NVR, AHDVR and WI-FI NVR, Smart series

User Manual



Please read this manual thoroughly before use and keep it for future reference

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Declaration

Without the written permission of the company, any company or individual should not extract, duplicate part of or all of contents of this manual and no spreading in any form.

As the upgrade of the products or other reason, the contents of manual will be upgraded periodically. Unless otherwise stipulated, the manual is used as a instruction. All statements, information and suggestions of the manual do not constitute any ostensive or implied guarantee.

Photographs, graphics, charts, and illustrations provided in the manual are for explanation and illustration purposes only, and may differ from specific products.

Safety Precautions



- Please do not place and install equipment directly under the sunlight or near heating device.
- Please do not install equipment in moist place or place with dust.
- 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 the correct rated input/output.
- Please do not disassembly.
- Please transport and use the equipment within allowing humidity (10%~90%) and temperature (-10°C~+55°C).
- When cleaning the device, unplug the power cord and completely shut off the power.
- The dust on the circuit board inside the device may cause a short circuit after being exposed to moisture. Regularly clean the circuit board, connectors, chassis, and chassis fan with a soft brush. If dirt is difficult to remove, wipe it off with a neutral detergent diluted in water and wipe it dry.
- Do not use volatile solvents such as alcohol, benzene, or thinner when cleaning the device. Do not use strong or abrasive cleaning agents. This can damage the surface coating.
- Please purchase the device dedicated HDD recommended by the manufacturer to ensure the quality and usage requirements.
- Make sure that there is no threat due to uneven mechanical load.
- Make sure that the video and audio cables have enough space to install the cable. The bend radius of the cable should not be less than 5 times the cable diameter.
- Make sure that the alarm cable is firmly installed and the contact is good.
- Make sure that the device is reliably grounded.



- Please 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 use recommended power cords, with the rated specifications.
- You connect the product to Internet at your own risk, including but not limited that may be subject to cyber-attacks, hacking attacks, virus infections, etc. The company will not be responsible for product abnormality, information leakage, etc.



Note

- After receiving the product, please open the packing box, take out the equipment and check the product and accessories according to the packing list in the box.
- If you find any damage to the contents of the box or any missing parts, please contact your dealer promptly.

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Chapter 1 - Outline and Feature

1.1 Default

- The factory **default** administrator **User** is **admin** and the **Password** is **admin**.
- The factory default IP address is 192.168.1.111

1.2 Function Features

- H.264 video compression format, support 4K / 6MP / 5MP / 4MP / 3MP / 2MP / 1080p / 720p/D1 resolution network camera input (depend of the model)
- Some models support H.265 video compression format, support 4K / 6MP / 5MP / 4MP / 3MP / 2MP / 1080p / 720p/D1 resolution network camera input (depend of the model)
- G.711U and G711a audio format for NVR, G711µ audio format for AHDVR
- Windows-style user interface with embedded Linux3.0 operating system
- Support preview, recording, playback, backup.
- Supports dual stream encoding
- USB2.0 or USB3.0, support backup, software upgrading & mouse operating.
- The device only supports FAT32 and NTFS format USB disk
- AHDVR support AHD, TVI, CVI, CVBS and IPCAM inputs (hybrid, 5 in 1)
- SATA interface that support up to 8TB HDD
- Embedded web server, support HTTPS security internet protocol

Chapter 2 - Connections

2.1 Device connections



PoE ports



LAN port



VGA connector



HDMI port



USB port



Audio connector

Chapter 3 - Startup

3.1 System Initialization

The steps to turn ON the device are the follows:

- 1. Connect the device to the monitor and plug in the mouse and the power.
- 2. Turn on the power switch on the rear panel to start the device. The system initialization screen appears, as shown in figure 3-1.



Figure 3-1



- Please make be sure that the voltage to be connected matches the device requirements and ensure that the ground is well connected.
- The illustrations that appear in this manual may not be exactly the same as the menu interface displayed on your monitor, all illustrations are for reference only.
- After the device starts up, it can be simply configured through the boot wizard.

3.2 Boot wizard

3.2.1 Quick configuration

When the device starts, enter in the "Boot Wizard" mode, click "Next Step".



Figure 3-2 (1)

Select the user, enter the password, select the system language and click "Login" (the **default Username** is **admin**, **Password** is **admin**).



Figure 3-2 (2)

When the login password is too simple, a security password prompt will pop up. Click "Modify "

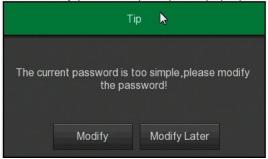


Figure 3-2 (3)

Click in the "New password" field, enter a New password, Confirm the new password, select the Security issues, enter the corresponding Answers and click "Save". Insert a USB flash drive on the device and click "Export key".

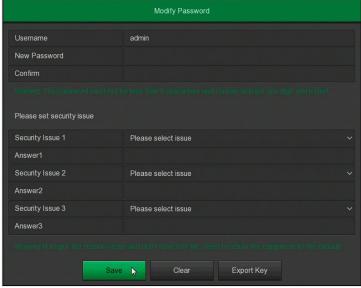


Figure 3-2 (4)

Go to the "General" interface, configure the Device setting and date and click "Next Step".



Figure 3-2 (5)

Go to the "Network" interface and configure the network parameters of the device. Click "Next Step".

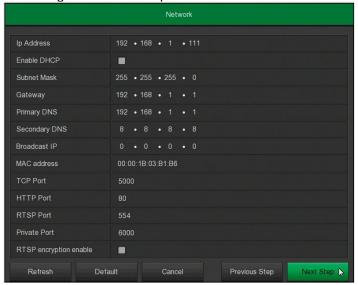


Figure 3-2 (6)

Go to the "Add Camera" interface, you can search and add devices. Click "Next Step".

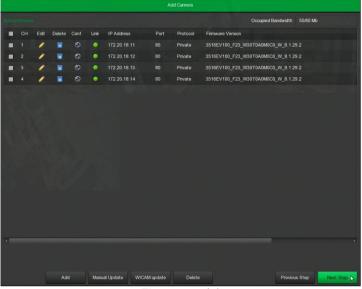


Figure 3-2 (7)

Go to the "Record Setup" interface and set the record schedule. Click "Finish".

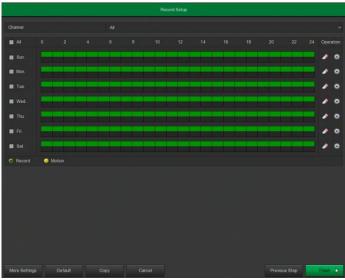


Figure 3-2 (8)



- On the wizard screen, click "Cancel" to exit.
- When the password is too simple, after the login, a password strength security interface will pop up. You can click "Modify later" to continue using the existing password.
- Please confirm that the device has been properly connected to the network before setting up the network parameters.
- System default setting is all channels recorded 24 hours / day.
- If the boot wizard has been configured, click "Menu → Configuration → General", cancel check "Enable wizard at startup" and the boot wizard interface will no longer appear.

3.2.2 Forgot Password

If you forgot your password, you can click "Forgot password" on the login page to enter the safety verification interface to reset the password (as shown in figure 3-3). The password can be reset trough "Answer the question" or "Import Key".

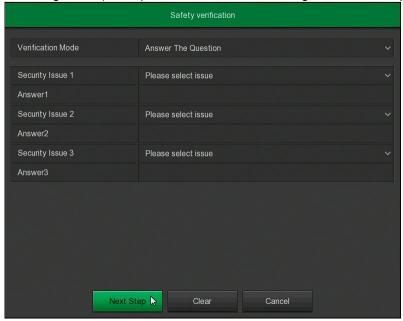


Figure 3-3

Answer the question: Select the three security questions when setting the password, enter the answer to the corresponding question to enter the new password setting interface, as shown in figure 3-4.

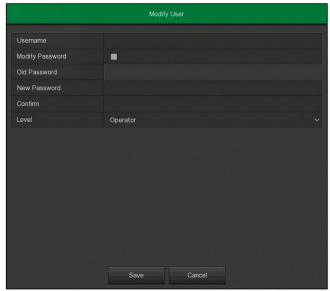


Figure 3-4

Import key: Select the authentication method "Import Key", as shown in figure 3-5.



Figure 3-5

- 1. Insert the USB disk (with the key file exported when the device setting password is stored) on the device and click Import to import the key file into the device.
- 2. In the "Modify user" interface, select the "Modify Password" checkbox, enter a New password, Confirm the password and click "Save", as shown in figure 3-6.

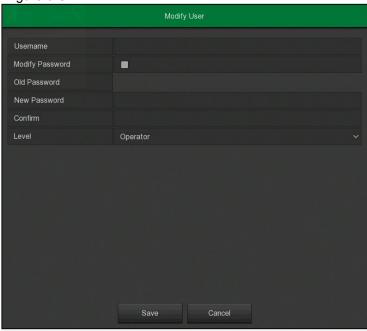


Figure 3-6

3.3 Preview Interface

After the system is started, it will enter into the default preview interface, as shown in figure 3-7.

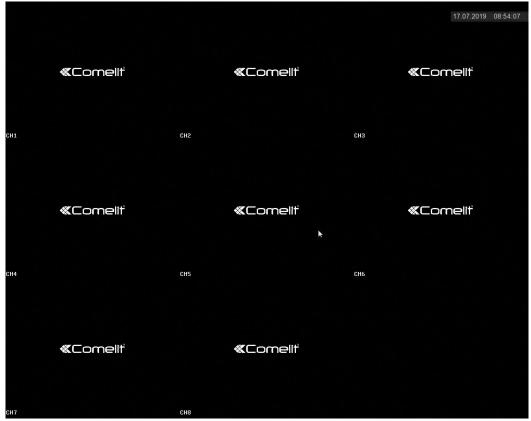


Figure 3-7

The default setting is to preview in multi-screen display mode. 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.

The function of each icon is shown in the following table:

Icon	Function
	Normal recording mode
ż	Motion detection recording mode

Table 3-1

3.4 Quick add device

Quick add device is shown in figure 3-8:

1. In preview menu, for the channel with unconnected IP cameras, click anywhere in the channel interface to display the "+" icon.



Figure 3-8 (1)

2. Select the device to add and click "Add".

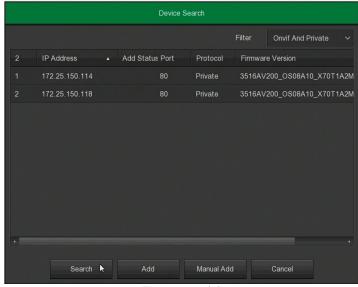


Figure 3-8 (2)

- > Search: click to search all online IP devices in the LAN according to the protocol in the "Filter" box.
- > Add: add selected device.
- > Manual Add: manually enter device information.
- > Filter: choose the protocol for the "Search"

3.5 Channel shortcut menu

After adding a device, click into the channel. The shortcut menu for the NVR appears as shown in figure 3-9 (1).



Figure 3-9 (1)

The function of each icon is shown in the following table:

Icon	Function
0	Screen rotation button. Click the button to rotate the screen clockwise 90°. Click the button again to rotate the screen clockwise 90° again.
	Instant playback button. Click the button to playback the lasts 5 minutes.
	Audio output control button. Click to set the channel output volume and mute.
Q.	Electronic zoom button. Click to open the electronic zoom function. Press and hold the left mouse button to select the zoom area, release the button. The preview interface is displayed and the original image of the channel is showed in the lower right corner of the screen. Click the right mouse button to exit the electronic zoom and restore the live preview interface.
<u>ئىد</u>	Image color button. You can set the channel brightness, contrast, saturation, sharpness.
	Bit stream information button. When the mouse moves to the icon position, You can see the channel data.
*	Image channel shortcut menu close button. Click to close the menu.

Table 3-2 (1)



Figure 3-9 (2)

The function of each icon is shown in the following table:

Icon	Function
AUTO	The current signal is auto.
€ VI	The current signal is analog "CVI".
AHD	The current signal is analog "AHD".
CVBS	The current signal is analog "CVBS" (analog).
T	The current signal is analog "TVI".
(PC)	The current signal is analog "IPC" (network camera).
	Instant playback button. Click the button to playback the lasts 5 minutes.
4	Audio output control button. Click to set the channel output volume and mute.
O.	Electronic zoom button. Click to open the electronic zoom function. Press and hold the left mouse button to select the zoom area, release the button. The preview interface is displayed and the original image of the channel is showed in the lower right corner of the screen. Click the right mouse button to exit the electronic zoom and restore the live preview interface.
-	Image color button. You can set the channel brightness, contrast, saturation, sharpness.
	Bit stream information button. When the mouse moves to the icon position, You can see the channel data.
*	Image channel shortcut menu close button. Click to close the menu.

Table 3-2 (2)

Chapter 4 - Menu

4.1 Shortcut menu

Login the system, right-click with the mouse to pop up the shortcut menu. As shown in figure 4-1, you can enter in the main menu, preview screen, sequence, video settings, add device, video playback, image color, etc. interface settings.



Figure 4-1

- Menu: click to enter into the main menu.
- > 1-Win: display the channels in one screen mode.
- ▶ 4-Win: display the channels in quad mode.
- **8-Win:** display the channels in 8-split screen mode.
- > 9-Win: display the channels in 9-split screen mode.
- ➤ 16-Win: display the channels in 16-split screen mode.
- > **25-Win:** display the channels in 25-split screen mode.
- > **36-Win:** display the channels in 36-split screen mode.
- > Sequence: click to enter into setup interface.
- Record: click to enter into the interface.
- Start Record: click to open the menu to quickly set up normal recording or motion detection recording for all channels (NVR only)
- > Add Camera: click to enter into the interface.
- **Playback:** click to enter into the interface.
- > PTZ: the device support PTZ controls.
- > NVR/XVR Image: click to enter into the interface.



Multi-screen display depends on the maximum number of channels supported by the device. For example, there
are 9 screens in the shortcut menu of the 9-channel device and 16 screens in the 16-channel device shortcut menu.

4.1.1 Manual screenshot (AHDVR only)

Is possible to take a screenshot, export it to a USB flash drive or send it to a mailbox as an email attachment, as shown in figure 4-2 below:

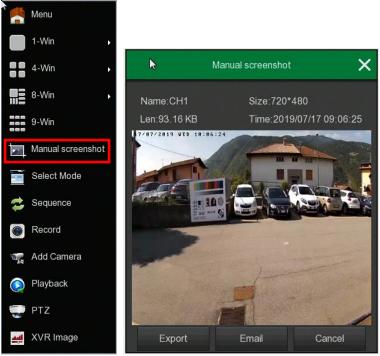


Figure 4-2

- 1. In the preview interface, select the channel, click the right mouse button to pop up the shortcut menu, select "Manual screenshot"
- 2. Insert a USB flash drive into the device and click Export. The image is saved to the USB flash drive. To sent to a mailbox as an email attachment click "Mail"

4.1.2 Select Mode (AHDVR only)

In the preview interface, click the right mouse button, click "Select Mode" to enter into the interface. Here you can set the channel signal, as shown in figure 4-3.

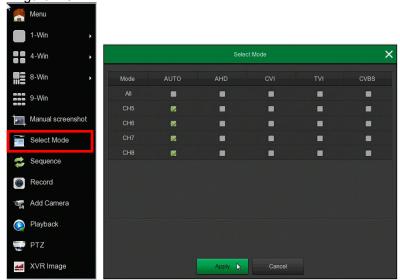


Figure 4-3



The Select mode is for the analog channel. The system default is "AUTO" and can manage the "AHD/CVI/TVI/CVBS" signals.

4.1.3 Sequence

The Sequence settings are shown in figure 4-4 below:

- 1. In the preview interface, right-click and select "Sequence"
- 2. Select "Enable", set the "Time" and the "Mode" and click "Save"

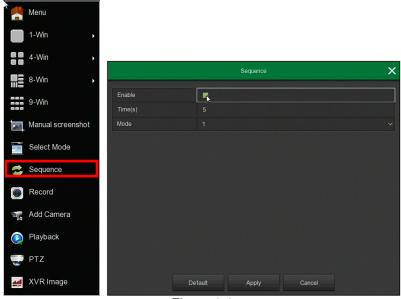


Figure 4-4

- **Enable:** enable/disable the function, default is disabled.
- > Time(s): dwell time, default 5 seconds.
- Mode: number of split screen, default single channel.

4.1.4 PTZ Setup

In the preview channel, right-click and select "PTZ" to enter into the interface (single screen mode).

■ PTZ control interface

PTZ control interface is used to move the PTZ, as shown in figure 4-5.

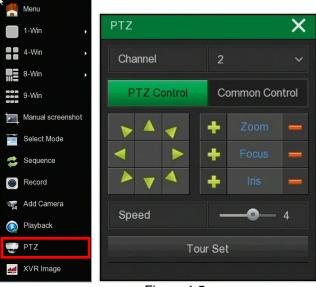


Figure 4-5

- > Channel: select the channel
- Zoom: click for to adjust camera zoom in/out
- Focus: click focus to adjust camera focus
- Iris: click for adjust camera iris
- > Speed: adjust the speed of the pan/tilt
- > Direction: use ______ to adjust the direction of the camera
- Confirm: Click to confirm (AHDVR only)

> (NVR) or "**Tour set**" button (AHDVR): click to enter the Tour setup interface.

■ Tour Setup interface

In the PTZ control interface, click on the "" icon (NVR) or "Tour set" button to enter into the interface. You can set

Presets "Stay time" and "Speed", as shown in figure 4-6 (1) and 4-6 (2).

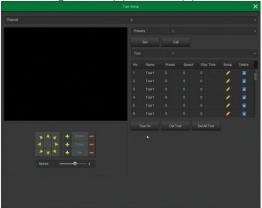


Figure 4-6 (1)

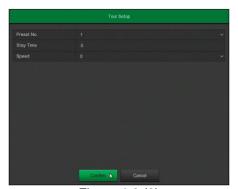


Figure 4-6 (2)

- **Preset setup:** in the Tour set interface, use the arrow buttons to change the position of the camera, then click the "Set" button below the Preset point number to complete the operation.
- Call: click "Call", the PTZ will go to the selected Preset position.
- ➤ **Tour set:** in the Tour set interface, select the tour line and click the " v button. In the pop-up interface, select the Preset number, stay time (seconds) and speed. Click the "Confirm" button. Click "Tour ON" to start the Tour. The tour settings are detailed in 4.3.5.6 or 4.3.5.7.
- > Tour ON: select the Tour number and click "Tour ON" to start the related Tour.
- ➤ **Tour OFF:** to stop the active Tour click the "Tour OFF" button.
- Del Tour: select the Tour number and click " or "Del Tour" to delete the related Tour.
- > **Del all Tour:** click to delete all the Tour.
- > Stay Time: it's the time that the PTZ stays at the Preset position.
- > **Speed:** PTZ speed during the Tour

■ Common control

Interface for calling Preset points and select the Tour number to turn on / off, as shown in Figure 4-7:

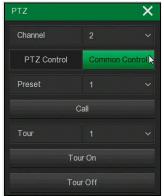


Figure 4-7

- Preset: select a Preset point.
- > Call: click "Call", the PTZ will go to the selected Preset position.
- Tour: select the Tour number and click to turn on/off.
- **Tour ON:** select the Tour number and click "Tour ON" to start the related Tour.
- **Tour OFF:** to stop the active Tour click the "Tour OFF" button.

4.1.5 Image

On the preview interface, right click mouse, select the "NVR (or XVR) Image" to enter into the interface, as shown in figure 4-8.



Figure 4-8

- > Brightness: adjust the monitor brightness.
- > Contrast: adjust the monitor contrast.
- > Saturation: adjust the monitor saturation.
- > **Hue:** adjust the monitor hue.

4.2 Main Menu

Main Menu includes Playback, Export, HDD, Record, Camera, Configuration, Maintenance, and Shutdown as shown in figure 4-9. Select one and click the left mouse button to open the menu.



Figure 4-9

4.3 Operation 4.3.1 Playback

After entering the main menu, open the "Playback" menu or right-click to select "Playback" menu in the preview interface, as shown in figure 4-10 (1) and 4-10 (2).

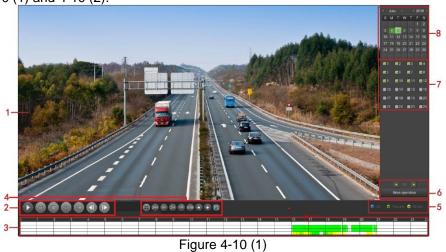


Figure 4-10 (2)

No.	Function	Description
1	Display window	Display searched video.
2	Playback controls (1)	Playback control keys
3	Time axis	Shows the recording type. Click on a point in the green area with the mouse to start playback from that point.
4	Playback controls (2)	: click full-screen playback. Click the right mouse button to exit Time bar unit: 24H, 6H, 2H, 1H, 30M. If 6H is selected, 6 hours will be displayed on the time bar. You can hold down the left mouse button and drag the time bar left and right. : when the time bar is zoomed in, click to move the time bar left or right.
5	Video mode selection area	Select the check box to choose the type of recording to be searched (All, Record, Motion).
6	Page turning area	"More operation": click to enter the video file list interface
7	Channels	Select the channel numbers to be queried
8	Calendar	The green highlighted date means that there is recorded file. Click the date you want to check to see the corresponding record file in the time bar.
9	Save/ Delete / Return	Save: select the files to be backed up, click "Save" to enter into the interface. Return: exit the file list interface.
10	Video file details	Displays the start time, end time and file size of the selected file.
11	Video file list	The channel recording files are displayed in chronological order.

Table 4-1

In the file list, you can see the start time of the video file and the video type. Select a video file, you can view the recording start time, end time and file size.

In the file list box, check the " icon to backup the file. Click "Save" to enter into the interface, as shown in figure 4-11:

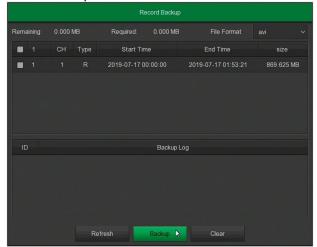


Figure 4-11

Select a file to backup it to an external USB device (avi format). You can choose multiple video files at the same time.

- > Remaining: remaining capacity of the USB device.
- > Required: size of the backup file.
- File Format: video file format.
- CH: video channel.
- > Type: video type (normal record [R] or motion detection record [A]).
- Start Time / End Time: time range of the video file.
- **Refresh:** click to update the interface.
- **Backup:** select the file and click Backup to start the operation.
- > Clear: clear all the video files in the list.

4.3.2 File backup

■ File backup

Click "Export" button in the main menu to enter into the interface. You can backup the video file to an external USB device, as shown in figure 4-12 (1):

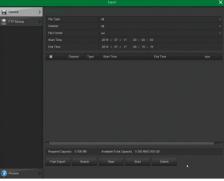


Figure 4-12 (1)

Insert the USB device into the device before to start the backup. Select the backup file type, channel, file format, time range and click "Search". The list shows the search results. Click "Start" to begin the backup.

- File type: video type (all, normal and motion detection).
- > Channel: video channel.
- > File Format: video file format.
- > Start Time / End Time: time range of the video file.
- > Required: size of the backup file.
- Available/Total capacity: remaining capacity of the USB device.
- Fast export: select the recording type, channel, file format, and the time range (30 minutes max).
- Search: set the video type, channel, file format and time range and click the "Search" button to display the corresponding video file in the file list.
- > Clear: clear all the video files in the list.
- > Start: start the backup.

■ FTP Backup (AHDVR only)

Click "Export→ FTP Backup" icon in the main menu to enter into the interface, as shown in the figure 4-12 (2):

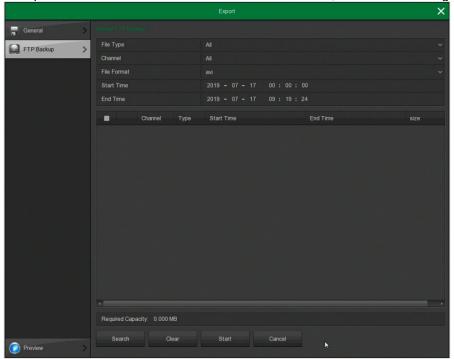


Figure 4-12 (2)

Before backup, you need to set the FTP server in "Menu→Configuration→Network→FTP.

- File type: video type (all, normal and motion detection).
- > Channel: video channel.
- > File Format: video file format.
- Start Time / End Time: time range of the video file.
- Required: size of the backup file.
- > Available/Total capacity: remaining capacity of the USB device.
- Fast export: select the recording type, channel, file format, and the time range (30 minutes max).
- Search: set the video type, channel, file format and time range and click the "Search" button to display the corresponding video file in the file list.
- > Clear: clear all the video files in the list.
- > Start: start the backup.

4.4 HDD

In the Menu page, click "HDD" to enter into the interface, as shown in figure 4-13:

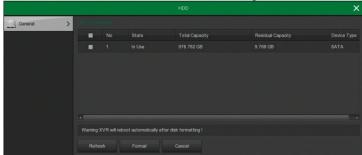


Figure 4-13

- No.: number of the HDD connected.
- > State: detect the status of HDD. You can use only if display "In use". After formatting, you need to restart the device.
- Total Capacity: total available HDD size. The single HDD size cannot exceed the capacity of 8TB.
- Residual Capacity: display the residual capacity of the HDD;
- Device Type: SATA.
- > Refresh: click to update the disk information.
- Format: format the HDD. Select the HDD → click the "Format" button → click the "Confirm" button.



- "Not connecting disk" indicates that the device is not connected or the hard disk is not detected.
- The hard disk must be formatted when is connected to the device for the first time or when "Not formatted" is displayed.
- You do not need to format the hard disk when the status shows "In use".
- After formatting the hard disk, restart the NVR.

4.4.1 Record

4.4.1.1 Schedule

In the Menu page, click "Record → Schedule" to enter into the interface, as shown in figure 4-14:



Figure 4-14

- > Channel: select the channel number. You can select "All" if you want to set the whole channels.
- **Record Type:** select the record type (Record and Motion).
- > Week day: select the day. You can select "All" if you want to set the whole. You can select "In front of the number of days to set individual days.
- More Settings: set motion detection pre-recording time (0, 5, 10, 15, 20, 25, 30 seconds).
- > delete the time period.
- : click to enter the Record Schedule.
- > Copy: after complete the setup, you can click "Copy" button to copy current setup to other channel(s).

Drawing schedule record

- 1. Select the recording channel to be set, as shown in figure 4-15 (area 1).
- 2. Select the recording type to be set. Green is normal recording, yellow is motion detection recording, as shown in figure 4-15 (area 2).
- 3. Hold down the left mouse button and draw the time period in the time bar, as shown in figure 4-15 (area 3).

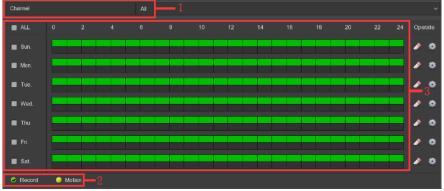


Figure 4-15



- There are 6 time periods available for each day.
- Select "All" to edit the time period of all week.

■ Input data to set the record schedule

- 1. Click "" to enter into the interface, as shown in figure 4-16.
- 2. Set the recording type for each time period. There are 6 time periods for each day. Select the day on "Use on" to apply to the corresponding day.
- 3. Click "Save" to complete the settings.

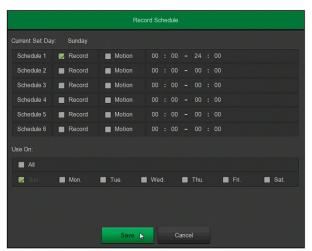


Figure 4-16



 You can enable normal recording and motion detection recording at the same time. When motion detection occurs, the device record in motion detection mode and not in normal record mode.

4.4.1.2 Parameters

Set the video stream parameters according to the network bandwidth.

- 1. In the Menu page click "Record→Parameters" to enter into the interface, as shown in figure 4-17.
- 2. Set the video stream parameter (resolution, stream type, frame rate, sub stream).
- 3. Click "Apply" to save the settings.

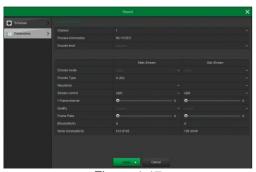


Figure 4-17

- > Channel: select the channel.
- Video Encoding: support H.264, H264+, H265, H265+ (depend of the device). Some devices only support H.264 and H.264+.
- **Resolution:** set the main and substream resolution.
- Stream type: select video or A/V.
- Bitrate (Kb/S): the bitrate change the picture quality. The larger the bitrate, the better the picture quality.
- Frame Rate: number of frames per second that the video displays. The higher the frame rate, the more realistic and smooth the image.
- I-Frame Interval: set the value by dragging the scroll bar

4.4.2 Camera

4.4.2.1 Add Camera

Add Camera

After adding a remote device, you can view the video directly on the device and perform operations such as storage and management. Add the device as follows:

- 1. In the Menu page, click "Camera → Add Camera", or right-click in preview interface and select "Add Camera" to enter into the interface, as shown in figure 4-18.
- 2. Click "Add \rightarrow select device to Add \rightarrow Add \rightarrow Cancel" to add the device (Add \rightarrow select device to Add \rightarrow Add \rightarrow Select channel to add \rightarrow Save \rightarrow Cancel for the AHDVR)

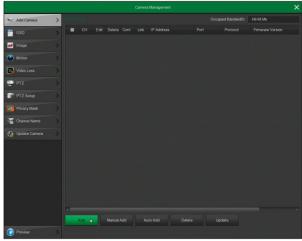


Figure 4-18

- Bandwidth idle: display the NVR remaining bandwidth in real time.
- Add: click to enter into the "Device Search" interface, as shown in figure 4-19.

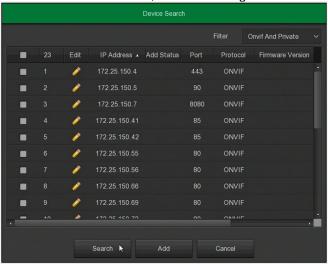


Figure 4-19

- Filter: filter search device type. Select the protocol or network segment device and click "Search" to search for the corresponding device in the LAN.
- Search: click to search the devices.
- Add: add the selected devices to the system.
- Match code (Wi-Fi NVR only)
 - 1. Connect the Wi-Fi IPC and the Wi-Fi NVR LAN port to the same switch with the network cable
 - 2. On the NVR main menu, select "Camera → Add Camera", or right click on the preview interface and select "Add Camera" to enter into the interface

 - 3. Click " or " to delete the added device
 4. Click "Add" → select add device → Match code → Cancel to complete the operation
- Edit: select " before one or more searched IP, click the " button to change the parameters and click "Save".
- Auto add: to automatically add the IPC.
- Manual add: click to enter into the "Channel Setup" interface, as shown in figure 4-20. There are two adding methods: IP and domain name. When adding IPC through a domain name, only Private and ONVIF protocols are supported.

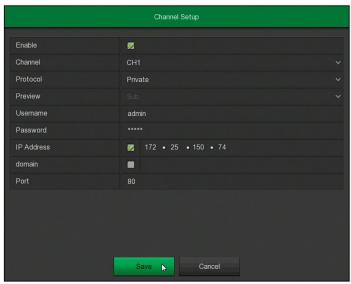


Figure 4-20

- **Enable:** select to enable the channel (default disabled).
- > Channel: select the channel.
- Add way: select how to add the channel (NVR only).
- **Protocol:** select the protocol (ONVIF, Private, RTSP).
- > **Preview:** the default is sub-stream preview.
- > User name: login user name of IPC.
- > Password: login password of IPC.
- ► IP: IPC IP address.
- > **Domain:** IPC domain name address (es. ComelitDNS address).
- Port: port used by IPC (default is 80).
- ➤ Update: check " before one or more IPC and click "Update".
- > **Delete:** delete the added device. In the list of added devices, click the " can also click the " icon to delete the channel quickly. You can also click the " icon to select multiple devices and click the " Delete" button to delete all selected devices.
- ➤ **Open H264+/H265+:** click to enable the H264+/H265+ encoding. To turn off H264+/H265+ encoding, disable the channel H264+/H265+ in the encoding parameter interface.
- > Status: " indicates that the connection is successful, " indicates that the connection failed. If the connection failed, the connection status will indicate the cause of the failure.
- Conf.: configuration. Click " icon to enter into the "Parameters" interface. You can modify the encoding type, resolution, bitrate, frame rate and other information.
- ➤ Edit: click the " icon to enter into the "Channel setup" interface.



Note

- Adding mode can be set to "Manual" or "Plug and play" in the PoE NVR only.
- To upgrade the IPC, copy the upgrade package to a USB flash drive and insert it into the device.
- During the upgrade, all IP devices cannot be powered off, otherwise, the upgrade fails or the device cannot start.

■ PoE (PoE NVR only)

After adding a PoE device, you can view the status and power of each PoE port on the PoE configuration page.

- 1. On the Menu page, select "Camera → Add Camera → PoE" to enter into the interface, as shown in figure 4-21.
- 2. Check the PoE device connection status, actual power and remaining power.

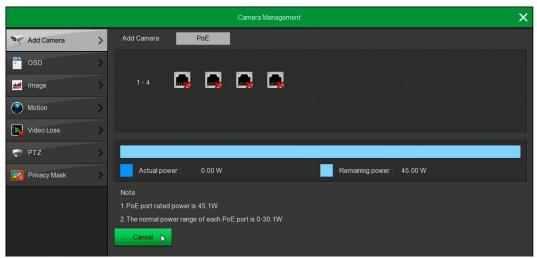


Figure 4-21



When the PoE power exceeds the rated power, the system automatically shutsdown the PoE port one by one
according to the channel number until the power is less than the rated power.

4.4.2.2 OSD

On the Menu page, select "Camera \rightarrow OSD" to enter into the interface, as shown in figure 4-22.

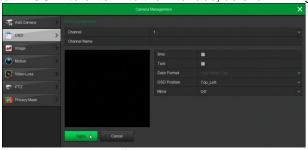


Figure 4-22

- Channel: select the channel.
- > Channel name: display the name of the IPC.
- > **Time:** enable the time on the screen.
- > **Text:** enable the text message on the screen.
- > Date format: set the IPC date format.
- > OSD position: Set the time and OSD text location, drop-down menu with the Top_left, Bottom_left "options."
- Mirror: enable to flip the image (OFF, Horizontal, Vertical, Both).



The OSD function is only supported by the Private protocol.

4.4.2.3 Image

On the Menu page, select "Camera→ Image" to enter into the interface. You can set the brightness, contrast, saturation, and sharpness values, as shown in figure 4-23:



Figure 4-23

- > Channel: select the channel to set.
- Brightness: set the brightness.
- > Contrast: set the contrast.

> Saturation: set the saturation.

Sharpness: set the sharpness.

4.4.2.4 Motion

When there is a movement, the system performs an alarm linkage action.

- 1. On the Menu page, select "Camera → Motion" to enter into the interface, as shown in figure 4-24.
- 2. "Enable detection" and configure parameters such as channel, area, sensitivity, record and email.
- 3. Click "Apply" to save the settings.



Figure 4-24

- > Channel: select the channel.
- Set area: Click to enter into the interface. Hold down the left mouse button to select the alarm area. The selected area is gray. Select the gray again to cancel the area.
- **Sensitivity:** select the sensitivity. The higher the value, the more sensitive the detection.
- **Enable detection:** check " to enable the motion detection alarm.
- > Send e-mail: check " to send an email in case of detection.
- Buzzer alarm: check " to enable the buzzer in case of detection...
- > Record channel: check " to enable the channel recording function in case of detection.
- Record time (sec): set the duration of each recording in case of detection.
- **Day:** select "All" or the day of the week to set the time period for sending alarm emails. Up to two time periods can be set each day.
- > Time period1/Time period2: Set the time period for sending alarm emails.
- **Copy:** click "Copy" to apply the settings to another channel.

4.4.2.5 Video Loss

On the Menu page, select "Camera

Video loss" to enter into the interface, as shown in figure 4-25.

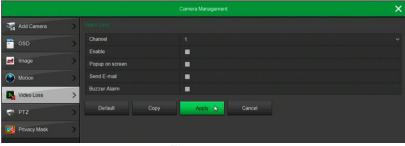


Figure 4-25

- > Channel: select the channel.
- **Enable:** Check " to enable the video loss alarm.
- **Popup on screen:** check " to enable the popup on screen in case of video loss alarm.
- Send e-mail: check " to send an email in case of video loss alarm.
- > Buzzer alarm: check " to enable the buzzer in case of video loss alarm.

4.4.2.6 PTZ

On the Menu page, click "Camera \rightarrow PTZ" to enter into the interface, as shown in figure 4-26 (1).



Figure 4-26 (1)

- **Channel:** select the channel where the dome camera is connected.
- Zoom: adjust the zoom by / keys
- Focus: adjust the focus by / E keys.
- Iris: adjust the iris by / E kevs
- > **Speed:** set the pan/tilt rotation speed operation.
- **Preset setting:** with the arrow buttons turn the PTZ to the desired location and click the preset button.
- **Tour setting:** select the tour number, click the setting button, select the preset number, stay time (seconds) and speed in the popup interface, as shown in figure 4-26 (2). Click "Confirm" button, return to the tour settings screen and click "Tour ON" to save the settings.

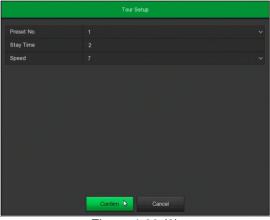


Figure 4-26 (2)

- ✓ **Preset No.:** select the preset point.
- ✓ Stay Time: stay time of the Preset.
- ✓ Speed: speed for Tour.
- > **Delete:** select the tour number, click to "delete" to remove.
- Del all Tour: click to delete all the tour.

4.4.2.7 PTZ Setup (AHDVR only)

The pan/tilt setting is used to set the parameters of the analog channel. Please make sure that the RS-485 control cable between the PTZ and the AHDVR is properly connected and configure the PTZ parameters.

- 1. On the Menu page, select "Camera →PTZ Setup " to enter into the interface, as shown in figure 4-27.
- 2. Set the pan/tilt parameters of the channel.
- 3. Click "Apply" to save the settings.



Figure 4-27

- **Channel:** select the channel where the dome camera is connected.
- > Protocol: select the PTZ protocol.
- Address: set the address (default is 0).
- **Baud Rate:** select the baud rate (default is 2400).
- > Data Bit: select the data bit (default is 8).
- > Stop Bit: select the stop bit (default is 1).
- > Check: select the check value (default is NONE).
- **Copy:** click "Copy" to apply the setting to another channel

4.4.2.8 Privacy Mask

On the Menu page, click "Camera → Privacy Mask" to enter into the interface, as shown in figure 4-28.

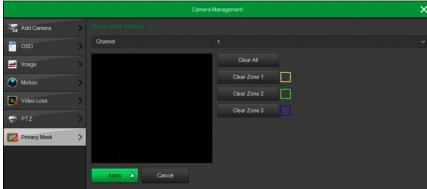


Figure 4-28

- > Channel: select the channel where set the privacy mask.
- > Privacy area selection: in the left window, hold down the left mouse button to select the area to be blocked.
- > Clear all: clear all selected areas.
- > Clear Zone 1, 2, 3: clear the area 1, 2, 3.

■ Local Privacy Mask (AHDVR only)

Local Privacy Mask is used to block the preview video of each channel on the AHDVR local side. On the Menu inetrface, click "Camera \rightarrow Privacy Mask \rightarrow Local Privacy Mask" to enter into the interface, as shown in figure 5-29.

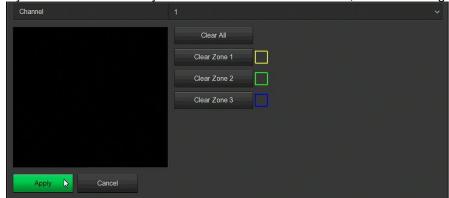


Figure 4-29

- > Channel: select the channel where set the privacy mask.
- > Privacy area selection: in the left window, hold down the left mouse button to select the area to be blocked.
- > Clear all: clear all selected areas.
- > Clear Zone 1, 2, 3: clear the area 1, 2, 3.



Note

- When the channel is set to <u>normal</u> privacy mask, the video of the channel is previewed and recorded without to show the blocked video.
- When the channel is set to <u>local</u> privacy mask, the channel is only block when previewing the video on the AHDVR.

4.4.2.9 Channel Name (AHDVR only)

Customize the channel name of the added device.

1. On the Menu page, select "Camera→ Channel Name" to enter into the interface, as shown in figure 4-30.

- 2. Set the channel name.
- 3. Click "Apply" to save the settings.

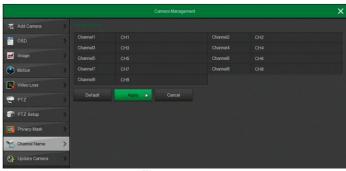


Figure 4-30

Channel: click on the right side of the channel CHx to popup the keyboard and set the channel name.

4.4.2.10 Update Camera (in development)

4.4.3 Configuration

4.4.3.1 General

General settings are divided into two parts: Device settings and Date settings.

■ Device Settings

On the Menu page, click "Configuration → General" to enter into the interface, as shown in figure 4-31.



Figure 4-31

- Enable setup Wizard at startup: click the "to enter into the "Startup Wizard" interface each time you boot the device.
- **Language:** set the language of the system.
- > Record Mode: when the disk is full, it will automatically overwrite the oldest video.
- **Record days:** set the number of days for recording storage.
- Video Standard: select PAL or NTSC.
- > Standby Time (min): set range from 0 to 120 minutes (default is 10 minutes).
- **Device name:** fill in the name of the device.
- Config import: insert the USB disk that stores the .ini format configuration file. Click "Config import → Confirm". The device automatically starts data import.
- ➤ Config export: Insert the USB disk into the device and click "Config Export → Confirm ". The configuration file will be stored. The configuration file format is ".ini".

■ Date Settings

On the Menu page, click "Configuration \rightarrow General \rightarrow Date Settings" to enter into the interface, as shown in figure 4-32 shows. After setting the device time, click "Apply" to save.

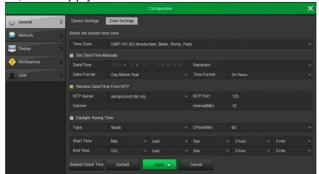


Figure 4-32

- > Set date/time manually: check " to set the local time manually.
- > Date/time: set the date/time manually.
- Date format: select the date format.
- Separator: select the separator for the date format.
- Time format: choose 24-hour or 12-hour format.
- Receive date/time from NTP: check " to enable NTP time update function.
- > NTP Server: enter the IP address or domain name of the NTP server.
- Time Zone: select the time zone of the device.
- > NTP Port: set the port of the NTP server.
- Interval (Min): set the NTP update interval.
- > Daylight-saving time: check "", to enable the daylight saving time function.
- Channel check time: select the channel and click Save to change the time of the channel with the device time.

4.4.3.2 Network

■ IP/Port

Set the IP address and DNS server of the device

- 1. On the Menu page, click "Configuration \rightarrow Network \rightarrow IP/Port" to enter into the interface, as shown in figure 4-33.
- 2. Configure the network parameters.
- 3. Click "Apply" to save the settings.



Figure 4-33

- > IP address: enter the IP address.
- **Enable DHCP:** enable / disable DHCP (Dynamic Host Configuration Protocol) function.
- Subnet mask: set the subnet mask.
- Gateway: set the gateway.
- Primary DNS: DNS server IP address. Is usually provided by the local access point service provider (ISP).
- > Secondary DNS: secondary DNS server IP address. Used when the primary DNS does not work.
- MAC address: displays the MAC address of the device.
- > TCP port: set the TCP port (default value is 5000).
- **HTTP port:** set the HTTP port (default value is 80).
- RTSP port: set the RTSP port (default value is 554).
- Private port: set the Private port (default value is 6000).
- > RTSP encryption enable: click " to enable the encryption of the RTSP stream (default is disabled)
- Network rate: display the network transmission rate (NVR only).
- Internal net card IP: set the intranet IP address for connecting the POE device (PoE NVR only).
- Refresh: click to refresh.



Note

- The IP address and the gateway must be in the same network segment.
- If You disable the DHCP function, you cannot display the original IP information. You need to reset the IP address and other parameters.
- Only PoE- devices have an internal network card.
- The internal network card IP and NVR IP address cannot be on the same network segment.

DDNS

Configure DDNS as follows:

- 1. On the Menu page, select "Configuration →Network →DDNS" to enter into the interface, as shown in figure 4-34.
- 2. Enable DDNS, select the DDNS type, enter the refresh time (seconds), username, and password.
- 3. Click "Apply" to save the DDNS configuration.
- 4. Enter the domain name in the PC web browser and press [Enter]. If you can display the web interface of the device, the configuration is successful. If it is not displayed, the configuration failed.

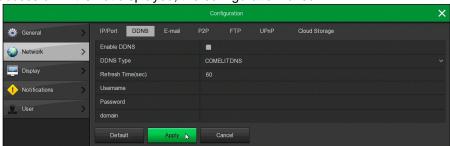


Figure 4-34

- Enable DDNS: enable DDNS function.
- DDNS type: select the DDNS type (es. Comelit DNS).
- **Refresh Time (sec):** do not refresh frequently. The interval between two refresh shall be more than 60 seconds. Too many refresh requests may result in server attack.
- User name: account registered in the DNS service provider.
- Password: password of the account registered in the DNS service provider.
- Domain: domain name registered in the DNS service provider.

■ E-mail

The email configuration steps are the follows:

- 1. On the main Menu page, click "Configuration \rightarrow Network \rightarrow E-mail" to enter into the interface, as shown in figure 4-35.
- 2. Enable "e-mail notifications", configure SMTP server, SMTP port, user name, password, sender, subject, message interval, select encryption type, attach file and other parameters.
- 3. Click "E-mail test" button and if the message "Success. Check the inbox." is displayed the mail configuration is successful. If the message "E-mail can't be delivered!" is displayed, the mail configuration failed.
- 4. After the email is sent successfully, click "Apply" to save the email configuration.

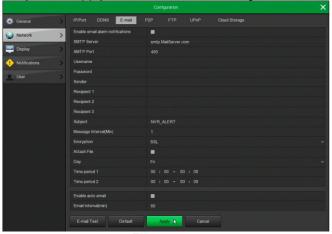


Figure 4-35

- **Enable e-mail alarm notifications:** enable / disable mail sending.
- > SMTP server: input the email SMTP server IP or the server domain name.
- > SMTP port: set the SMTP port.
- > User name: input the username to login into the email box.
- Password: input the password to login into the email box.
- > Sender: input sender email address.
- Recipient 1 / 2 / 3: input receiver email address. The system supports 3 email boxes.
- Subject: input email subject here (default is "NVR ALERT" for NVR and "XVR ALERT" for AHDVR).
- Message interval (Min): interval between emails. When the alarm is triggered, the email is sent according to the interval time. The time range is 0~600 minutes, 0 minutes means that the mail is sent without interval.
- **Encryption:** select the Mailbox server encryption (NONE, SSL, TLS, default is "SSL").
- > Attach File: enable the email attachment function. When the alarm is triggered, the system send snapshots.
- E-mail test: test email function.

■ P2P

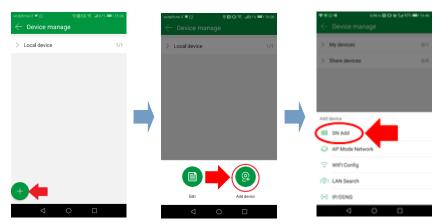
P2P is a private network penetration technology.

You can add devices in the following two ways to manage the devices.

- 1) Download the Comelit View Smart app and register an account.
- 2) Login to the P2P platform and add the device by scanning the QR code.
- **1:** In the main interface, click "Configuration \rightarrow Network \rightarrow P2P" to enter into the interface, as shown in figure 4-36 below.
- 2: Select to enable P2P.
- **3:** Click "Apply" to save the configuration.
- 4: Click "Refresh". If the status shows "Online", the P2P is enabled and can be used normally.

Comelit View Smart app configuration





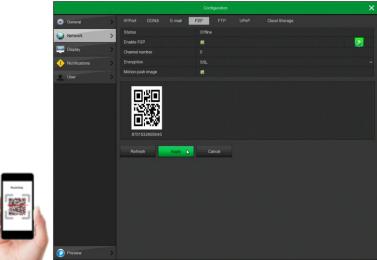


Figure 4-36

- > Status: display the P2P device status.
- Enable P2P: enable/disable the function.

- Channel number: displays how many users viewing the NVR video on the app.
- **Encryption:** select the encryption type. If enabled, all communications between the device and the server are encrypted.
- Motion push image: if enabled, send an alarm picture to the app (NVR only).
- SN: displays the serial number of the device. This serial number is unique.
- Refresh: Refresh the P2P interface information.

■ FTP

With FTP (File Transfer Protocol) function, you can store alarm pictures on the FTP server.

Prerequisites

You need to purchase or download the FTP service tool and install the software on your PC.



Note

 To create an FTP user, you must set FTP folder write permission. Otherwise, the picture will not be uploaded successfully.

Configure FTP operations as follows:

- 1: on the main Menu page, click "Configuration → Network → FTP" to enter into the FTP interface, as shown in figure 4-37 below.
- 2: select "Enable FTP" and enter the parameters.
- 3: click "Apply" to save the configuration.
- Step 4: click "Test" to check the configuration.

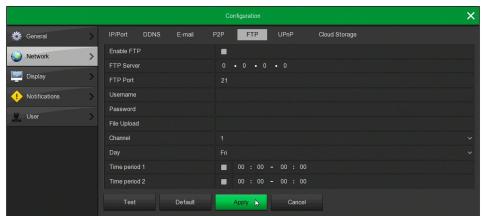


Figure 4-37

- **Enable FTP:** enable/disable the function.
- FTP Server: IP address of the FTP server.
- > FTP Port: the default FTP port is 21.
- User Name: input the username to login into the FTP server.
- **Password:** input the password to login into the FTP server.
- File Upload: folder name into the FTP account directory.
 - ✓ When the remote directory is empty, the system automatically creates different folders.
 - Enter the name of the remote directory, the system will create a folder with the corresponding name in the FTP root directory.
- > Channel: select the channel.
- > Day: select the time to upload the FTP file according to the day. You can set two time periods for each day.
- > Time period 1&2: set the time period for uploading FTP files.
- Test: click "Test" to check the parameters.

■ UPnP

After the mapping between the internal network and the external network is established through the UPnP protocol, the external network user can use the external IP address to directly access the NVR/AHDVR device.

Prerequisites

- 1) Login to the router and set the IP address to access the external network.
- 2) Enable the UPnP function on the router.
- 3) Connect the device to the LAN port of the router and access the private network.
- 4) In the main menu, select "Configuration \rightarrow Network \rightarrow IP/Port", set "IP address" as the router's private IP or select "DHCP" to obtain the IP address automatically.

The steps are as follows:

- 1: on the main Menu page, click "Configuration → Network → UPnP" to enter into the interface, as shown in figure 4-38 below.
- 2: enable the function and configure related parameters.
- 3: click "Apply" to save the configuration.

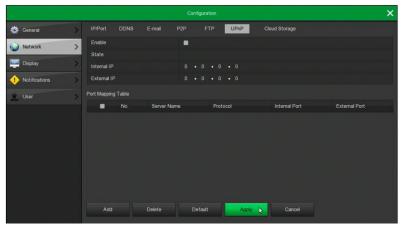


Figure 4-38

- **Enable:** enable/disable the function.
- State: displays the status of UPnP.
- Internal IP: enter the router's LAN port address. After the mapping successful, the IP address will be automatically obtained without setting.
- External IP: enter the router's WAN port address. After the mapping successful, the IP address will be automatically obtained without setting.
- Port mapping table: this corresponds to the UPnP mapping table information on the router.
 - ✓ Server Name: web server name.
 - ✓ Protocol: type of protocol.
 - ✓ Internal port: the port to map.
 - ✓ External port: the port mapped on the router.
- Add: click "Add" to set the mapping. Enter the service name, internal port, and external port.
- Server Name: enter the service name.
- Internal Port: enter the HTTP port, RTSP port, TCP port.
- **External Port:** self-defined, can be the same of the internal port.
- **Delete:** select the mapping information to delete.



Note

- When setting the external port of the router, try to use the port between 1024 and 65535. Avoid to use the ports 1~255 and the system ports 256~1023 to avoid conflict.
- When deploying multiple devices in the same LAN, plan the port mapping to avoid to have multiple devices with the same external port.
- When performing port mapping, ensure that the mapped port is not occupied or restricted.
- TCP internal and external ports cannot be modified.

■ PPPOE (AHDVR only)

PPPoE (Point-to-Point Protocol over Ethernet) is one of the ways in which the devices access the network. After obtaining the PPPoE username and password provided by the Internet Service Provider, you can establish a network connection through PPPoE dialup. After the connection is successful, the device automatically obtains a dynamic IP address of the WAN.

The steps are as follows:

1: on the menu page, select "Configuration \rightarrow Network \rightarrow PPPOE" to enter into the interface, as shown in figure 4-39 below.

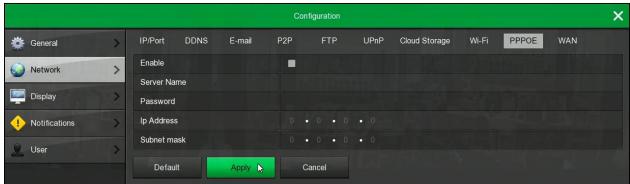


Figure 4-39

- 2: select "Enable", input the username and password.
- 3: click "Apply" to save the configuration.

After the PPPoE configuration is successful, the public IP address is displayed. Users can access the device through this IP address.

- **Enable:** enable/disable the function.
- > Server Name: username provided by the ISP (Internet Service Provider).
- **Password:** password corresponding to the username.
- ➤ IP Address: after successful PPPoE dialing, the device can be accessed through this IP address.
- **Subnet mask:** after successful PPPoE dialing, the subnet mask is displayed here.



After the configuration is complete, the IP address of the TCP/IP interface cannot be modified

Cloud storage

When the device triggers an alarm, it can store the captured alarm image of the device on the cloud storage.

Prerequisites

You need to have a Google Cloud Storage account.

Set up cloud storage as follows:

1: on the main Menu page, select "Configuration \rightarrow Network \rightarrow Cloud Storage" to enter into the interface, as shown in figure 4-40 below.

2: enable cloud storage, enable Google and click Add. Follow the prompts to Display the URL to copy in the Internet Explorer address bar to register the device. Enter the code to enter in the Google device registration page.

3: click "Apply" to save the settings.

4: click "Test" to check if the NVR can successfully upload files to the cloud server. "Username", "Total Capacity" and "Used Capacity" information will be automatically displayed.



Figure 4-40

- **Enable:** enable/disable the function.
- Google: select the cloud storage.
- Upload folder: set the upload cloud storage folder name.
- Username: displays the username.
- > Capacity: total capacity of the cloud storage.
- Used: cloud storage used capacity.
- Test: Add and click "Test" to save.

■ Wi-Fi (Wi-Fi NVR only)

The steps are as follows:

1: on the Menu page, select "Configuration → Network → WIFI" to enter into the, as shown in figure 4-41 (1) below.

2: select "Show" to show the ESSID (username) and password.

3: Click "Advance", as shown in figure 4-41 (2). Enable "SSID broadcast" (if the Wi-Fi camera is connected to the same hotspost of the NVR, select "Other" as Wi-Fi channel. If the Wi-Fi camera is not connected to the same hotspost of the NVR, select the Wi-Fi channel number as Wi-Fi channel). Click "Apply" to save the configuration.



Figure 4-41 (1)

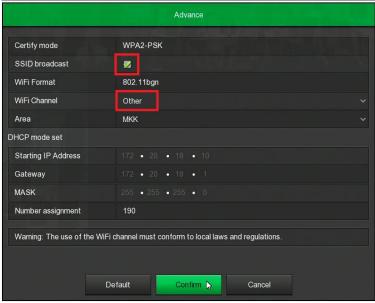
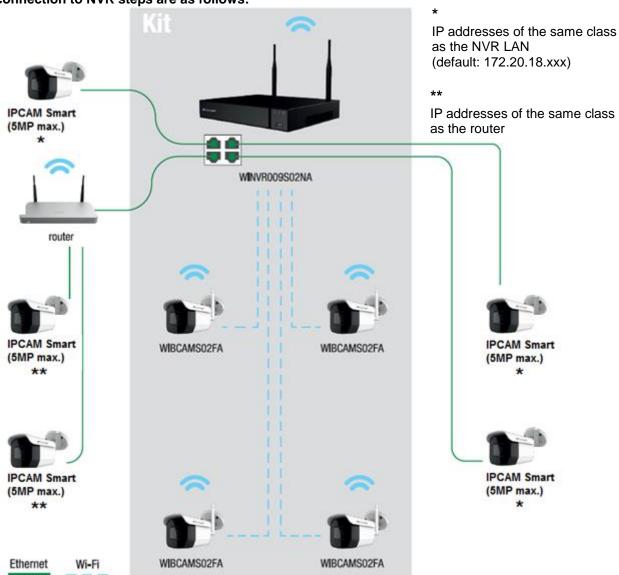


Figure 4-41 (2)

Wi-Fi IPC connection to NVR steps are as follows:











■ WAN (Wi-Fi NVR only)

On the Menu page, click "Configuration →Network →WAN" to enter into the interface, as figure 4-42 shows.

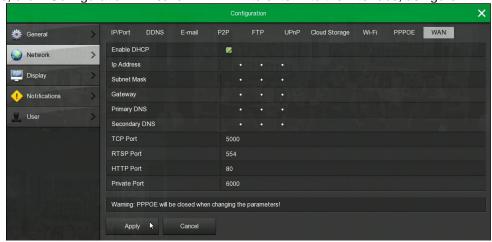


Figure 4-42

- > IP Address: enter the IP address of NVR.
- **Enable DHCP:** enable / disable DHCP (Dynamic Host Configuration Protocol) function.
- > Subnet Mask: enter the Subnet mask.
- Gateway: enter the Gateway.
- Primary DNS: Primary DNS server IP address which is usually provided by the local access point service provider (ISP). Enter the IP address of your domain name server here.
- **Secondary DNS:** Secondary DNS server IP address. Enter the IP address of your domain name server here. Start when the primary one does not work.

- ▶ MAC address: Displays the physical address of the NVR.
- TCP Port: set the TCP port (default value is 5000).
- > HTTP Port: set the HTTP port (default value is 80).
- > RTSP Port: set the RTSP port (default value is 554).
- > Private Port: set the Private port (default value is 6000)...



Note

- The IP address and the default gateway must be in the same network segment.
- If You disable the DHCP function, you cannot display the original IP information. You need to reset the IP address and other parameters.
- If You modify the interface parameters, the system automatically closes the PPPOE function.

■ Telnet (AHDVR only)

On the main menu page, select "Configuration → Network →Telnet " to enter into the interface, as shown in figure 4-43 below.



Figure 4-43

Enable: Enable / disable the function (default is disabled).

4.4.3.3 Display

Set the display parameters.

The steps are as follows:

- 1: on the Menu page, select "Configuration → Display" to enter into the interface, as shown in figure 4-44.
- 2: configure resolution, transparency and other parameters.
- 3: click Apply to save the configuration.



Figure 4-44

- **Resolution:** set the resolution of the screen.
- > **GUI Transparency:** set the transparency of the OSD menu.
- > Show OSD Time: enable/disable the time on the screen.
- **Show channel name:** enable/disable the channel name on the screen.
- View after boot: select the screen split screen type.



Note

- After the configuration resolution is saved, restart the device to configure it successfully.
- Only systems that support dual screens have the ability to sub screen Resolutions and Show after boot (Sub) configurations.

4.4.3.4 Notifications

Set the alarm mode of abnormal events. When an abnormal event occurs, the system executes the alarm linkage action.

■ HDD notification

The steps are as follows:

- 1: on the Menu page, select "Configuration →Notifications →HDD notification" to enter into the interface, as shown in figure 4-45.
- 2: select the event type, click "Enable" to enable the e-mail sending and buzzer alarm.
- 3: click "Apply" to save the configuration.



Figure 4-45

- **Event type:** select No HDD and/or HDD error.
- **Enable:** enable/disable the notifications.
- > Send e-mail: enable/disable the e-mail sending function in case of HDD notification.
- > Buzzer alarm: enable/disable the buzzer alarm function in case of HDD notification.

■ Net notification

The steps are as follows:

1: on the Menu page, select "Configuration → Notifications → Net notification" to enter into the interface, as shown in figure 4-46.

2: select the event type, click "Enable" to enable the e-mail sending and buzzer alarm.

3: click "Apply" to save the configuration.



Figure 4-46

- **Event Type:** select Broken network and/or IP conflict.
- **Enable:** enable/disable the notifications.
- **Send e-mail:** enable/disable the e-mail sending function in case of Net notification.
- **Buzzer alarm:** enable/disable the buzzer alarm function in case of Net notification.

4.4.3.5 User

In the Menu page, select "Configuration → User" to enter into the interface, as shown in figure 4-47.



Note

- The factory default administrator group is "administrator", the default administrator user is admin. Is not possible
 to delete or modify their permissions.
- Users in the group can modify permissions in the same group.
- Each user can be in only one group.
- The **default password** of the admin user is **admin**. The admin user can add, delete or edit users, add users in the group and set user rights control.
- There are two levels of users, operator and general. The default permissions of the two levels are different.
- To facilitate user management, it is recommended to set the operator permission lower than the generall user permission.

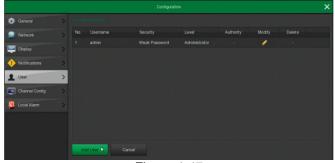


Figure 4-47

User list: Displays all the users of the device. Administrator user can change its password but cannot modify its permissions.

■ Add user

The steps are as follows:

1: click the "Add User" button to enter into the interface.

- 2: fill in the user information, select the level and click "Save".
- 3: setting authority.

Select the added user and click the corresponding " button below the Authority to enter the permission setting interface and set the user authority.



Authority note

Authority are divided into local configuration, remote configuration, channel configuration,

- Local Config: include All, Local Sequence, Local HDD, Local Camera Setup, Local Configuration, Local Network, Local Display, Local Notifications, Local User, Local System Information, Local Log, Local Manual Update, Local Online Update, Local Auto Reboot, Local Restore Default, Local Shutdown Reboot, Local Channel Config, Local Alarm.
- Remote Config: include All, Remote Sequence, Remote HDD, Remote Camera Setup, Remote Configuration, Remote Network, Remote Display, Remote Notifications, Remote User, Remote System Information, Remote Log, Remote Manual Update, Remote Auto Reboot, Remote Restore Default, Remote Shutdown Reboot, Remote Channel Config, Remote Alarm.
- Channel Config: Local Preview, Local PTZ, Local Playback, Local Record, Local Encode Parameters, Local OSD, Local Image, Local Motion, Local Export, Local Privacy Mask, Local Video Loss, Remote Preview, Remote PTZ, Remote Playback, Remote Record, Remote Encode, Remote OSD, Remote Image, Remote Motion, Remote Export, Remote Privacy Mask, Remote Video Loss for all channel.

Modify the user

The steps are as follows:

- 1: select the user, click the " user, click the
- 2: modify the password or the level and click "Save".

■ Delete the user

The steps are as follows:

- 1: select the user to delete, click the " user to delete, click the " user to delete, click the user the user to delete, click the user to delete, c
- 2: click "Confirm" to delete the user and return to the user management interface.

■ Modify password

- The step to change the administrator password the first time is as follows:
- 1: on the Menu page, select "Configuration → User → Modify" to enter into the interface, as shown in figure 4-48.
- 2: Input the new password and confirm the password.
- 3: select the security questions 1, 2, 3, fill the corresponding answer and click "Save".
- 4: insert the USB disk into the device, click "Export key" to complete the operation.

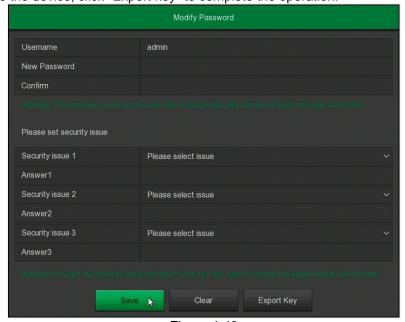


Figure 4-48

- ✓ The steps to modify the administrator password again are as follows:
- **1:** on the Menu page, select "Configuration \rightarrow User \rightarrow Modify" to enter into the interface.
- 2: select the Change Password check box, enter the old password, the new password and confirm the new password.
- 3: reset the security issues and corresponding answers, export the key.
- 4: click "Save" to complete the password modification.



When you change the device password again, you do not need to set security issues and export the key.

4.4.3.6 Channel config (AHDVR only)

Different models of devices support different numbers of IP channels. Is possible to increase the number of IP channels by disabling analog channels.

The steps are as follows:

- 1: on the menu page, select "Configuration → Channel config" to enter into the interface, as shown in figure 4-49.
- 2: check the channel type. If at the channel is connected an analog camera, select HD. If at the channel is connected a network camera, select IP.
- 3: click "Apply" to save the configuration.



Figure 4-49



• If is selected the "HD" mode, at the channel you can connect TVI / CVBS / AHD / CVI signals. If is selected the "IP address" mode, at the channel you can connect an IP device.

4.4.4 Maintenance

4.4.4.1 System (NVR only)

■ Version

In the Menu page, click "Maintenance \rightarrow System \rightarrow Version Info" to enter into the interface, as shown in figure 4-50. Here you can view the system version information, including product model, version and date.



Figure 4-50

■ Record Status

In the Menu page, click "Maintenance \rightarrow System \rightarrow Record Status" to enter into the interface, as shown in figure 4-51. Here you can view the recording status, stream type, bit rate and recording type of all connected IPC channels of the NVR.

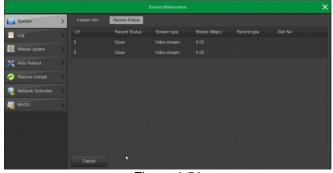


Figure 4-51

4.4.4.1 System (AHDVR only)

■ Stream Information

Show the data traffic used by the video.

The steps are as follows:

On the menu page, select "Maintenance→ System→ Stream Info" to enter into the interface, as shown in figure 4-52.

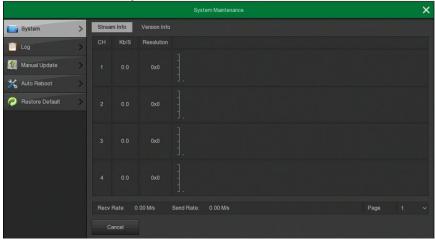


Figure 4-52

■ Version Info

Here you can view the system version information, including product model, version number and version date.

The steps are as follows:

On the menu page, select "Maintenance→ System→ Version Info" to enter into the interface, as shown in figure 4-53.

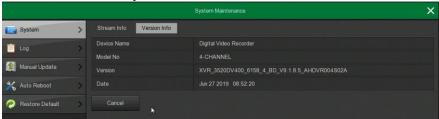


Figure 4-53

4.4.4.2 Log

Here you can view the system log.

The steps are as follows:

- 1: select "Menu → Maintenance → Log" to enter into the interface.
- 2: select the log type; search time period (start time and end time) as required.
- 3: click the "Query" button to view the log.



Figure 4-54

- > **Type:** select the type of information you need.
- > Start Time/End Time: enter the time range for the search log.
- Query: query log button.
- > PgUp / PgDn: click to switch the pages.
- > Clear: clear all information.
- **Export:** export the log information of the query to the USB flash drive.
- Export all: export all log information to the USB flash drive.

4.4.4.3 Manual Update

Insert the USB device with the upgrade file into the NVR. The upgrade package information (number, name, size, date) will be displayed in the list.

The steps are as follows:

1: insert the USB device with the upgrade file (named xxxxx_update_x_Vx.x.xx.x.bin).

- 2: on the Menu page, select "Menu→ Maintenance → Manual Update" to enter into the interface, as shown in figure 4-54.
- **3:** Click "Refresh". Select the upgrade file and click "Upgrade → Confirm". The device will restart automatically to complete the upgrade.



Figure 4-55

- **Refresh:** Refresh the current interface information.
- Upgrade: Click the device to start the upgrade.

4.4.4.4 Auto Reboot

The steps are as follows:

- 1: on the Menu page, select "Maintenance → Auto Reboot" to enter into the interface, as shown in figure 4-56.
- 2: select the time of "Reboot device automatically".
- 3: click "Apply" to complete the setup.



Figure 4-56

4.4.4.5 Restore Default

The steps are as follows:

- 1: on the Menu page, select "Maintenance → Restore Default" to enter into the interface, as shown in figure 4-57.
- 2: select the configuration item that needs to be restored to default.
- 3: click "Apply → Confirm".

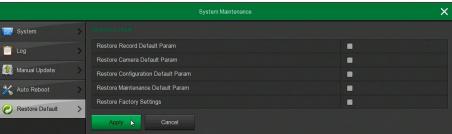


Figure 4-57

4.4.4.6 Network Detection (NVR only)

Network detection is divided into Stream Info and Net Test.

■ Stream Info

Show the data traffic used by the video.

The steps are as follows:

- 1: in the Menu page, select "Maintenance \rightarrow Network Detection \rightarrow Stream Info" to enter into the interface, as shown in figure 4-58.
- 2: select the channel to view the real-time data.



Figure 4-58

Net Test

Net test show the network delay, packet loss and network packet capture.

The network delay and packet loss steps are as follows:

- 1: on the Menu page, select "Maintenance \rightarrow Network Detection \rightarrow Network Detection" to enter into the interface, as shown in figure 4-59 below.
- **2:** Enter the destination address and click "Test". The system displays the test results, including the overall rating of "average delay" and packet loss rate.

The network packet capture steps are as follows:

- 1: in the Menu page, select "Maintenance →Network Detection → Network Detection" to enter into the interface, as shown in figure 4-59 below.
- 2: insert the USB flash drive into the NVR.
- 3: click "Packet capture", wait for the device to complete the capture backup, and click "Confirm".



Figure 4-59

4.4.4.7 MHDD (NVR only)

This function is used to detect the current status of the hard.

The steps are as follows:

- 1: on the Menu page, select "Maintenance→ MHDD" to enter into the interface, as shown in figure 4-60.
- 2: select number of the hard disk to be detected and select the "Test type"
- 3: the device starts to detect the hard disk.
- 4: the hard disk information are displayed in the S.M.A.R.T. information list.

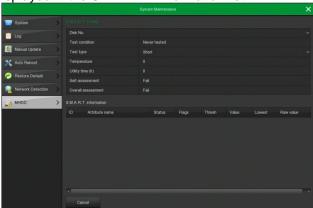


Figure 4-60

> S.M.A.R.T Configuration:

- ✓ **Disk No:** pull down to select the HDD number.
- ✓ **Test condition:** shows if the hard disk has been detected before.
- ✓ **Test type:** Short or Extended.
- ✓ **Temperature:** display the hard disk temperature.
- ✓ **Utility time (h):** shows from how long time the hard disk is used (hours).
- ✓ **Self-assessment:** show if the hard disk is in health (short test).
- ✓ Overall assessment: show if the whole hard disk is in health.
- > S.M.A.R.T information: display the hard disk information.



Note

- Only some devices support hard disk detection.
- When the self-assessment or overall assessment results are "not passed", the hard disk must be replaced to avoid data loss.

4.4.5 Shutdown

On the Menu page, select "Shutdown" to enter into the interface, as shown in figure 4-61:

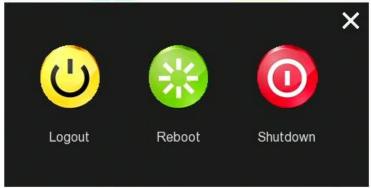


Figure 4-61

Logout: Logout the current user, switch to user login interface. **Reboot:** Reboot the device.

Shutdown: Shutdown the device.

Chapter 5 - WEB Operation



- Different types of devices have different interface displays. The following screenshots are for reference only.
- The device supports accessing and managing on the PC through the Web.
- The web page provides application modules such as real-time preview, playback, configuration and logout.
- The device support Internet Explorer browser.

5.1 Internet connection

1: check if the device is properly connected to the network.

2: set the IP address, subnet mask and gateway for PC and device.

- ✓ If there is no routing device on the network, allocate the IP address of the same network segment: If there is a routing device on the network, you need to set the corresponding gateway and subnet mask.
- ✓ The **default IP address** of the device is **192.168.1.111**.
- ✓ The default username is admin, the default password is admin

5.2 Login

Open the browser, input the IP address (**default** value is **192.168.1.111**), to enter into the login interface, as below figure 5-1.



Figure 5-1

Select the system language in the upper right corner of the interface. Enter the username (**default** value is **admin**) and the password (**default** value is **admin**). Click "Login".

5.3 Active X download and installation

The first time you log in to the device, you need to download and install the browser plug-in, as shown in figure 5-2. Click Install and follow the prompts to complete the installation.

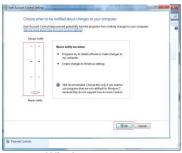


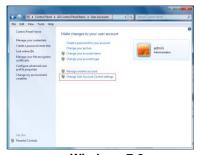
Figure 5-2



Note

- After upgrades the device to a new version, you need to delete the original ActiveX and download and install again.
- With Windows 7 you could have problems for backup and recording. If so, please check the Admin setting, the procedure are below:





Windows 7-1

Windows 7-2

If the Active X can't be downloaded, please adjust the security level and firewall setting to the lowest and make some adjustments: Tool → Internet Option → Custom level → ActiveX and enables all the options below ActiveX. Click OK (please refer to the figure 5-3).



Figure 5-3

5.4 Live View

After login you enter into the live preview interface, as shown in figure 5-4 below:



Figure 5-4

1. System Menu. Including Live View, Playback, Configuration, Help, Logout, and show login user name.

2. Real-time Monitoring Channel. Open/Close Preview, record and stream switching.

Mark	Specification
♣ Channel 01	Open / close corresponding preview channel.
	Start/stop recording, save video on local HDD.
in in	Main and sub stream switching

Table 5-1

3. Preview channel shortcut button

Mark	Specification
₩▼	Preview window toggle. From left to right are: single screen, quad, 9 split screen.
:3	Switch all preview channel to main or sub streams and open preview

▶,■	Play / Stop all preview channels.
0	Click this icon to make a snapshot. The default storage path of the picture is C:\NVR (or XVR)\Capture. You can enter in Configuration →
(a	Local Config menu to modify it. Click this icon to start recording all channels, click the icon again to stop recording. The default storage path of the recording is C:\NVR (or XVR)\Record. You can enter in Configuration → Local Config menu to modify it.
⊕,	Turn on / off the electronic zoom function. Click on the electronic zoom function and hold the left mouse button to select the electronic zoom area. The interface show the area selected. Click the right mouse button to restore the original status
⟨+ →	In single screen preview, click to switch channels
(M) / (II)	Turn on / off the speaker.
(III)	Full-screen. Press Esc on the keyboard to exit the full screen.

Table 5-2

4. PTZ setting operation window

Mark	Specification
K + X + + K + X	PTZ control direction button
U	PTZ self-test
2 2	Zoom buttons
0 0	Focus buttons
0	Iris buttons
4	Speed control.
4	Preset point setting
\Box	Call presets
₩	Settings
×	Delete settings
(5)	Cruise path setting
	Turn on / off cruise

Table 5-3

5.5 Configuration

5.5.1 Local Config

In the main interface, click "Configuration \rightarrow Local Config" to enter into the interface, as shown in figure 5-5 below. Click "Browse" to select the path to save, click "Save" to complete the path settings.

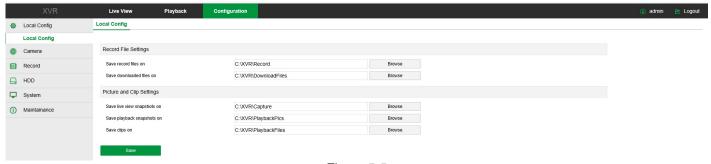


Figure 5-5

5.5.2 Camera

5.5.2.1 Add Camera

Add Camera

In the main interface, click "Configuration \rightarrow Camera \rightarrow Add Camera" to enter into the interface, as shown in figure 5-6 below. Here you can add, edit and delete devices.



Figure 5-6

■ PoE (NVR only)

In the main interface, click "Configuration \rightarrow Camera \rightarrow Add Camera \rightarrow PoE" to enter into the interface, as shown in figure 5-7 below. Here you can view the connection status and power of each PoE port.

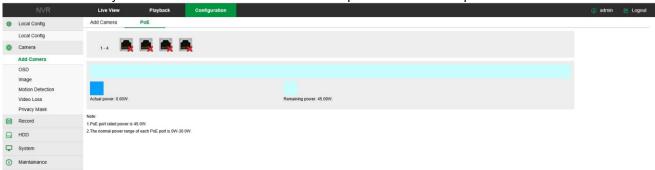


Figure 5-7

5.5.2.2 OSD

In the main interface, click "Configuration \rightarrow Camera \rightarrow OSD" to enter into the interface, as shown in figure 5-8 below. Here you can view and set the device text, date and other related information.

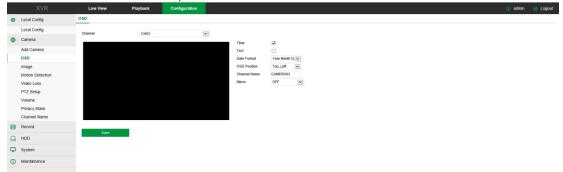


Figure 5-8

5.5.2.3 Image

In the main interface, click "Configuration →Camera →Image" to enter into the interface, as shown in figure 5-9 below. Here you can view and set the channel brightness, contrast, saturation and sharpness.



Figure 5-9

5.5.2.4 Motion Detection

In the main interface, click "Configuration →Camera →Motion Detection" to enter into the interface, as shown in figure 5-10 below. Here you can set the motion detection related information.

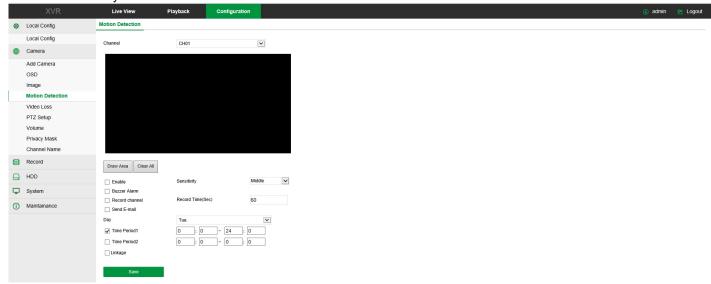


Figure 5-10

5.5.2.5 Video Loss

In the main interface, click "Configuration \rightarrow Camera \rightarrow Video Loss" to enter into the interface, as shown in figure 5-11 below. Here you can turn on channel video loss and set the corresponding alarm when the video is lost.



Figure 5-11

5.5.2.6 PTZ Setup

In the main interface, click "Configuration→Camera→PTZ Setup" to enter into the interface, as shown in figure 5-12. Here you can set the information about the PTZ control for each channel.



Figure 5-12

5.5.2.7 Volume

The volume screen is used to adjust the volume of each analog channel.

The steps are as follows:

- 1: in the main interface, click "Configuration→Camera→Volume" to enter into the interface, as shown in figure 5-13.
- 2: select the channel to configure, check the mute box or use the slider to adjust the volume of the audio output.
- 3: click "Save" to complete the setup.



Figure 5-13

5.5.2.8 Privacy Mask

In the main interface, click "Configuration →Camera →Privacy Mask" to enter into the interface, as shown in figure 5-14 below. Here you can set the mask area. You can set at least three areas.

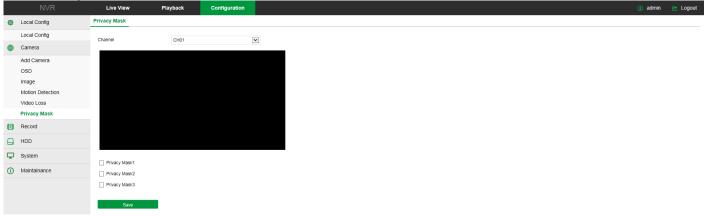


Figure 5-14

5.5.3 Record 5.5.3.1 Record

The steps are as follows:

1: in the main interface, click "Configuration →Record →Record" to enter into the interface, as shown in figure 5-15 below:

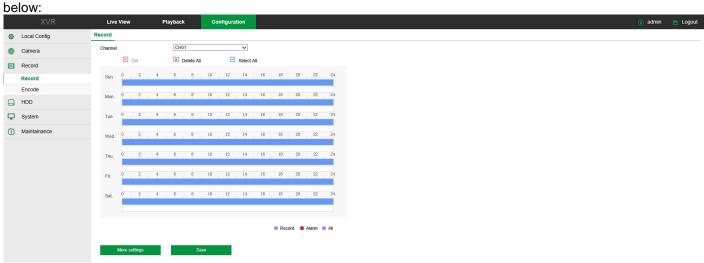


Figure 5-15

2: set the parameters, see the table below:

Parameter	Description	
Channel	Select the channel for setting the record. You can set different recording plans for different channels. If you want to set the same for all channels, select "All".	
Del	Delete the selected recording time period.	
Delete All	Click to delete all recording settings.	

Select All	Click to set all channels for normal and motion detection recording from Monday to Sunday.
Copy to	After you set a day, click "Copy to" to apply the day's settings to other days.
Time period setting	Click one of the set recording time periods, in the pop up set the time period, select the recording type and click "Save". When you click "Del", the selected time period is deleted.
More Settings	Click to enter the pre-record setting interface. Set the pre-recorded action status 0 seconds to 30 seconds before the recording, click "Ok".

Table 5-1

3: Click "Save" to complete setting.

5.5.3.2 Encode

In the main interface, click "Configuration →Record →Encode" to enter into the interface, as shown in figure 5-16 below.

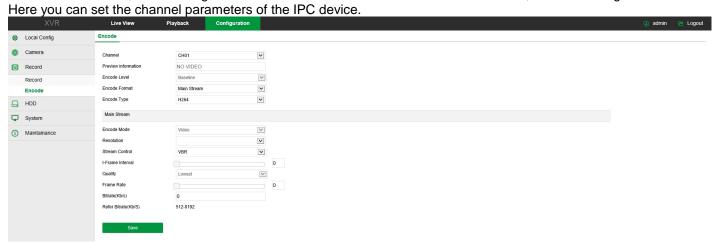


Figure 5-16

5.5.4 HDD

In the main interface, click "Configuration \rightarrow HDD" to enter into the interface, as shown in figure 5-17 below. Here you can view the HDD information and also format it.

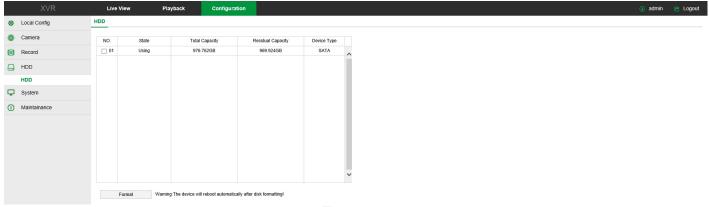


Figure 5-17

5.5.5 System 5.5.5.1 General

■ Device Setting

In the main interface, click "Configuration →System →General →Device Setting" to enter into the interface, as shown in figure 5-18 below. Here you can set the device's language, record mode, record days, resolution and other information. Click "Save" to complete the configuration.



Figure 5-18

Date

Set the time zone and manually set the system time or synchronize with the computer or set the system date using the Network Time Protocol (NTP) function.

The steps are as follows:

1: in the main interface, click "Configuration \rightarrow System \rightarrow General \rightarrow Date" to enter into the interface, as shown in figure 5-19 below.

2: select the setting date type, there are three ways.

- Select the "Set date/time manually" checkbox to manually select the date and time and click "Save".
- ✓ Select the "Synchronization with the computer" checkbox and click "Save".
- ✓ Select the "Receive date/time from NTP" checkbox, select NTP server (or select custom server), select the time zone, enter NTP port, set NTP interval, date format, date separator, time format and click "Save".

The date setting parameters are described in the following table:

Parameter	Description
NTP Server	Select the server domain name
Custom NTP	If You select "Custom", enter the NTP server
server	domain name.
NTP Port	Enter NTP server port.
Date Format	Set the date display format for the device.
Time Format	Set the time format of the device (24-hour or 12-hour).
Date Separator	Set the separator between year, month, and day.
Time Zone	Set the time zone.
Channel Check Time	Select the channel.

Table 5-2

Select the channel number or select "All" and click "Save".

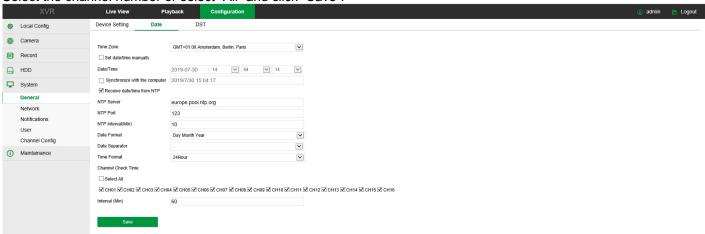


Figure 5-19

■ DST

The steps are as follows:

- 1: in the main interface, click "Configuration →System →General →DST" to enter into the interface, as shown in figure 5-20 below.
- 2: select the "Enable DST" checkbox, set the type, start time, end time and offset.
- 3: click "Save".



Figure 5-20

5.5.5.2 Network

■ IP/Port

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow IP/Port" to enter into the interface, as shown in figure 5-21 below. Here you can set the IP address, subnet mask, gateway, port, DNS and other network information.

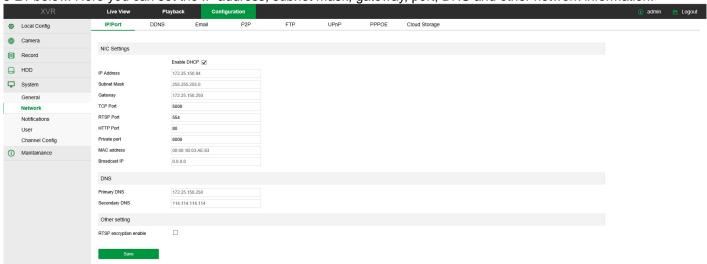


Figure 5-21

■ DDNS

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow DDNS" to enter into the interface, as shown in figure 5-22 below. Here you can enable and set the DDNS function.

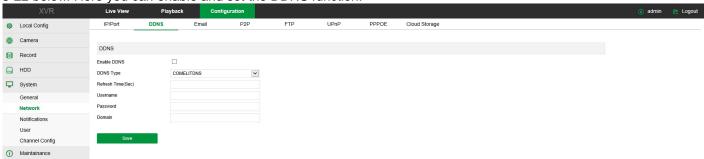


Figure 5-22

■ Email

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow Email" to enter into the interface, as shown in figure 5-23 below. Here you can enable and set the mail function.

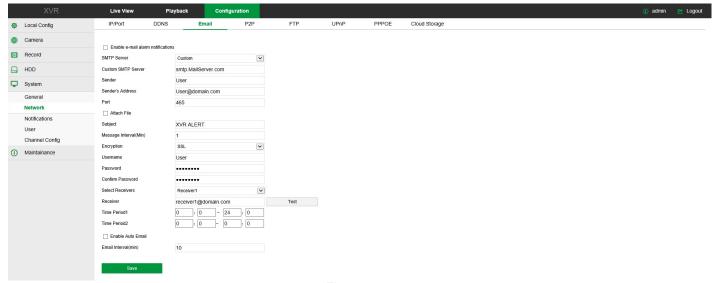


Figure 5-23

■ P2F

In the main interface, click "Configuration→System→Network→P2P" to enter into the interface, as shown in figure 5-24 below. Here you can turn enable/disable P2P function.

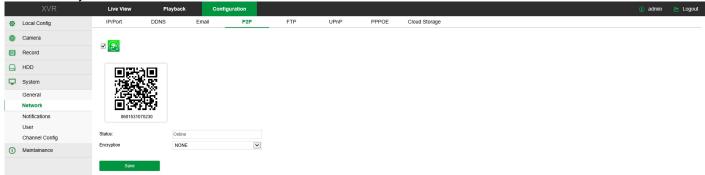


Figure 5-24

■ FTP

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow FTP" to enter into the interface, as shown in figure 5-25 below. Here you can enable and set the FTP server function.

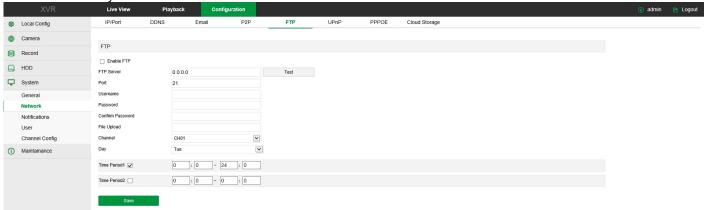


Figure 5-25

■ UPnP

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow UPnP" to enter into the interface, as shown in figure 5-26 below. Here you can enable and set UPnP function.

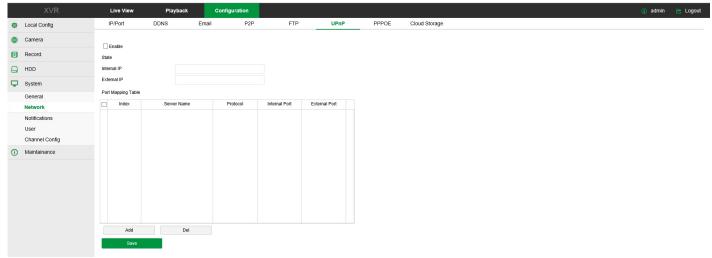


Figure 5-26

Cloud Storage

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow Cloud Storage" to enter into the interface, as shown in figure 5-27 below. Here you can enable and set Cloud Storage function.

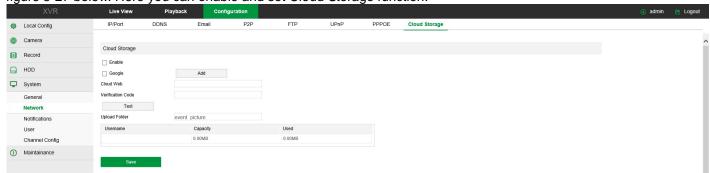


Figure 5-27

■ Wi-Fi (Wi-Fi NVR only)

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow Wi-Fi" to enter into the interface, as shown in figure 5-28 below. Here you can view or set the NVR Wi-Fi information, restart the NVR routing module and enter in the advanced settings interface.

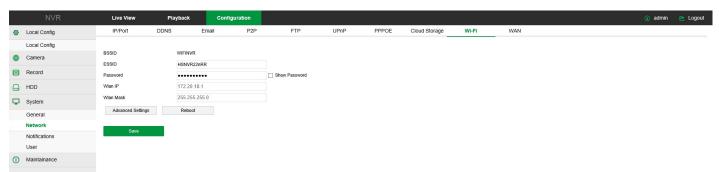


Figure 5-28

■ WAN (Wi-Fi NVR only)

In the main interface, click "Configuration \rightarrow System \rightarrow Network \rightarrow WAN" to enter into the interface, as shown in figure 5-29 below. Here you can set the NVR Wi-Fi module's IP address, subnet mask and other information.

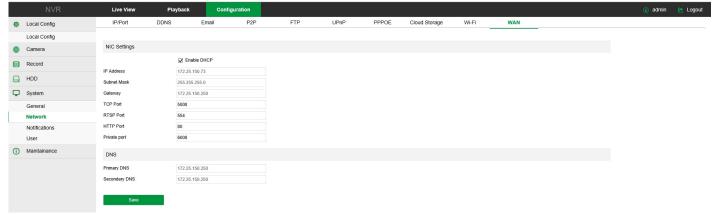


Figure 5-29

■ PPPOE (Wi-Fi NVR and AHDVR only)

In the main interface, click "Configuration →System →Network →PPPOE" to enter into the interface, as shown in figure 5-30 below. Here you can establish a network connection through PPPoE dial-up mode. After the connection is successful, the device automatically obtains a dynamic IP address.

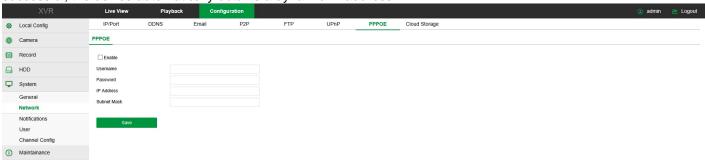


Figure 5-30

5.5.5.3 Notifications

In the main interface, click "Configuration →System →Notifications" to enter into the interface, as shown in figure 5-31 below.



Figure 5-31

5.5.5.4 User

In the main interface, click "Configuration \rightarrow System \rightarrow User" to enter into the interface, as shown in figure 5-32 below. Here you can add, delete and edit the users.

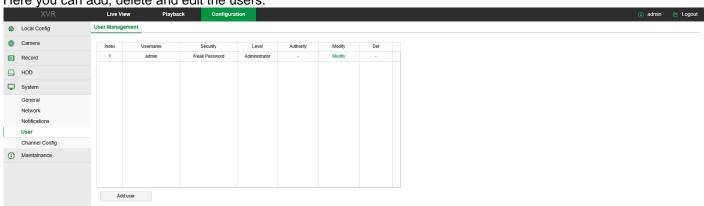


Figure 5-32

5.5.5.5 Channel Config (AHDVR only)

In the main interface, click "Configure—System—Channel Config" to enter into the interface, as shown in figure 5-33 below. Here you can select the device signal type.

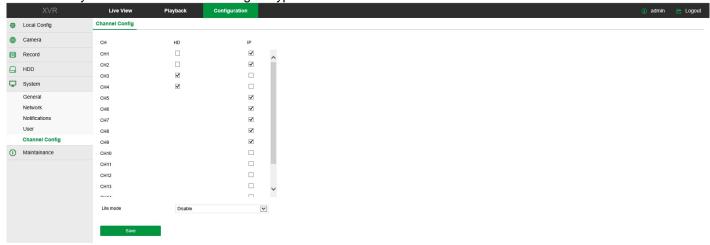


Figure 5-33

5.5.6 Maintenance

5.5.6.1 Version Info

In the main interface, click "Configuration \rightarrow Maintenance \rightarrow Version Info" to enter into the interface, as shown in figure 5-34 below. Here you can see information about the device version.

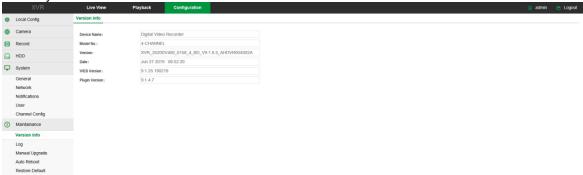


Figure 5-34

5.5.6.2 Log

In the main interface, click "Configuration \rightarrow Maintenance \rightarrow Log" to enter into the interface, as shown in figure 5-35 below. Here you can search and clear the device log.

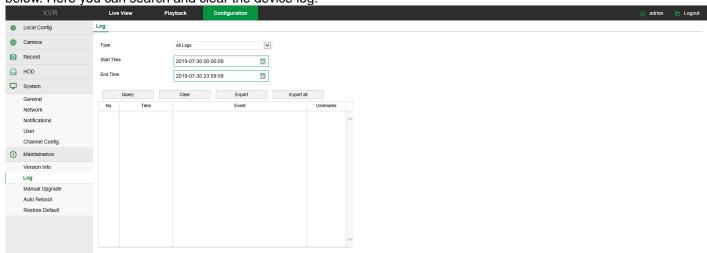


Figure 5-35

5.5.6.3 Manual Upgrade

In the manual upgrade interface, you can reboot and upgrade your device.

In the main interface, click "Configuration →Maintenance →Manual Upgrade" to enter into the interface, as shown in figure 5-36 below.

- ✓ **Reboot System:** click "Reboot → OK" to reboot the device.
- ✓ **Upgrade:** click "Browse" to open the folder where the upgrade file is located, select the file, click "Upgrade".



Figure 5-36

5.5.6.4 Auto Reboot

In the main interface, click "Configuration → Maintenance → Auto Reboot" to enter into the interface, as shown in figure 5-37 below. Here you can set the device reboot time.



Figure 5-37

5.5.6.5 Restore Default

Select to restore the device parameters to the factory default.

In the main interface, click "Configuration \rightarrow Maintenance \rightarrow Restore Default" to enter into the interface, as shown in figure 5-38 below. Select the parameters you want to restore, and click "Save".

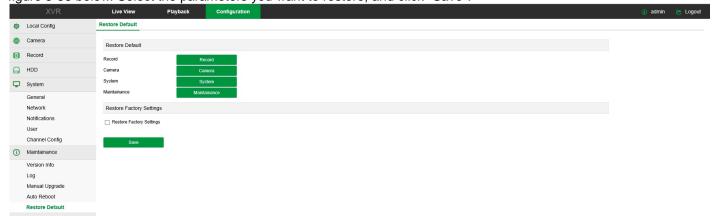


Figure 5-38

5.6 Playback

In the main interface, click "Playback" to enter into the interface, as shown in figure 5-39 below.

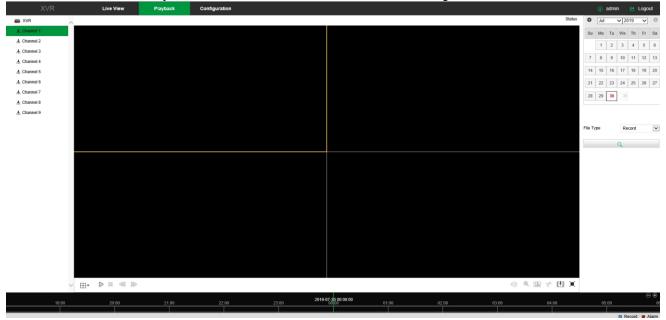


Figure 5-39

- > **Timebar:** displays the type of recording and the time period.
- ➤ Layout: click "⊞/□" to toggle the video playback window.
- ➤ Play/Pause: select the video file and click " > / " to start / pause the playback.
- > Stop: when the video is played, press " " to stop playing.
- Slow Forward: when the video is played, click " "to play slowly (x1/2, x1/4, x1/8). You can check the current playback speed in the current status of the upper right corner of the preview interface.
- Fast Forward: when the video is played, click " to play fastly (x2, x4, x8). You can check the current playback speed in the upper right corner of the preview interface.
- > Audio Mute/ON: when the video is played, click " \(\frac{1}{2} \right) \(\frac{1}{2} \right) \) " to enable/disable the audio.
- ➤ **Electronic Zoom:** when the video is played, click " ⁽¹⁾ / ⁽¹⁾ " to enable / disable the electronic zoom function.
- > Snapshot: when the video is played, click " to capture the image.
- Clip: When the video is played, click " " " to select the video clip starting point, click " " again to stop the video clip.
- **Download:** after searching the video file, click " to enter in the list, select the file and click "Download". The interface is shown in figure 5-40. The "First Page", "Prev Page", "Next Page" and "Last Page" are used to switch all files. The video file can be searched by the calendar, file type and channel number.



Figure 5-40

Full Screen: when the video is played, click " to put in full-screen. Press "Esc" button on the keyboard to exit the full-screen.

Chapter 6 - Appendix

6.1 Maintenance

- 1. To shutdown the device do not turn off the power switch directly but click the shutdown button of the system to avoid data loss or damage of the hard disk.
- 2. Keep the device away from high temperature, heat source and dust place.
- 3. Remove the dust deposited on the case, keep good ventilation around chassis.
- 4. Do not hot swap the audio/video signal and the RS-485 line or will be damaged easily.
- 5. Check the HDD power cable and data cable of the device regularly and look if they are aging.
- 6. Avoid that other circuits and devices can affect the audio/video signal as much as possible, prevent the hard disk damaged by electrostatic or induced voltage.

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