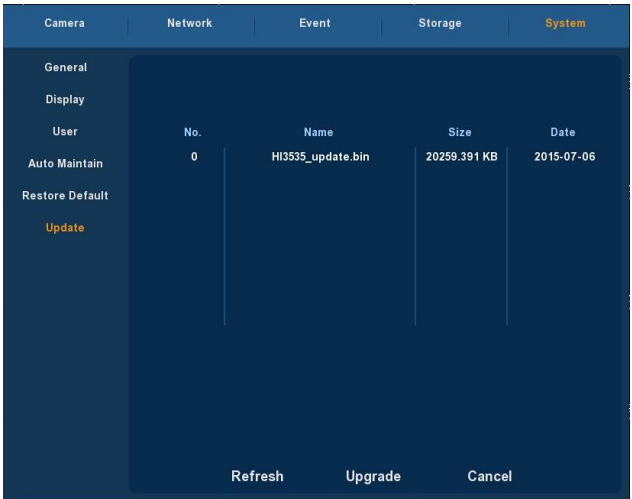


Figure 5-33

If the device have detected upgrade files in the U disk, the related information of upgrade package (number, name, size, date) will be displayed.

U disk Upgrade steps: Copy the upgrade file (named should be the format update_nvr.tgz) to the root directory of U disk, connect this U disk to the device's USB port, if did not display the upgrade file in the list ,please refresh the interface (If the upgrade package still cannot be searched out , please check whether the USB port connect well with the U disk , and also check whether the upgrade file name is correct). After the upgrade file appears, select the upgrade file, click the "upgrading" and begin to upgrade; If you don't want to upgrade, click cancel to return.

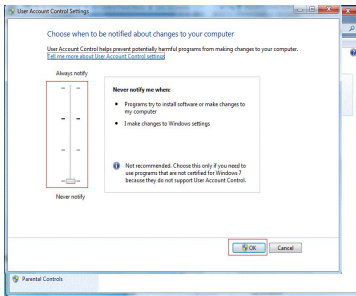
Note: During the upgrading process, please do not cut off the power or take off your U disk. After the upgrading, your system will restart automatically. (This process will takes about 3 to 5 minutes.) Here, we advice you to restore factory Settings after the upgrading.

6 WEB Operation

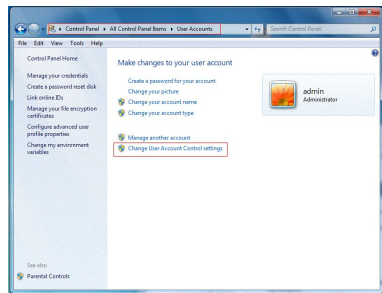
6.1 Active X install

To make sure NVR connects to Internet successfully, open IE Browser, input required IP address, the default setting is 192.168.1.168, and then the Active X will be downloaded and installed automatically

Notice: 1.For WIN 7, could have problems for backup and recording, if so, please check the Admin setting, procedure as follows:



WIN7-1



WIN7-2

2.The Active X can't be loaded? Please adjust the security level and firewall setting to the lowest, and make some adjustment to IE as well: Tool-Internet Option- Custom level-ActiveX- enable all the options below ActiveX and click OK! Finally, the Active X will be downloaded and installed automatically, please refer to the Figure 6-1.



Figure 6-1

6.2 IE Login

After the plug-in is installed, login interface as below Figure 6-2, entering the user name and password. The default user name is admin, and the password is 12345, click the login then can remote login.



Figure 6-2

6.3 IE Login Interface

After logging the client successfully, entering live preview interface and video connection automatically. The interface as below Figure 6-3:

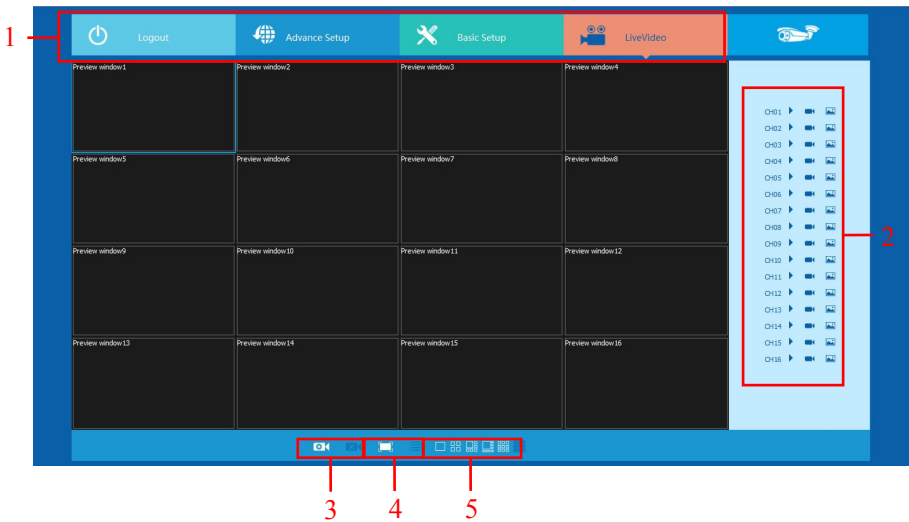







Figure 6-3

1.System Menu. Including Live Video Record Setting, Local Setting and Logout.

2.Real-time Monitoring Channel. Open/Close Preview, Local Video and Photograph.

Mark	Specification
CH1-CH16	Preview Channel.
	Open or close corresponding preview channel.
	Click the button, begin recording, the video saves in computer hard disk.
	Click the button, capture images, the picture saves in computer hard disk.

3.Open/Close All Channeles Preview Image

Mark	Specification
	Open all preview channeles.
	Close all preview channeles.

4.display modes to choose. The left is the preview window in full screen,in this display mode,right-click and select "retreat".

5.Preview Window Switch. from left to right are: Single Channel, Four Channel, Six Channel, Eight Channel, Nine Channel, Sixteen Channel.

6.4 Basic Setup

6.4.1 System

6.4.1.1 Common

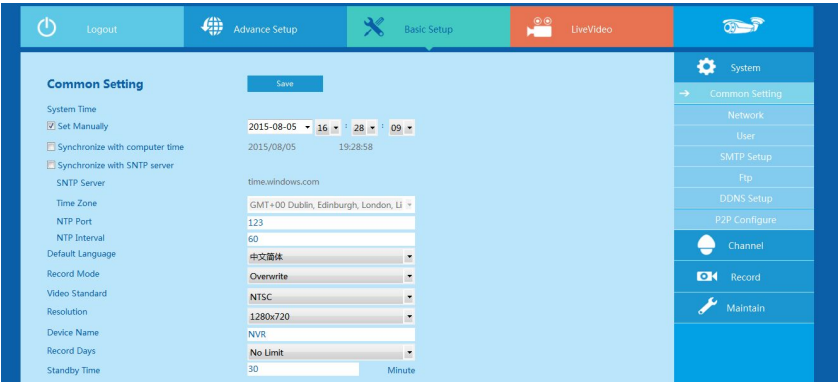


Figure 6-4

Figure 6-4, setting up the current system time of device, date, system language, display resolution and other information.

Parameter	Specification
System Time	Set up the system time of device than saving.
Default language	Set up the device language, you can change the language as you need.
Record Model	Can be set to automatically overwrite when the hard disk is full.
Device ID	Reserved.
Video Standard	The video standard of device must be same with the IPC.
Resolution	1080P and VGA output resolution of device can be set.
Standby time	Lock time of local time can be set, the time is 1-120 minutes.

6.4.1.2 Network

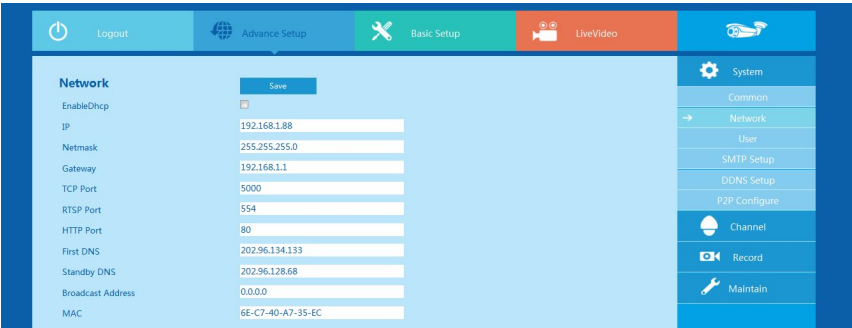


Figure 6-5

Figure 6-5, the IP address, Subnet Mask, Gateway, DNS, TCP port, Data port, HTTP port and related parameters of the device can be set by the interface.

Related parameters setting consistent with NVR client; The IP address effects at once after you modify, don't need restart NVR device.

6.4.1.3 User

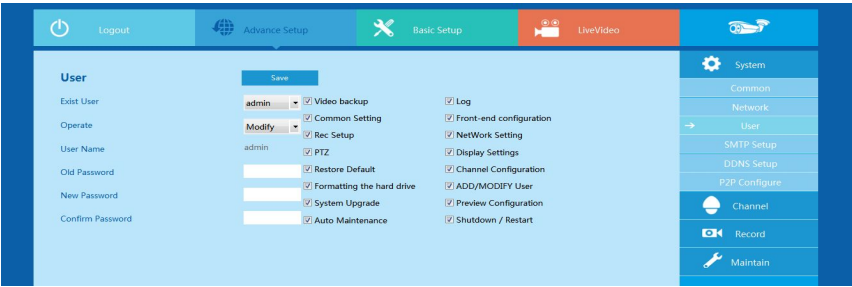


Figure 6-6

Figure 6-6, you can add or delete user, modify the information and rights of user by the interface; Related parameters setting consistent with NVR client.

6.4.1.4 SMTP Setup

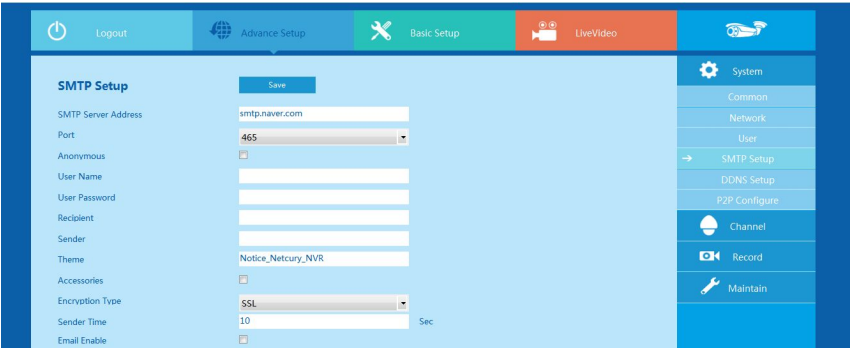


Figure 6-7

Figure 6-7, when alarm message appears, mails can be sent to designated mail address through the setup of this page. The relevant parameters should be set up the same with the NVR port.

6.4.1.5 DDNS Setup

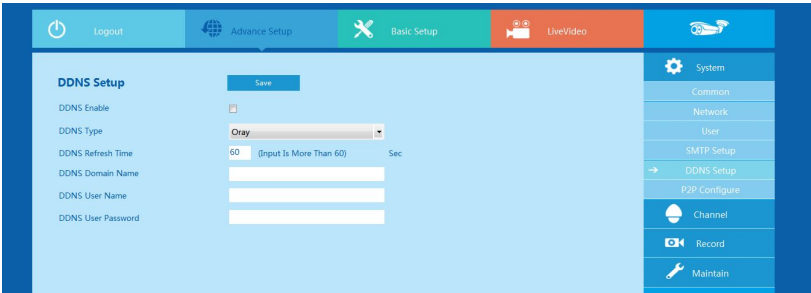


Figure 6-8

Figure 6-8, the NVR can be set up remotely via domain name through this interface and the relevant parameters setup should be the same with the NVR port.

After determining the date in this interface, videos of associated channels can be checked according to the video types. Relevant parameters should be the same with the NVR port.

6.4.1.6 P2P Configure

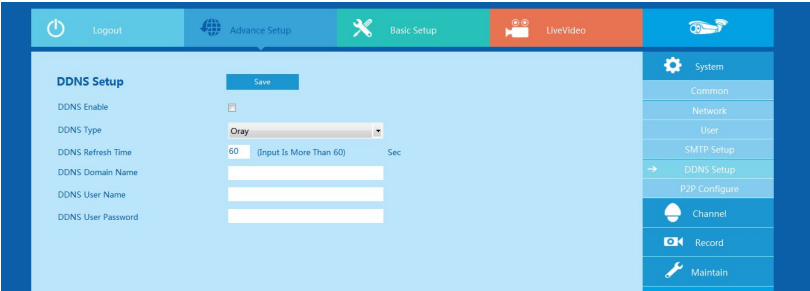


Figure 6-9

Figure 6-9, the P2P function of NVR can be enable in this page, the relevant parameters setup should be the same with the NVR.

6.4.2 Channel

6.4.2.1 Channel Setup

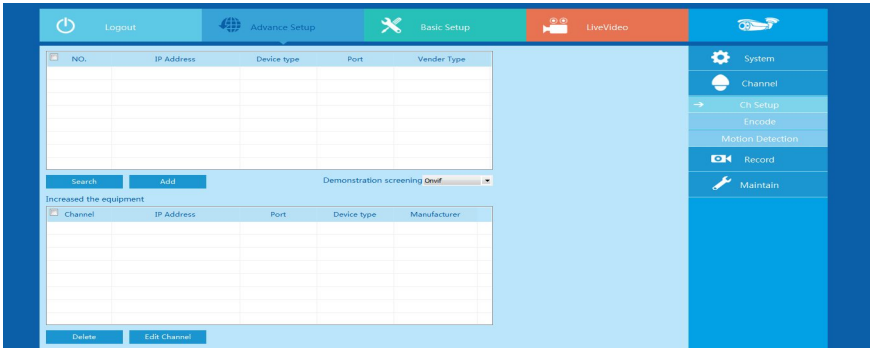


Figure 6-10

Figure 6-10, you can add or modify channel parameters by channel configuration interface; Click "search", you can search IPC device with Onvif protocol with the same network segment with NVR; Selecting the channel number on configuration interface, click the IPC information you search, the channel parameters of the interface will change accordingly, the setting channel parameter settings will become effective after you click the "save".

6.4.2.2 Encode

The interface of encoding parameters as below Figure 6-11, relevant parameters are same with NVR setting.

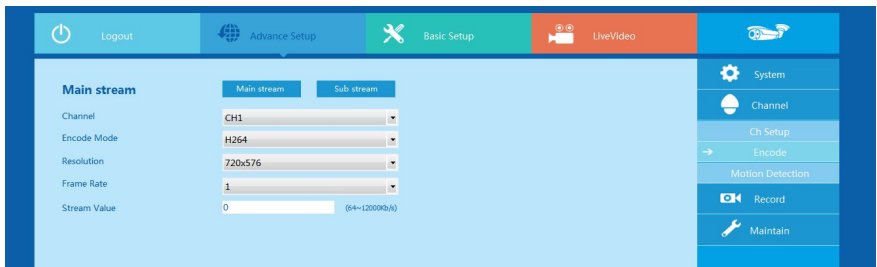


Figure 6-11

You can get parameters of Main-stream and Sub-stream of IPC device of channel access (coding mode, resolution, frame rate, the value of the stream), also can set the value of stream of Main-stream and Sub-stream of IPC device by the interface.

6.4.2.3 Motion Detection

Motion detection interface is shown in Figure 6-12, the relevant parameters consistent with NVR-side settings.

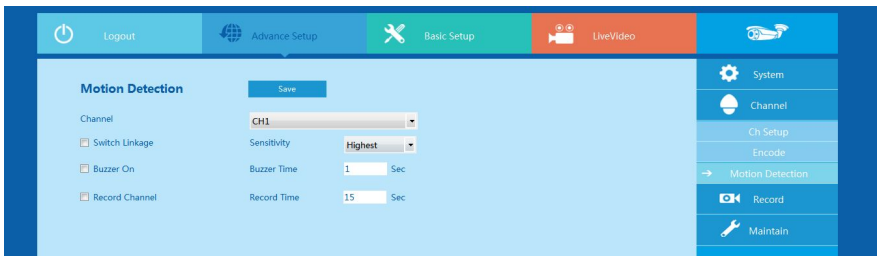


Figure 6-12

The IPC's Main Stream, Sub Stream parameter can be obtained in this page (Coding mode, Resolution, Frame Rate, Stream Value) the Stream Value can be adjusted as well.

6.4.3 Rec Setup

6.4.3.1 Common

Rec Setup interface is shown in Figure 6-13.

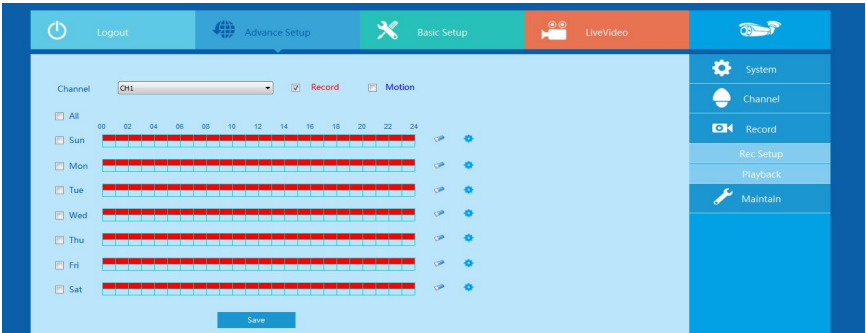


Figure 6-13

You can set up the channel recording as timetable by the interface, relevant parameters are same with NVR setting.

6.4.3.2 Playback

Rec Playback interface is shown in Figure 6-14.

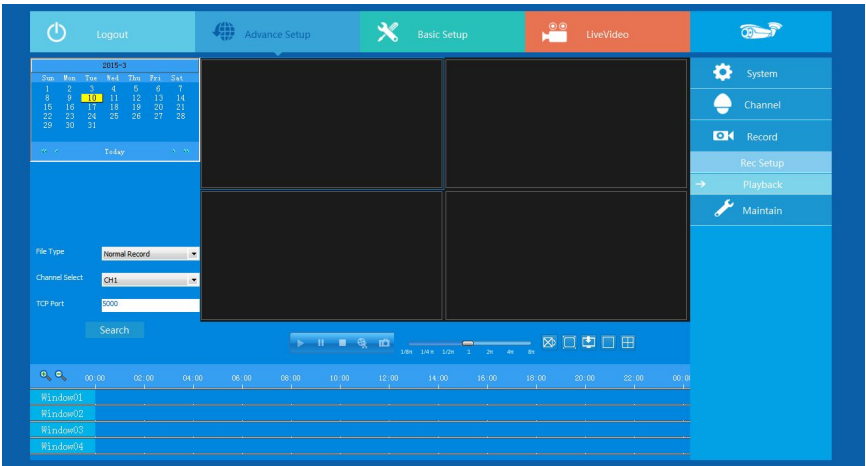


Figure 6-14

After determining the date in this interface, videos of associated channels can be checked according to the video types. Relevant parameters should be the same with the NVR port.

6.5 Advance Setup

Click Advance Setup, than you can find Disk, Device Manage, Default, Log and Version.

6.5.1.1 Disk

You can format the disk (when you use the hard disk to record first time, you need format the disk first), you can find the information of hard disk (Disk Number, State, Total capacity, Residual Capacity and Device Type), as below Figure 6-15.

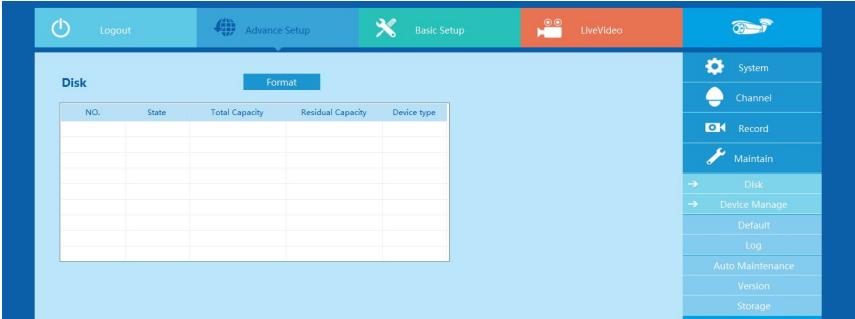


Figure 6-15

6.5.1.2 Device Manage

You can restart and update the device of NVR by remoting, as below Figure 6-16.

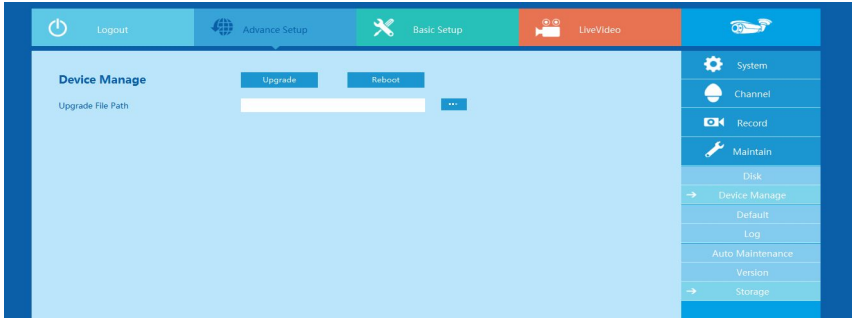


Figure 6-16

6.5.1.3 Default

You can restore the default parameters of NVR by remoting, the method of setting is same with local setting, as below Figure 6-17.

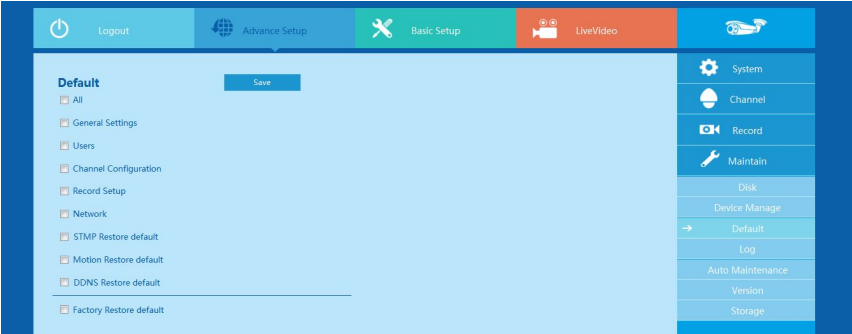


Figure 6-17

6.5.1.4 Log information

You can find specific log information by log query.

Specific steps: Set up the type and time of the journal you need (as below Figure 6-18, you can recall the calendar to choose the date by clicking the blank frame of start time and begin time), click “query” to query the journal, if there has recordings of journal, it will display on list, you can check all journales by page up/page down.

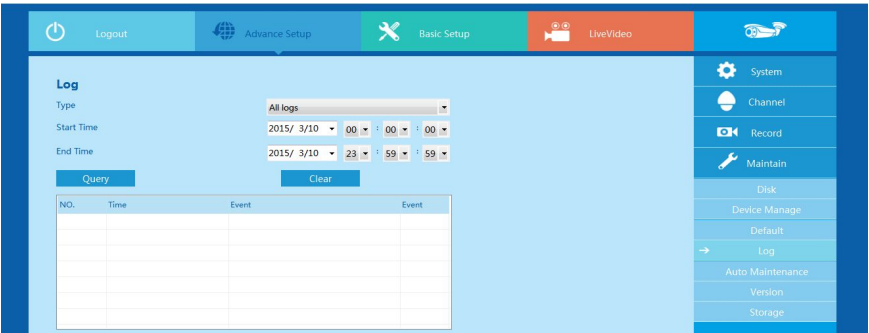


Figure 6-18

6.5.1.5 Auto Maintenance

Here you can set auto-reboot time, You can select proper setup from dropdown list. As below Figure 6-19.

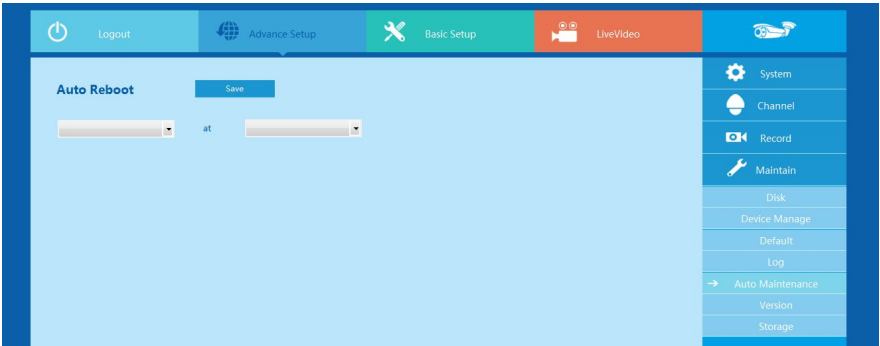


Figure 6-19

6.5.1.6 Version

User can check the version information of the system, including serial number of product, model number, version number and version date. As below Figure 6-20.

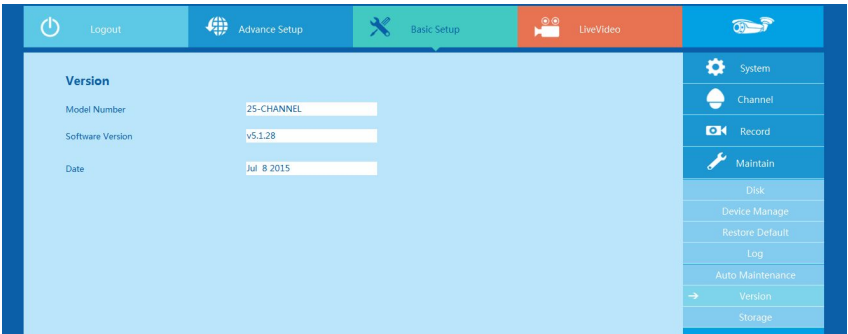


Figure 6-20

6.5.1.7 Storage

In Storage configuration, the user can set up the save path of video file (preview video file) in computer, remote file download and capture image. as below Figure 6-21.

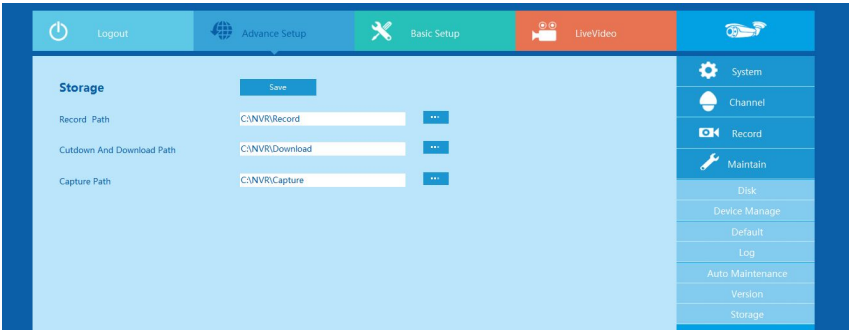


Figure 6-21

6.6 Logout

Click the logout icon , back to the login screen.

7 Appendix

7.1 Q&A

1. How to do when can't detect the hard disk?

Answer: If the system does not detect the hard disk, kindly please check the data line and the power line of hard disk whether are connected well, whether there is a problem about the interface of hard disk on the motherboard, or kindly please check hard disk whether is supported by the NVR in specification.

2. After modifying password, what can you do when you forget the password?

Answer: When the administrator forget password, kindly please get in touch with our technical staff. The easy to remember and relatively safe password is recommended when you set the password (if you have security needs, kindly please don't try to set simple passwords such as 123).

3. what results will maybe happen due to the heat when NVR is working?

Answer: It will produce some heat when NVR is working, kindly please put the NVR in the place where is safe and ventilated to stop the stability and life of the system be affected due to long-term high temperature of NVR.

4. Whether can use if i install the hard disk drive of computer to NVR?

Answer: If the hard disk you use can be supported by the system of NVR, it can work, but you need note, if the NVR begins to work, all datas in your hard disk will loss.

5. Whether can playback when recording?

Answer: Yes.

6. Whether can remove a part of video recordings of hard disk of NVR?

Answer: Considering the security of document, you can't remove a part of video recording, if you need remove all video recordings, you can format the hard disk.

7. Why can't login to NVR client?

Answer: Kindly please check configuration of network connection whether is right, connection of RJ-45 interface whether is fine, if also can't work, kindly please check whether the user name and password are right.

8. Why can't find any recording information when playback?

Answer: Kindly please check whether the connection of data line of hard disk is good, whether the time of system is changed, whether the query condition that is settetd can't save video files. If also have the question after restarting, kindly please check whether the hard disk is damaged.

7.2 Maintenance

1. When DVR shutdowns, kindly please don't turn off the power switch directly, should use the shutdown button of system to avoid data loss or damage of the hard disk.

2. Ensure DVR away from high temperature heat source and place.

3. Remove the dust deposited in the body timing, keep the good ventilation around chassis, it is good for radiating.

4. About the audio/video signal line and RS-485 interfaces, kindly please don't hot swap, or these port will be damaged easily.

5. Check the HDD power cable and data cable of the NVR regularly and look whether they are aging.
6. Avoid the audio/video signal effected by other circuits and devices as much as possible, prevent the hard disk damaged by electrostatic or induced voltage.