Network Video Recorder (NVR)
User Manual

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About This Document：

- This document is for use with multiple models. The appearance and function of the products are subject to the actual products.

- Any loss caused by failure to follow the instructions in this document is the responsibility of the user.

- This document will be updated in real time according to the laws and regulations of the relevant region. For details, please refer to the product's paper, electronic CD, QR code or

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Network Security Advice

Required measures to ensure basic network security of equipment:

Modify the factory default password and use a strong password

Devices that do not change the factory default password or use a weak password are the easiest to be hacked. Users are advised to modify the default password and use strong passwords whenever possible (minimum of 6 characters, including uppercase, lowercase, number, and symbol).

Update firmware

According to the standard operating specifications of the technology industry, the firmware of NVR, DVR and IP cameras should be updated to the latest version to ensure the latest features and security of the device.

The following recommendations can enhance your device's network security:

1.   Change your password regularly

Regularly modifying the login credentials ensures that authorized users can log in to the device.

2.   Modify the default HTTP and data ports

Modify the device's default HTTP and data ports, which are used for remote communication and video browsing.

These two ports can be set to any number between 1025 and 65535. Changing the default port reduces the risk of the intruder guessing which port you are using.

3.   Use HTTPS/SSL encryption

Set up an SSL certificate to enable HTTPS encrypted transmission. The information transmission between the front-end device and the recording device is fully encrypted.

4.   Enable IP filtering

After IP filtering is enabled, only devices with the specified IP address can access the system.

5.   Change the ONVIF password

Some old versions of the IP camera firmware, after the system's master password is changed, the ONVIF password will not be automatically changed. You must update the camera's firmware or manually update the ONIVF password.

6.   Only forward the ports that must be used

Forward only the network ports that must be used. Avoid forwarding a long port area. Do not set the device's IP to DMZ.

If the camera is connected locally to the NVR, you do not need to forward the port for each camera. Only the ports of the NVR need to be forwarded.

7. Use a different username and password on the video surveillance system.

In the unlikely event that your social media account, bank, email, etc. account information is leaked, the person who obtained the account information will not be able to invade your video surveillance system.

8. Restrict the permissions of the ordinary account

If your system is serving multiple users, make sure that each user has permission to access only its permissions.

UPNP

When the UPnP protocol is enabled, the router will automatically map the intranet ports. Functionally, this is user-friendly, but it causes the system to automatically forward the data of the corresponding port, causing the data that should be restricted to be stolen by others.

If you have manually opened HTTP and TCP port mappings on your router, we strongly recommend that you turn this feature off. In actual usage scenarios, we strongly recommend that you do not turn this feature on.

SNMP

If you do not use the SNMP, we strongly recommend that you turn it off. The SNMP function is limited to temporary use for testing purposes.

Multicast

Multicast technology is suitable for the technical means of transmitting video data in multiple video storage devices. There have been no known vulnerabilities involving multicast technology so far, but if you are not using this feature, we recommend that you turn off multicast playback on your network.

12. Check logs

If you want to know if your device is secure, you can check the logs to find some unusual access operations. The device log will tell you which IP address you have tried to log in or what the user has done.

Physically protect your device

For the safety of your device, we strongly recommend that you physically protect your device from unauthorized boring operations. We recommend that you place the device in a locked room and place it in a locked cabinet with a locked box.

It is highly recommended that you use PoE to connect IP cameras to NVR.

IP cameras connected to the NVR using PoE will be isolated from other networks so that they cannot be accessed directly.

Network isolation between NVR and IP cameras

We recommend isolating your NVR and IP cameras from your computer network. This will protect unauthorized users on your computer network from having access to these devices.

About This Document

Purpose

This document describes in detail the installation, use, and interface operations of the NVR (Network Video Recorder) device.

Model

Series	model
Hi3536C	SN-NVR2504E1-P4、SN-NVR2508E1-P8、SN-NVR2508E2-P8、SN-NVR2516E2-P16、SN-NVR2504E1、SN-NVR2508E1、SN-NVR2516E2、SN-NVR2532E2
Hi3536	SN-NVR2632E4-P16、SN-NVR2632E4、SN-NVR2664E4、SN-NVR2632E8、SN-NVR2664E8、SN-NVR2604E1-P4、SN-NVR2608E1-P8、SN-NVR2604E1-P4-J、SN-NVR2608E1-P8-J
Hi3536D	SN-NVR2404E1-E(II)、SN-NVR2408E1-E(II)、SN-NVR2404E1-E、SN-NVR2408E1-E、SN-NVR2404E1-P4、SN-NVR2408E1-P8

Modify Log

ID	Version	Log	Release Time
1	V 4.0	Initial Release	2017/
2	V 4.1	Add function	
3	V 4.1.3	Perfect interface, add models	
4	V 4.1.5	Add reverse playback Open data port 2	20180106
5	V 4.1.6	Add 4 spilt screens of automatic adjusting main stream or sub stream. Add private protocol access. Support multi-screen playback. Add the schedule recording function by	

		channel setting	
		Increase the allocation of permissions by channel	
	V 4.2	Add boot wizard	
		Add toolbar	
		Add manual recording and timely playback	
		Add multiple clicks to enlarge	
		Add user lockout	
		Remove the upper right corner to display the alarm warning	
		Add the view of the latest alarm information, modify the manual alarm	
		Modify quick navigation content	
		Preview channel and modify network parameter function on IPC side	
		Support for copying to some or all channels	
		Remove the full screen function	
		Add background backup	
		Add video dual authentication	
		Intelligent motion detection	
		Add the color to distinguish the video type, increase the video type search	
		Add sound switch	
		Add instant playback	
		Remove the timeline function	
		Increase intelligence analysis	
		Increase test DDNS function	
		Increase test mail function	
		Modify the time precision to half an hour, remove the recording plan master switch	
		Add hardware information	
		Added video dual authentication and boot wizard configuration function	
		Add alarm log	
		Add interval update profile	
6	V 4.2.1	Add the NTP synchronization interval and add the manual NTP	

		synchronization interval.	
		Add access to thermal imaging cameras and display IPC product models	
		Remove auto hide	
		Add the patrol route and line sweep function	
		Add upgrade IPC, restart IPC, restore factory IPC	
		Increase the selection of primary and sub stream backups	
		Add click playback button to play video	
		Add UI display granular IPC intelligence analysis	
		Add 802.1x functionality	
		Add SNMP function	
		Add upgrade device features	
		Add the timing restart function	
		Add U disk upgrade display progress bar	
7	V 4.2.4	Increase U-boot and kernel version display	
		Increase P2P status display	
		Increase signal type display	
		Increase POE icon display	
		Increase SSL access IPC, special models support	
		Optimize username and password saving methods	
		Increase batch backup	
		Increase fixed point playback	
		Increase hard disk alarm	
		Optimized recording expiration time input mode is editable	
		Increase the city after each time zone	
		Increase face recognition	
		Add P2P server	
8	V 4.3	Add pattern unlock	
		Add mailbox reset password	
		Increase the secure question reset password	

		Add 1+7 split screen	
		Add channel information display	
		Add 3D ball machine	
		Remove the video type switch from the scene	
		Add RAID	
		Add S.M.A.R.T	
		Add formatting (fat32 and NTFS)	
		Support event video quick download backup	
		Add event video backup	
		Add the full screen of the bomb and send the screenshot	
		Add IPC intelligent analysis configuration	
		Add manual input automatic logout time	
		Restore factory refinement	

Symbol Conventions

The symbols may be found in this document, which are defined as follows:

Symbol	Description
⚠ DANGER	Alerts you to a high risk hazard that could, if not avoided.
⚠ WARNING	Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.
⚠ CAUTION	Alerts you to a potentially hazardous situation that could, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
☞ TIP	Provides a tip that may help you solve a problem or save time.
📖 NOTE	Provides additional information to emphasize or supplement important points in the main text.

Safety instructions

The following are the correct use of the product. In order to prevent danger and prevent property damage, please read this manual carefully before using the device and strictly comply that when using it. Please save the manual after reading.

Requirements

- The front-end devices of POE are required to be installed indoors.
- The NVR device does not support wall mounting.
- Do not place and install the device in direct sunlight or near heat-generating equipment.
- Do not install the device in a place subject to high humidity, dust or soot.
- Please keep the equipment installed horizontally or install the equipment in a stable place, taking care to prevent the product from falling.
- Do not drop or spill liquid into the device and ensure that no liquid-filled items are placed on the device to prevent liquid from flowing into the device.
- Install the device in a well-ventilated area, and do not block the ventilation openings of the device.
- Use the device only within the rated input and output range.
- Do not disassemble the device at will.
- Please transport, use and store the device within the permissible humidity and temperature range.

Power Requirement

- Be sure to use the specified manufacturer's model battery, otherwise there is a danger of explosion!
- Be sure to use the battery as required, otherwise there is a danger of the battery catching fire, exploding or burning!
- Only use the same model of battery when replacing the battery!
- Be sure to dispose of the used battery as the instruction of battery!
- Be sure to use the power adapter that meets standard with the device, otherwise the personal injury or equipment damage caused by the user will be borne by the user.

- Use a power supply that meets the SELV (Safety Extra Low Voltage) requirements and supply power according to the rated voltage of IEC60950-1 in accordance with the Limited Power Source. The specific power supply requirements are based on the equipment label.

- Connect the Class I product to plug with the power outlet with a protective ground connection.

- The appliance is coupled to the port unit. Keep it at an easy angle for normal use.

Important Statement

Users are required to enable and maintain the lawful interception (LI) interfaces of video surveillance products in strict compliance with relevant laws and regulations. Installation of surveillance devices in an office area by an enterprise or individual to monitor employee behavior and working efficiency outside the permitted scope of the local law and use of video surveillance devices for eavesdropping of illegal purposes constitute behaviors of unlawful interception.

Contents

1 Preface

1.1 Product Description

This product is a high performance NVR device. The product has local preview, video multi-screen split display, local real-time storage function of video files, support for mouse shortcut operation, remote management and control functions.

This product supports three storage methods: central storage, front-end storage, and client storage. The front-end monitoring point can be located anywhere in the network without geographical restrictions. It is combined with other front-end devices such as network cameras, network video server networks, and professional video surveillance systems to form a powerful security monitoring network. In the networked deployment system of this product, the central point and the monitoring point need only one network cable to connect. It is not necessary to set up visual and audio lines to the monitoring point, and the construction is simple, and the wiring cost and maintenance cost are low.

This product is widely used in public security, transportation, electric power, education and other industries.

1.2 Product Features

1.2.1 Cloud Upgrade

For devices that have access to the public network, you can update the software of the device through online upgrade.

1.2.2 Real-time Monitoring

It has a VGA (Video Graphics Array) port and an HDMI (High Definition Media Interface) port. It can be monitored by a monitor screen or monitor, and supports simultaneous output of VGA and HDMI.

1.2.3 Playback

Each channel can independent real-time recording, and play functions such as retrieval, playback, network monitoring, video query, and download. Please refer to chapter Playback

Multiple playback modes: slow release, fast release, reverse playback, and frame-by-frame playback.

The exact time when the event occurred can be displayed during playback of the recording.

You can select any area of the screen for partial magnification.

1.2.4 User Management

Each user group has a rights management set, which can be selected autonomously. The total rights set is a subset, and the user rights in the group cannot exceed the rights management set of the user group.

1.2.5 Storage Funtion

According to the user's configuration and policies (such as through alarm and timing settings), the corresponding audio and video data transmitted by the remote device is stored in the NVR device. For details, please refer to chapter Storage Management.

Users can record by WEB mode as needed. The video files are stored on the computer where the client is located. Please refer to chapter Storage.

1.2.6 Alarm Function

Real-time response to external alarm input, correct processing according to the user's preset linkage settings and give corresponding prompts.

The setting options of the central alarm receiving server are provided, so that the alarm information can be actively and remotely notified, and the alarm input can come from various external devices connected.

The alarm information can be notified to the user by mail or APP push information.

1.2.7 Network Monitoring

Through the network, the audio and video data of the IP camera or NVS (Network Video Server) of the NVR device is transmitted to the network terminal for decompression and reproduction. The device supports 8 simultaneous online users to perform streaming operations.

The audio and video data is transmitted using protocols such as HTTP (Hyper Text Transfer Protocol), TCP (Transmission Control Protocol), UDF (User Datagram Protocol), MULTICAST, RTP (Real-time Transport Protocol), and RTCP (Real Time Streaming Protocol).

Use SNMP (Simple Network Management Protocol) for some alarm data or information

Support WEB mode access system, applied to WAN, LAN environment.

1.2.8 Split Screen

Image compression and digitization are used to compress several images in the same scale and display them on the display of a monitor. 1/4/8/9/16/32 screen splitting is supported during preview; 1/4/9/16 screen splitting is supported during playback.

1.2.9 Recording Function

The device supports regular recording, motion detection recording, alarm recording, and intelligent recording. The recording file is placed on the hard disk device, USB (Universal Serial Bus) device, and client PC (personal computer). It can be connected to the WEB terminal, USB device, or local device. Query and playback the stored video files.

1.2.10 Backup Function

Support USB2.0 and eSATA video backup.

1.2.11 External Device Control

The peripheral control function is supported, and the control protocol and connection interface of each peripheral can be freely set.

Support transparent data transmission of multiple interfaces, such as: RS232, RS485.

1.2.12 Accessibility

Supports video NTSL (Nation Television Standards Committee) system and PAL (Phase

Alteration Line) system.

Supports system resource information and real-time display of running status.

Supports for logging recording.

Supports local GUI (Graphical User Interface) output and quick menu operation via mouse.

Supports playback of audio and video from remote IPC or NVS devices.

📖 NOTE

For other functions, please see the following text.

2 Product Structure

2.1 Front Panel

Figure 2-1 NVR24 / NVR25

Table 2-1 Front panel function

Port	Description
PWR	When the NVR is operating, the PWR indicator is steady on. When the NVR is shut down, the PWR indicator is turned off.
HDD	Hard disk status indicator This indicator flashes when data is transmitted.
POE	PoE network status indicator This indicator flashes when data is transmitted.
KB/MOUSE	Only supports connected to an USB mouse.
BACKUP	Only supports connected to U disk

Figure 2-2 NVR2604E1

Table 2-2 Front panel function

Port	Description
PWR	When the NVR is operating, the PWR indicator is steady on. When the

	NVR is shut down, the PWR indicator is turned off.
NET	Network status indicator This indicator flashes when data is transmitted.
REC	Hard disk status indicator This indicator flashes when data is transmitted.
⟶⟵	Only supports connected to an USB mouse

Figure 2-3 NVR2632E8

Table 2-3 Front panel function

Port	Description
PWR	When the NVR is operating, the PWR indicator is steady on. When the NVR is shut down, the PWR indicator is turned off.
HDD	Hard disk status indicator This indicator flashes when data is transmitted.
⟶⟵	Only supports connected to an USB mouse

Figure 2-4 WiFi model

Table 2-4 Front panel function

Port	Description
PWR	When the NVR is operating, the PWR indicator is steady on. When the

	NVR is shut down, the PWR indicator is turned off.
NET	Network status indicator This indicator flashes when data is transmitted.
REC	Hard disk status indicator This indicator flashes when data is transmitted.
↤	Only supports connected to an USB mouse

2.2 Back Panel

Figure 2-5 NVR2508E1-P8/2508E2-P8

Table 2-5 Real panel function

Port	Description
POE	POE network interfaces
LAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
AUDIO OUT / AUDIO IN	Audio output / Audio input
VGA	Video output interface
HDMI	
Alarm I/O	Alarm input/Alarm output
⏚	GND
DC48V	Connected to an external power adapter

图 1-1 NVR2608E1-P8C

Table 2-6 Real panel function

Port	Description
POE	POE network interfaces
LAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
AUDIO OUT / AUDIO IN	Audio output / Audio input
VGA	Video output interface
HDMI	
USB 3.0	Only supports connected to 3.0 U disk
Alarm I/O	Alarm input/Alarm output
⏚	GND
DC48V	Connected to an external power adapter

Figure 2-6 NVR2632E4 / NVR2632E8

Table 2-7   Real panel function

Port	Description
	Alarm input and alarm output./RS485
LINE OUT / LINE IN	Audio output / Audio input
LAN1 /LAN2	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
VGA	Video output interface
HDMI（1/2）	
RS232	Standard RS232 serial communication interface of the device
USB 3.0	Only supports connected to 3.0 U disk
E SATA	External hard disk interface
	Power switch
	Safe ground screw of the device
	AC 110V/220V power input interface

Figure 2-7 NVR2632E4-P16

Table 2-8 Real panel function

Port	Description
POE port	POE network interfaces
	Alarm input and alarm output./RS485

LINE OUT / LINE IN	Audio output / Audio input
LAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
VGA	Video output interface
HDMI	
RS232	Standard RS232 serial communication interface of the device
USB 3.0	Only supports connected to 3.0 U disk
E SATA	External hard disk interface
⊡	Power switch
⊜	Safe ground screw of the device
⊡	AC 110V/220V power input interface

Figure 2-8 WiFi model

Table 2-9 Real panel function

Port	Description
WAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
VGA	Video output interface
DC 12V	Connected to an external power adapter
⏚	Safe ground screw of the device

2.3 Important Notes

Thank you for choosing the NVR. Please read the user manual carefully before using this product.

The NVR is a complex system-based device. To avoid misoperations and malfunctions caused by environmental factors and human factors during installation, commission, and application, note the following points when installing and using this product:

Read the user manual carefully before installing and using this product.

• Use Monitoring dedicated hard disks as the storage devices of the NVR with high stability and competitive price/performance ratios (the quality of hard disks sold on markets varies greatly with different brands and models).

• Do not open the enclosure of this product unless performed by a professional person to avoid damage and electric shock.

• We are not liable for any video data loss caused by improper installation, configuration, operation, and hard disk errors.

• All images in the document are for reference only, please subject to the actual products.

2.4 About This User Manual

Please note the following points before using this user manual:

• This user manual is intended for persons who operate and use the NVR.

• The information in this user manual applies to the full series NVR, NVR as an example for description.

• Read this user manual carefully before using the NVR and follow the methods described in this manual when using the NVR.

• If you have any doubts when using the NVR, contact your product seller.

• In the case of product upgrade, the information in this document is subject to change without notice.

2.5 Installation Environment and Precautions

Installation environment

Table 2-10 defines the installation environment of the NVR.

Table 2-10 Installation environment

Item	Description
Electromagnetism	The NVR conform to national standards of electromagnetic radiation and does not cause harm to the human body.
Temperature	-10°C to $+45^{o}$C
Humidity	20% to 80%
Atmospheric pressure	86 Kpa to 106 Kpa
Power supply	DC 12V, DC 48V 2A(1 HDD) or AC110/ 220V 4A(2

Item	Description
	HDDs or more)，please refer to actual product.
Power consumption	<15W (excluding the hard disk)

Installation precautions

Note the following points when installing and operating the NVR:

- The power adapter of the NVR uses DC48V±20% input. Do not use the NVR when voltage is too high or too low.

- Install the NVR horizontally.

- Avoid direct sunlight on the NVR and keep away from any heat sources and hot environments.

- Connect the NVR to other devices correctly during installation.

- The NVR is not configured with any hard disk upon delivery. Install one or more hard disks when using the NVR for the first time.

The NVR identifies hard disk capacity automatically and supports mainstream hard disk models.

User should use good brands of hard disk so that the NVR can operate stably and reliably, please

refer to chapter 10 Disk Compatibility

Other precautions

- Clean the NVR with a piece of soft and dry cloth. Do not use chemical solvents.
- Do not place objects on the NVR.

The NVR meets the national standards of electromagnetic radiation and does not cause

electromagnetic radiation to the human body.

Series of NVR

3 Install device

3.1 Process

```
                    ┌──────────┐
                    │  Start   │
                    └──────────┘
                         ⇓
              ┌────────────────────────┐
              │  Unpacking inspection  │
              └────────────────────────┘
                         ⇓
              ╭────────────────────────╮
              │    Install hard disk    │
              ╰────────────────────────╯
                         ⇓
              ╭────────────────────────╮
              │     Connect cable       │
              ╰────────────────────────╯
                         ⇓
              ┌────────────────────────┐
              │     Boot device         │
              └────────────────────────┘
                         ⇓
              ┌────────────────────────┐
              │  Configure and enter    │
              │  interface              │
              └────────────────────────┘
                         ⇓
                    ┌──────────┐
                    │   End    │
                    └──────────┘
```

Step 1   Check the appearance, packaging, and label of the device to ensure which no damage.

Step 2   Install the hard disk and fix the hard disk on the device bracket.

Step 3   Connect the device cable.

Step 4   After ensuring that the device is connecting correct, connect the power and turn on the device.

Step 5   Configure the initial parameters of the device. The boot wizard contains network configuration, add cameras, and manage disks. For details, please refer to the chapter of Wizard .

3.2 Unpacking Inspection

When the transportation company sends network video recorder to you, please check the following table for unpacking. If you have any questions, please contact our sales technicians.

Table 3-1 Unpacking inspection

No	Item		Check content
1	Overall packaging	Appearance	Is there any obvious damage
		Package	Is there accidental impact
		Accessories	Is it complete
2	Label	Label of device	Is the equipment model consistent with the order contract? Whether the label is torn 📖 **NOTE** Do not tear or discard, otherwise warranty service is not guaranteed. When you call the company for sales personnel calls, you will need to provide the serial number of the product on the label.
3	Cabinet	Package	Is there any obvious damage
		Data cable, power cable, fan power supply, and motherboard	Is the connection loose? 📖 **NOTE** If it is loose, please contact the company's after-sales

			personnel.

3.3 Install Hard Disk

When installing for the first time, first check if the hard disk is installed. It is recommended to use the company recommended hard disk model 9 disk compatibility.

It is not recommended to use a PC dedicated hard disk.

⚠ CAUTION

When replacing the hard disk, please turn off the power and then open the device to replace the hard disk.

Please use the monitoring dedicated SATA hard disk recommended by the hard disk manufacturer.

Use a reasonable hard disk capacity according to the recording requirements.

3.3.1 Install One or Two Hard disks

Step 1 Remove the screws for fixing the upper cover and take down the cover.

Step 2 Take out the screws and silicone cushion, route the screws through the silicone cushion, and install it to the screw holes, as show in Figure 3-1..

Figure 3-1 Installing the hard disk screws

Step 3 Route the screws through the hole on the base, push the hard disk to the appropriate position on the left, as shown in Figure 3-2.

Figure 3-2 Install hard disk

Step 4 Turn the device over, and fasten the rest two hard disk fixing screws, as shown in Figure 3-3.

Figure 3-3 Install hard disk

Step 5 Insert the hard disk data cable and power cable, then put on the upper cover and fasten the fixing screws.

3.3.2 Install Four Hard disks

Step 1 Remove the screws for fixing the upper cover and take down the cover.

Step 2 Put the hard disk under the hard disk bracket, hold the hard disk with one hand and aim the hard disk hole at the bracket hole, then fix the screws for hard disk (install the hard disk near the fan first), as shown in Figure 3-4.

Figure 3-4 Installing the hard disks

Step 3 Install other hard disks following step 2.

Step 4 Insert the hard disk data cable and power cable, then put on the upper cover and fasten the fixing screws.

3.3.3 Install Eight Hard disks

Step 1 Remove the screws for fixing the upper cover and take down the cover.

Step 2 Unscrew the screws on both sides and the upside of the upper bracket respectively, lift the upper bracket, as shown

Figure 3-5 Unscrew the screws lift the upper bracket

Step 3 Put the hard disk under the lower bracket, hold the hard disk with one hand and aim the hard disk hole at the bracket hole, then fix the screws for hard disk, as shown in Figure 3-6.

Step 4 Pull down upper bracket and screw it , then install other hard disks in upper layer following step 3, as shown in the right figure in Figure 3-6.

Figure 3-6 Unscrew the screws   lift the upper bracket

Step 5 Insert the hard disk data cable and power cable, then put on the upper cover and fasten the

fixing screws.

4 Basic Operations

4.1 Power on the Device

⚠ **CAUTION**

- Ensure that the NVR is correctly connected to a power supply, and a display is correctly connected to the high definition multimedia interface (HD-OUT) or video graphics array (VGA) port of the NVR before power-on.

- In some environments, abnormal power supply may cause the failure of the NVR to work properly and even damage the NVR in severe cases. It is recommended to use a regulated power supply to power the NVR in such environments.

After the NVR is connected to a power supply, the power indicator is steadily on. Start the NVR. The real-time video screen is displaying, as shown in Figure 2-1.

Figure 4-1 Real-time video screen

NOTE

Users need to provide a hard disk for the NVR. The hard disk is strictly detected during device startup.

If the detection result failed, the possible causes are as follows.

The hard disk is new and is not formatted. Login to the system and format the hard disk.

The hard disk is formatted, but the file system is inconsistent with the file system supported by the

NVR. Format the hard disk.

The hard disk is damaged.

4.2 Activation

When the user login the device at first time, or reset the NVR, you need to activate the device
and set login and channel default password, as shown in Figure 4-2.

Figure 4-2 Activation

Table 4-1 Description of activation

Name	Description
Username	The default username is admin, and "admin" is super administrator.
Password	Valid password range 6-32 characters.
Confirm password	At least 2 kinds of numbers, lower case, upper case or special characters contained.
	Only these special characters are supported !@#$*+-=_%&"
	Channel default password limit is not empty.
Channel password	The NVR channel connection password is the camera login password.

User can set the pattern unlock to login the device, as shown in Figure 4-3.

Figure 4-3 Set pattern unlock

NOTE

> After the pattern is unlocked, the system defaults to the pattern unlock login. If the pattern unlock is
>
> not set, you will need to input the password to login.
>
> If you don't need to set the pattern to unlock, click "Skip this step".

Set the Email to receive the verification code if user forget the initial password to create new
password, as shown in Figure 4-4.

Figure 4-4 Set Email

NOTE

Set the email address, if you forget the password, you can though the email address to receive the verification, and reset the password.

If the email address is not set, you can reply to the secure question or send the QR code to the seller to give the temporary password to login to the device..

If you don't need to set the email, click "Skip this step".

Set the secure question, if user forgot the password can through the secure questions to create new password to login the device.

Figure 4-5 Set question

 NOTE

The user can set three questions, and if they forget the password, they can answer the question and enter the

reset password interface.

Question one can be set: Your favorite animal

        Company name of your first job

        The name of the first boy/girl you like

        The worst security question you have ever seen

        The most funning/worst design you have ever seen

Question 2: Your favorite team

Question 3: Your favorite city

The three question options cannot be set to the same issue.

The answer requires a minimum of four characters and a maximum of 32 characters.

If you do not want to set a password question, you can click Skip this step.

4.3 Power off the Device

Click the main menu and choose **System** > **Maintenance**, the maintenance setting page is displaying, click **Shutdown** to power off the NVR. If there is a power switch on the rear panel of the NVR, you can RPM off the power switch to disconnect the NVR from the power supply.

4.4 Login to the System

Step 1 Login to the device, there are two modes to login if you set the pattern unlock, as shown in

Figure 4-6 Pattern unlock login page

Step 2 On the NVR login page, click " Password" to at pattern unlock interface. If user don't set the pattern unlock it will show password to login interface directly, select the language, as shown in Figure 4-7.

Figure 4-7 Password login page

Step 3 Input the username and password.

NOTE

The password incorrect more than 3 times, please login again after 5 minutes. You can also power off, and power on to start on the device, input the correct password to avoid waiting five minutes.

If user forget password, click Forgot password. User can choose a way to create new password:

1. Scan the QR code and send the QR code to your seller, seller send the verification

code to user and set new password to login .

2. Answer the secure question to create new password.

Step 4 Click Login to access the main User Interface (UI).

Step 5 Modify the default password, as shown in Figure 4-8

Figure 4-8 Modify default password

----End

5 Wizard

Login the NVR, the wizard is showing on live video, click **Start Wizard,** the pop-up window

will show as Figure 5-1.

Figure 5-1 Wizard

Figure 5-2 Wizard of network

Step 1 Set the parameter, the details please refer to Table 5-1.

Table 5-1 Network parameter

Parameter	Description	Configuration
DHCP	Enable DHCP, the device will obtain the IP address from the DHCP server.	[Setting method] Enable
IP Address	Set the IP of device when DHCP is disable	[Setting method] Manual

Parameter	Description	Configuration
Subnet mask	Set the subnet mask of device	[Setting method] Manual [Default value] 255.255.255.0
Gateway	If the user wants to access device, he must set that	[Setting method] Manual [Default value] 192.168.0.1
Obtain DNS automatically	N/A	[Setting method] Enable
DNS 1	N/A	[Setting method] Manual [Default value] 192.168.0.1
DNS 2	N/A	[Setting method] Manual [Default value] 192.168.0.1
UPnP	Auto: device to obtain Web port, data port and client port. Manual: user set the port manually.	[Setting method] Choose type from drop-down list [Default value] Auto
Web Port	N/A	[Setting method] When UPnP is manual, you need to set these.
Data Port	N/A	
Client	N/A	

Step 2 Click [Next] to view the basic information about device, as shown in Figure 5-3.

Figure 5-3 Wizard of date and time

Choose date format and time format from drop-down list.

Click ⬤ to synchrony time from network.

Disable the NTP-Sync, set time manually.

Roll the mouse to choose year, month and day when clicking the date.

Roll the mouse to choose hour, minute and second when clicking the date.

Click **Modify Time** to save the time.

Step 3 Click **Time Zone,** choose the current time zone from drop-down list, as shown in Figure 5-4.

Figure 5-4 Wizard of time zone

Step 4 Click **DST,** enable the DST, set start and end time. Select offset time from drop-down list.

Step 5 Click [Next] to enter the adding camera wizard, as shown in Figure 5-5.

Figure 5-5 Wizard of adding camera

The details of adding camera please refer to *chapter 7.3*.

Step 6 Click [Next] to enter wizard of disk, as shown in Figure 5-6.

Figure 5-6 Wizard of disk

You can view the general information of disk. You can also format the disk.

Step 7 Click ▨Next▨ to enter wizard of P2P, as shown in Figure 5-7

Figure 5-7 P2P

Step 8 Enable the P2P, user can use mobile devices to manage the NVR by scanning the P2P ID, if the mobile phone has loaded the InView Pro 4(search the APP at App Store or Google Play).

Step 9 Click Next to enter the wizard of resolution , as shown in Figure 5-8. Choose resolution from drop-down list.

Figure 5-8 Wizard of resolution

Step 10 Click **Finish** to end the wizard, tick the **Not show this window next time,** wizard would not show at next time. Reopen wizard at **system >user >advance setting.**

6 Quick Navigation

After the NVR operation screen is displaying, move the cursor to the down most position of the NVR screen. The NVR floating menu bar is displaying.

Click ![home icon] in the left of NVR floating menu bar. The quick home menu is showing. The quick home menu provides **Playback**, **System and Power(Shutdown, Reboot and Logout)** as shown in Figure 6-1.

Figure 6-1 Quick home menu

In the middle of NVR floating menu bar, the video tool bar provides **video window switching**, **auto SEQ, volume, playback,** and **channel information,** as shown in Figure 6-2.

Figure 6-2 Real-time video toolbar

The real-time video toolbar is described as follows:

: Layout. Click the icon, the real-time video window switch

between the single-screen mode and multi-screen mode. Click ![up arrow] on the right of screen splitting

format and choose the channels to view the video.

 : Auto SEQ. click icon, the layout dwell on screen is enabled, for how to set the dwell on,

please see *chapter 7.7.5.*

 : Audio. Click icon, the audio setting screen is displaying, which you can choose the

channel and adjust the volume.

A main menu quick toolbar is display on the right of NVR floating menu bar. The main menu

quick toolbar provides **manual alarm, alarm information, clean alarm information** and **time**,

as shown in Figure 6-3.

Figure 6-3 Main menu quick toolbar

 : Manual alarm, click the icon, the window shows in Figure 6-4.

Figure 6-4 Manual alarm

 : Alarm message, click icon would show pop-up message window, as shown in 6.1.

6.1 Alarm message

: Clean alarm, click icon and clean the current alarm actions like vioce and external alarm out.

: Information, click icon and the genreal information would show, like network, system, channel and disk, as shown in Figure 6-5.

Figure 6-5 Information

6.2 Real Time Video Bar

Click realtime image, the quick setting will show as figure.

Record: click the icon and start to record video. Click again to end record.

Instant playback: click the icon, the window will play previous five minutes record video.

is the time bar of playback.

Audio: open or close the audio.

PTZ: This function only is useful for speed dome cameras. You can adjust every parameter as shown in Figure 6-6.

Figure 6-6 PTZ adjust screen

: User adjust direction of camera.

: At this part, user can set **Advanced, Scan** and **Tour** settings.

: 3D, this function only can be used for high speed dome camera. Click the icon to enter the camera live video screen, use the mouse to move the camera or zoom in or out the lens. Click the point to zoom in. Drag and draw the area, zoom in the drawing area, Reverse drag to zoom out.

: Zoom in, click zoom in, roll the mouse wheel to zoom in and zoom out. Right-click to

exit the zooming.

: Image, click the icon ,as shown in Figure 6-7. Select scene, and drag cursor to adjust

value of brightness, sharpness, contrast and saturation.

Figure 6-7 Camera picture parameter

: Two way audio. The NVR and carmera can talk to each other.

: Modify device parameters, as shwon in Figure 6-8.

Figure 6-8 Modify device parameter

6.3 Playback

Playback refers to playing back a video.

Click ![icon] in the quick navigation bar to access the playback screen, as shown in Figure 6-9.

Figure 6-9 Playback screen

The toolbar at the bottom of the playback screen is described as follows:

: Layout.

: Reversed, pause/play, stop.

:30s backward, 30s farward.

:Triple speed, it supports up to 32 times to playback.

: Zoom.

: Audio.

![icon]: Start and end backup. Click the icon, the video backup starts, select the video and click the

icon again.

The backup type shows, click **save**, then saving the file pop-up windows would show as Figure

6-10 . Click **OK** to save.

This function is available after a USB disk is plugging in the device.

Figure 6-10   Select directory

![icon]：Batch backup, click the icon to backup multi-channels, as shown in Figure 6-11.

Choose the folder to save, select the stream information from drop-down list, set the start time

and end time, select the channels, Click **OK** to backup.

Figure 6-11   Batch backup

: Type of time bar, recording video can show

6.3.1 Time Search

Search refers to searching for a video by date and time.

Operation Description

Click in the quick navigation bar to access the search screen, as shown in Figure 6-12.

Figure 6-12   Time Search screen

Operation Steps

Step 1 Select a camera in the camera list on the left side of the search screen. The video view of the selected camera is displaying in the play window.

Step 2 Select a date in the calendar on the light-down side of the search screen.

Step 3 Choose record type , and search the video quickly.

Step 4 Choose proper button to adjust video.

----End

6.3.2 Picture Grid

Picture grid refers to evenly dividing the video of a channel by time range and searching for a video based on thumbnails divided by time range.

Click **Picture Grid** on the quick navigation bar to access the picture grid screen, as shown in Figure 6-13.

Figure 6-13   Picture grid screen

Operation Steps

Step 1 Select a camera in the camera list on the left side of the picture grid screen. Videos shot by the camera in the earliest time range on the current day are displayed as thumbnails in the window on the right side.

Step 2 Select a day from calendar.

Step 3 A day are dividend to 12 grids, two hours is one grid.

Step 4 Select a required thumbnail, double-click it or right-click it and choose Play from the shortcut menu to play the video.

----End

6.3.3 Event

Click ⏱ on the quick navigation bar; choose **event** at title to access the alarm event screen, as shown in Figure 6-14

Figure 6-14   Event screen

Operation Steps

Step 1 Select a camera in the camera list on the left.

Step 2 Set start and end time.

Step 3 Tick the alarm type, such as alarm in, motion alarm, block alarm, video loss and

intelligent analysis.

Step 4 Click Search to query the event, the result would show at window.

Step 5 Double click to play video about event. It will play recording video.

----End

6.3.4 Backup

Click 🔁 on the quick navigation bar, choose Backup at title to access the backup screen,
as shown in Figure 6-15.

Figure 6-15 Backup screen

.

You can view the detail information of backup. Click delete button to quit the download.

----End

6.4 Thermal Temperature

📖 NOTE

The thermal temperature function is only carried by some devices. If the current device does not have the function, please ignore it.

6.4.1 Temperature Parameters

Temperature parameters include: temperature unit, ambient type, ambient temperature, cavity temperature, correctional coefficient and area temperature display mode.

Operation Procedure

Step 3 Choose Thermal >Temperature Parameters.

The **Temperature Parameters** page is displayed, as shown in Figure 6-16.

Figure 6-16 Temperature Parameters interface

Step 4 Set the parameters according to Table 6-1.

Table 6-1 Temperature parameters

Parameter	Description	Setting
Open Temperature Measure	Enable temperature measure.	
Temperature Unit	Celsius and Fahrenheit temperature units are available.	[Setting method] Select a value from the drop-down list box. [Default value] Celsius
Ambient Temperature	The ambient temperature of camera. It is set when ambient is outside.	[Setting method] Enter a value manually.

Parameter	Description	Setting
Cavity Temperature	The cavity temperature of camera.	N/A
Correction Coefficient	Correction coefficient is refer to the deviation of measured object temperature and actual temperature. For example: 1. The measured object temperature is 30, and actual temperature is 37, so the correction coefficient should be **7.** 2. The measured object temperature is 37, and actual temperature is 30, so the correction coefficient should be -**7.**	[Setting method] Enter a value manually. [Default value] 0.00
Area Temperature Display Mode	The display position of temperature information on the live-video image.	[Setting method] Select a value from the drop-down list box. [Default value] Low left
Font Border	The font will be bolded.	[Setting method] Enable or disable [Default value] disable

Parameter	Description	Setting
Custom Colors	Enable to custom the color, there are nine colors chosen.	[Setting method] Enable or disable [Default value] disable
Area Temperature Type	There are three types of area temperature.	[Setting method] Select a value from the drop-down list box. [Default value] Highest Temperature
Measure Mode	There are two types measure modes.	[Setting method] Select a value from the drop-down list box. [Default value] General
Display Alarm Area	N/A	[Setting method] Enable or disable [Default value] disable
Area Alarm Interval	N/A	[Setting method] Enter a value manually ranges from 1 to 1800. [Default value] 10

Figure 6-17   Advanced parameter

Table 6-2 Advanced parameters

Parameter	Description	Setting
Dimming Mode	There are auto and manual modes. It will show on temperature item.	[Setting method] Select a value from the drop-down list box. [Default value] Auto
Greater Prominent	Enable that, the image will show the setting color if the temperature is higher than set value.	[Setting method] Enter a value manually. Choose one color to show.

Parameter	Description	Setting
Section Prominent	Enable that, the image will show the setting color if the temperature is between minimum and maximum temperature.	[Setting method] Enter a value manually. Choose one color to show.
Less Prominent	Enable that, the image will show the setting color if the temperature is lower than set value.	[Setting method] Enter a value manually. Choose one color to show.

Step 5

Step 6 Click **Copy** to copy the same settings to others thermal cameras.

Step 7 Click **Apply**.

Step 8 The message "Apply success" is displayed, the system saves the settings.

----End

6.4.2 Temperature Area

Operation Procedure

Step 1 Choose Thermal >Temperature Area.

The **Temperature Area** page is displayed, as shown in Figure 6-18

Figure 6-18 Temperature area and alarm configuration

Step 2 Set the parameters according to Table 6-3

Table 6-3 Temperature area and alarm configuration

Parameter	Description	Setting
Channel	N/A	[Setting method] Select a value from the drop-down list box. [Default value] 1
Measure Mode	Set at temperature parameter interface.	N/A

Parameter	Description	Setting
PTZ Area(only use for PTZ cameras)	Choose or set the preset, adjust the camera with PTZ keyboard. The all presets can set 20 areas to alarm	Set the preset manually, or select an existing preset in the drop-down list.
Enable	Tick to enable alarm areas.	N/A
ID	It ranges from 0 to 19.	N/A
Name	Area name of temperature area.	[Setting method] Enter a value manually.
Type	Type of temperature area. ID 0 is default rectangle area, which is full screen. There are 20 areas can be set, these are from 0 to 19 area.	[Setting method] Select a value from the drop-down list box. [Default value] Rectangle/Point
Alarm Type	Threshold alarm and Temperature difference alarm are available for alarm type.	[Setting method] Select a value from the drop-down list box. [Default value] Threshold alarm
Warning Value	Camera will warn when the surveillance object temperature reaches the warning value.	[Setting method] Enter a value manually. [Default value] 48.00
Alarm Value	Camera will alarm when the surveillance object temperature reaches the alarm value.	[Setting method] Enter a value manually. [Default value] 50.00

Parameter	Description	Setting
Maximum Alarm Value	The maximum value of the alarm range, if the alarm value is exceeded, no alarm will be generated.	[Setting method] Enter a value manually. [Default value] 60.00
Emission Rate	The emission rate is the capability of an object to emit or absorb energy. The emission rate should be set only when the target is special material.	[Setting method] Enter a value manually. [Default value] 0.95
Distance(M)	The distance between camera and target.	[Setting method] Enter a value manually. [Default value] 15  📖 NOTE Enter actual distance when the distance between camera and target is less than 15 m. Enter 15 when the distance between camera and target is great than or equal to 15 m.
Alarm	Open or close the alarm output and linkage of area.	[Setting method] Tick the alarm areas

Step 3 Set temperature area.

1. Tick an area ID.
2. Select type from drop-list.
3. Press and hold the left mouse button, and drag in the video area to draw a temperature area. Right-click to finish the area selected.
4. Click **Apply**, the message "Apply success" is displayed, the temperature area is set successfully.

         Delete a temperature area:
1. Select an area ID.
2. Click the temperature area and right-click.
3. Remove the tick of area ID.
4. Click **Apply**, the message "Apply success" is displayed, the temperature area is deleted successfully.

Step 4 Click **Apply**.

Step 5 The message "Apply success" is displayed, the system saves the settings.

----End

6.4.3 Schedule Linkage

Operation Procedure

Step 1 Choose Thermal > Schedule Linkage

The **Schedule Linkage** page is displayed, as shown in Figure 6-19.

Figure 6-19 Schedule Linkage

Step 2 Tick the output channel.

Step 3 Enable "Alarm Record", "E-mail" button.

Step 4 Set schedule linkage.

Figure 6-20 Schedule

Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 6-19.

Method 2: Hold down the left mouse button, drag and release mouse to select the alarm time within 0:00-24:00 from Sunday to Saturday.

◫ NOTE

When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Method 3: Click ⊗ in the alarm time page to select the whole day or whole week.

Deleting alarm time: Click ⊗ again or inverse selection to delete the selected alarm time.

Step 5 Click **Apply**.

Step 6 The message "Apply success" is displayed, the system saves the settings.

----End

6.4.4 Advanced

Operation Procedure

Step 1 Choose **Thermal** > **Advanced** to enter the advance interface, as shown in Figure 7-1**.**

Figure 6-21 Advanced

Step 2 Select the temperature collection interval from the drop-list.

Step 3 Click **Apply**.

Step 4 The message "Apply success" is displayed, the system saves the settings.

----End

6.4.5 Inquire

Operation Procedure

Step 1 Choose **Thermal** > **Inquire** to enter the inquire interface, as shown in Figure 6-22.

Figure 6-22 Inquire

Step 2 Choose the channel is thermal camera.

Step 3 Set the start and end time.

Step 4 Choose the area, which is set at the temperature area interface. The default area is 0(full screen).

Step 5 Choose the type of temperature, set the temperature range.

Step 6 Choose the interval of showing, click **Search** to show the result, there are two modes to show result, list or picture.

6.5 Face Defection

The function only be used for NVR2604E1-P4C-J and NVR2608E1-P8C-J

6.5.1 Face Comparison

Click the icon ![icon] or ![Face Recognition] at quick navigation bar, enter to the face comparison

interface, as shown in Figure 6-23.

Figure 6-23 Face comparison interface

Table 6-4 Face comparison

No.	Description
1	Camera list
2	Menu
3	Live video
4	Real time comparison area, the snapshot picture of person will compare with the face library's information, the result show in this area.
5	Layout

6	Snapshot in real time video, put the cursor on picture such as ![icon], you can add it to face library, or face search. The cursor on area 6 and the pictures is not update, move the mouse so that the pictures can be shown in time.

6.5.2 Face Search

Figure 6-24   Face search interface

Table 6-5 Face comparison

No.	Description
1	Query condition :1. choose camera; 2. Set start time and end time. 3. Choose the manner of searching, such as by picture or by feature. 4. Set similarity 5. Click "Search" to query.
2	Result of querying, it shows 15 pictures per page.
3	Page, it shows up to 10 pages, if the result is more than 150 pictures, you should set a more precise range.
4	The detail information of chosen picture, the default is the first picture of page.
5	Play video of snapshot, it will play a 30-second video before and after the snapshot,.

6.5.3 Face Library

Figure 6-25   Face library

Table 6-6 Face library

No.	Description
1	Add a new face library
2	Edit or delete the face library.
3	Add or delete the personnel. Add personnel as shown in Figure 7-1.
4	Import or export the face library.
5	Person information display method.
6	Snapshot in real time video, put the cursor on picture such as ![icon], you can add it to face library, or face search. The cursor on area 6 and the pictures is not update, move the mouse so that the pictures can be shown in time.
7	Operate, edit or delete the personnel, as shown in Figure 8-24.

Figure 6-26　Person enroll

Person Enroll ✕

Name	
Gender	Male
ID	
Birthday	2019/07/04
Group	Default Lib
Type	Teacher
Never expire	⬤
Picture	

OK　　Cancel

6.5.4 Comparison Configuration

In comparison configuration interface, click [icon] to set the comparison strategy, enable the face matching, select face database, set similarity, tick the linkage mode, set schedule of enable face comparison, as shown in Figure 6-27.

Figure 6-27   Comparison configuration

6.6 Attendance

The function only be used for NVR2604E1-P4C-J and NVR2608E1-P8C-J

6.6.1 Attendance Data

Click to enter attendance data interface, as shown in Figure 6-28.

Figure 6-28   Attendance data

Operation Steps

Step 1 Tick the attendance library.

Step 2 Choose time mode, such as today, this week, this month and custom time.

Step 3 Choose search type, such as attendance summary and attendance details.

Step 4 Click search, the result will show in interface.

Step 5 Click Export to export the query result.

6.6.2 Attendance Management

In attendance management, user can set attendance rule, library and check point, as shown in Figure 6-29.

Figure 6-29   Attendance rule settings

Operation Steps

Step 1 Set start work time and end work time.

Step 2 Tick the workday

Step 3 Set valid time of check in and check out.

Step 4 Click Save to save the setting.

Attendance library

Step 1 Click **Attendance Library** to add library, the attendance library can call the face database directly.

Figure 6-30 Attendance library

Step 2 Tick the library and click Add to add to attendance library. If you want to modify the library.

Step 3 click ⚙ Database management to enter the face database management to modify parameter.

Step 4 Click Save to save the setting.

Attendance check point settings:

Step 1 Click **Attendance check point** settings to set point, as shown in Figure 6-31.

Figure 6-31 Attendance check point setting

Step 2 Click ![icon] to edit check point setting, as shown in Figure 6-32

Figure 6-32 Check point

Step 3 Enable the function, set similarity and tick the library, all face detection cameras can be set the check points

Step 4 Click **OK** to save the setting.

7 UI System Setting

7.1 Channel Information

Click the ⊞ will show as Figure 7-1, tick the Channel or Encode, the information will show in

live video screen.

Figure 7-1 Channel information

7.2 Main Menu

Right-click on UI screen, the main menu as shown in Figure 7-2. The main menu includes

Channel, **Record, Network, Alarm** and S**ystem**.

Figure 7-2 NVR main menu

----End

7.3 Channel Management

IP cameras can directly connect to input channels of the NVR by plugging in POE port. When IP cameras are insufficient, the NVR can automatically searches for and adds IP cameras or manually add cameras in the same Local Area Network (LAN).

Channel management includes add or delete **Camera, Encode, Sensor Setting, OSD** and **Privacy Zone**.

7.3.1 Camera

Operation Description

Click **Channel** in the main menu to access the camera management screen, as shown in Figure 7-3 .

Figure 7-3 Channel management screen

7.3.1.1 Add Camera Automatically

The NVR can add automatically cameras to the camera list.

Operation Methods

Method 1: Click [⟳ Refresh] button, the cameras these are the same local area network with NVR will show in list, input username and password (the default value both are admin)click [Add Devices], the cameras in the list would be added to channels directly.

Method 2: Select the cameras you wanted to add, and click [Add] the selected cameras would be added to the camera list.

Tick the online non-onvif channels at list and click [Batch Update] to access the directory of software; it would to update the channels at once.

📖 **NOTE**

- On the camera management screen, check the status of channel in the camera list. If the status of a channel is ●, this camera is online. If the status of a channel is ●, this camera is offline.
- The added cameras should be the same network segment as NVR.

7.3.1.2 Add Camera Manually

Operation Steps

Step 1 Click +, the screen to add devices manually is displaying, as shown in Figure 7-4.

Figure 7-4 Add camera screen

Step 2 Input IP address, port, user name and password of camera.

Step 3 Select a protocol from the drop-down list. Remote channel is only used for thermal imaging cameras.

Step 4 Click ▊ OK ▊, the camera is added successfully.

📖 NOTE

If all channels of the NVR are connected by cameras, please delete the cameras that you don't need , so that you can add more cameras.

If a IP camera is added manually, input the correct username and password of the camera below the online device list. The camera will be added successfully. If not the camera would be shown on list at offline.

7.3.1.3 Delete Camera

Operation Steps

Step 1 Select a camera to delete in the camera list and click 🗑, the delete confirmation message screen is displaying, as shown in Figure 7-1.

Figure 7-1 Delete confirmation message

Are you sure to delete the selected channel?

OK   Cancel

Step 2 Click ![OK], the camera is deleted successfully.

7.3.1.4 Operate Camera

At camera list, click ![···] to operate camera as shown in Figure 7-2, user can update, reboot and reset the camera immediately.

Figure 7-2 More operation

⊕ Update

⊛ Reboot

⊡ Reset

Step 1 Click **Update,** pop-up window to select software, as shown in Figure 7-3.

Step 2 Set the directory click ![OK] to update camera.

Figure 7-3 Select directory of software

Select Directory			×
Device List	Name	Modify Date	Size
/dev/sda1	■ -		
/dev/sda2	📄 02_1920x1080_20181229100453.mp4	29/12/2018 10:05:10	5.5 MB
	📄 02_1920x1080_20181229100554.mp4	29/12/2018 10:06:44	30.6 MB

Remain/Total   Location :   /nfsroot/usbbk_a1
0.7 GB/0.7 GB   Selected Directory :   /nfsroot/usbbk_a1

OK   Cancel

Step 3 Click **Reboot,** message "**Are you sure to reboot?** " would show, click ![OK] to reboot the camera.

Step 4 Click **Reset,** message "**Are you sure to reset?**" would show, user can enable the

retain IP address function. click [OK] to rebset the camera.

Step 5 Tick the cameras with non-onvif protocol and cameras are online, click **Update** to update

all cameras at once.

📖 **NOTE**

> Update need upload the software by flash driver.

7.3.2 Encode Parameter

The system allows setting the stream information, encoding type, resolution, frame rate, bitrate

control, bitrate and quality for cameras in a channel in **Encode Parameter** screen.

Operation Description

Click **Encode** in the main menu or **Menu** of the channel management screen and choose **Encode**

to access the **Encode** screen, as shown in Figure 7-4.

Figure 7-4 Encode screen

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 Select stream information.

Step 3 Select encode type, resolution, frame rate, bitrate type and bitrate size from the drop-down lists.

Step 4 Click ▇ Copy ▇ and select channels or tick **all**, then click ▇ OK ▇ to apply the parameter settings to cameras in selected channels , click ▇ Apply ▇ to save encode parameter settings.

----End

7.3.3 Sensor Setting

Sensor setting refer to basic attributes of pictures, it includes the brightness, sharpness, contrast and saturation. You can set picture parameters for each channel based on scene.

Operation Description

Click **Sensor Setting** in the main menu or click menu of the channel management screen and choose **Sensor Setting** to access the Sensor Setting screen, as shown in Figure 7-5.

Figure 7-5 Sensor setting screen

The Sensor Setting are as follows:

- Brightness: it indicates brightness or darkness of picture.

- Sharpness: it indicates picture's clarity.

- Contrast: it refers to the brightest white and darkest black in an image.

- Saturation: it indicates brilliance of the picture color.

Other parameters are sensor settings of IP cameras, like scene, exposure, white balance, day-night, noise reduction, enhance image, zoom focus, etc.

- Scene: it includes indoor, outdoor, default. Mirror includes normal, horizontal, vertical, horizontal + vertical.

- Exposure: it includes mode, max shutter, meter area and max gain.

- White balance: it includes tungsten, fluorescent, daylight, shadow, manual, etc.

- Day-night: user can transit day to night, or switch mode.

- Noise reduction: it includes 2D NR and 3D NR.

- Enhance image: it includes WDR, HLC, BLC, defog and anti-shake.

- Zoom focus: user can zoom and focus.

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 Select scene from the drop-down list. The default values of picture parameters vary with scenarios.

Step 3 Set parameters.

Step 4 Click Default to reset to factory settings, click Apply to save image settings.
----End

7.3.4 OSD Settings

Click **OSD** in the main menu or menu of the channel management screen and choose **OSD** to access the OSD screen, as shown in Figure 7-6.

Figure 7-6 OSD setting screen

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 Click ⬤ next to Time to enable or disable OSD time setting.

Step 3 Click ⬤ next to Name to enable or disable OSD channel setting.

Step 4 Set the channel name.

Step 5 In the video window, click and drag time or channel to move to a location.

Step 6 Click Copy and select channels, then click OK to apply the OSD settings to cameras in selected channels , click Apply to save OSD settings.

----End

7.3.5 Privacy Zone

The system allows you to mask images in a specified zone and this zone is called privacy zone.

Operation Description

Click **Privacy Zone** in the main menu or menu of the channel management screen and choose privacy zone to access the **Privacy Zone** screen, as shown in Figure 7-7.

Figure 7-7 Privacy zone screen

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 In the video window, hold down and drag the left mouse button to draw a privacy area.

Step 3 Click **Copy** and select channels or tick **all**, then click **OK** to apply the privacy settings to cameras in selected channels , click **Apply** to save privacy settings.

Step 4 Double click privacy area to delete setting.

----End

7.4 Record Setting

Set the **Record Schedule**, view the disk capacity, examine the record' status.

7.4.1 Record Schedule

Operation Description

Click **Record** in the main menu or click the record page of any function screen in the main menu to access the record schedule screen, as shown in Figure 7-8.

Figure 7-8 Record management screen

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 Enable the record enable.

Step 3 Enable the record audio.

Step 4 Set the record schedule. **Method 1**: Hold down the left mouse button, drag and release mouse to select the arming time within 00:00-24:00 from Monday to Sunday.

📖 NOTE

- When you select time by dragging the cursor, the cursor cannot move out of the time area.
  Otherwise, no time would be selected.

- The selected area is blue. The default is all week.

Method 2: Click 🔄 in the record schedule page to select the whole day or whole week.

Step 5 Deleting record schedule: Click 🔄 again or inverse selection to delete the selected

record schedule.

Step 6 Click Copy and select channels or tick **all**, then click OK to apply the record

management settings to cameras in selected channels , click Apply to save settings.

----End

7.4.2 Disk

View the total capacity of disk, disk status, disk SN code and storage space of disk. You can
format the disk and set record expiration manner.

Operation Description

Step 1 Click **Record** in the main menu or menu of the record screen and choose **Disk** to access
the disk screen, as shown in Figure 7-9.

Figure 7-9 Disk screen

Step 2 Click **Format**. The message "Are you sure to format disk? Your data will be lost" is displaying.

Step 3 Click OK , and the disk would be formatted.

Step 4 Record expiration setting. Select record expiration days from the drop-down list of record expiration.

Step 5 Click Apply to save the settings.

----End

7.4.3 RAID

📖 NOTE

RAID is only used for the device with 4 disks or more. And the disks must be enterprise level disks.

The capacity of disks are better same for efficient using.

RAID5 at least 3 disks can be created. RAID6 at least 4 disks can be created. RAID10 at least 4

disks can be created. Create hot spare disk need more one disk or double basic disks.

The capacity of disks are better same for efficient using.

Figure 7-10 RAID

Operation Steps

Step 1 Click **RAID** to create the RAID.

Step 2 Click **Create** to choose disk to create a new RAID.

Step 3 Tick the **Hot-spare Disk** to back up the broken disk in case, the number of disk must

more than basic disks.

Step 4 Click   OK   to save the creation, format the new RAID.

7.4.4 S.M.A.R.T

S.M.A.R.T is Self-Monitoring Analysis and Reporting Technology, user can view the health of

disk, as shown in Figure 7-11.

Figure 7-11 S.M.A.R.T

7.5 Alarm Management

Set the **General alarm information, Motion Detection, Video Loss, Intelligent Analysis,**
Alarm In and **Abnormal Alarm** in alarm management screen.

7.5.1 General

Step 1 Click **Alarm** in the main menu (or click the alarm page of any function screen in the main
menu) to access the alarm management screen, as shown in Figure 7-12.

Figure 7-12 Alarm management screen

Step 2 Enable the Enable alarm button.

Step 3 Select a value from the drop-down list of duration time.

Step 4 Click Apply to save alarm settings.

----End

7.5.2 Motion Detection

The NVR will send motion detection alarm while something moving in the specific view of camera.

Operation Description

Step 1 Click **Motion Detection** in the main menu or menu of the alarm management screen and choose **Motion Detection** to access the Motion Detection screen, as shown in Figure 7-13.

Figure 7-13 Motion detection screen

Operation Steps

Step 2 Select a channel from the drop-down list of channel.

Step 3 Click ⬤ to enable motion detection.

Step 4 Enable the Event actions include: buzzer, alarm out, push message, pop up message, full screen, send E-mail and alarm record.

Step 5 Click Area page to access the motion detection area setting, as shown in Figure 7-14.

Figure 7-14 Motion detection area setting screen

Area :

> 1. Hold down and drag the left mouse button to draw a motion detection area.
>
> 2. Select a value from the drop-down list next to **Sensitivity**.

Step 6 Click **Schedule** page to access the schedule screen. For details, please see 7.4.1 Record

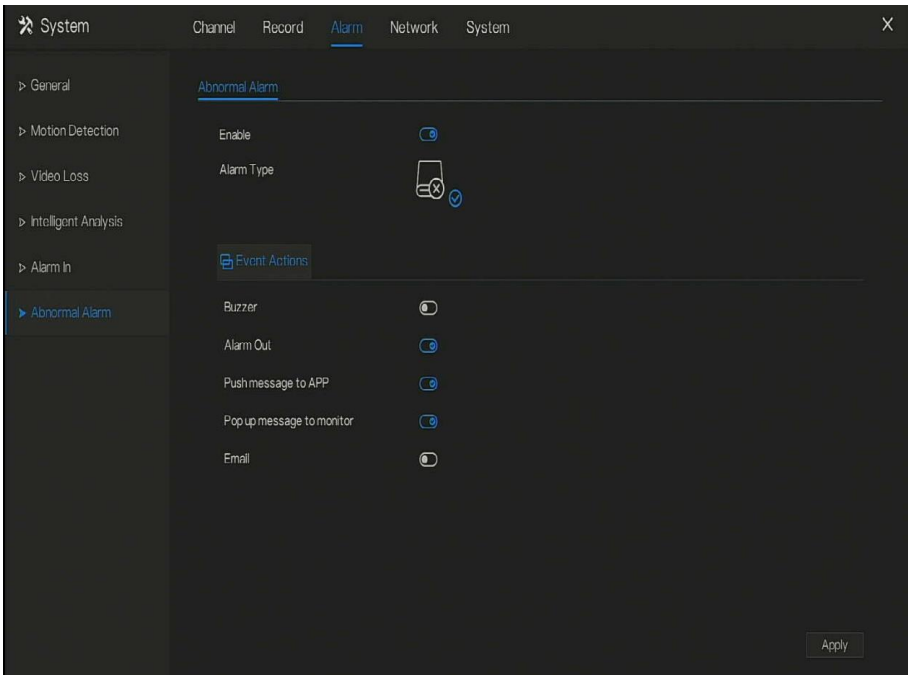Schedule Figure 7-8Step 4 Set the record schedule.

Step 7 Click Copy and select channels or tick **all**, then click OK to apply the motion

detection settings to cameras in selected channels, click Apply to save motion detection

alarm settings.

📖 **NOTE**

> After a motion detection area is selected, double-click it to delete the selected area.
>
> The default area is whole area.
>
> If you leave the page without applying, the tip "Do you want to save?" would show. Click save to
>
> save the settings. Click cancel to quit the settings.

----End

7.5.3 Video Loss

If a camera is disconnected to NVR, it will trigger video loss alarm.

Operation Description

Click **Video Loss** in the main menu or menu of the alarm management screen and choose **video Loss** to access the video loss screen, as shown in Figure 7-15.

Figure 7-15 Video loss screen

Operation Steps

Step 1 Select a channel from the drop-down list of channel.

Step 2 Click ![toggle] to enable video loss alarm.

Step 3 Enable the Event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

Step 4 Click Schedule page to access the schedule screen.

Step 5 For details, please see 7.4.1 Record Schedule Figure 7-8Step 4 Set the record schedule.

Step 6 Click ![Copy] and select a channel, then click ![OK] to apply the parameter settings to cameras in selected channels, click ![Apply] to save video loss settings.

----End

7.5.4 Intelligent Analysis

Operation Description

Step 1 Click **Intelligent Analysis** in the main menu or menu of the alarm management screen and choose **Intelligent Analysis** to access intelligent analysis screen, as shown in Figure 7-6.

Figure 7-16 Intelligent Analysis screen

Step 2 Select one action to set the alarm.(perimeter, single virtual fence, double virtual fences, object left, signal bad, advanced)

Step 3 Select a channel from the drop-down list of channel.

Step 4 Click [image] to enable intelligent analysis alarm.

Step 5 Enable the event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

Step 6 Click Schedule page to access the schedule screen.

Step 7 For details, please see Figure 7-8Step 4 Set the record schedule.

Step 8 Click　Copy　and select a channel, then click　OK　to apply the parameter settings to cameras in selected channels, click　Apply　to save video loss settings.

----End

7.5.5 Alarm In

Operation Description

Click **Alarm in** in the main menu or menu of the alarm management screen and choose **Alarm in** to access the alarm in screen, as shown in Figure 7-17.

Figure 7-17 Alarm in screen

Operation Steps

Step 1 Select a channel in **alarm in**.

Step 2 Click ⬤ to enable or disable the functions.

Step 3 Select **Alarm type** from the drop-down list.

📖 **NOTE**

NC: Normal close the alarm

NO: Normal open the alarm

Step 4 Set **name**.

Step 5 Enable the event actions include: buzzer, alarm out, push message, pop up message, send

E-mail and post recording.

Step 6 Click **Schedule** page to access the schedule screen. For details, please see 7.4.1 Record

Schedule Figure 7-8Step 4 Set the record schedule.

Step 7 Click [Apply] to save alarm in settings.

----End

7.5.6 Abnormal Alarm

Camera tamper means that the NVR would send alarm notification while objects cover IP cameras.

Operation Description

Step 1 Click **Abnormal Alarm** in the main menu or menu of the alarm management screen and choose **Abnormal Alarm** to access the abnormal alarm screen, as shown in Figure 7-18.

Figure 7-18 Abnormal alarm screen

Operation Steps

Step 2 Tick the abnormal actions.

Step 3 Enable the event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

Step 4 Click **Apply** to save abnormal alarm settings.

----End

7.6 Network Management

Set the **Network Parameter, 802.1X, DDNS, E-mail, Port Mapping, P2P, IP Filter** and **SNMP** in the network management screen.

Operation Description

Step 1 Click **Network** in the main menu (or click the network page of any function screen in the main menu) to access the network management screen, as shown in Figure 7-19.

Figure 7-19 Network management screen

7.6.1 Network

Set **DHCP a**nd **DNS** manually or automatically.

7.6.1.1 IP

Operation Steps

Step 1 Click ⬤ next to **DHCP** to enable or disable the function of automatically getting an IP address. The function is disabled by default.

Step 2 If the function is disabled, click input boxes next to **IP**, **Subnet mask**, and **Gateway** to set the parameters as required.

Step 3 Click ⬤ next to **Obtain DNS Automatically** to enable or disable the function of automatically getting a DNS address. The function is enabled by default.

Step 4 If the function is disabled, click input boxes next to **DNS 1(default 192.168.0.1)** and **DNS 2(default 8.8.8.8)**, delete original address, and enter new address.

Step 5 Click Apply to save IP settings.

----End

7.6.1.2 Port

Operation Steps

Step 1 Click **Port** page to access the port setting screen, as shown in Figure 7-20.

Figure 7-20   Port setting screen

Step 2 Set the web port, data port and client port.

Step 3 Click [Apply] to save port settings.

----End

7.6.1.3 POE

Operation Steps

Step 1 Click **POE** page to access the POE setting screen, as shown in Figure 7-21.

Figure 7-21 POE screen

Step 2 The NVR will deploy IP addresses to the cameras which connect POE immediately.

Step 3 Click ![Apply] to set POE camera IP address successfully.

----End

7.6.1.4 WiFi Parameter

Operation Steps

Step 1 Click **WiFi Parameter** page to access the WiFi Parameter setting screen, as shown in Figure 7-21.

Figure 7-22 WiFi Parameter

Step 2 Set the parameters of WiFi。

Step 3 Click Apply to set POE camera IP address successfully.

📖 **NOTE**

> BSDID, default value of the device, cannot be changed.
>
> SSID, the name can be changed to facilitate customer search.
>
> WiFi channel; 1-13 channels, plus the other channel, can be changed according to network blocking
>
> conditions to avoid interference.
>
> The area can be selected according to the country where it is located, MKK, ETSI1, ETSI2, FCC.

7.6.1.5 WiFi Network

Operation Steps

Step 1 Click **WiFi Parameter** page to access the WiFi Parameter setting screen, as shown in
Figure 7-21.

Figure 1-1 WiFi network

----End

7.6.2 802.1 X

Operation Steps

Step 1 Click next to **802.1 X** to enable or disable the function .The default is disabled.

Figure 7-23 802.1 X

Step 2 Input the user and password of 802.1X, the account is created by user.

Step 3 Click [Apply] to save the settings. The visitor to view the NVR need to input account to certify.

7.6.3 DDNS

Please make sure of connecting the specified camera to the Internet, and obtain the user name and password for logging into the dynamic domain name system (DDNS) from the server.

Operation Steps

Step 1 Click **DDNS** in the main menu or menu of the network management screen and choose **DDNS** to access the DDNS screen.

Step 2 Click [ ] next to **Enable** to enable the DDNS function. It is disabled by default, as shown in Figure 7-24.

Figure 7-24 DDNS setting screen

Step 3 Select a required value from the protocol drop-down list.

Step 4 Set domain name, input user and password.

Step 5 Click ▢Test▢ to check the domain name.

Step 6 Click ▢Apply▢ to save DDNS network settings

📖 **NOTE**

An external network can access the NVR via an address that is set in the DDNS settings.

----End

7.6.4 E-mail

If the simple mail transfer protocol (SMTP) function is enabling, the device automatically sends alarm information to specified email addresses when an alarm is generated.

Operation Steps

Step 1 Click **E-mail** in the main menu or menu of the network management screen and choose **E-mail** to access the E-mail screen, as shown in Figure 7-25.

Figure 7-25 E-mail setting screen

Step 2 Set SMTP server and SMTP server port manually.

Step 3 Input E-mail sender, user name and password manually.

Step 4 Set E-mail for receive alarm. the message "**Mail has been sent, please check**" is

displaying. Open the mail, if the verification code is received, that shows the E-mail is set

successfully.

Step 5 Set E-mail for retrieve the password. the message "Mail has been sent, please check" is

displaying. Open the mail, if the verification code is received, that shows the E-mail is set

successfully.

Step 6 Set SSL encryption for encrypting mail or not.

Step 7 Click Apply to save settings.

----End

7.6.5 Port Mapping

Operation Steps

Step 1 Click **Port Mapping** in the main menu or menu of the network management screen and

choose **Port Mapping** to access the port mapping screen, as shown in Figure 7-26.

Figure 7-26 Port mapping setting screen

Step 2 Select UPnP enable type.

Step 3 Manual UPnP: input http port, data port and client port manually.

Step 4 Auto UPnP: device obtain the port automatically.

Step 5 Click [Apply] to save settings.

----End

7.6.6 P2P

Show the UUID code and set the P2P status of the device.

Operation Steps

Step 1 Click **P2P** in the main menu or menu of the network management screen and choose **P2P** to access the P2P screen, as shown in Figure 7-27.

Figure 7-27 P2P screen

Step 2 Click [toggle] to enable the P2P function.

Step 3 Click Apply to save P2P network settings or click **Cancel** to cancel settings.

Step 4 After the **Inview Pro4** is installed in mobile phone, run the APP and scan the QR to add and access the NVR when the device is online.

----End

7.6.7 IP Filter

Set the IP address in specified network segment to allow or prohibit access.

Operation Steps

Step 1 Click **IP Filter** in the main menu or menu of the network management screen and choose **IP Filter** to access the IP filter screen, as shown in Figure 7-28.

Figure 7-28 IP Filter setting screen

Step 2 Click ⬤ next to **IP Filter** to enable the function of IP Filter.

Step 3 Select black list or white list drop-down list.

Step 4 Click ➕ to set black &white list IP segment screen is displaying, as show in Figure 7-29.

Figure 7-29 IP Address Segment screen

Step 5 Enter value manually for start IP address, end IP address.

Step 6 Click _____. The system saves the settings. The black and white lists IP segment listed in the black (white) list.

NOTE

Black list: IP address in specified network segment to prohibit access.

White list: IP address in specified network segment to allow access

Select a name in the list and click **Delete** to delete the name from the list.

Select a name in the list and click **Edit** to edit the name in the list.

Only one rule type is available, and the last rule type set is efficient.

----End

7.6.8 SNMP

There are three versions of simple network management protocol at interface.

Operation Steps

Step 1 Click **IP Filter** in the main menu or menu of the network management screen and choose **IP Filter** to access the IP filter screen, as shown in Figure 7-30.

Figure 7-30 SNMP settings screen

Step 2 Click ⬤ next to **SNMPV 1** to enable the function . The interface is shown as Figure 7-31.

Figure 7-31   SNMPV 1/2 interface

Step 3 Input the parameters of protocol.

Step 4 Click Apply to save settings or click Cancel to cancel settings.

----End

7.7 System Management

View the device **Information** and set **General** information, **User, Security Center, Auto Sequence, Logs, Maintenance** and **Auto Restart** for the system setting.

Operation Description

Click **System** in the main menu (or click the system page of any function screen in the main menu) to access the system setting screen, as shown in Figure 7-32.

Figure 7-32 System setting screen

7.7.1 Information

View the device ID, device name, device type, model, firmware version, HDD volume, channel support, alarm in, and alarm out, audio in, audio out in **information** screen, as shown in Figure 7-33 .

Figure 7-33 Information interface

7.7.2 General

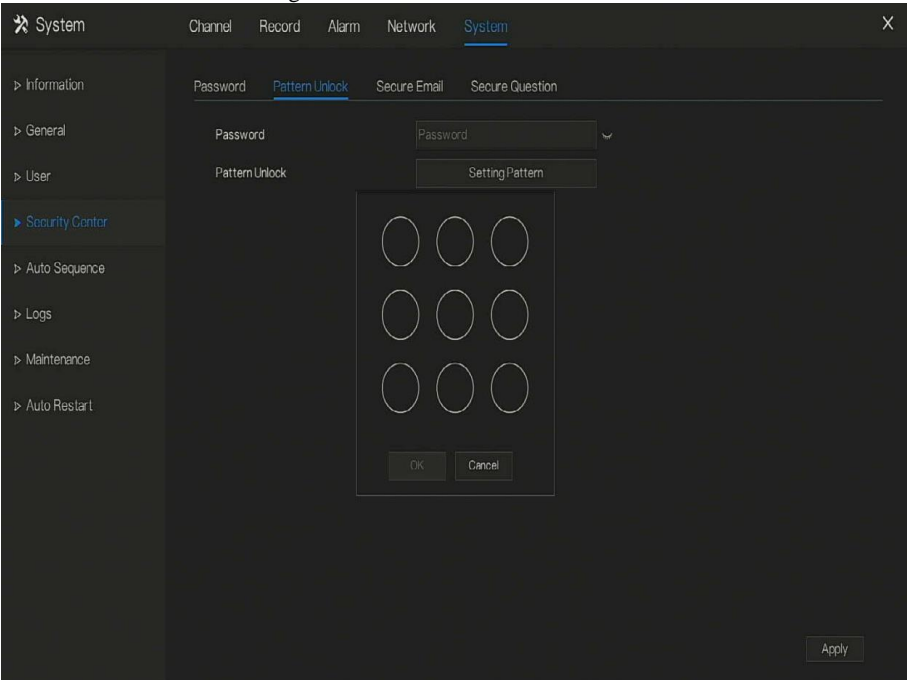## 7.7.2.1 System

Operation Steps

Step 1 Click **General** in the main menu or menu of the system management screen and choose
General to access the system screen, as shown in Figure 7-34.

Figure 7-34 system setting screen

Step 2 Enter device name for selected device.

Step 3 Select a proper resolution from the output resolution drop-down list.

Step 4 Select a required language from the Language drop-down list.

Step 5 Click **Apply** to save settings.

----End

7.7.2.2 Date and Time

Operation Steps

Step 1 Click **Date and Time** page to access the date and time setting screen, as shown in Figure 7-35.

Figure 7-35 Date and Time setting screen

Step 2 Select required format from the Date Format and time format drop-down list.

Step 3 Click ⬤ next to NTP Sync to disable time synchronization. Time synchronization is enabled by default. Time is synchronized with the NTP.

Step 4 After NTP Sync is disabled, you can manually set the system time:

> Click **Date** and scroll the mouse scroll wheel to select the year, month, and date.
> Click **Time** and scroll the mouse scroll wheel to select the hour, minute, and second.
> Click **Modify Time** to save the time settings.

Step 5 Click Apply to save settings.

----End

7.7.2.3 Time Zone

Operation Steps

Step 1 Click **Time zone** page to access the time zone setting screen, as shown in Figure 7-36.

Figure 7-36 Time zone setting screen

Step 2 Select a required time zone from the Time Zone drop-down list.

Step 3 Click ▢ Apply ▢ to save settings.

----End

7.7.2.4 DST

When the DST start time arrives, the device time automatically goes forward one hour (offset time). When the DST end time arrives, the device time automatically goes backward one hour. The offset time can change if local rule is different.

Operation Steps

Step 1 Click **DST** page to access the DST setting screen, as shown in Figure 7-37.

Figure 7-37 DST setting screen

Step 2 Click ⬤ next to **DST** to enable DST.

Step 3 Select start time, end time, offset time from the drop-down list respectively, that basis on the local rules.

Step 4 Click Apply to save settings.

----End

7.7.3 User

Add, modify, and delete a user and privilege in user screen, admin user can dispose privilege to different user.

7.7.3.1 User

Operation Steps

Step 1 Click **User** in the main menu or menu of the system management screen and choose **User** to access the user screen, as shown in Figure 7-38.

Figure 7-38 User management screen

Step 2 Add or delete a user.

- Add a user

    Click **Add**, the **Add User** dialog box appears, as shown in Figure 7-39.

Figure 7-39 Add user screen

Input a username, password and confirm password.

📖 NOTE

The password should include letter, character and number, at least two types.

The password should be 6~32 characters.

Step 3 Select a **Group** from the drop-down list box.

Step 4 Select a **Change password reminder** value from the drop-down list box.

Step 5 Select the operation privileges and channels in the list of the add user screen.

Step 6 Click ⬛ OK ⬛. The user is set successfully.

📖 NOTE

The default user is **Administrator** and cannot be deleted or modified.

Select a user from user list and click 🖉 to edit , or click 🗑 to delete a user.

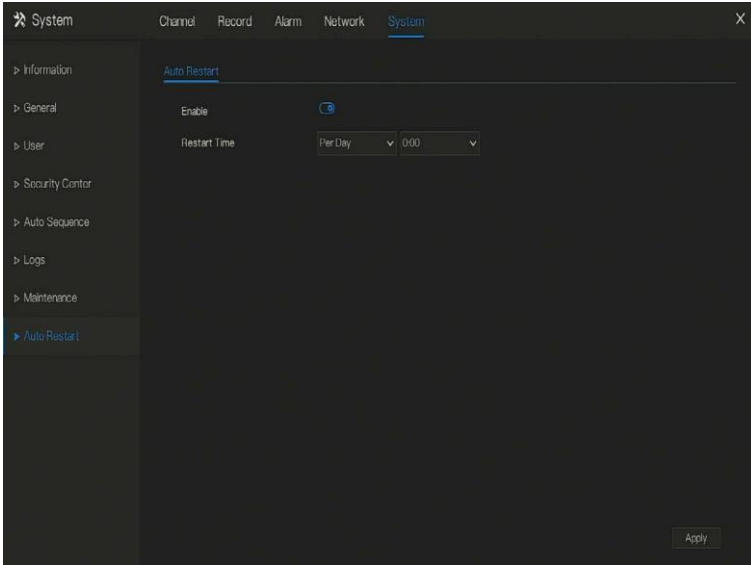**-----End**

7.7.3.2 Advance Setting

Operation Steps

Step 1 Click **User** in the main menu or menu of the system management screen and choose **Adv**

Setting to access the user screen, as shown in Figure 9-8.

Figure 7-40 Advance setting screen

Step 2 Enable or disable Auto login, Password double authentication, Boot Wizard. Set the

logout time if the user disable the auto login.

Step 3 Click Apply to save settings.

-----End

7.7.4 Security Center

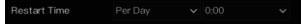User can modify the password, pattern unlock, secure email, and secure question..

7.7.4.1 Password

Operation Steps

Step 1 Click **Security Center** in the main menu or menu of the system management screen and choose **Password** to access the modify password screen, as shown in Figure 7-41.

Figure 7-41 Password modification screen

Step 2 Input the correct old password, new password, and confirm password.

📖 NOTE

The password should include at least two kinds of letter, character and number.

The password should be 6~32 characters.

Only special characters (!@#$*+=-) are supported,

Step 3 Click [Apply] to save modified password settings.

----End

7.7.4.2 Pattern Unlock

Operation Steps

Step 1 Click **Security Center** in the main menu or menu of the system management screen and choose **Pattern Unlock** to access the modify pattern unlock screen, as shown in Figure 7-42.

Figure 7-42 Pattern unlock screen

Step 2 Input the password, click **Setting Pattern** to set an new pattern unlock.

Step 3 Draw the pattern, then it will remind to draw the confirmation pattern again.

Step 4 Click OK to save the pattern unlock.

----End

7.7.4.3 Secure Email

Set the email to receive the verification code to create new password, as shown in Figure 7-43.

Figure 7-43   Secure Email

Step 1 Input the password of NVR.

Step 2 Set the Email which will receive email of the verification code.

Step 3 Click Apply to save setting.

----End

7.7.4.4 Secure Question

Set the questions to create new password, as shown in Figure 7-43.

Figure 7-44   Secure question

Step 1 Input the password of NVR.

Step 2 Choose the question from drop-down list.

Step 3 Input the answer, click **Apply** to save setting.

----End

7.7.5 Auto Sequence

Set video mode, dwell time in display screen.

Operation Steps

Step 1 Click **Auto Sequence** in the main menu or menu of the system management screen and choose **Auto Sequence** to access the display screen, as shown in Figure 7-45.

Figure 7-45 Auto Sequence screen

Step 2 Set mode of display. Select a display mode from the **SEQ** drop-down list.

Step 3 Select dwell time from the **SEQ** Dwell time drop-down list(the display screen will loop play the real time video according to setting time).

Step 4 Click Apply to save dwell settings.

----End

7.7.6 Auxliary Screen

📖 NOTE

This function only can be used for the devices are 8 or more than channels. The main screen is connected by HDMI(HD-OUT 2), auxiliary screen is connected by VGA.

Operation Steps

Step 1 Click **Auxiliary Screen** in the main menu or menu of the system management screen.

Step 2 Enable the auxiliary screen, as shown in Figure 7-46

Figure 7-46 Auxiliary screen

Step 3 Set the Output Resolution, Decoding Ability(main + auxiliary), Layout Mode, Display
Channel.

Step 4 Enable tour to set **Auto Sequence** of auxiliary scree as shown in .

Figure 7-47 Auto sequence of auxiliary screen

Step 5 Click ▢ Apply ▢ to save settings.

📖 **NOTE**

> The auxiliary screen shows different channels with main screen, and the auto sequence show all
> channels..

7.7.7 Logs

Search for logs information and export the information.

Operation Steps

Step 1 Click **Logs** in the main menu or menu of the system management screen and choose **Logs**
to access the log screen, as shown in Figure 7-48.

Figure 7-48 Log screen

Step 2 Set the logs start date, end date, start time and end time on log screen.

Step 3 Select logs type from the drop-down list.

Step 4 Click **Search** to query logs.

Step 5 Click **Export** to export logs to USB storage.

----End

7.7.8 Maintenance

Operation Steps

Step 1 Click **Maintenance** in the main menu or menu of the system management screen and choose **Maintenance** to access the maintenance screen, as shown in Figure 7-49.

Figure 7-49 Maintenance screen

Step 2 Click Shutdown , Reboot , Logout, Exit system, Reset or update to operate NVR if you need.

Step 3 Click import configuration or export configuration to view the message " **A**re you sure to import the configuration?"** user should make flash driver is working.

Step 4 The tip will show on screen, click **ok** to ensure choice.

Step 5 Click **Import Config** to import the configuration to flash drive.

Step 6 Import the configuration, the device would restart immediately.

Step 7 Click **Export Config** to export the configuration from flash drive.

NOTE

When the NVR finishes updating, the device would restart.

----End

7.7.9 Auto Restart

Operation Steps

Step 1 Click **Auto restart** in the main menu or menu of the system management screen and choose **Auto restart** to access the maintenance screen, as shown in Figure 7-49.

Figure 7-50 Auto restart screen

Step 2 Enable the function, restart time is showing as figure .

Step 3 Restart the NVR per day, week or month.

Step 4 Select the restart time from the drop-down list.

----End

8　WEB Quick Start

8.1 Activation

If you don't set the password at UI interface, user need activate the device, as shown in

Figure 8-1 Activation

Step 1 Set the password, confirm the password.

Step 2 Input the channel password.

Step 3 Set the email of recovery the password.

Figure 8-2 Email

Step 4 Set the question of recovery the password.

Figure 8-3 Question

☐ NOTE

If you don't to set the email or question, you can skip the steps.

8.2 Login and Logout

⚠ CAUTION

You must use below Firefox 53 or below Chrome 45 to access the Web interface.

Otherwise, the interface functions cannot be used normally.

The win 7/ win 10 system supports IE 8 or more, but the XP system does not.

Brower supports 32 bits.

Descriptions of browser:

To access the client by using Chrome 42-44, you need to enable manually Npapi in the browser according to following steps:

- In the Chrome address bar, enter chrome://flag/#enable-npapi.

- Go to the experimental features management page.
- Enable NAPAPI Mac, Windows.
- Click **Enable** (NPAPI plugin is enabled).
- Re-launch Chrome.

Here we take IE 10 as an example for videos viewing.

Login

Step 1 Open IE browser, enter the IP address of the NVR (default value: 192.168.0.121) in the address box, and press **Enter**.

The login page is displayed, as shown in Figure 8-4.

Figure 8-4 Login page interface

Step 2 Input the user name and password.

📖 NOTE

The default user name and password both are admin. The password incorrect more than 3 times, please login again after 5 minutes.

User can change the system display language on the login page.

The modify password page pop-up window would show when login the NVR for the first time.

Step 3 Click **Login** to access the homepage, it would show reminder to download the latest

version of the plugin, as shown in Figure 6-4.

Figure 8-5   Download the plugin

Step 4 Install the latest plugin, reopen the browser and the homepage is displaying as shown in

Figure 8-6.

Figure 8-6 Homepage interface

Logout

To logout of the system, click [icon] in the upper right corner of the homepage. The pop-up

message shows "**Do you want to exit?**" Click [OK] and the login page will display.

Homepage Layout

NVR allows you to use the Web interface in a PC for implementation of such functions as live video, playback, retrieval, setting, image parameters access, configuration, PTZ control and so on. Figure 6-6 shows the overall layout of the interface. For descriptions of the interface, please refer to Table 8-1.

Figure 8-7 Homepage layout

Table 8-1 Descriptions of homepage

No.	Function	Description
1	Function navigation bar	Main functions navigation bar of the device, it includes Live Video, Playback, Alarm Search, Face Recognition, Attendance and System Setting.

2	Alarm	Alarm notification. User can tick pop-up message to monitor, system alarm and channel alarm.
3	Logout button	User can click **Logout** to exit the current account and return to the login interface.
4	Help	Help for running environment, plug-in installation and activation.
5	Devices list	Display a list of the channels of the managed NVR and the channels managed by NVR.
6	Real-time video	Display the real-time videos of the channels managed by NVR.
7	Channel Operation	Include snapshot, record, stream switch and audio on/off.
8	PTZ control button	Click to show PTZ control buttons in zone 10, you can control the PTZ equipment in the current channels. That function only use for IP dome camera.
9	Color parameter button	Click to show color parameter setting buttons in zone 9, you can set and adjust the color parameters, for example, brightness, contrast, saturation, and sharpness. Click **More** to access image settings.
10	Operation zone	The operation zone of PTZ control and image parameter setting.
11	Layouts	Select the one-screen, four-screen, nine-screen or sixteen- screen to switch the layout.
12	Manual alarm	Trigger and close the external alarm device manually.

----End

8.3 Browsing Videos

8.3.1 Browsing Real-Time Videos

You can browse real-time videos in the web management system.

Preparation

To ensure that real-time videos can be played properly, user must perform the following operations when you log in to the web management system for the first time:

Step 1 Open Internet Explorer. Choose **Tools > Internet Options > Security > Trusted sites > Sites**. In the displayed dialog box, click **Add**, as shown in Figure 8-8.

Figure 8-8 Adding a trusted site

Step 2 In Internet Explorer, choose **Tools > Internet Options > Security > Customer level**, and set Download unsigned ActiveX controls and Initialize and script ActiveX controls not marked as safe for scripting under ActiveX controls and plug-ins to Enable, as shown in Figure 8-9.

Figure 8-9 Configuring ActiveX controls and plug-ins

Step 3 Download and install the player control as prompted. During installing, you need to close

the browser.

📖 NOTE

If the repair tips displayed when installing the control , close the browser and continue the
installation, reopen the login page when the control is installed.

8.3.2 Live Video

Descriptions

After login the device, click online channel, you can view the real-time videos, as shown in

Figure 8-10.

Figure 8-10 Real-time videos interface

----End

8.3.3 Channel Operation

Descriptions

Channel operation includes snapshot, record, stream switch and audio on/off. Table 8-2describes the operations.

Table 8-2 Descriptions of homepage

Buttons	Button description	How to operate
	Snapshot	Click button to take snapshots of the current image.
	Record	Click button to start recording and click button again to stop recording.
	Switch stream	Click button to switch stream 1 (main stream) and stream 2(sub stream).
	Enable/Disable video	Click button to enable the audio and click again to disenable the video.

----End

8.3.4 PTZ Control and Setting

Descriptions

The PTZ control and setting function applies only to Network Dome or camera connected to an external PTZ.

PTZ Setting

If a Network Dome or a camera connected to PTZ had been added to the NVR channel, user can control the PTZ rotation to adjust their shooting angle when you are viewing the video. This allows you to perform Omni-directional video surveillance.

Click , the PTZ operation and setting interface is displaying, as shown in Figure 8-11. Table 8-3 describes the operations.

Figure 8-11 PTZ control interface

Table 8-3 Device parameters

Buttons	Button description	How to operate
	Direction key	Click button to control omni-directional movement of the PTZ.
	Speed slider	Drag the slider to adjust the value of PTZ rotation speed.

Buttons	Button description	How to operate
![Zoom in icon]	Zoom in	Click buttons to adjust the focal length.
![Zoom out icon]	Zoom out	
![Iris+ icon]	Iris+	Click buttons to adjust the aperture.
![Iris- icon]	Iris-	
![Far focus icon]	Far focus	Click buttons to adjust the focal length.
![Near focus icon]	Near focus	
![Auto focus icon]	Auto focus	Click button to focus automatically.
![Home preset icon]	Home preset	N/A
![Preset icon]	Preset	The camera is set the tour, click the button and dome camera rotate as the setting.
![More icon]	More	More settings

8.3.5 Sensor Setting

Descriptions

The sensor setting can adjust scene, brightness, sharpness, contrast and saturation, Click

to access image setting, as shown in Figure 8-12. Table 8-4 describes the operations.

Figure 8-12 Image parameter interface

Table 8-4 Device parameters

Buttons	Button description	How to operate
☀	Brightness	Click button to adjust the image brightness.
△	Sharpness	Click button to adjust the image definition.
◑	Contrast	Click button to adjust the transparency of the image.

Buttons	Button description	How to operate
▣	Saturation	Click button to adjust the chromatic purity of the image.

Click more will be access to system sensor setting. As shown in Figure 8-13, more detail please
refer to *chapter Figure 4-7*.

Figure 8-13   Sensor setting interface

----End

8.3.6 Layout

Click at the bottom left conner of real-time videos interface, the buttons

indicate 1 screen, 4 screens and 9 screens from left to right. More POE port will be 16 screens.

----End

8. 4 Playback

8.4.1 Video Playback

Video playback refers to playing of videos stored in local hard disks.

Procedure

Step 1 Click ![icon] in the function navigation bar, the video playback interface is displayed, as shown in Figure 8-14.

Figure 8-14 Video playback

Step 2 Select a channel. Click a device in the device list. A selected device is marked with ![icon].

An unselected device is marked with ![icon].

Step 3 Select a date from calendar at left bottom, the date will be colored if it has record as shown in upper figure.

Step 4 Tick the type of recrod, such as schedule record, manual record and alarm record.

Step 5 Display videos.

After a device and date are selected, video information is displayed below the video pane. The time scale above the file axis shows the different time points of video recording. The time in blue in the middle is the time of the video playing.

The file axis displays videos. The blue file axis indicates a video exits, grey file axis indicates no video exits.

You can drag the axis to play recording quickly.

Step 6 Play a video.

You can play a video after selecting a device and date. Figure 8-15 shows the control bar of video playback.

Figure 8-15 Control bar

: reversed.

:play/pause.

: triple speed.

: split screen. One or four screens.

: sync/async. You can set the differen channels to play synchronously or asynchronous. Sync mode indicates the selected channels play video synchronously. Async mode indicates user play different time period record

: types of time bar.

: user can operate the record as same as live video.

----End

8.5 Alarm Search

You can search for channel alarm and system alarm in the alarm search interface.

8.5.1 Channel Alarm

Procedure

Step 1 Click in the function navigation bar, the channel alarm interface is displayed, as

shown in Figure 8-16.

Figure 8-16 Channel alarm interface

Step 2 Click ![icon] at the top right conner, select the channel and type, set start time and end time, as shown in Figure 8-17.

Figure 8-17 Set channel alarm

Step 3 Click **Search**, the result will be displayed as shown in Figure 8-18.

Figure 8-18   Channel alarm result

NOTE

Click $\boxed{|<< \ 1 \ /6 \ >>|}$ to select the page of alarm list.

$\boxed{\text{Every page show} \ 20 \quad \blacktriangledown}$ shows the rows shown in every page.

----End

8.5.2 System Alarm

Procedure

Step 1 Click **System Alarm** in the channel alarm interface, the system alarm is displayed, as shown in Figure 8-19.

Figure 8-19 System alarm result

Step 2 Click ![icon] at the top right conner, set the channel, type(alarm in and other), start time and end time, as shown in Figure 8-20.

Figure 8-20 Search system alarm

Step 3 Click **Search**, the result will be displayed.

----End

8.6 Face Recognition

The function is only applicable for NVR2604E1-P4C-J and NVR2608E1-P8C-J

8.6.1 Face Comparison

Click the icon ![icon] or ![Face Recognition] at quick navigation bar, enter to the face comparison interface, as shown in Figure 8-21.

Figure 8-21 Face comparison interface

Table 8-5 Face comparison

No.	Description
1	Camera list
2	Menu

3	Live video
4	Real time comparison area, the snapshot picture of person will compare with the face library's information, the result show in this area.
5	Layout
6	Snapshot in real time video, put the cursor on picture such as , you can add it to face library, or face search. The cursor on area 6 and the pictures is not update, move the mouse so that the pictures can be shown in time.

8.6.2 Face Search

Figure 8-22   Face search interface

Table 8-6 Face comparison

No.	Description
1	Query condition:1. choose camera;
	2. set start time and end time.
	3.choose the manner of searching, such as by picture or by feature.
	4.Set similarity
	5.click "Search" to query.
2	Result of querying, it shows 15 pictures per page.
3	Page, it shows up to 10 pages, if the result is more than 150 pictures, you should set a

	more precise range.
4	The detail information of chosen picture, the default is the first picture of page.
5	Play video of snapshot, it will play a 30-second video before and after the snapshot,.

8.6.3 Face Library

Figure 8-23   Face library

Table 8-7 Face library

No.	Description
1	Add a new face library
2	Edit or delete the face library.
3	Add or delete the personnel. Add personnel as shown in Figure 7-1.
4	Import or export the face library.
5	Person information display method.
6	Snapshot in real time video, put the cursor on picture such as ![icon], you can add it to face library, or face search. The cursor on area 6 and the pictures is not update, move the mouse so that the pictures can be shown in time.
7	Operate, edit or delete the personnel, as shown in Figure 8-24.

Figure 8-24   Person enroll

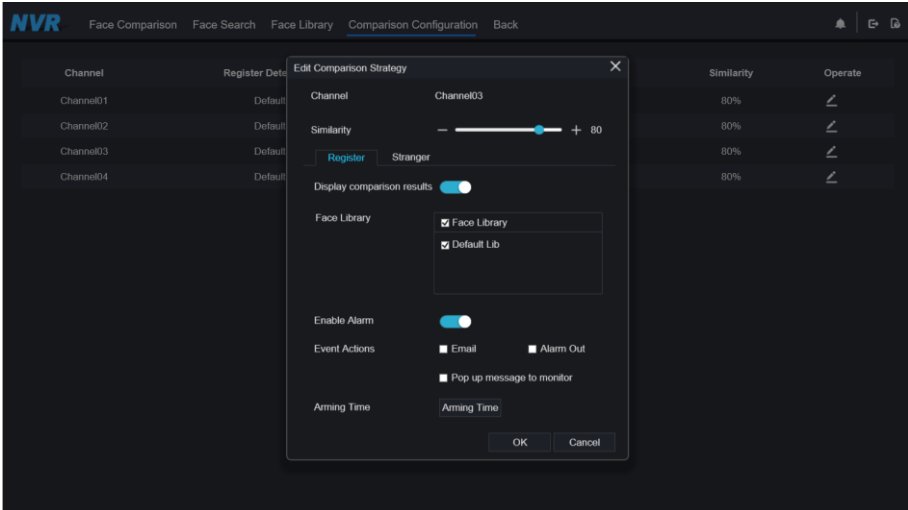## 8.6.4 Comparison Configuration

In comparison configuration interface, click to set the comparison strategy, enable the face

matching, select face database, set similarity, tick the linkage mode, set schedule of enable face

comparison, as shown in Figure 8-25.

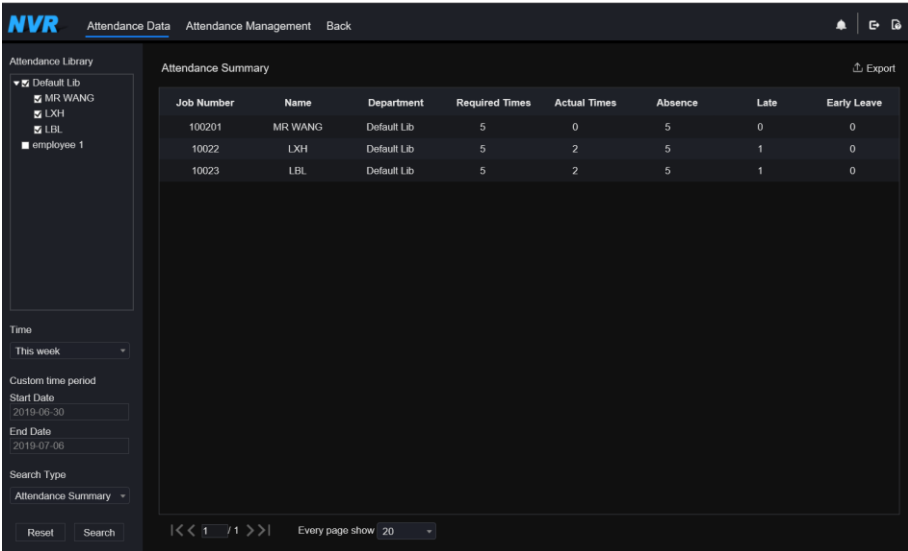Figure 8-25   Comparison configuration

8.7 Attendance

The function is only applicable for NVR2604E1-P4C-J and NVR2608E1-P8C-J

8.7.1 Attendance Data

Click to enter attendance data interface, as shown in Figure 8-26.

Figure 8-26　Attendance data

Operation Steps

Step 1 Tick the attendance library.

Step 2 Choose time mode, such as today, this week, this month and custom time.

Step 3 Choose search type, such as attendance summary and attendance details.

Step 4 Click search, the result will show in interface.

Step 5 Click Export to export the query result.

8.7.2 Attendance Management

In attendance management, user can set attendance rule, library and check point, as shown in Figure 8-27.

Figure 8-27   Attendance rule settings

Operation Steps

Step 1 Set start work time and end work time.
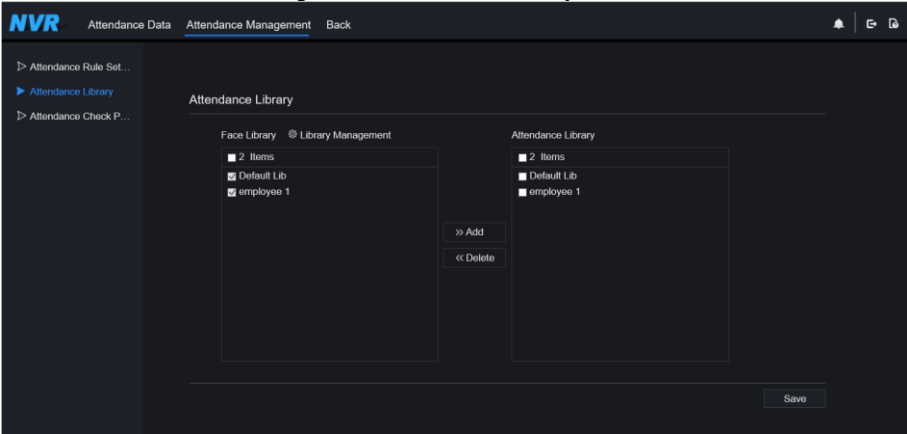
Step 2 Tick the workday

Step 3 Set valid time of check in and check out.

Step 4 Click Save to save the setting.

Attendance library

Step 1 Click **Attendance Library** to add library, the attendance library can call the face database directly.

Figure 8-28   Attendance library

Step 2 Tick the library and click **Add** to add to attendance library. If you want to modify the
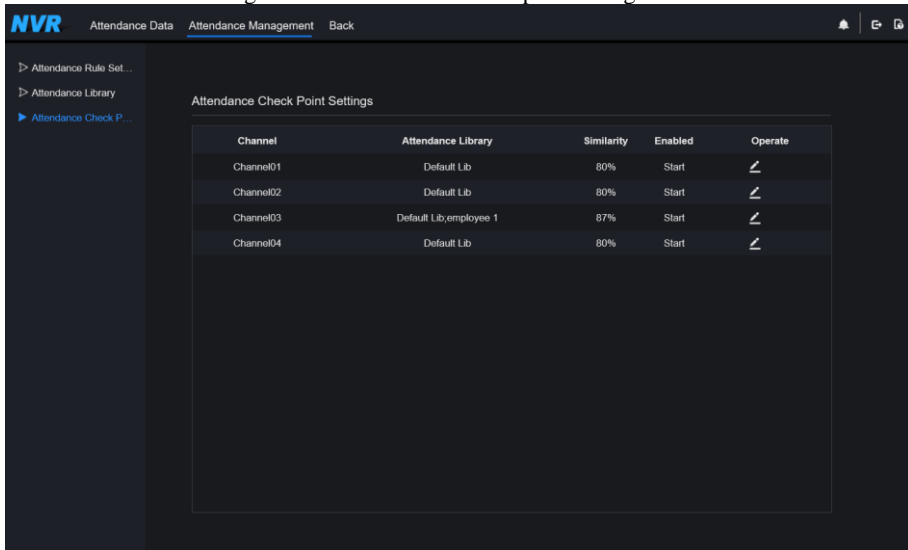library, please enter to library interface to change parameters..

Step 3   click ⚙ Database management to enter the face database management to modify

parameter.

Step 4 Click **Save** to save the setting.

Attendance check point settings:

Step 1 Click Attendance check point settings to set point, as shown in Figure 8-29.

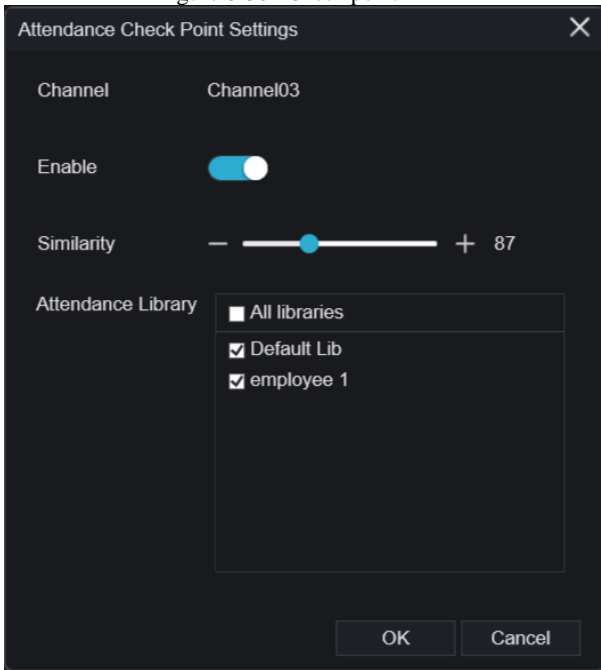Figure 8-29   Attendance check point setting

Step 2 Click ![icon] to edit check point setting, as shown in Figure 8-30

Figure 8-30   Check point

Step 3   Enable the function, set similarity and tick the library, all face detection cameras can be set the check points

Step 4 Click OK to save the setting.

9 System Setting

The system setting allows you to set system, channel, record, alarm, network and local setting.
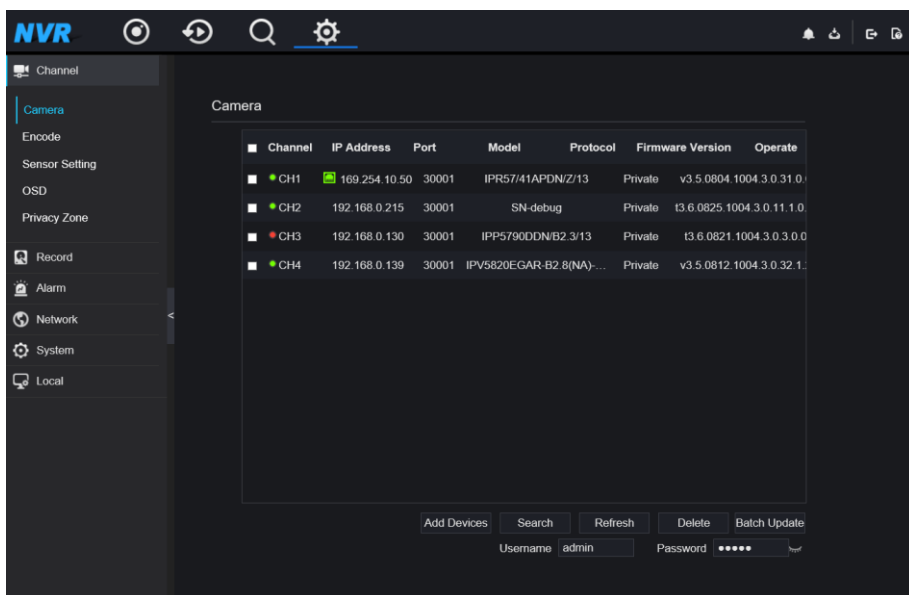
9.1 Channel

User can set parameter about camera, encode, sensor setting, OSD and privacy zone.

9.1.1 Camera

Step 1 On the **System Setting** screen, choose **Channel > Camera** to access the camera interface, as shown in Figure 9-1.

Figure 9-1 Camera interface

Step 2 Input username and password (the default value both are admin), and click [Click To Add]
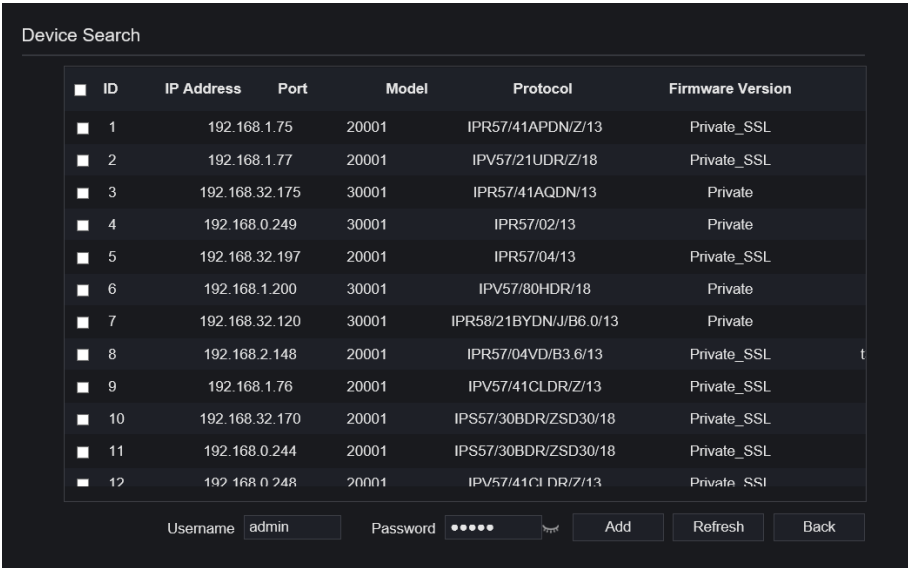add cameras automatically.

Step 3 Click [Search] to search cameras at the same LAN as NVR, as shown in Figure 9-2.

Choose the camera, input username and password, click **Add** to add new camera.

Figure 9-2   Device search

	ID	IP Address	Port	Model	Protocol	Firmware Version	
■	1	192.168.1.75	20001	IPR57/41APDN/Z/13	Private_SSL	
■	2	192.168.1.77	20001	IPV57/21UDR/Z/18	Private_SSL	
■	3	192.168.32.175	30001	IPR57/41AQDN/13	Private	
■	4	192.168.0.249	30001	IPR57/02/13	Private	
■	5	192.168.32.197	20001	IPR57/04/13	Private_SSL	
■	6	192.168.1.200	30001	IPV57/80HDR/18	Private	
■	7	192.168.32.120	30001	IPR58/21BYDN/J/B6.0/13	Private	
■	8	192.168.2.148	20001	IPR57/04VD/B3.6/13	Private_SSL	t
■	9	192.168.1.76	20001	IPV57/41CLDR/Z/13	Private_SSL	
■	10	192.168.32.170	20001	IPS57/30BDR/ZSD30/18	Private_SSL	
■	11	192.168.0.244	20001	IPS57/30BDR/ZSD30/18	Private_SSL	
■	12	192.168.0.248	20001	IPV57/41CLDR/Z/13	Private_SSL	

Username admin   Password •••••   Add   Refresh   Back

Step 4 Click [Back] to back to camera interface.

Step 5 Click [Refresh] to refresh cameras status.

Step 6 Choose the cameras and click [Delete] to delete.

Step 7 Click Batch Update to update all selected cameras at once, the pop-up window would
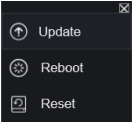
show to select software.

Step 8 Click [✎] to modify the information of device parameters, as shown in Figure 9-3.

Figure 9-3 Modify device parameters

Step 9 Click to access web immediately.

Step 10 Click to update, reboot or reset the selected camera, as shows.

The pop-up message "Are you sure to restart the device?" "Are you sure to reset? Reserve IP Address" would respectively show.

📖 **NOTE**

：it indicates the camera is online, user can view the live video immediately.
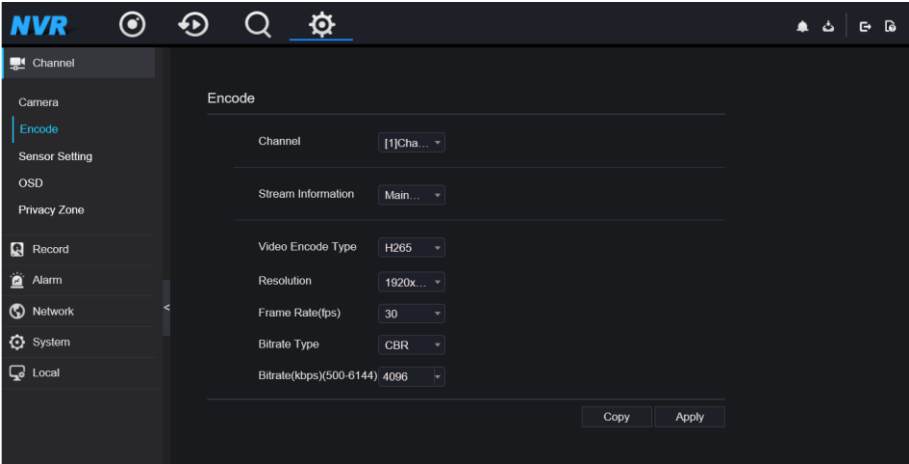
：it indicates the camera is offline, it maybe not connect the network, or the password is incorrect. User access to the modify device parameters interface to change.

9.1.2 Encode

Step 1 On the **System Setting** screen, choose **Channel > Encode** to access the encode interface, as shown in Figure 9-4.

Figure 9-4 Encode interface

Step 2 Select a channel from drop-down list.

Step 3 Select stream information, encode type, resolution, frame rate, bitrate control and bitrate from drop-down list.
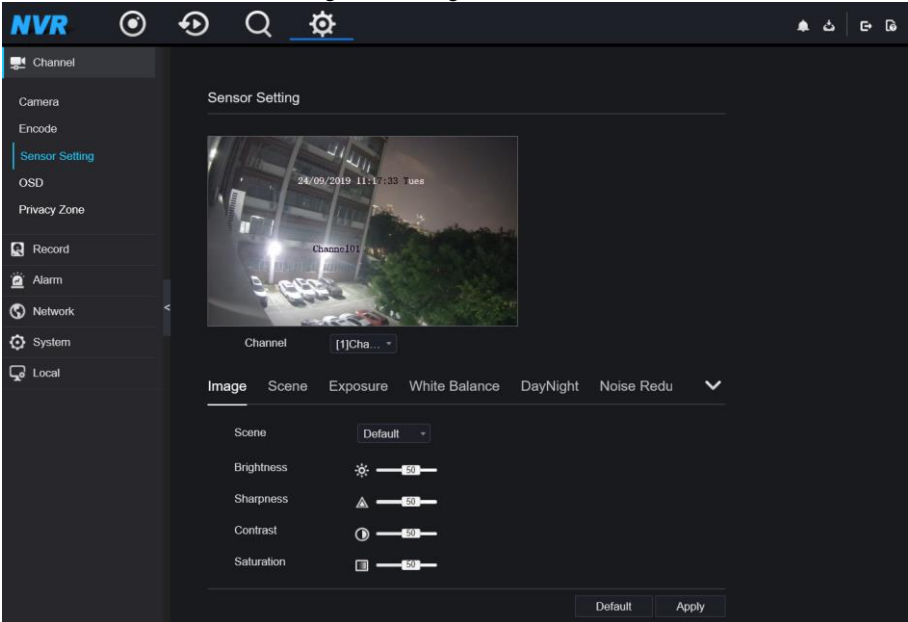
Step 4 Click **Copy** to choose other camera to copy settings. Click **Apply** to save the settings.

----End

9.1.3 Sensor Setting

Step 1 On the **System Setting** screen, choose **Channel >Sensor Setting** to access the sensor setting interface, as shown in Figure 9-5.

Figure 9-5 Image interface

Step 2 Select a channel and scene from drop-down list.

Step 3 Set image parameters, like scene, brightness, sharpness, contrast and saturation.

Step 4 Other parameters are camera's senor setting, user can refer IP cameras's settings.

Step 5 Click **Copy** to choose other camera to copy settings. Click **Apply** to save the settings.

📖 **NOTE**

Brightness: It indicates the total brightness of an image. As the value increases, the image becomes brighter.

Sharpness: It indicates the border sharpness of an image. As the value increases, the borders become clearer, and the number of noise points increases.

Saturation: It indicates the color saturation of an image. As the value increases, the image becomes more colorful.

Contrast : It indicates the measurement of different brightness levels between the brightest white and darkest black in an image. The larger the difference range is, the greater the contrast; the smaller the difference range is, the smaller the contrast.

Scene: it includes indoor, outdoor, default. Mirror includes normal, horizontal, vertical, horizontal + vertical.

Exposure: it includes mode, max shutter, meter area and max gain.

White balance: it includes tungsten, fluorescent, daylight, shadow, manual, etc.

Day-night: user can transit day to night, or switch mode.

Noise reduction: it includes 2D NR and 3D NR.

Enhance image: it includes WDR, HLC, BLC, defog and anti-shake.

Zoom focus: user can zoom and focus.

----End

9.1.4 OSD

Step 1 On the **System Setting** screen, choose **Channel >OSD** to access the OSD interface, as shown in Figure 5-4

Figure 9-6 OSD interface

Step 2 Select a channel and scene from drop list.

Step 3 Enable time and channel name. You can set channel name. Drag the icon of Channel Name or Date and Time to move, select the location.
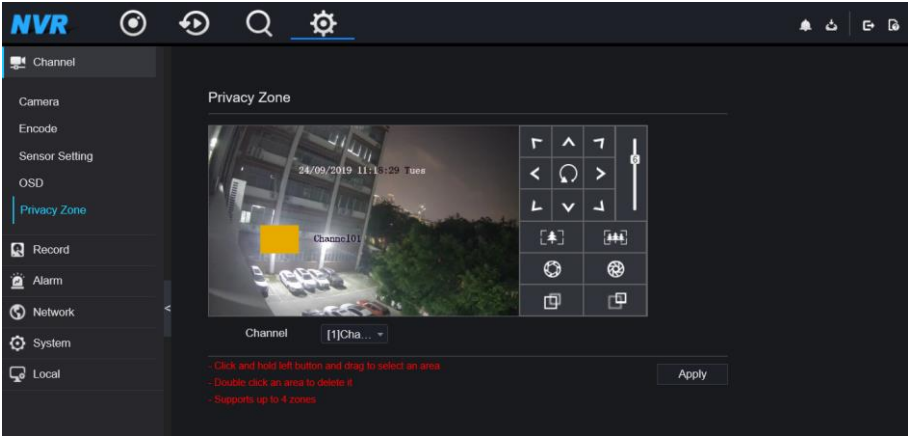
Step 4 Click **Copy** to choose other camera to copy settings. Click **Apply** to save the settings.

----End

9.1.5 Privacy Zone
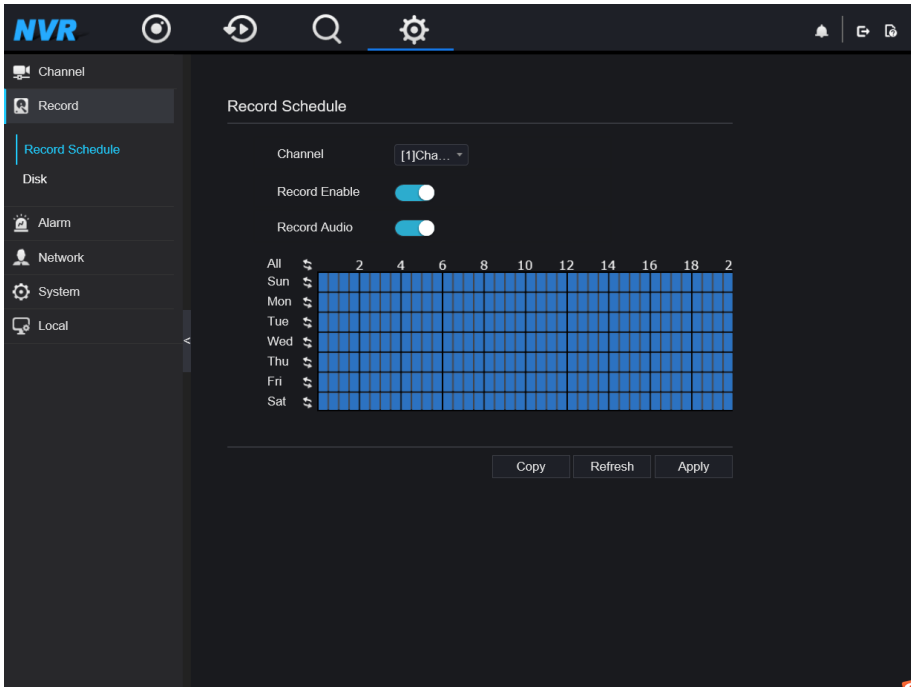
Step 1 On the **System Setting** screen, choose **Channel >Privacy Zone** to access the privacy zone interface, as shown in Figure 9-7.

Figure 9-7 Privacy interface

Step 2 Select a channel from drop-down list .

Step 3 Drag the mouse to select area to cover with rectangle frame. You can set less than four areas to be covered. Double click would delete the area.

Step 4 PTZ can be used for adjusting the IP dome cameras.

Step 5 Click [Copy] to choose other camera to copy settings. Click [Apply] to save the settings.

----End

9.2 Record

Users can set record policy in storage interface.

9.2.1 Record Schedule

Procedure

Step 1 On the **System Setting** screen, choose **Record > Record schedule** to access the record schedule interface, as shown in Figure 9-8.

Figure 9-8 Record schedule interface

Step 2 Select a channel .

Step 3 Enable the record, then enable record audio.

Step 4 Set the record schedule, you can drag the mouse to choose area, click [icon] to choose all

day or all week, you can also click one by one to set the schedule. Or dray the mouse cursor to

choose.

Step 5 Click **Refresh** to return the previous settings.

Step 6 Click **Copy** to choose other camera to copy settings. Click **Apply** to save

the settings.

----End

9.2.2 Disk

Step 1 On the **System Setting** screen, choose **Record >Disk** to access the disk interface, as
shown in Figure 9-9.

Figure 9-9 Disk interface

Step 2 You can view the information like capacity, disk status, disk SN code and used space.

Step 3 Click Format to delete all data. Before deleting data user will view pop-up window

" Are you sure to format disk? Your data will be lost". Click OK to delete, click

 Cancel to quit.

Step 4 Set the expired time, it is up to 90 days.

----End

9.2.3 RAID

📖 **NOTE**

RAID is only used for the device with 4 disks or more. And the disks must be enterprise level disks.

The capacity of disks are better same for efficient using.

RAID5 at least 3 disks can be created. RAID6 at least 4 disks can be created. RAID10 at least 4

disks can be created. Create hot spare disk need more one disk or double basic disks.

The capacity of disks are better same for efficient using.

Figure 9-10 RAID

Operation Steps

Step 1 Click **RAID** to create the RAID.

Step 2 Click **Create** to choose disk to create a new RAID.

Step 3 Tick the **Hot-spare Disk** to back up the broken disk in case, the number of disk must

more than basic disks.

Step 4 Click [OK] to save the creation, format the new RAID

Step 5   click **format it will show**   .

Figure 9-11 Modify the RAID

9.2.4 S.M.A.R.T

S.M.A.R.T is Self-Monitoring Analysis and Reporting Technology, user can view the health of

disk, as shown in 7.3.

Figure 9-12 S.M.A.R.T

9.3 Alarm

User can set general, motion detection, video loss, intelligent analysis and alarm in on alarm interface.

9.3.1 General

Procedure

Step 1 On the **System Setting** screen, choose **Alarm > General** to access the general interface.

Step 2 Enable alarm to set duration time, as shown in Figure 9-13.

Step 3

Figure 9-13 General interface

Step 4 Click ▉ Apply ▉ to save settings. Click ▉ Refresh ▉ to return to the previous settings.

----End

9.3.2 Motion Detection
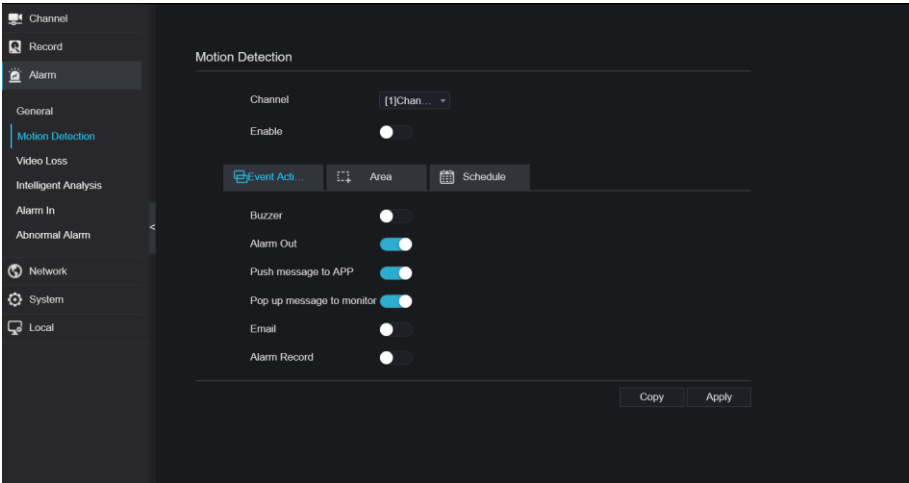
Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Motion Detection** to access the motion detection interface, as shown in Figure 9-14.

Figure 9-14 Motion detection interface

Step 2 Click channel drop-down list to choose channel.

Step 3 Enable motion detection alarm.

Step 4 Set **Event Activity**, includes buzzer, alarm out, push message, pop-up message, send E-mail and alarm record.

Step 5 Click **Area** to access the motion detection area setting, as shown in Figure 9-15.

Figure 9-15 Motion detection area interface

1. Hold down and drag the left mouse button to draw a motion detection area.

2. Select a value from the drop-down list next to **Sensitivity**.

3. Double -click the chosen area to delete.

Step 6 Click **Schedule** to access schedule settings, drag and release mouse to select the alarming time within 00:00-24:00 from Monday to Sunday. Click the chosen area can cancel. The settings of alarm schedule are same as disk schedule.

Step 7 Click [Copy] to choose other camera to copy settings. Click [Apply] to save the settings.

---End

9.3.3 Video Loss

Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Video Loss** to access the video loss interface, as shown in Figure 9-16.

Figure 9-16 Video loss interface

Step 2 Click drop-down list to choose channel.

Step 3 Enable the video loss alarm.

Step 4 Set event activity and schedule please refer to *Figure 5-1 motion detection settings* .

Step 5 Click [Copy] to choose other camera to copy settings. Click [Apply] to save the settings.

----End

9.3.4 Intelligent Analysis

Procedure

Please refer to chapter *7.6.1 video loss settings,* interface displayed as shown in Figure 9-17.

Figure 9-17 Intelligent analysis interface

9.3.5 Alarm In
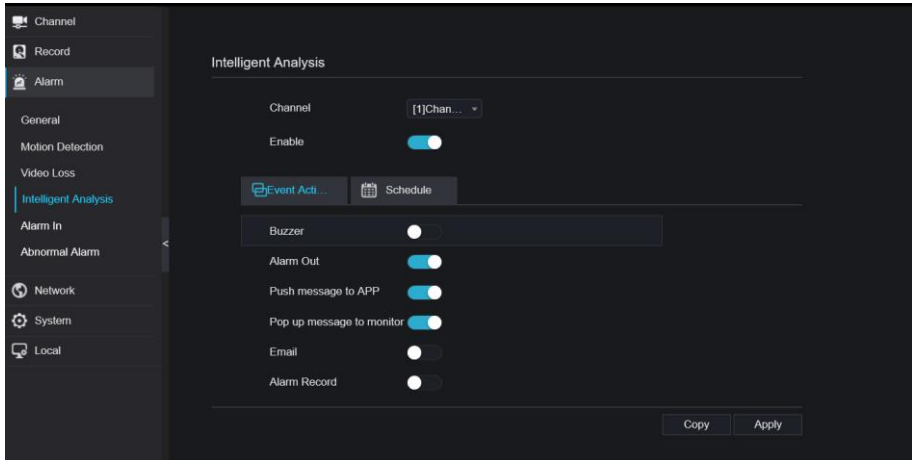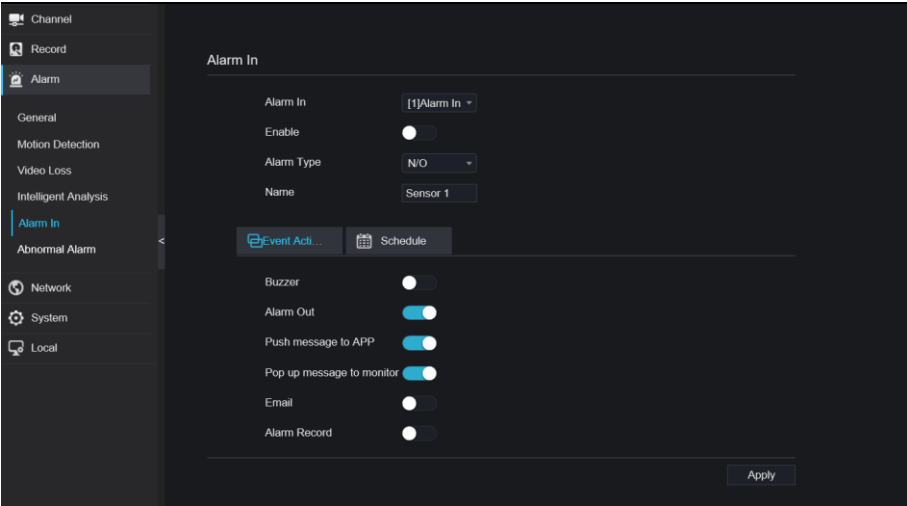
Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Alarm In** to access the alarm in interface, as shown in Figure 9-18.

Figure 9-18 Alarm in interface

Step 2 Click drop-down list to choose alarm in .

Step 3 Enable the button, choose alarm type.

Step 4 Set name, default is Sensor 1.

Step 5 Set event activity and schedule please refer to *motion detection settings* .

Step 6 Click [Apply] to save settings.

----End

9.3.6 Abnormal Alarm

Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Abnormal Alarm** to access the abnormal alarm interface, as shown in Figure 6-10.

Figure 9-19 Abnormal alarm interface

Step 2 Click drop-down list to choose alarm in .

Step 3 Enable the button, tick alarm type.

Step 4 Set name, default is Sensor 1.

Step 5 Set event activity and schedule please refer to *motion detection settings* .

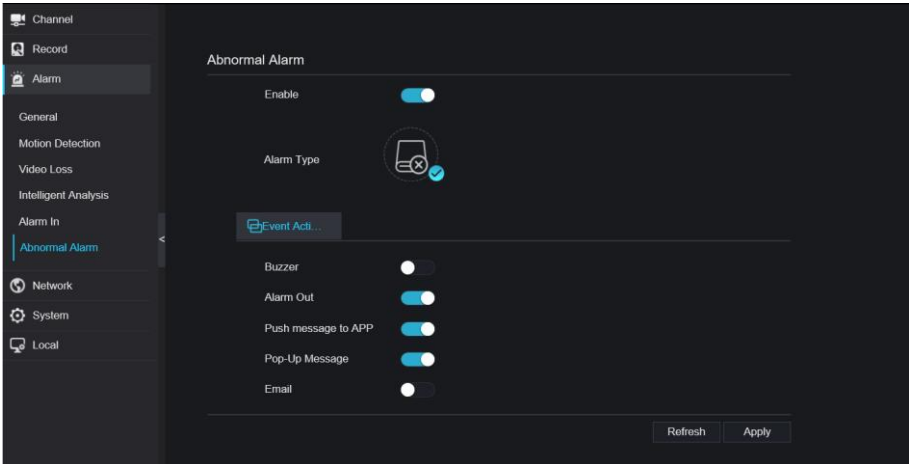Step 6 Click **Apply** to save settings.

----End

9.4 Network

Users can set Network, DDNS, E-mail, UPnP, P2P, IP Filter, 802.1X, SNMP and Web Mode.

9.4.1 Network

Procedure

Step 1 On the **System Setting** screen, choose **Network > Network** to access the network
interface, as shown in Figure 9-20.

Figure 9-20 Network interface

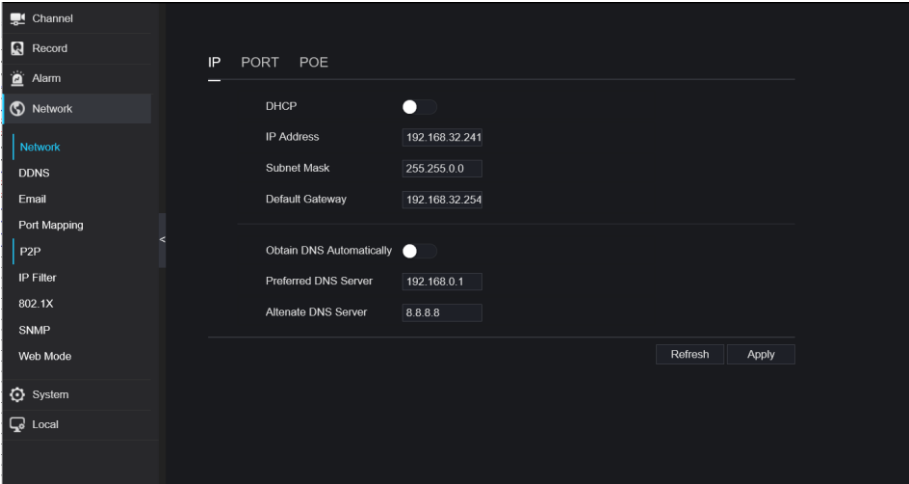Step 2 Click ⬤ next to **IP** to enable or disable the function of automatically getting an IP

address. The function is enabled by default.

If the function is disabled, click input boxes next to **IP**, **Subnet mask**, and **Gateway** to set the

parameters as required.

Step 3 Click ⬤ next to **Obtain DNS Automatically** to enable or disable the function of

automatically getting a DNS address. The function is enabled by default.

If the function is disabled, click input boxes next to **DNS1** and **DNS2**, delete original addresses,

and enter new addresses.

Step 4 Set **PORT** and **POE** manually, input the information about these.

Step 5 Click Refresh to restore previous settings. Click Apply to save the settings.

----End

9.4.2 DDNS

Procedure

Step 1 Click **DDNS** in the network interface, choose **Network > DDNS** to access the DDNS

interface as shown in Figure 9-21.

Figure 9-21 DDNS interface

Step 2 Click the button to enable the DDNS function. It is disabled by default.

Step 3 Select a required value from the **protocol** drop-down list.

Step 4 Set domain name, user, and password.

Step 5 Click Refresh to restore previous settings. Click Apply to save the settings.

NOTE

An external network can access an address specified in the DDNS settings to access the NVR.

----End

9.4.3 E-mail

Procedure

Step 1 Click **E-mail** in the network interface, choose **Network > E-mail** to access the E-mail

interface, as shown in Figure 9-22

Figure 9-22 E-mail interface

Step 2 Set SMTP server and SMTP server port manually.

Step 3 Set sender E-mail, user name and password manually.

Step 4 Set E-mail for receive alarm the message.

Step 5 Set E-mail for retrieve the password the message.

Step 6 Click **SSL Encryption** drop-down list to enable safeguard of email.

Step 7 Click Refresh to restore previous settings. Click Apply to save the settings.

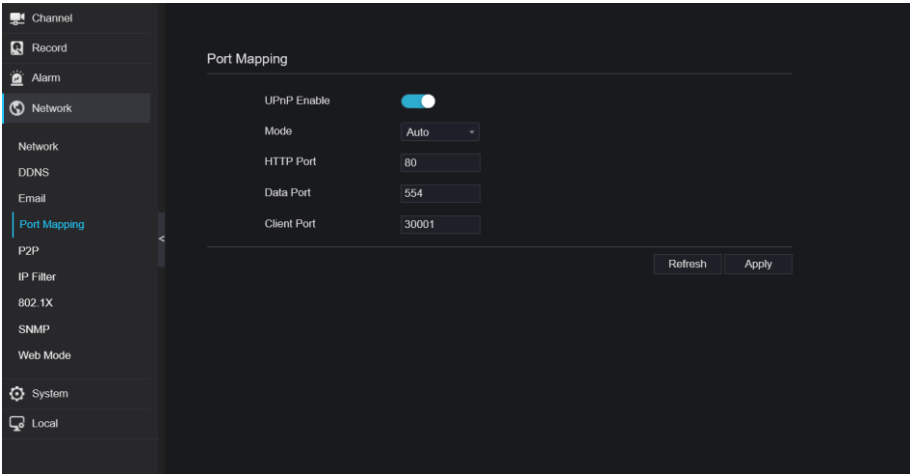**----End**

9.4.4 Port Mapping

Procedure

Step 1 Click **Port Mapping** in the network interface, choose **Network > Port Mapping** to access the UPnP interface as shown in Figure 9-23.

Figure 9-23 Port Mapping interface

Step 2 Select manner from UPnP enable drop list. The default value is auto.

Step 3 After **UPnP** is manual, set the Web port, data port and client port manually.

Step 4 Click Refresh to restore previous settings. Click Apply to save the settings.

NOTE

Auto :system perform UPnP automatically.
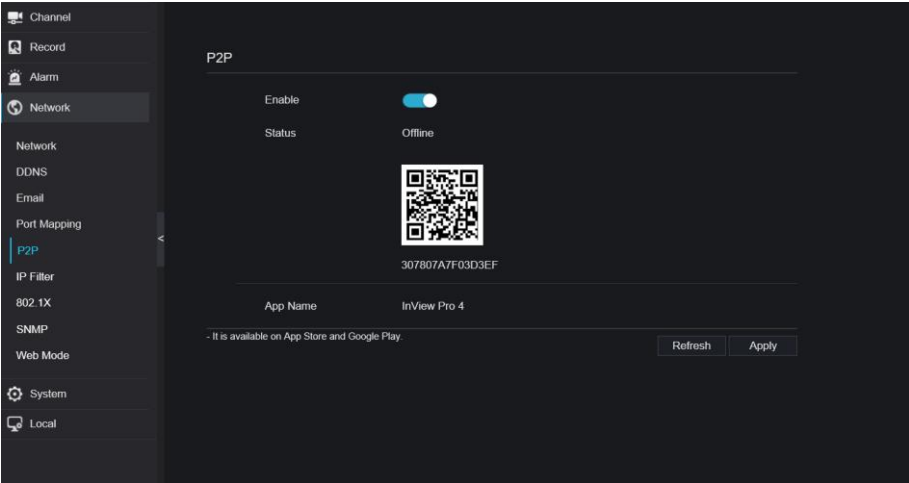Manual : the ports distribute by router, you need to refer router then input them.

----End

9.4.5 P2P

Procedure

Step 1 Click **P2P** in the network interface, choose **Network > P2P** to access the P2P interface, as shown in Figure 9-24.

Figure 9-24 P2P interface

Step 2 Click **Enable** to enable the P2P function.

Step 3 Click Refresh to restore previous settings. Click Apply to save the settings.

Step 4 After the Inview Pro4 is installed in mobile phone, run the APP and scan the UUID QR code to add then access the NVR when the device is online.
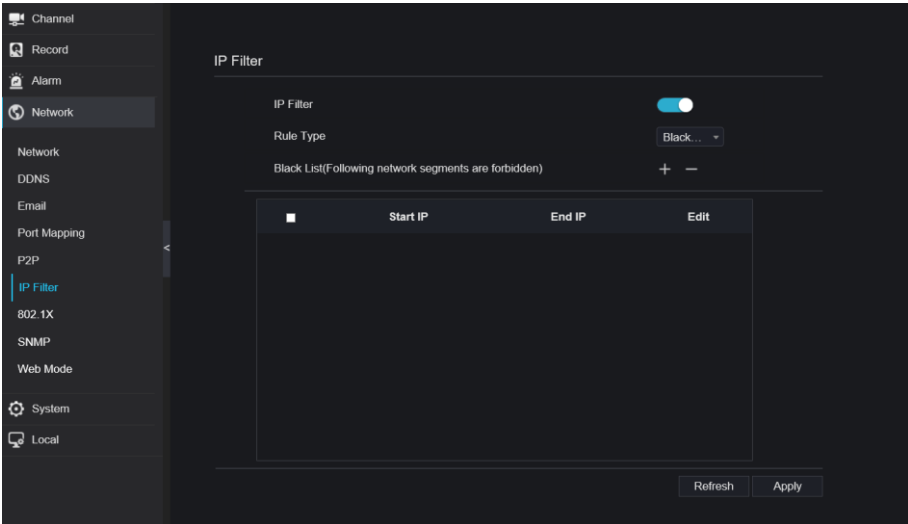
----End

9.4.6 IP Filter

Procedure

Step 1 Click **IP Filter** in the network interface, choose **Network > IP Filter** to access the IP filter interface, as shown in Figure 9-25.

Figure 9-25 IP filter interface

Step 2 Click **Enable** to enable the IP filter function.

Step 3 Click drop-down list of rule type to choose black list or white list.

Step 4 Click ![+],view the pop-up windows to set black list or white list, as shown in 7.7.5.

Click ![—] to delete the list.

Figure 9-26 Black or white list interface

Step 5 Set start IP and end IP.

Step 6 Click ![Cancel] to deny settings, click ![OK] to save the settings.

Step 7 Click ![Refresh] to restore previous settings. Click ![Apply] to save the settings.

NOTE

Black list: IP address in specified network segment to prohibit access.
White list: IP address in specified network segment to allow access.
Select a name in the list and click Delete to delete the name from the list.
Select a name in the list and click Edit to edit the name in the list.
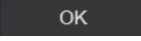Only one rule type is available, and the last rule type set is efficient.

----End

9.4.7 802.1X

Procedure

Step 1 Click **802.1X** in the network interface, 802.1X interface is displayed, enable the button, as shown in Figure 9-27.

Figure 9-27 802.1X interface

Step 2 Input the user and password of 802.1X authentication.

Step 3 Click Refresh to restore previous settings. Click Apply to save the settings.

----End

9.4.8 SNMP

Procedure

Step 1 Click **SNMP** in the network interface, SNMP interface is displayed, enable the button aside of SNMPV1, as shown in Figure 9-28.

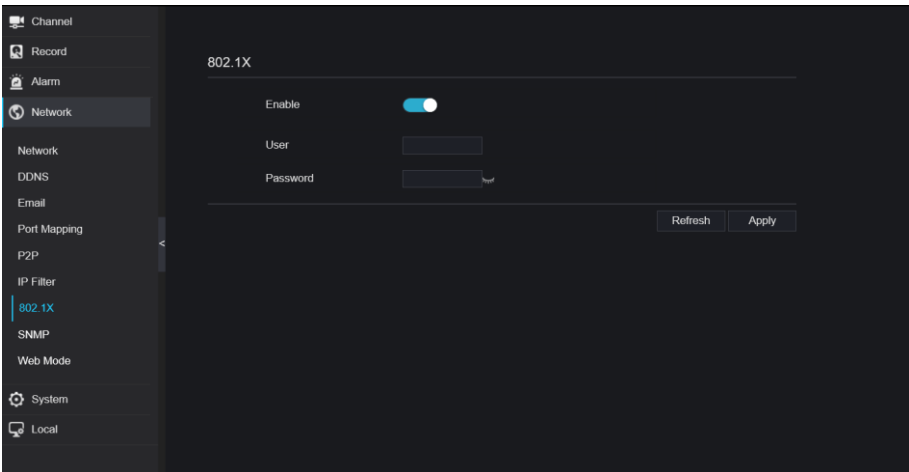Figure 9-28 SNMP interface

Step 2 Input the information of SNMP (simple network management protocol) . there three types of that function. User can apply that if need.

Table 9-1 SNMP parameters

Parameter	Description	Setting
SMTP Server Address	IP address of the SMTP server.	[Setting method] Enter a value manually.
SMTP Server Port	Port number of the SMTP server.	[Setting method] Enter a value manually. [Default value] 25
User Name	User name of the mailbox for sending emails.	[Setting method] Enter a value manually.

Parameter	Description	Setting
Password	Password of the mailbox for sending emails.	[Setting method] Enter a value manually.
Sender E-mail Address	Mailbox for sending emails.	[Setting method] Enter a value manually.
Recipient_E-mail_Address1	(Mandatory) Email address of recipient 1.	[Setting method] Enter a value manually.
Recipient_E-mail_Address2	(Optional) Email address of recipient 2.	
Recipient_E-mail_Address3	(Optional) Email address of recipient 3.	
Recipient_E-mail_Address4	(Optional) Email address of recipient 4.	
Recipient_E-mail_Address5	(Optional) Email address of recipient 5.	
Attachment Image Quality	A higher-quality image means more storage space. Set this parameter based on the site requirement.	N/A
Transport Mode	Email encryption mode. Set this parameter based on the encryption modes supported by the SMTP server.	[Setting method] Select a value from the drop-down list box. [Default value] No Encrypted

Step 3 Click Refresh to restore previous settings. Click Apply to save the settings.

----End

9.4.9 Web Mode

Step 1 Click **Web Mode** in the network interface, Web mode interface is displayed, as shown in Figure 5-1.

Figure 9-29 Web mode interface

Step 2 Enable the https, the device will restart and start https secure.

Step 3 Click ~~Refresh~~ to restore previous settings. Click ~~Apply~~ to save the settings.

----End

9.5 System

Users can set parameters about information, general, user, password, logs, maintenance and auto restart.

9.5.1 Device Information

Procedure

Step 1 Click ⚙ on the navigation bar, the device information interface is displayed, as shown in Figure 9-30.

Figure 9-30 Device information interface

Step 2 Set the device name according to Table 9-2.

Table 9-2 Device parameters

Parameter	Description	Setting
Device ID	Unique device identifier used by the platform to distinguish the devices.	[Setting method] The parameter cannot be modified.
Device Name	Name of the device.	[Setting method] **System Setting > General** Modify the device name.
Device Type	N/A	[Setting method] These parameters cannot be modified.
Model		
Firmware version		
HDD volume		
Channel support		
Alarm in		
Alarm out		

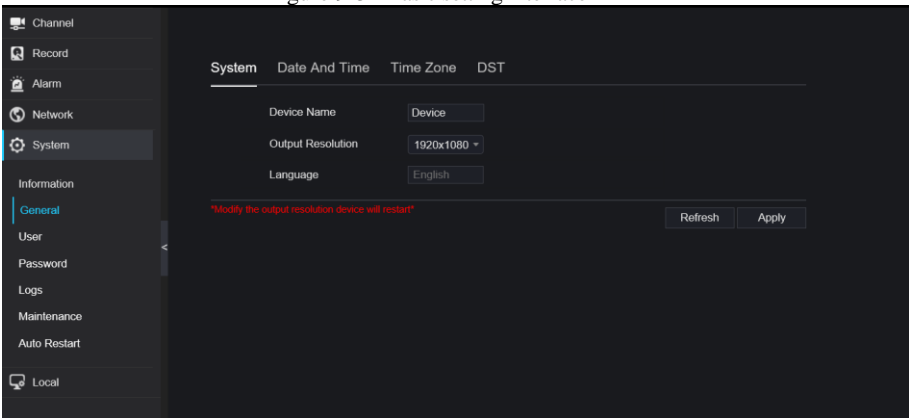| Parameter	Description	Setting
Audio in		
Audio out		

----End

9.5.2 General

You can set system, date and time, time zone and DST general interface.

Procedure

Step 1 On the **System Setting** screen, choose **System >General** to access the general interface, as shown in Figure 9-31.

Figure 9-31 Basic setting interface

Step 2 Set system.

　　1. Input the device name.

　　2. Choose output resolution from drop list.

　　3. Click ▨ Apply ▨ to save the system setting.

Step 3 Set date and time.

　　1. Synchronize the time from the NTP server, as shown in Figure 5-8.

　　2. Click NTP Sync button to enable synchronize time. The default value is enabling.

Figure 9-32 System interface

3. Select NTP server, date format and time format from drop list.
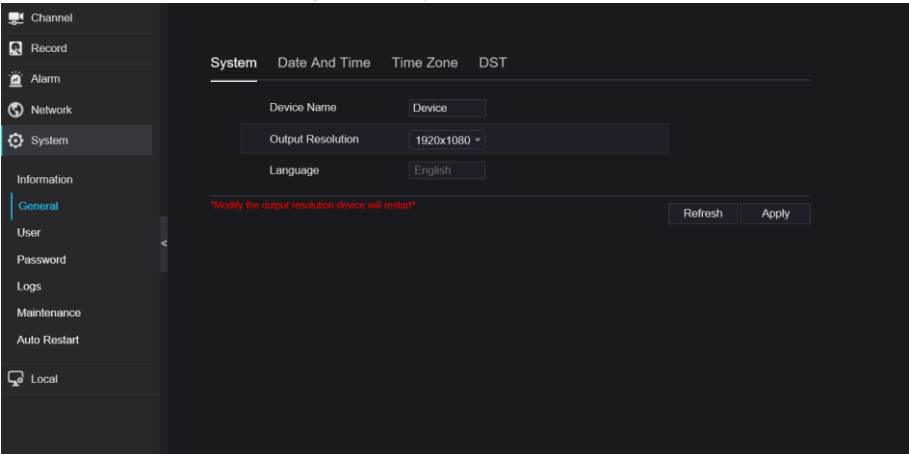
4. Click Apply to save date and time setting. The device time will synchronize with NTP server time.

5. Set the device time manually, as shown in Figure 9-33.

6. Click NTP Sync button to disable synchronize time.

7. Async date and time interface

Figure 9-33 Date and time

Step 4 Set the time zone.

1. Select date format and time format from the drop-down list.

2. Click [Apply] to save the device time setting. Click [Refresh] to return to previous setting.

Step 5 Set time zone.

Click **Time Zone** to enter the time zone setting interface, as shown in Figure 9-34.

Time zone setting interface

Figure 9-34 Time zone

Select a time zone from the drop-down list.
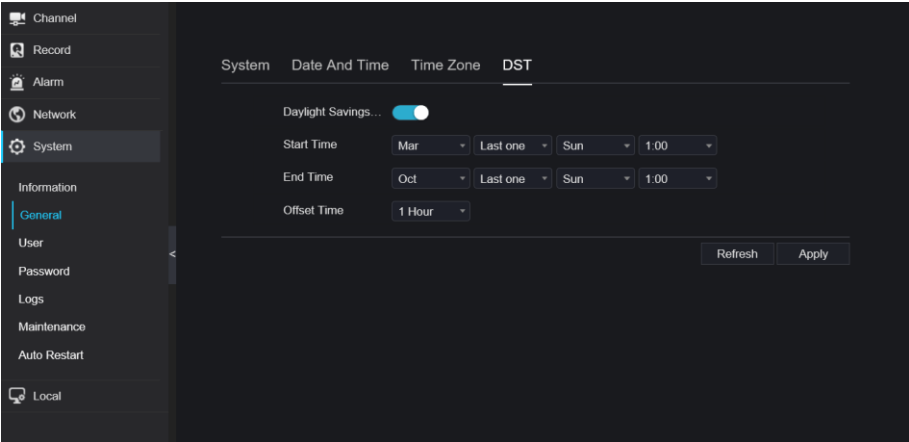
Click [Apply] to save the time zone setting. Click [Refresh] to return to previous setting.

Step 6 Set DST.

1. Click DST to enter the DST setting interface, click DST button to enable, as shown in Figure 9-35. The button is disable by default.

Figure 9-35 DST setting interface

Select a start time from the drop-down list.

Select an end time from the drop-down list.

Select an offset time from the drop-down list.

Click Apply to save the DST setting. Click Refresh to return to previous setting.

9.5.3 User

You can create new user accounts to manage the device.

9.5.3.1 Add User

Procedure

Step 1 On the **System Setting** screen, choose **System >User** to access the **User** interface, as shown in Figure 9-36.

Figure 9-36 User interface

Step 2 Click **Add** to add a new user, as shown in Figure 9-37.

Figure 9-37 Add user

Step 3 Input username, password and confirm password.

Step 4 Select group and change password reminder from drop-down list.

Step 5 Assign the privilege to user.

Step 6 Select channels to manage.

Step 7 Click , the message **"Add success"** is showed. If the password is not

meet the rule, it would show .

Step 8 Click to edit user's information.

Step 9 Click to delete the account, it woud show , click

 to delete.

----End

9.5.3.2 Adv.Setting

Procedure

Step 1 On the **System Setting** screen, choose **System >User** > **Adv. Setting** to access interface,

as shown in Figure 9-38.

Figure 9-38 Adv. Setting interface

Step 2 Enable the **Password double authentication**. If the user want to playback video , he need input another username and password to authenticate.

Step 3 Click Apply to save the device time setting. Click Refresh to return to previous setting.

9.5.4 Password

Procedure

Step 1 On the **System Setting** screen, choose **System >Password** to access password interface, as shown in Figure 9-39.

Figure 9-39 Password interface

Step 2 Input old password, new password and confirm password.

Step 3 Click ![Apply] to save settings. Click ![Refresh] to return to previous setting.

📖 **NOTE**

Valid password range [6-32] characters.

At least 2 kinds of numbers, lowercase, uppercase or special character contained.

Only special characters are support !@#$*+=-.

----End

9.5.5 Logs

Procedure

Step 1 On the **System Setting** screen, choose **System >Logs** to access logs interface, as shown in Figure 9-40.

Figure 9-40 Logs interface

Step 2 Set start and end time from calendar.

Step 3 Select log type from drop-down list.

Step 4 Click **Search** to acquire log information.

Step 5 Click **Export** to export the logs.

----End

9.5.6 Maintenance

Procedure

Step 1 On the **System Setting** screen, choose **System >Maintenance** to access maintenance

interface, as shown in Figure 9-41.

Figure 9-41 Maintenance interface

Step 2 Click **Reboot**, the pop-up message would show you, click OK to reboot.

Step 3 Click **Update,** the message shows ![Update Please select upgrade file / Please close the window after the upgrade!], choose software from specific location to update.

Step 4 Click **Reset**, the pop-up message ![Click 'OK' to reset / OK Cancel] shows to you, click

![OK] to reset.

Step 5 If the device is online, and the cloud server has the software, click the **Cloud Update, it shows '**make sure to update**' ,** click **OK** to update.

----End

9.5.7 Auto Restart

Procedure

Step 1 On the **System Setting** screen, choose **System > Auto Restart** to access auto restart enable the auto restart, the screen as shown in Figure 9-42.

Figure 9-42 Auto restart

Step 2 Select one type of restart time from drop-down list.

Step 3 Click ![Apply] to save settings. Click ![Refresh] to return to previous setting.

9.6 Local

Set the image download path for snapshot and the record download path for record files in the download configuration interface.

Procedure

Step 1 Click **Local Download Config** in local interface, as shown in Figure 9-43.

Figure 9-43 Local interface

Step 2 Enter the image download path.

Step 3 Enter the record download path.

Step 4 Click Refresh to return the previous settings. Click Apply to save the

settings.

----End

10 Disk Compatibility

The hard disks in the following list are tested and certified by our company, if you want to use other hard disks, please consult to our technical staff.

Table 10-1 Disk specification

Disk Brand	Type	Capacity	Model	Parameter	Verification of Platform
WD(Western Digital)	Monitoring level	3T	WD30EJRX -89G3VY0	3000G/ 5400RPM/64MB /SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		1T	WD10EJRX -89N74Y0	1000G/5400RP M/64MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		4T	WD40PUR X- 64GVNY0	4000G/5400RP M/64MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		2T	WD20EUR S-63S48Y0		NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		3T	WD30EUR S-63SPKY0		NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		0.5T	WD5000AA KK-001CA0		NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		1T	WD10EZE X-00BN5A0	1000G/7200RP M/64MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		4T	WD40EJRX -89T1XY0	4000G/5400RP M/64MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series

		3T	WD30PURX-64P6ZY0	3000G/5400RPM/64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		6T	WD60PURX-64WYOY1	6000G/5400RPM/64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		8T	WD82EJRX-89AD9Y0		NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
	Desktop	12T	WD121EJRX-89S5UY0	7200RPM/256MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
Seagate	Monitoring level	2T	ST2000VX000	2000G/5900RPM/64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		2T	ST2000VX008	2000G/5900RPM/64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		4T	ST4000VX000	4000G/5900RPM/ 64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		3T	ST3000VX000	3000G/5900RPM/64MB/SATA	NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		4T	ST3000VX010		NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		1T	ST31000528AS		NVR25 Series l /NVR 26 Series /ADR33 Series l /ADR36 Series
		6T	ST6000VX0001		NVR25 Series l /NVR 26 Series /ADR33 Series l

					/ADR36 Series
		3T	ST3000VX010	3000G/5900RPM/64MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
		8T	ST8000VX0002		NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
	Enterprise level	6T	ST6000VN0011	6000G/7200RPM/128MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series
Toshiba	Monitoring level	1T	DT01ABA100V	1000G/5400 RPM /32MB/SATA	NVR25 Series 1 /NVR 26 Series /ADR33 Series 1 /ADR36 Series

Video recording size per channel per hour =bitrate (kbps)*3600/1200/8 (M)

Recording duration =Total hard disk capacity (M) / Video recording size per channel per hour / number channels   (H)