

NETWORK VIDEO RECORDER USER MANUAL

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About This Document

Purpose

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

Inteded Audience

This document is intended for:

- Technical support engineers
- Maintenance engineers
- Surveillance operators

Symbol Conventions

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

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

Special Announcement

This manual may contain misprints, technology information that is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product. The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Update information will be added to new versions of this manual without prior notice. This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product



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 the power outlet with a protective ground connection.

The appliance is coupled to the port unit. Keep it at a proper 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.

This manual is only for reference and does not ensure that the information is totally consistent with the actual products. For consistency, see the actual products.



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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.

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





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 One disk model



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 One Eight disk model



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 Panell

Figure 2-5 One Disk 4 PoE



Figure 2-6 Two disks 8 PoE



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

Figure 2-7 One disk 8 PoE





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 2-8 Four disks/ eight disks



Table 2-7 Real panel function

Port	Description
	Alarm input and Alarm output./RS485
LINE OUT / LINE IN	Audio output / Audio input
LAN 1/LAN 2	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
VGA	Video output interface
HDMI (1/2)	
RS 232	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
- 0	Power switch
÷	Safe ground screw of the device
	AC 110V/220V power input interface



Figure 2-9 Four disks 16 PoE



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	
RS 232	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
- 0	Power switch
÷	Safe ground screw of the device
	AC 110V/220V power input interface







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° 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 HDDs or more), please refer to actual products Datasheet.
Power consumption	<15W (excluding the hard disk)



Installation environment

Note the following points when installing and operating the NVR:

- The power adapter of the NVR uses DC48V \pm 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

- ENR-XXYYY-N-ZZZ
- XX-Number of Bay
- YYY-Number of Channel
- ZZZ-Available features



3.Install Device

3.1 Process



Please note the following points before using this user manual:

- 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.

No		Item	Check content
		Appearance	Is there any obvious damage
1	Overall	Package	Is there accidental impact
	packaging	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?

Table 3-1	Unpacking	Inspection
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3.2 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 10 disk compatibility. It is not recommended to use a PC dedicated hard disk.



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.





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 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 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

- Ensure that the NVR is correctly connected to a power supply, and a display is correctly connected to the high-definition multimedia interface (HDMI) 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 displayed as shown in Figure 4-1.



Figure 4-1 Real-time video screen

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	Activation
--------	-----	------------

	1			English	ß
			▶ NORDEN®		
1			admin		
/			Enter a new password	~ 0	
- /		1	Confirm the new password	<u> </u>	
			Enter channel default password	<u>~</u>	
			LOGIN		
/					

Step 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 $\ \mbox{Figure 4-3}$



Figure 4-3 Set pattern unlock





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

	/				English G
/			Email for recovery	user password	
		/	342	NEXT	
/					
/					



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

	Engles	 ß
	Question (Recovery the password) The brand and model of your favorite car Enter question one answer	
/	Your lavorite team -	
	Your favorite city -	
	SKIP FRUSH	

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 Your favorite team 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



Figure 4-6 Pattern unlock login page

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

 <u>A</u> Username ☆ Password 	MODD		
 <u>A</u> Username <u>A</u> Password → 	PNURD		
🕆 Password	<u></u> Username		
	Password	Tree ⁴	



Step 2 Input the username and password.

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.

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.

- Step 4 Click Login to access the main User Interface (UI).
- Step 5 Modify the default password, as shown in Figure 4-8

	Modify default pas	sword	
New password			¥
Confirm password			
		Modify password	
Veld			
– Valid password range	e [6–32] characters.		
- At least 2 kinds of nu	mbers,lowercase,upperc	ase or special character cont	ained.
- Only special characte	ers are supported !@#\$*+	+=	

Figure 4-8 Password login page



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

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	
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] 192.168.1.200	
Obtain DNS automatically	N/A	[Setting method] Enable	
Preferred DNS Server	N/A	[Setting method] Manual [Default value] 192.168.1.1	
Alternate DNS Server	N/A	[Setting method] Manual [Default value] 8.8.8.8	
Enable Port Mapping	Enable to set the ports of HTTP, HTTPS, RSTP, Control. 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		

Table -1 Network parameter



Step 4 Click Next to view the basic information about device, as shown in Figure 5-3.

🕈 Setup Wizard	×
Date And Time Time Zone	DST
Date Format	DD/MM/YY hh:mm:ss 🗸
Time Format	24H 🗸
Enable NTP	C
NTP Server	time.windows.com
Sync Time Frequency (sec)	86400
Date	12/05/2021
Time	11:11:47
	Update Time
	Previous Next Cancel

Figure 5-3 Wizard of Date and time

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

Click **C** 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


🕈 Wizard	×
Date And Time Time Zone	DST
Time Zone	(GMT+5.30) Dublin, Edinb
	Previous Next Cancel

Figure 5-4 Wizard of Date and time

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.



		/			/		/		+
1/10/10/10/10	🕈 Setup Wiza	rd							
► NORDEN®	Camera							NORDEN®	
	Channel		Model	Protocol	Operate				
6 18 18	© CH1 © CH2								
/									
/		Delete	Add D	evices	Stop Search(1	6s)			
► NORDEN*	IP Model Protocol Firmware Version							NORDEN"	
6 10 1	192.168.1	34:30001 ENC-STE	3G. Private	v3.6.0825.¥	004.175.0.30.2.3	3			
1									
	Username	admin F	assword *		ہر Ado			NORDEN®	
PROHIDEN			Previ	ous Nex	Can	cel			
- 19 P	1	13			1		/		

Figure 5-5 Wizard of adding camera

The details of adding camera please refer to chapter 7.1 Step 6 Click Next to enter wizard of the disk, as shown in Figure 5-6

Figure 5-6 Wizard of disk

	/	+		/			+	1	+
/		🕈 Setu	ıp Wizard						
	PNURDEN)isk Capacity	Used	SN	Disk Model	Status	FNURDEN	
1			isk4 1TB	0 MB	49Q679YFS	TOSHBA HDW	. Normal		
/								► NORDEN®	
1									
							Format		
/									
					Previous	Next	Cancel		
-									

You can view the general information of disk. You can also format the disk. Step 7 Click Next to enter enter wizard of P2P, as shown in Figure 5-7



Figure 5-7 P2P

1	+ /	+	1	/
	🕈 Setup Wizard		×	
► NORDEN [®]	P2P		► NORDEN [®]	
	Enable P2P	0		
	Status	Online		
	P2P ID	B011003AGCV911E9R		
				/
► NORDEN®		间运输	►NORDEN®	
	App Name	Eyeguard		
	- It is available on App Sto	re and Google Play.		
►NORDEN®			►NORDEN®	
		Previous Next Canc	rel	

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 wizard of resolution, as shown in Figure 5-8 Choose resolution from drop-down list. (the highest resolution is 3840*2160)

1		🕈 Setup Wiza	rd					
/	► NORDEN®	Resolution					► NORDEN [®]	
		Output Re	solution	1920x1080				
-								
2								
/	►NORDEN®						► NORDEN®	
X								
-								
1	► NORDEN®	□ Don't sh	ow setup wizard n	iext time.				
				Previous	Nex Fini	sh		
-								

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 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.





The real-time video toolbar is described as follows:





Layout. User can choose layout and add new layout strategies as shown in Figure 6-3 Click Δ on the right of the screen splitting format and choose the channels to view the video.

+ Add Layout			x
Channel	Layout Name	Dwel Time(sec) 5 ~	
[1].it [2]Channelt2 [3]Channel29			
	Lut 2 Chamal 2		
	3. Channei29 4. drghj		
	•		

Figure 6-3 Add Layout

Input the layout name, choose the dwell time, choose the splitting format. Choose one channel or many channels to add on screen.



:Auto SEQ. click icon, the layout dwell on screen is enabled, for how to set the dwell on, please see chapter 7.5.4



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



:Channel information, tick the channel or encode, the live video will show the channel information.



:Live view strategy, user can depend on the network to switch the strategy, there are three modes, such as fluency, balanced and real-time.

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 6-4



Figure 6-4 Main menu quick toolbar



÷.

:Manual alarm, click the icon, user can set different channels, choose alarm out, the window shows in Figure 6-5.

	Manual Alarm					
Source	Aları	m Out	Active	De-Active		
Local	1	~	Active	De-Active		
Channel02	1	~	Active	De-Active		
Channel04	1	~	Active	De-Active		

Figure 6-5 Manual alarm



Alarm message, click icon would show pop-up message window, as shown in 6.6



6.1 Alarm message

Figure 6-6 Alarm message

	Pop up message t	to monitor 🛛 🗙
Channel	Туре	Start Time
Channel14	Motion Detection	27/04/2020 11:02:32
Channel14	Motion Detection	27/04/2020 11:02:22
Channel8	Video Loss	27/04/2020 11:02:18
Channel14	Motion Detection	27/04/2020 11:02:07
Channel14	Motion Detection	27/04/2020 11:01:55
Channel14	Motion Detection	27/04/2020 11:01:17
Channel14	Motion Detection	27/04/2020 11:00:01
Channel14	Motion Detection	27/04/2020 10:59:41
Channel14	Motion Detection	27/04/2020 10:59:30
Channel14	Motion Detection	27/04/2020 10:59:08
Channel14	Motion Detection	27/04/2020 10:58:44
Channel14	Motion Detection	27/04/2020 10:58:01

*

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

(i)

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

System Network Channel Dis	sk Alarm	
	q	IPv4 CCTV
Status	Online	k.
IP Address	192.168.2.48	192.168.99.121
Subnet Mask	255.255.254.0	255.255.255.0
Default Gateway	192.168.2.1	192.168.99.1
MAC Address	00:1C:27:1B:E3:CD	6A:C2:5E:D2:B7:02
DHCP	OFF	
Preferred DNS Server	4.2.2.2	
Alternate DNS Server	8.8.8.8	
Total Bandwidth	1000.00 Mbps	
Received Packets	7.86 Mbps	

Figure 6-7 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 6.8



Figure 6-8 PTZ adjust screen



: User adjust direction of camera



Ð

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.





Figure 6-9 Camera picture parameter





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



Snapshot panorama if the USB disk is plugging in the NVR.

Fisheye (only used for fisheye cameras), click to switch the fisheye modes, as shown in Figure 6.10.

Fisheye Toolbar Show Mode 8 ▦ 101 相 (H, Ċ, Ģ Ģ H

Figure 6-10 Fisheye



Channel Name	Channel 10
PAddress	192 . 168 . 1 . 83
Protocol	Private 🗸
Port	30001
Username	admin
Password	****
Remote Channel	CH-1 v

6.3 Playback

Playback refers to playing back a video, fixed-point playback, playback the search type. Click On the quick navigation bar to access the playback screen, as shown in Figure 6-11

Figure 6-11 Playback screen

• Playback						
n 🖸 Select All	State of the state	1	-	17-		
0 📑 [24] Channel 24 *	-	1 alton to				
13 🧧 [25] Channel 25	24	ALAR ST		-		
🗆 🖸 [26] Channel 26	AT A	CONTRACTOR		1		
🖬 📕 [27] Chennel 27		A MARCE		14		
🗧 🚺 [28] Channel26						
🗆 🚺 [29] Channel 29						
🗆 🧧 [30] Charnel 30						
ci 🧰 (31) Channel31						
Schedde Record	H- 4 (i)	■ M 2 2 3	()	0.4. × * 0	(P)	
Alam Record	an o			08 20/07/20	10 11 434 1 - European	



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



The backup type shows, click save, then saving the file pop-up windows would show as Figure 6-12. Click **OK** to save. This function is available after a USB disk is plugging in the device.

	Se	elect Directory		×
Device List O				-
	Na		Modify Date	
/dev/sdb2	in -			
	📄 kemel-35200-V2			2.0 MB
	📄 u-boot-3520D-V			
			*	
0.7 GB/0.7 GB	Selected Directory :	/nfsroot/usbbk_b1		
			OK	Cancel

Figure 6-12 Select directory

Batch backup, click the icon to backup multi-channels, as shown in Figure 6-13:

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. the backup videos are marked by watermark, you can view it by our player.

isnapshot panorama if the USB disk is plugging in the NVR.



Figure 6-13 Batch backup

۲	Batch Backup	х		
	Save to			ì
	Video Type			
	Stream Information	Main Stream		~
	Start Time	2019/05/28	21:45:16	
	End Time	2019/05/29	21:45:16	
	Channel	Select All		
			OK	Cancel



: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 Olice click click click reaction of the search screen, as shown in Figure 6-14.

 • Playback
 TimeSearch
 Pcture Grid
 Event Recording
 Backup List
 X

 a Select AI
 a (1)4
 a (2)0arrent2
 a (2)0arren2
 a (2)0arrent2

Figure 6-14 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.

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 Click Click Click Click on the quick navigation bar to access the picture grid screen, as shown in Figure 6-15



Figure 6-15 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. Click the image to change the interval.
- Step 4 Select a required thumbnail, double-click it or right-click it and choose Play from the shortcut menu to play the video.
- Step 5 Click to replay the gird individually.





6.3.3 Event Recording

Click On the quick navigation bar; choose **Event** at title to access the alarm event screen, as shown in Figure 6-17

Playback						
Select Al	Start Time				Opera	ila -
🛢 🖸 [1]ult	12/06/2021 12:28:51	Channel01	Motion Detection		٥	0
🧧 🛃 [2] Chamel 12	12/05/2021 12:28:30	Channel01	Motion Detection		Ð	
😫 🖸 [3] Chemel29	12/05/2021 12:28:04	Channel()1	Motion Detection		Ð	Θ
🗧 🖸 (4) dirghj	12/06/2021 12:27:47	Channel01	Motion Detection		Ð	θ
		Channel01	Motion Detection		Ð	Θ
	12/05/2021 12:27:02	Channel01	Motion Detection		Ð	
	12/05/2021 12:26:51	Channel01	Motion Detection		Ð	θ
Start line	12/05/202112:28:29	CharmelO1	Motion Detection		Ð	Ð
End Time	12/05/2021 12:26:18	Ciarrel01	Motion Detection		Ð	Ð
12/05/2021 13:1655	12/05/202112:25:58	Channel01	Motion Detection		Ð	Φ
Alamh	12/05/2021 12:25:41	Channel01	Motion Detection		Ð	Φ
Canera Alamin		Channel01	Motion Detection		Ð	Φ
Metion Detection	12/05/2021 12:25:10	Channel01	Motion Detection		Ð	ø
Canera Tamper		Channel01	Motion Detection		Ð	Φ
+Ehnligent Anlysis	12/05/2021 12:24:34	Channel01	Motion Detection		Ð	θ
Abrornal Alarm		Channel01	Motion Detection		Ð	
Search			K 1/62 X	Dou	ble click to play	video

Figure 6-17 Event screen



Operation Steps

- Step 1 Select cameras in the camera list on the left
- Step 2 Set start and end time.
- Step 3 Tick the alarm type, such as alarm in, camera alarm in, motion alarm, video loss, intelligent analysis and abnormal alarm
- 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.



: play the recording video.



: backup the recording video.

dlarm in	
💆 Camera Alarm in	
Motion Detection	
💆 Camera Tamper	
Video Loss	
+ 🖬 Intelligent Analysis	
🕂 🗹 Abnormal Alarm	
Search	

the type of intelligent analysis and abnormal alarm are subdivided, user can tick the detail alarm to show.

Intelligent analysis includes perimeter, single virtual fence, double virtual fences, loiter, multi loiter, object left, object removed, abnormal speed, converse, illegal parking, signal bad, register, stranger, registered license plate, over temperature, low temperature, abnormal temperature, threshold warning, threshold alarm, temperature difference warning, temperature difference alarm, temperature section alarm, face temperature, wear mask, no mask, personnel count threshold alarm, personnel count threshold alarm includes disk error, IP conflict, network disconnected. User can choose the accurate alarm events to search.

6.3.4 Backup

Click On the quick navigation bar, choose Backup at title to access the backup screen, as shown in Figure 6-18

Figure 6-18 Backup screen

Q	Search					
D						
đ				n /nfsroot/usbbk_b	25	~ @

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



6.4 AI Recognition (Only for Some Models)

At AI recognition interface, we can set the **Real time Comparison**, **Smart search**, **Archives library**, **Comparison** configuration.

The all snapshots support to add to the libraries according the real needs

6.4.1 Real Time Comparison

Real time comparison can compare human faces, vehicle license plate, and AI(include riding, vehicle, full body)

6.4.1.1 Human Face

At real time comparison interface, click the **L** to enter the human face comparison interface, choose the cameras with face recognition function to play live video, the snapshots of camera will compare with the templates which has been registered in libraries, the result shows as in Figure 6-19.



Figure 6-19 Human face comparison

Click the "+" can add the snapshot to face library immediately.

Snapshot in real time video, put the cursor on picture such as *marginal states*, you can add it to face library, or face search. The cursor on area and the pictures are not update, move the mouse so that the pictures can be shown in time.



6.4.1.2 Vehicle License Plate

At real time comparison interface, click the 🔤 tto enter the vehicle license plate comparison interface, choose the cameras with license plate recognition function to play live video, the snapshot of camera will be compared with libraries, the result shows as in Figure 6-20



Figure 6-20 Vehicle license plate

Click the "+" can add the snapshot to license plate library immediately.

6.4.1.3 Vehicle and Full Body

At real time comparison interface, click the **1** to enter the vehicle license plate comparison interface, choose the AI recognition cameras to play live video, the snapshot of camera will compare in libraries, the snapshot to vehicle and full body will show at the bottom of page, the result shows as in Figure 6-21.





Figure 6-21 Full body

6.4.1.4 Real-time Body Temperature Filter

At AI recognition, click **u** to enter the real-time body temperature filter, user can choose human body temperature cameras to show, it will show the temperature recording and over temperature snapshots. Click full-screen, the channel list and snapshots statistics will be hidden.



Figure 6-22 Real-time body temperature filter





Figure 6-23 Full screen

If user enable the mask detection, the results will show wear mask or no mask.

6.4.2 Smart Search

At smart search interface, user can search the human face, vehicle license plate, full body, car, body temperature. The limit of pictures showing is 1000, click picture to show detail information, result can be exported to flash disk.

6.4.2.1 Human Face Search



Figure 6-24 Human face search



- Step 1 Choose human face search at smart search interface.
- Step 2 Tick the face recognition camera channels, set the start and end time.
- Step 3 Choose the condition (by picture or by feature), the picture can choose from the file folder.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 The detail picture can be used to search or add to library.
- Step 7 Click play button of video to play the recording of snapshot, click "Backup" to backup the recording videos.

	Backup 2	×
Stream:	Main Stream 🗸	
Video Type:	Mp4	
Channel:	СН9	
Sizo:	30.0 MB	
Start Time:	27/04/2020 14:09:37	
End Time:	27/04/2020 14:10:07	
Save	Cancel	

Figure 6-25 Full screen

Step 8 Click "Export" to export the result, choose export type pictures or videos.

Figure 6-26 Export

Export Type	Export Pictures	~	
Save to	Export Pictures		•
	Export video		

Play video of snapshot, it will play a 30-seconds video before and after the snapshot.



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 and the pictures is not update, move the mouse so that the pictures can be shown in time.

6.4.2.2 Vehicle License Plate Search

A	AlRecogni	tion	Real-time		Smart Search				
1	C Select Al		Soarch result						± Export
	Character	en f	Ournel		License Plate	License plate image	License Plate Lb	Expire date	Operate
输	[2] Cham	e12	Channel10	27/04/2020 14:18:13		VU69 YDE	DefailtLb	Never expire	+ 🛛 🖗
	🛢 🖸 [3] Oum	e03 [†]	Channel 10	27/04/2020 14:16:16	KSI8 XNO	KSI8 XND	Dofailt Lib	Novor expire	+ 🖯 🖗
	[4] Charm		Channel10	27/04/2020 14:16:23	K8 VWW	KBVWW			+ 0 0
2	[5] Cum	e05	Channel(1)	27/04/2020 14:16:24	BX17 VWB	BXI7 VWB	DetailLb	Never expire	+ 0 0
•	[6] Chann	c106	Channel10	27/04/2020 14:10:25		AFGI XUU			+ 🖯 🖓
	🗖 🖬 [7] Chann	e07	Channel TO	27/04/2020 14:10/28		GVI4 TYA	DefaitLb	Never expire	+ 🖯 🖨
	🛢 🖬 (8) Chann	#03	Channel 10	27/04/2020 14:16:33	KY68 WZM	KY68 WZM			+ 0 0
	🛢 🖬 [ii] Chann	e0)	Channel10	27/04/2020 14:16:36		AS52 RXZ			+ 0 0
	🖪 🖸 [10] Charr	w10	Channel®	27/04/2020 14:16:40		KTJ-956	Default Lib	Nover expire	+ 🖯 🖓
	🛛 🚺 (1) Ourr	witi	Channel 10	27/04/2020 14:18:44	I PJ72 YKV	PJ72 YKV			+ 0 0
	Start Time		Channel (1)			EY60 UZX			+ 🛛 🖓
	27/04/2020	11:16:06	Channel 10		AKI8 BZL	AKIB BZL			+ 🛛 🖓
	End Time		Channel10	27/04/2020 14.10/48		GYI2 RZB			+ 🖯 🕀
		14-46/05	Clane/0	27/04/2020 14:16:50		WV69 XZM			+ 0 0
	Ucense plate(op)	(unal)	Channel10	27/04/2020 14:16:52	PZ65 PW0	PZ65 PWO			+ 0 0
			ChannellD	27/04/2020 14:655		PZ65 BYV	Dofait Lib	Novor expire	+ 🛛 🖗
	Resot	South					34 X		

Figure 6-27 Vehicle License Plate search

- Step 1 Choose vehicle License Plate at smart search interface.
- Step 2 Tick the vehicle license plate recognition camera channels, set the start time and end time.
- Step 3 Input the license plate optionally.
- Step 4 Click "Search" to search the snapshot of license plate.
- Step 5 The result will show at the page, click "+" add to library.
- Step 6 Click "Playback" to view the recording video, click "Backup" to backup the video.
- Step 7 Click "Export" to export the result.



6.4.2.3 Full Body Search



Figure 6-28 Full body search

- Step 1 Choose full body search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Set the gender, click cycling or no cycling .
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 Click play button of video to play the recording of snapshot, click "backup" to backup the video.
- Step 7 Click "Export" to export the result.



6.4.2.4 Vehicle Search



Figure 6-29 Vehicle Search

- Step 1 Choose vehicle search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Tick the color.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will be showed at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 Click play button of video to play the recording of snapshot, click "backup" to backup the video
- Step 7 Click "Export" to export the result.



6.4.2.5 Body Temperature Search



Figure 6-30 Body temperature search

- Step 1 Choose body temperature search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Choose the person type, temperature type, input ID optionally.
- Step 4 Click "Search" to search the temperature.
- Step 5 Click "Export" to export the result



6.4.2.6 Personnel Count



Figure 6-31 Personnel Count

- Step 1 Choose personnel count at smart search interface.
- Step 2 Tick the AI recognition camera channels, set statistical type and date.
- Step 3 Click "Search" to search the snapshot of human face.
- Step 4 Click 🗾 👔 😑 to view the data by different manners.

6.4.3 Archives Library

At archives library, user can add or edit the face library , license plate library. The license plate libraries can be import to and export from IP cameras.



6.4.3.1 Face Library

1	AlRecognition						Archives Likrary			
1	Face Library	+ Add	X Del		import ;	t, Export	Q Refresh S	E Filter		= 11
	© Select Al		Name	Gender	Britday					Operate
	DvfallUb			Main	28/11/2019		unitow	Shutert	Naver expire	∠∎ Q
	040			Maie			utinow	Student	Never expire	2 🛢 Q
	0~r			Male			ukrow	Student	Never expire	∠ 8 Q
	<pre>advalogy</pre>			Male				Sludert	Never anpite	280
	mage .			Male	28/11/2019		utrow	Teacher	Never expire	2 8 Q
	angewering .			Malo			utinow	Student	Novor expire	∠∎ Q
	alutions.			Maie			utknow	Student	Never expire	∠∎ Q
				Main			utknow	Student	Never expire	∠ ∎ Q
	. zknow			Male			utinow	Student	Never espire	₹ ∎ Q
	Beel			Male				Student		∠∎ 0.
	mardware .			Malo	28/11/2019			Student		∠ @ Q
	a sourcea			Malo			utinow	Student	Novor expire	∠∎ Q
				Main			stintow	Shutert	Never expire	∠∎ Q
							utknow	Student	Never expire	∠ ∎ Q
				Male			urknow	Student	Never expire	2 8 Q
				Male	28/11/2019			Student		2∎0
				Malo	28/11/2019		utinow	Student	Never expire	∠ @ Q
				Mala			utinow	Student	Novor expire	∠∎ Q
							K 3/12	ж		

Figure 6-32 Face library

Click "+" to add face library.

Click "Add" to add person enroll.

Tick the person, click "Delete" to delete the person.

Click "Import" to add the person batch.

Click "Export" to export the all person in library.

Click "Filter" to filter the all persons in library, as shown in Figure 6-33.

Figure 6-33 Filter

Deader	A.B.	
Gender	AI	×
D		
Туре	All	~
Picture	All	~

Click operate icon to edit or delete the chosen person.



6.4.3.2 License Plate Library

At license plate library interface, user can add/delete/operate the library. It supports the white-list and black-list according the libraries to export and import the library to IP cameras.

Al Recognition		Smart Search Ard	ives Library Comparison		
Liconse Plate Lis	+ + Add X Delete	import _b Export _Q	Refresh		
Select Al	Ucerse Plate	License Plate Lib	Expire date	Remark	Operate
Contract of the second	□ DomerAria	Liors PHOLD Orfant B Cefant D	Expre date		2

Figure 6-34 License plate library

Click "+" to add license plate library.

Click "Add" to add plate to library.

Tick the plate, click "Delete" to delete the license plate.

Click "Import" to add the license plate batch.

Click "Export" to export the all-license plate library.

Click operate icon to edit or delete the chosen license plate.

Click "Import from Camera" to select license plate library to channel.

N	Select License Plate Library							
	Channel	Channel09	~					
	License Plate Lib	\varTheta White List						
	LICAISA FIALA LID	O Black List						
		ОК	Cancel					

Click "Export to Camera" to add license plate number to camera.





6.4.4 Comparison Configuration

The comparison function is only for AI cameras, please refer to actual cameras. At comparison configuration interface, user can set the comparison of human face/ license plate/temperature/ mask detection configuration/ personnel count configuration.

6.4.4.1 Face Comparison

At face comparison interface, user can set different channels' strategy, such as similarity, display comparison result, face library, enable alarming, event action, arming time, as shown in Fig 6-35.

βł.	AlRecognition	Real-time comparison	Smart Search Archives Library	Comparison Configuration	х
1			Stranger Detect Library	Similarity	Operate
					۷ ک
r					۷
		Defailt Lb			٤
					۷
					۷
					۷
	Ourrel2				
					۷
					۷
					۷
					۷

Figure 6-35 Face comparison



4	Edit Strategy	×
	Channel	Channel01
	Enable Comparison	0
	Similarity	+ 80
	Register Stranger	
	Display comparison resul.	0
	Face Library	FaceLibrary FaceLibrary DefaultLib App nvr v
	Enable Alarm	D
	Event Actions	Setting
	Arming Time	Setting
		OK Cancel

6.4.4.2 License Comparison

At license plate interface, users can set strategies of different channels of license plate recognition cameras, such as register and unregister, enable alarming, event action, arming time, as shown in Figure 6-37.

Ŕ	AlRecognition			Comparison Configuration		
1	Channel	Registered detection Brary	Unregistered detection	onlibrary	Operate	
÷						
^						
		DefaitLb				
					۷	
					۷	
					۷	
	Charrie (26				۷	
					۷	
					4	
					۷	

Figure 6-37 License Comparison

Figure 6-36 Face comparison



Figure6-38 Strategy



6.4.4.3 Temperature Comparison

At comparison configuration interface, click

to enter the temperature configuration, as shown in Figure 6-39



	AIRec	ognitic	n											long	ars.	an C	ontig	ų a	01			
1	Terry	veratur	e Confi	grato	r s																	
£		bromal	temper	ature me	100,707	nert i	alarm	Ð	•													
		ow terry	perature	thresho	kd (0.1-																	
		igh terra	perature	thresho	kd (0.1-																	
		iormal te	mperati	#e (0.1-																		
																					Ann	

At temperature comparison interface, user can set low temperature threshold, high temperature threshold, normal temperature. Abnormal temperature measurement alarm, when it is turned on, the temperature below the low threshold and above the high temperature threshold will generate abnormal temperature alarm. When it is turned off, body temperatures below the low threshold and above the high threshold are discarded.



amperature Configuration	Schedule Linka	<u>.</u>		
Enable Alarm		a		
🗟 Event Actions. 🔲 School	Mo			
Pushmessage to APP	o Errel	Buzer		
Popupmessage to monitor	OR#Screen	Cloud Storage		
Alarm Out	0			
Alarm Time(s)(0:Continuous)				
Cutput ID				

Figure 6-40 Schedule linkage

Enable alarm, set the schedule linkage, it will send alarm information if the temperature is higher than low threshold and lower the normal temperature, or higher than normal temperature and lower than high threshold.

6.4.4.4 Mask Detection Configuration

3				
No Mask				
	e- + 90			
				a na a sa
	C No Mark	No Mask	No Mask + 90	No. Mask -

Figure 6-41 Mask Detection Configuration

Enable mask detection, choose the mode (no mask or wear mask). Set the confidence degree, the default value is 90



AlRecognition Real-time comparison Smirt Search Archives Library Comparison/Configuration X Mark Detection Configuration Strubble Likkope Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration

Figure 6-42 Schedule linkage

Enable the alarm, the real-time comparison can show if one the wear mask or not. Choose event actions, and set the schedule. Click "Apply" to save the settings.

6.4.4.5 Personnel Count Configuration

R	Al Recognition F	Real-time comparison	Smart Search	Archives Library	Comparison Configuration	х
1	Personnel Court Configuratio	n Schedule Linkage				
£	Personnel Court Enable	0				
۲	OSD Enable	Ð				
1	Counting Clear Interval	1Day				
	Set Correction Value	۲				
	Alarm Threshold					
	Alarm Interval					
	OSD displayed on the second	Sary screen				
						Acply

Figure 6-43 Personnel count configuration



Enable personnel count to start the people counting.

Enable OSD to show OSD (OSD is displayed on the auxiliary screen, you need to start the auxiliary screen in "System> Auxiliary Screen" before displaying).

Select the counting clear interval (never, 10 minutes, half an hour, 1 hour, 12 hours, 1 day).

Set correction value, Configure the calibration value to start the manual calibration of the personnel count value.

Alarm threshold: when the number of people counts reaches the threshold, an alarm is activated. Alarm interval: 10s, 20s, 30s, 40s, 50s, 60s.

Click "Apply" to save the settings.

Figure 6-44 Schedule linkage

Æ	Al Recognition Ri	eal-time comparison	Smart Search	Archives Library	Comparison Configuration	•	×
1		Schedule Linkage					
ľ	Enable Alarm	edule 🖸					
	Push message to APP DPop up message to monitor	o Enval 08					
	Alam Out	۵					
						Acety	

Set schedule linkage action to alarm.

6.5 Attendance (Only for Some Models)

6.5.1 Attendance Data

Click to enter attendance data interface, as shown in Figure 6-45



Figure 6-45 Attendance data

Attendance	Attendens (Attenda	rcs Varagement	F		Ж
Athendanse Library						
• Defactio						
* 0 m						
• 0 ··· .						
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 Control 						
 Dissipanting 						
 Episten 						

-						
Tally w						
Catter Recented						
14-140 F. 100						
Letter ICASTE						
Search Type						
American Survey v						
and street						

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.
- $Step 4 \ \ Click \, search, the \, result \, will \, show \, in \, interface.$
- $Step 4 \quad Click \, Export to \, export the \, query \, result$

6.5.2 Attendance Management

In attendance management, user can set attendance rule, library and check point, as shown in Figure 6-46

Attendance Attendance Management X Attendance Attendance Management X Attendance Attendance Mail Attendance Mail X Attendance Attendance Mail Start-work line 000 X Attendance Mukkay Time: Start-work line 000 X X Attendance Otek Polit S Workay Setting: DSuit Wuk a Time: Start-work line 000 X Check-in-used time: Before start-work line: 0 min. to Attension-work time: 0 min. --E employee does not check in when starting work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when ending work, mark as attent --E employee does not check out when

Figure 6-46 Attendance data



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.

Attendance	Attendance Data Attendance Manageme	ent		
> Attendance Rule Settings	Attendance Library			
> Attendance Librory	FaceLbrary G Library Management		Attendance Library	
> Atlandance Check Point S	D 2 Rema R/Defail 1 b RID Ind Risc Recharge Renge Renge Renge Renge Render Risc Risc Risc Risc Risc Rischare Robertoud	19 Add 40 Doete	D'Etens D'Orfalit I.b Diao Dina Diachnology D'Image Dengheering Djietform Diac Diachow Diakow Diaki Diachow Diaki Diachow Diaki	
				Apply

Figure 6-46 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

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 6-48



Attendance	Attendance Data	Attendance Management			x
> Attendance Rule Settings	Attendance Check Po	int Settings			
> Attondance Library	Charnel	Attendance Library	Similarity	Enabled	Operate
	ChannelCT	Defailt Lbapp.nr.technology;mage.angneeringplattorm.jpc.urknow;test/hardw		Start	
	Channel (2			Start	
	Charrel03				
	Orame@4			Start	۷
	Chambil05				۷
	Channel 06	Default Likuppovr, technology (invige engineering platform) pour know (test (verder			۷
	Chanel3/				۷
	Channel08	Defailt Lbuppner technology/invge.engineeringplatform/pcurknow.test/hardw.		Start	
	Channel09			Start	
	Clame10				
	Ournett				۷
	Channel 12			Start	۷
	Cheme13			Start	۷
	Chame/14			Start	
	ChannellS			Start	
	Ciurre/6			Start	

Figure 6-48 Attendance check point setting

Step 2 Click 💋 Step 1 to edit check point setting, as shown in Figure 6-49



Figure 6-49 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.

6.6 Thermal Temperature (Only for Some Models)

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

6.6 Temperature Parameters

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

Operation Procedure Step 1 Choose Thermal > Temperature Parameters The **Temperature Parameters** page is displayed, as shown in Figure 6-50

 Internal
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 Description Relations
 Description Relations
 Image: Rela

Figure 6-50 Temperature Parameters

Step 2 Set the parameters according to Table 6-1



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.
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
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

Table 6-1 Temperature parameters



Parameter	Description	Setting
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]
Area Alarm Interval	N/A	[Setting method] Enter a value manually ranges from 1 to 1800. [Default value] 10

Figure 6-51 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.
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 3 Click **Copy** to copy the same settings to others thermal cameras.

Step 4 Click Apply.

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

6.6.2 Temperature Area

Operation Procedure

 $Step 1 \quad Choose \, Thermal > Temperature \, Area$

The **Temperature Area** page is displayed, as shown in Figure 6-52



 Thermal 	Setting Dourse					8
> Temperature Parameters						
> Temperature Area						
> Schedule Linkage	Measure Mode			•		
> Advanced	0.	1	** **			
٠	121 E					
	1 heat					



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
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



Parameter	Description	Setting
Name	Area name of temperature area.	[Setting method] Enter a value manually.
Туре	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
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 Imnore 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.

6.6.3 Schedule Linkage

Operation Procedure Step 1 Choose Thermal > Schedule Linkage The **Schedule Linkage** page is displayed, as shown in Figure 6-53

80 Thermal	Setting Inquire		×
⇒ Temperature Parameters	Schedule Linkage		
> Temperature Area			
> Scheckle Linkage	Throshold Alarm Threshold Warning	Temperature Differenc. Temperature Differenc. Temperature Section	
> Advanced	😸 Livert Actions 🛛 Scheru		
		•	
	Enable Alarm Out		
	Enable Camera Alarm Out		
	Enable Event Recording	Ð	
			Apply

Figure 6-53 Schedule Linkage



Step 2 Tick the output channel.

- Step 3 Enable "Alarm Record", "E-mail" button.
- Step 4 Set schedule linkage.



Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 6-53 **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.

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.

6.6.4 Advanced

Step 1 Choose Thermal > Advanced to enter the advance interface, as shown in .Figure 6-55



Figure 6-55 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.

6.6.5 Inquire

Operation Procedure

Step 1 Choose **Thermal** > **Inquire** to enter the inquire interface, as shown in Figure 6-56



Figure 6-56 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.

6.7 Channel Information

Click the 🔳 will show as Figure 6-57, tick the Channel or Encode, the information will show in live video screen.



Figure 6-57 Channel information

6.8 Main Menu

Right-click on UI screen, the main menu as shown in Figure 6-58 The main menu includes Channel, Record, Network, Alarm and System.



Figure 6-58 Channel information



7.UI System Setting

Different devices may have different functions, please refer to actual product.

7.1 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 search 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, Privacy Zone, ROI, Microphone, Human Thermometer, Smart, and Intelligent Tracking.

7.1.1 Camera

Operation Description

Click **Channel** in the main menu to access the camera management screen, as shown in Figure 7-1. there are four modes to add cameras, add manually, add by batch, add by PoE, add automatically.

🛠 System	Channel	Record	Alarm	Netwo	ork System				
▶ Camera	Camera	Protocol	Managemen						
⊳ Encode		Channel	F	5 %	Model	Protocol	Firmware Version	Operate	
▷ Sensor Setting			103.243.46.	90:30001		Private		∠ @ …	
> OSD	⊾⊓	CH2	103.243.46.	90:30002		Private		∠ @ …	
> Privacy Zone		 CH3 CH4 	192.168.2.49	:30001	ENC-STBGF-00R	Private	v3.6.0825.1004.175.0.30.2	2.3 <u>∠</u> ⊡… +	
> ROI		CH5						+	
> Microphone		CH6 CH7						+ +	
> Human Thermometer						Ac	ld Devices Delet	e Batch Update	
> Smart	Online [Device	Sto	p Search(3	s)				
Intelligent Tracking		P			Model	Protoc	ol Firmware	Version Modify IP	
	D	192.168.2.21	5:30001	ENC-H	HP5Z-500L-70	Private	t3.6.0824.1004.	175.0.14.7.3.P2 🗾 🗾	
		192.168.2.3	210:80			ONVIF			
		192.168.2.	44:80			ONVIF			
		192.168.2.	20:80			ONVIF			
	•	192.168.1.2	237:80			ONVIF			
				11	anne bergeren				
				User	name admin	Ра	ssword	Add	

Figure 7-1 Channel management screen



7.1.1.1 Add Camera Automatically

The NVR can add automatically cameras to the camera list.

Operation Methods

Method 1: Click StartSearch button, the cameras these are the same local subnet with NVR will show in list, the search will be lasting for 20 seconds. Input username and password (the default value both are admin) click AddDevices the cameras in the list would be added to channels

Method 2: Select the cameras you wanted to add, and click 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.

the selected cameras would be added to the camera

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 **e** this camera is offline.
- The added cameras should be the same subnet segment as NVR.

7.1.1.2 Add Camera Automatically

Operation Steps

Step 1 Click _____, the screen to add devices manually is displaying, as shown in Figure 7-2

Channel		P	Protocol	
CH1	192.168.3	2.196.30001	Private	•
CH2	192.168.3	2.222:30001	Private	
CH4	192.168.3	2.175:30001	Private	*
Channel				
P Address				
Protocol		ONVIF		~
Port		80		
Jsername				
assword				
Remote Chan	nel			

Figure 7-2 Add camera screen



Step 2 Input IP address, port, user name and password of camera. If the user want to add the same camera's second channel who can double click the online camera IP, so that the information will be copied to the below, user modify the remote channel to add quickly.

Step 3 Select a protocol from the drop-down list(ONVIF, Private, custom protocols). Remote channel is only used for multi channels cameras, such as human temperature cameras, fisheye cameras, and so on.

Step 4 Click OK , the camera is added successfully.

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 an 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. The protocol can be chosen the custom protocols these are set at protocol interface. The user can click the added channel to copy the information to save the time, you can just need to modify difference information, such as the remote channel.

7.1.1.3 Add Camera by RSTP

If the user wants to add the different protocol cameras to NVR, you can set the protocol management, and add cameras one by one, as shown in Figure 7-3

* System	Channel Record Alarm Netw	work System	×
» Carrera	Camera Protocol Management		
> Encode	Custom Protocol		
▹ Sensor Setting	Protocol Name	Outon 1	0
▶ 0SD	Stream Type	Main Stream C Sub Stream	
> Privacy Zone	Protocol Type		
⊳ ROI	Port Parts		
» Microphone	Example:[Type];//[P Address]:[Port]/[Pi	an)	
Human Thermometer			
⊳ Smart			0
> Intelligent Tracking			
			Actriy

Figure 7-3 Protocol management

Step 1 Click Channel > Camera > Protocol Management.

- Step 2 Choose the custom protocol from the drop-down list, there are 16 kinds of protocols can be set.
- Step 3 Input the protocol name.

Step 4 Tick main stream and sub stream. The main stream shows image on full screen live video. The sub stream shows image on split screen. If you just tick main stream and the channel will not show image on split screen.

- Step 5 Choose the type of protocol, the default value is RTSP.
- Step 6 Input the port, it depends the IP camera.
- Step 7 Input the path, it depends the manufacturer of cameras.
- Step 8 Click Apply to save the settings.



NOTE

Choose the protocol from the drop-down list, the protocol is set at protocol management interface. The cameras should be confirmed to the protocols.

7.1.1.4 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





Step 1 Click , the camera will be deleted successfully.

7.1.1.5 Operate Camera

At camera list, click , To operate camera as shown in Figure 7-5, user can update, reboot and reset the camera immediately.



Figure 7-5 More operation

Step 1 Click Update, pop-up window to select software, as shown in Figure 7-5



Step 2 Set the directory click , to update camera.



Step 3 Click **Reboot**, message "**Are you sure to reboot**?" would show, click **C** 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 to reset the camera.

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

The online camera can be modified the IP, click **Modify IP** to modify as shown in following figure, input the new IP Step 6 address and subnet mask.

Update need upload the firmware by flash driver.

7.1.2 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 7-7



X System	Channel Record Alarm	Network System		×
> Camera	Encode			
▶ Encode	Channel			
Sensor Setting				
> OSD	Stream Information	Main Stream	Sub Stream	
> Privacy Zone	Video Format	H265		
- 00	Audio Encode Type			
\$ HO	Resolution	1920x1080		
s Microphone	Frame Rate(fps)			
> Human Thermometer	(Frame Interval(Frame)			
⇒ Smart	Bitrate Type	CBR		
> Intelligent Tracking	Gitrate(kbps)			
	Gusiny			
	Smart Encode	Ð		
				Сару Адріу

Figure 7-7 Encode Screen

Operation Steps

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

Step 2 Set video format, audio encode type, resolution, frame rate, bitrate type, bitrate size and quality from the drop-down lists.

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

7.1.3 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 7-8



* System System Alarm » Priva > Microphone > Intelligent Tracking Defau + 50

Figure 7-8 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.



7.1.4 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 7-9



Figure 7-9 OSD setting screen

Operation Steps

	Step 1	Select a channel fror	m the drop-down list of channel	Ι.
--	--------	-----------------------	---------------------------------	----

- Step 2 Click next to Time to enable or disable OSD time setting.
- Step 3 Click One 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.
 to apply the OSD settings to cameras in selected channels ,

7.1.5 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 7-10.





Figure 7-10 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 3ClickCopyand select channels or tick all, then clickOKto apply the privacy settings to cameras in selectedchannels , clickApplyto save privacy settings.to apply the privacy settings to cameras in selected

Step 4 Double click privacy area to delete setting.



7.1.6 ROI

Click **ROI** in the main menu or menu of the channel management screen and choose **ROI** to access the ROI screen, as shown in Figure 7.11



Table 7-1 ROI Parameter

Parameter	Description	Setting
Stream	Stream ID.	[Setting method] Select a value from the drop-down list box. [Default value] Stream 1
Enable	Enable the ROI	[Setting method] Click the button. [Default value] OFF
Area ID	ROI area ID, there are 8 area	[Setting method] Select a value from the drop-down list box. [Default value] 1
Level	Visual effect of ROI. The higher the grade is, the more clearly areas inside and the vaguer areas outside are. There are five levels.	[Setting method] Select a value from the drop-down list box. [Default value] 5



Parameter	Description	Setting
Area Name	The marked name used for areas.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes.

7.1.7 Microphone (Only for Some Models)

Click **Microphone** in the main menu or menu of the channel management screen and choose Microphone to access the **Microphone** screen, as shown in Figure 7-12

X System	Chernel Record Alarm	n Network System			x
> Camera	Mcrophone				
> Encode	Channel				
Sensor Setting	Mcrophone	3			
	Microphone Type	Lite h			
▷ Privacy Zone	Mcrophone Volume		+ 50		
> Human Thermometer					
> Smart					
> Intelligent Tracking					

Figure 7-12 Microphone

Table 7-12 Microphone

Parameter	Description	Setting
Enable Microphone	Indicates whether to enable the microphone function.	[Setting method] Click the button on to enable microphone.
Microphone Type	Microphone types include: • Line In An active audio input is required.	[Setting method] Select a value from the drop-down list box.
Microphone Volume	Allows you to adjust the microphone volume.	[Setting method] Slide the slider left or right.[Default value] 50 NOTE The value ranges from 0 to 100.



7.1.8 Human Thermometer (Only for Some Models)

Click **Human thermometer** in the main menu or menu of the channel management screen and choose **Human thermometer** to access the **Human thermometer** screen, as shown in



Figure 7-13 Human Thermometer

7.1.8.1 Parameter Configuration

Table 7-3	Human	Thermometer
-----------	-------	-------------

Parameter	Description	Setting
Face detection	Detect face of human	[Setting method] Enable [Default value] On
Display trace	Display the information of tracing. Mode 1 :	[Setting method] Enable the button [Default value] Mode 1



Parameter	Description	Setting
Show detection area	Enable, the live video will show area of detection.	[Setting method] Enable
Show detection area	Face detection sensitivity, the value range is high, medium, low, the larger the value is, the higher the sensitivity. The higher the sensitivity value is, the higher the detection rate will be, but the more false detection may occur, such as the false detection of the patterns on pedestrian clothes to adult faces.	[Setting method] Choose from drop -list [Default value] Medium
Area ID	There are 8 areas can be set to detect temperature.Choose from the drop-list, left-click to draw the area, right-click to finish the set.	[Setting method] Choose from drop -list [Default value] 1
Face pixel min (1-2000)	When the pixel of the face in the image is less than the set value (the minimum pixel for face recognition), it is not captured.	[Setting method] Input a number from 1 to 2000 [Default value] 30
Face pixel max (1-2000)	When the pixel of the face in the image is more than the set value (the maximum pixel for face recognition), it is not captured.	[Setting method] Input a number from 1 to 2000 [Default value] 70
Image matting quality	The quality of snap image, There are three mode can be chosen, such as low, mid and high.	[Setting method] Choose from drop list. [Default value] Medium
Snapshot mode	There are two types, timing and optimal	[Setting method] Choose from drop -list [Default value] Timing
Upload image interval	The snapshot mode is optimal, set the interval.	[Setting method] Input a number from 1 to 10 [Default value] 5
Snapshot count	At optimal mode, set the number of snapshot image	[Setting method] Input 1



Yaw degree(0-90)	Both eyes appear on the screen, offset in the left and right direction	[Setting method] Input a number from 0 to 90 [Default value] 30
Tilt degree(0-90)	The face is deflected, and both eyes cannot appear in the picture.	[Setting method] Input a number from 0 to 90 [Default value] 30
Pitch degree(0-90)	Face is moving up and down	[Setting method] Input a number from 0 to 90 [Default value] 30
FTP upload image matting	Configuration > Network Service > FTP, set FTP related parameters, the captured picture will be sent to the set FTP location	[Default value] Disable
OSD over snapshot	Enable, the snapshots will record the temperature, as shown in figure.	[Default value] Disable

Figure 7-14 Temperature parameters





Parameter	Description	Setting
Temperature Unit	Celsius and Fahrenheit temperature units are available. The unit is link to all temperature parameter, please modify the linkage value.	[Setting method] Select a value from the drop-down list box. [Default value] Celsius
Ambient Temperature	The ambient temperature of camera.	[Setting method] Enter a value manually.
Cavity Temperature	The cavity temperature of camera.	N/A
Correction Coefficient	Correction coefficient refers 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 is 7. 2. The measured object temperature is 37, and actual temperature is 30, so the correction coefficient is -7.	[Setting method] Enter a value manually. [Default value] 0.00
Mount distance	The actual distance between the detection person and the device, it is set to facilitate the temperature measurement accuracy.	[Setting method] Select a value from the drop-down list box. [Default value] General
Face color	Enable, if the camera detect the face and the face will be covered color, normal is yellow, and high temperature is red, as shown in figure.	[Default value] Disable
Environment adaptation	Enable, the device will restart the temperature if the ambient temperature of camera varies greatly. It is recommended not to open.	[Default value] Disable

Table 7-4 Temperature parameters



Parameter	Description	Setting
Abnormal temperature display	Enable, the measure temperature is lower than 34 °C will show on OSD. Disable, the measure temperature is lower than 34 °C will not show on OSD	[Default value] Disable
Temperature area	Two modes, shows at themal channel. Mode 1 is full face area, mode 2 is forehead area.	[Setting method] Select a value from the drop-down list box. [Default value] Mode 1
Temperature measure mode	Two modes, mode 1 is suitable for high air temperature, if the forehead temperature is less than 31 °C, not to show as body temperature. Mode 2 is suitable for low air temperature, if the forehead temperature is at 30-31 °C, so it will show as body temperature too.	[Setting method] Select a value from the drop-down list box. [Default value] Mode 1

Table 7-5	Temperature	parameters of	[:] linkage
-----------	-------------	---------------	----------------------

Parameter	Description	Setting
Output channel	Choose channels to output alarm	[Setting method] Tick the channels [Default value] Uncheck
Alarm rules	Set the maximum temperature greater than set value	[Default value] Maximum temperature greater than
Alarm Interval(1-1800 S)	N/A	[Setting method] Input a number from 1 to 1800 [Default value] 10
Alarm record	Enable, install the SD card, when there is an alarm, the camera will record the current video.	[Setting method] Enable
SMTP	Enable, when there is an alarm, the camera will send mail.	[Setting method] Enable
FTP upload	Enable, when there is an alarm, the camera will upload FTP.	[Setting method] Enable



7.1.8.2 Thermal Mapping



Figure 7-15 Thermal mapping

·····	Table 7-6	Parameter	of thermal	mapping
-------	-----------	-----------	------------	---------

Parameter	Description	Setting
[#] [##]	Zoom in /zoom out.	[Setting method] Click the button
d d	Near focus / far focus.	Output channel
Lock focus position	N/A	[Setting method] Tick .
ID	There are 8 scenes can be calibrated.	[Setting method] Select from drop-down list .
Scene depth(m)	The distance of the clear image presented within the range before and after the focus.	[Setting method] Input value
Mapping point	You need map three points at two channels. Points are correspond of each. The three points should cover most areas, and two points are located in the diagonal display of the picture. Point one is green cross. Point two is red cross. Point three is blue cross.	[Setting method] Select from drop list .



7.1.8.3 Thermal Calibration



Figure 7-16 Thermal calibration

Table 7-7	Thermal	calibration
-----------	---------	-------------

Parameter	Description	Setting
Display area information	Enable to show the information of displaying area.	[Setting method] enable
Target temperature	The special calibration tool's temperature, it is general black body' s target temperature.	[Setting method] Input value
Emission rate	Emission rate is the thermal calibration device's base parameter, the general blackbody's is 0.98.	[Setting method] Input value
Distance	Distance is the actual horizontal distance between measuring object and the camera	[Setting method] Input value



7.1.9 Smart (Only for Some Models)

The comparison function is only for AI multiobject cameras, please refer to actual cameras.

7.1.9.1 AI Multiobject



Figure 7-17 AI multiobject

Table 7-8 AI multiobject

Parameter	Description	Setting
Face detection	The camera will snap the face when someone appears in live video.	Enable
Full body detection	The camera will snap the whole body when someone appears in live video.	Enable
Licence plate detection	The camera will snap the licence when the vehicle's licence appears in live video.	Enable
Vehicle detection	The camera will snap the licence when the vehicle appears in live video.	Enable
Display trace info	Enable the function and a trace frame will show at live video. Mode 1:	Choose from drop list.



Parameter	Description	Setting
	Mode 2:	
Show detection area	Enable to set a detection area, and the frame will show at live video	Enable
Confidence coefficient	The range of snap image, there are three type, such as high, mid and low. The higher the confidence, the better the snap quality and the fewer snapshots	Choose from drop list
Face pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value ranges 30 to 300
Body pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more body will be captured, but it may be mistaken.	Input a value ranges 30 to 300
Plate pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value ranges 30 to 300
Vehicle pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken	Input a value ranges 30 to 300
Image matting quality	The quality of snap image, There are three mode can be chosen, such as low, mid and high.	Choose from drop list.
Attribute	Click to enable, the screenshot can display the relevant basic information of the vehicle. Such as the age of people, gender, etc. The color, model of the car.	Enable
Snapshot mode	There are three mode can be chosen, such as timing, and optimal.	Choose from drop list
Upload image interval(1-10 s)	At timing mode, set the interval of upload image.	Input a value ranges 1 to 10
Snapshot count	At optimal mode, set the number of snapshot image	Input a value ranges 1 to 5



Parameter	Description	Setting
Yaw degree(0-90)	Both eyes appear on the screen, offset in the left and right direction	Input a value ranges 0 to 90
Tilt degree(0-90)	Both eyes appear on the screen, offset in the left and right direction	
Pitch degree(0-90)	Face is moving up and down	
FTP upload image matting	Configuration > Network Service > FTP, set FTP related parameters, the captured picture will be sent to the set FTP location	Enable
FTP upload whole image	Capture a picture and send a whole image.	Enable

Figure 7-18 Schedule





7.1.9.2 License Plate Recognition

🛪 System	Channel Record Alarm Net	work System			×
> Camera	Al Muttobject License Plate Recognit	Face Detection			
> Encode	109-27 -014 Set 74-11 -	Acres	Crannel 10		
 Sensor Setting 	PART CRAW				
> 0SD		Section.			
▷ Privacy Zone					
> ROI		in	Cear		
> Microphone	Parameter Configurer Sched				
> Human Thermometer	License Plate Recognition	0	Snapshot Mode	Optimal 👻	
	Confidence Degree	Modum 🗸	Shapshot Count(1-10)(1)		
Panar	Minimum Plate Wildth(60-100)		FTP upload image matting	۲	
> Intelligent Tracking	Image Matting Quilty	Medium 👻	FTP upload whole image		
	u u u			Aqqiy	

Figure 7-19 License Plate Recognition

Table	7-9	License	plate	recognitiont
-------	-----	---------	-------	--------------

Function	Procedure	Description
Licence plate recognition	The camera will snap the face when someone appears in live video.	Enable
Confidence coefficient	The range of snap image, there are three type, such as high, mid and low. The higher the confidence, the better the snap quality and the fewer snapshots.	Choose from drop-down list.
Minimum plate width (60-100 Pixel)	60-100 pixels, the smaller the pixel be set, the more plate will be captured, but it may be mistaken.	Input a value ranges 60 to 100
Image matting quality	The quality of snap image, There are three mode can be chosen, such as low, mid and high.	Choose from drop-down list.
Snapshot mode	There are three mode can be chosen, such as timing, and optimal.	Choose from drop-down list.



Function	Procedure	Description
Upload image interval(1-10 s	At timing mode, set the interval of upload image	Input a value ranges 1 to 10
Snapshot count (1)	At optimal mode, set the number of snapshot image	Input 1
FTP upload image matting	Configuration > Network Service > FTP, set FTP related parameters, the captured picture will be sent to the set FTP location	Enable
FTP upload whole image	Capture a picture and send a whole image.	Enable

7.1.9.3 Face Detection

🛠 System	Chernel Record Alarm N	etwork System		×
⊳ Camera	Al Multiobject License Plate Recog	nition Face Defection		
> Encode		1	Channel 2	
 Sensor Setting 		and I		
» 0SD	r. (cant			
Privacy Zone	100	100		
> R0		1.8-1	Clear	
▶ Microphone	Parameter Configurer Sch	edule		
> Human Thermometer	Face Detection	•	Snapshot Mode	Timing 🗸
	Upbody Detection	Ð	Upload Image Interval(1-10s)	
• Smart	Fulbody Detection	0	Yaw Degree(0-90)	
Intelligent Tracking	Display Trace Info	0	Tilt Degree(0-90)	
	Confidence Degree	Medum v	FTP upload image matting	O
	Face Pixel Mn(1-2000)		FTP upload whole image	Ð
	Image Matting Quilty	Medun v		
				Acply

Figure 7-20 Face detection



Parameter	Description	Setting
Face detection	Detect face of human	[Setting method] Enable [Default value] On
Up body detection	Detect up body of human	[Setting method] Enable [Default value] OFF
Full body detection	Detect full body of human	[Setting method] Enable [Default value] OFF
Display trace	Display the information of tracing.	[Setting method] Enable
Confidence coefficient	Face detection sensitivity, the value range is high, medium, low, the larger the value is, the higher the sensitivity. The higher the sensitivity value is, the higher the detection rate will be, but the more false detection may occur, such as the false detection of the patterns on pedestrian clothes to adult faces.	[Setting method] Choose from drop -list [Default value] Medium
Face pixel min (1-2000) snapshots.	When the pixel of the face in the image is less than the set value (the minimum pixel for face recognition), it is not captured.	[Setting method] Input a number from 1 to 2000 [Default value] 30
Face pixel max (1-2000)	When the pixel of the face in the image is more than the set value (the maximum pixel for face recognition), it is not captured.	[Setting method] Input a number from 1 to 2000 [Default value] 70
Image matting quality	The quality of snap image, There are three mode can be chosen, such as low, mid and high.	[Setting method] Choose from drop list. [Default value] Medium

Table 7-10 Human face detection



Parameter	Description	Setting
Snapshot mode	There are two types, timing and optimal.	[Setting method] Choose from drop -list [Default value] Timing
Upload image interval	The snapshot mode is optimal, set the interval.	[Setting method] Input a number from 1 to 10 [Default value] 5
Snapshot count	At optimal mode, set the number of snapshot image	[Setting method] Input 1
Yaw degree(0-90)	Both eyes appear on the screen, offset in the left and right direction	[Setting method] Input a number from 0 to 90 [Default value] 30
Tilt degree(0-90)	The face is deflected, and both eyes cannot appear in the picture.	[Setting method] Input a number from 0 to 90 [Default value] 30
FTP upload image matting	Configuration > Network Service > FTP, set FTP related parameters, the captured picture will be sent to the set FTP location	[Default value] Disable
FTP upload whole image	Capture a picture and send a whole image.	[Default value] Disable

7.1.10 Intelligent Tracking (Only for Some Models)

The automatic target tracking function is that the dome camera can continuously track the moving target of the pre-made scene, and automatically adjusts the camera zoom focus according to the moving target distance, and the dome automatically returns to the preset scene when the moving target disappears.



🛠 System	Channel Record Alarm	Network System	×
> Camera	Intelligent Tracking		
> Encode	Channel		
▹ Sensor Setting	intelligent Tracking	٩	
	Calbration Coefficient	- •	
> Privacy Zone	Trace Magnify		
5.80	Time Of Duration(s)		0
. Harrison			0
> wordartine			
> Human Thermometer			
> Smart			
			THE REAL POINT
			ACEPY

Figure 7-21 Intelligent tracking

Table 7-10 Intelligent tracking parameters

Parameter	Description	Setting
Enable	Enable the button to enable the intelligent tracking	[How to set] Click Enable to enable. [Default value] OFF
Calibration Coefficient	It is equivalent to a control coefficient, and real-time tracking doubling rate nonlinear positive correlation, usually the higher the installation height, the greater the calibration coefficient value; it ranges from 1 to 30	[Setting method] Drag the slider. [Default value] 1
Trace Magnify	It is the value of lens zoom, it has a large influence on the real-time tracking magnification,	[Setting method] Drag the slider. [Default value] 7
Time of Duration	The maximum time of a tracking period, it ranges from 0 to 300 s.	[Setting method] Drag the slider. [Default value] 120


7.2 Record Setting

Set the Record Schedule, Disk, Storage Mode, S.M.R.T, Disk Detection, Disk Calculation, FTP and so on.

7.2.1 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 7-22

🛠 System	Channel Hecord Alarm Network System	×
Record Schedule	Record Schonia	
> Disk	Chamel v	
» Storage Mode	Enable Record 3	
> SMART	Enable Record Audio	
> Disk Detection	Ender ANR 🔊	
> Disk Calculation	Al \$ 2 4 6 8 10 12 14 16 18 20 22 24 Sun \$ Mon \$ Wed \$ The \$ Mon \$ Wed \$ The \$ Mon \$ Wed \$ Mon \$ The \$ Mon \$ The \$ Mon \$ The \$ Mon \$	
	ζαργ Αστίν	

Figure 7-22 Record management screen

Operation Steps

- $Step 1 \quad Select a \ channel \ from \ the \ drop-down \ list \ of \ channel \ option.$
- Step 2 Enable the record.
- Step 3 Enable the record audio.

Step 4 Enable ANR, the camera is installed with SD card, if the camera is disconnected from the network, when the network is recovered, the NVR can read the recording of camera and copy the loss video form the SD card.

Step 5 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.



- 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.
- User can choose alarm type to record, if the chosen alarm is happening at the setting time, it will record. So that it will using the disk effectively to avoid repeating useless recording.
- The ANR function can be used only for the cameras with supplementary recording function.
- User can set different alarms to record.

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

Step 6 Deleting record schedule: Click again or inverse selection to delete the selected record schedule.

Step 7 Click Copy and select channels or tick all, then click K to apply the record management settings to selected channels, click Apply to save settings.

7.2.2 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 time.

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 7-23.

* System	Channel Record Alarm	Network System		x
> Record Schedule	Dea			
⇒ Storage Mode	Disk1			
> SMART	Checker			
> Disk Detection			Format	
> Disk Calculation	Disk Status	Normal		
	Disk SN	WD-WXEW79UKF4		
	Used Space	25498		
	Disk Group			
	Recording Overwrite	3		
	Expired Time(Day)			
				Apply

Figure 7-23 Disk screen



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

Step 3 Choose the disk group, there are four groups.

Step 4 Click ,and the disk would be formatted

Step 5 Enable recording overwrite, the disk will be overwrite automatically.

Step 6 Record expiration setting. Select record expiration days from the drop-down list of record expiration. The expired time is not 0, the records will be deleted when the time is over the setting value.

Step 7 Click Apply to save the settings.

The disk groups can keep the recording of channels at different disks, it will improve the storage efficiency. The expired time is 0, it means the disk will be rewrite only when the disk is full.

7.2.3 RAID

The NVR support to build/edit/delete the RAID. User can choose the type of RAID according to the importance of recording.

RAID is only used for the device with 4 disks or more. And the disks must be enterprise level disks. The capacity of disks is 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 is better same for efficient using.

> Record Schedule	RAD					
	D Create RAD			×	HED Members	Cperate
		Name	Capacity	Hotspare Disk		
		Disk1				
		Disk3				
						Create

Figure 7-24 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 to back up the broken disk in case, the number of disk must more than basic disks.
- Step 4 Click to save the creation, format the new RAID.

7.2.4 Storage Mode

User is based on need to distribute the channels to different disk group, and use disk capacity reasonably, as shown in Figure:7-25

🛠 System	Channel Reco	ord Alarm	n Network	System	×
> Record Schedule	Storage Wode				
	Mode Selection				
	Disk Group				
▶ RAD	Channel				
	Cart		9 0 1 2 1	11 (S (S)	
			17 18 19 20 2	1 22 23 21 2	
▹ Cloud Storage					Αχήγ
	The default Char	nnel belangs to (Group 1		
		Disk1			
		Disk2			
		Disk3		33-48	
		Disk4		49-64	

Figure 7-25 Storage mode

Operation Steps

- Step 1 Choose the disk group.
- Step 2 Select the channel to record to disk group.
- Step 3 Click Apply to save the settings.
- Step 4 The group list will show the detail information.

If the channels are not in list, it means NVR will not to record these channels, please make sure about all channels are in list. Choose number of channel number you should consider the capacity of disk group.



7.2.5 S.M.A.R.T

7.2.5.1 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 7-26

Disk								
Disk Sh	Z'E2.09	8	Disk Model	ST2000	VX000-1CU164			
Тепре	rature 420 C		Working Time	2.4 Yea				
Disk He	ath GOOD							
	raw-read-error-	ato OK				prefail	0xa89c170d0000	
	start-stop-count					old-age		
	reallocated-sects							
	seek-error-rate						0x36c8810d0c00	
							0x615200000000	
							0x00000000000	
						old-age		

Figure 7-26 S.M.A.R.T

7.2.5.2 WDDA

The western digital disk has the WDDA function, the NVR can read the information of disk, so that user can view the status of disk, as shown in Figure 7-27

Figure 7-27 WDDA

🛠 System	Channel	Record	Alarm	Network	System		8 <u>6</u> 7 8 7 8 8	
> Record Schedule		WODA						
	Disk		sk1					
» Storage Made	Disk SN	w	D-WXE14791		Disk Model	WDC WD21PS	RX-89AHTY0	
	Warning				Advisory			
> Disk Detection			Altribule	Natie			Raw value	
		Lifetime Po	wer On Resi	et Alert		Normal	354.00	
> Disk Calculation			iours Alert					
s FTP		Head Load I	Lifetime Cou	nt Alert		Normal		
			nperature Al	ert		Normal		
		Total Lifetin	ne Workload	Alert		Normal		
			cad Rate Ale					
		Power On R		kert				
			Rate Akert					



7.2.6 Disk Detection

Before the recording the video, user need to detect the disk to keep the data safety, as shown in Figure 7-28.

X System	Charmel	Record Alarm	Network	System			×
▷ Record Schedule	Disk Detectio	<u>0</u>					
⊳ Disk	Disk			⊕KeyArea ₩			
▹ Storage Mode							
					DetectingProcess		
					HDD Capacity		
					Bad Sector		
▶ Citud Storage							
					Geod 📕	Bed	

Figure 7-28 Disk Detection

Operation Steps

- Step 1 Choose the disk from the drop-down list.
- Step 2 Tick all or key to detect the disk. Detect all need some time, detect key section maybe need a few minutes.
- Step 3 Click Scan to scan the disk.
- Step 4 The result of disk will show in interface

The green block means good, the red block means bad, if the red blocks are too much or at key section, please change the disk immediately.

Please turn off the video recording before the disk is detected, otherwise the recording of video maybe lost.



7.2.7 Cloud Storage (Only for Some Models)

The cloud storage can save the motion detection and intelligent analysis alarm, if user certificate the Google Drive.

* System	Channel Record Alarm	Network System		×
> Record Schedule	Clout Storage			
⊳ Disk	Enable	œ		
» Storage Mode	Cloud Type	Googin Drive		
> RAD	Certification Status	Not Certified		
	Upload Video Size(5-84MB)	5		
> Disk Detection	Harris Land Loose pain			
Disk Calculation		El Wasties		
	Authorization code		Send 9:23	
				Accily

Figure 7-29 Cloud Storage

Operation Steps

Step 1 Enable the cloud storage, and the UUID of code path will show.

Step 2 Choose the cloud type, the default is Google cloud.

Step 3 Set upload video size, the video is saving in sub stream(the video size is less).

Step 4 Use browser to scan the UUID to jump to Google drive certification, input the account and password to certificate the NVR.

Step 5 Input the code , click Send to fish certificate, as shown in Figure 7-30

Cloud S	Storage		
	Enable Cloud Type Certification Status	Google Drive Certification	

Figure 7-30 Certification

Step 6 Click Apply to save the settings



Google Cloud only needs to be authenticated once, without multiple authentications. After the authentication is completed, the cloud storage function can be turned on or off as required.

This function needs to be re-certified after the device is restored to factory settings. The UUID is the path of Google drive.

7.2.8 Disk Calculation

User can calculate the usage of disk, so that he can set the storage strategy reasonably, as shown in Figure 7-31. There are two modes can be set, computing capacity and computing time

* System	Channel <u>Record</u> Alarm Network System	x
> Record Schedule	<u>Dea Canalatea</u>	
	Mode Selection Computing Capacity 🐱	
Storage Mode	Expect to save time 1 Divy 🗸	
	The daily video time # 24 h	
	The received disk score	
> Disk Detection		
⇒ Cloud Storage		

Figure 7-31 Disk calculation of capacity

Figure 7-32 Disk calculation of time

🛠 System	Channel Record Alarm Network System	×
> Record Schedule	Dia Casilatea	
	Mode Selection Computation time 🐱	
» Storage Mode		
	The daily video time 8 24 h	
> Disk Detection	VORO LADE SAVE INE	



7.2.9 FTP Enable FTP upload, when the alarm is happens, user can linkage the FTP upload to save the alarm recordings.

* System	Channel Record Alarm	Network System		×
> Record Schedule				
	Enable FTP Upload			
» Storage Mode	FTP Address			
	FTP Part			
> Disk Detection				
· Pict Pain Later	Password			
> Lex Calculation	FTP Path.			
	Lpiced File Size(3-64ME)			
				Apply

Figure 7-33 FTP

- Step 1 Enable the FTP upload.
- Step 2 Input the FTP address and port.
- Step 3 Input the account, password and FTP path.
- Step 4 Set the upload file size, it ranges from 0 to 64 MB.
- Step 5 Click "Test" to test the parameters, if test successfully, then to "Apply" to save the settings.

7.3 Alarm Management

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

7.3.1 General

7.3.1.1 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 7-34



🛠 System	Channel Record Alarm	Network System	×
	General IO Control Push		
> Motion Detection	Enable Alarm	•	
	Outation Time		
> Intelligent Analysis	Buzzer duration time		
⊳ Alam h			
> Abnormal Alarm			
> Alarm Out			
			Acply

Figure 7-34 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.



7.3.1.2 IO control push

If you select normally open and tick the disabled items, the alarm input 1 will not push message in the normally open state. Only when the alarm in 1 is in the normally closed, it can push alarm message.

Step 1 Enable the IO control push.

General IO Control Push		
Enable	G	
Alarm In		
Mode	N/0 🗸	
Disabled Items	□Pushmessage to APP	
	Uemai	
	Apply	

Figure 7-35 IO control push

- Step 2 Choose one alarm in and mode(N/C, N/O).
- Step 3 Tick the disable items, click "Apply" to save setting.

7.3.2 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 7-36



🛠 System	Channel Record Alarm N	etwork System	×
▷ General	Motion Detection		
 ► Motion Detection ► Video Loss ► Intelligent Analysis 	Channel Enable Motion Detection Enable Motion Analysis	(3)Channel03 v Cl	
⊳ Alarm In ⊳ Abnormal Alarm	Event ActionsDetection Are	a 🛗 Schedule	
⇒ Alarm Out	Push message to APP Pop up message to monitor Email Buzzor Cloud Storage FTP PTZ Full Screen Enable Alarm Out		
			Copy Apply

Figure 7-36 Motion detection screen

For Email, FTP, you should set the parameter of these in advance Enable Remote IO, the users connect the ADAM (data acquisition modules) to NVR in advanced alarm time the alarm will be duration. remote ID, the ADAM is connected to NVR's ID.

Operation Steps

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

Step 2 Click 💽 to enable motion detection.

Step 3 Enable motion analysis, if the camera detect the motion action, the area will be block as shown in Figure 7-37.

Step 4 Enable the Event actions include: push to APP, Email, FTP, Buzzer, Pop up message to monitor, Full screen, Cloud storage, Alarm out, Camera alarm out, Event recording, and so on.

Step 5 Click Area page to access the motion detection area setting, as shown in Figure 7-37.



Figure 7-37 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 7.2.1 Record schedule figure 7-22 Step 5 Set the record <u>schedule</u>

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.

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.

Enable the alarm out, user need to set alarm time and output ID, four ID are corresponding to back panel's alarm out, 1 A and 1 B, 2 A and 2 B, 3 A and 3 B, 4 A and 4 B.

Channel alarm out is corresponding to alarm port of camera.



Figure 7-38 Alarm schedule



7.3.3 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 7-36.

🛠 System	Channel Record Alarm Network System	×
⊳ General	Video Loss	_
Motion Detection	Channel 1 v	
	Enable 🕜	
▶ Intelligent Analysis	Event Actions Schedule	
⊳ Alarm In	BRush message to APP □Email □Buzzer	
> Abnormal Alarm	Alarm Out C Alarm Time(s)(0:Continuous) 0 Output D 1 2 3 4 Alarm Record E	

Figure 7-39 Video Loss Screen

Operation Steps

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

- Step 2 Click 💽 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 7.2.1 Record Schedule Figure <u>7-22 Step 5 Set the record schedule</u>.

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.



7.3.4 Advanced Intelligent Analysis (Only for Some Models)

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 7-40

X System	Channel Record Alarm Network System	×
> General	Persinenter Single Virtual Fence Double Virtual Fences Object Left Object Removed Signal Bad Loter Multi Loter Abnormal Speed Converse Begal Parking Personnel Court Fence Advanced	
> Motion Detection		
	Owned 1	
	Endoe D	
> Alarm h	Event Actors Indexector Area 🗂 Schedule	
> Abrormal Alarm	BPadhmessage to APP ⊡Email ⊡F1P ⊡Bazer ⊡Popup message to monitor ⊔Full Sorreen Endels Aum Out S	
> Alarm Out	Enable Event Recording	
	Açely	

Figure 7-40 Intelligent Analysis screen

Operation Steps

Step 2 Select one action to set the alarm. (perimeter, single virtual fence, double virtual fences, object left, signal bad, loiter, multi loiter, abnormal speed, converse, illegal parking, personnel count, fence, advanced)

- Step 3 Select a channel from the drop-down list of channel.
- Step 4 Click on able 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 7-19 Step 5 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.



Figure 7-41 Personnel count



Table 7-12 Personnel count parameters

Parameter	Description	Setting
Enable	Enable the button to enable the personnel count	[How to set] Click Enable toenable. [Defaultvalue] OFF
OSD enable	Enable, the statistical data of personnel count will show on OSD	[How to set] Click Enable to enable . [Defaultvalue] OFF
Counting clear interval	There are five modes can be chosen, such as 10 min, half-hour, 1 hour, 12 hour, 1 day.	[Setting method] Choose from drop-down list [Default value] 7
Area type	The area to count personnel.	[Default value] Line



Fence:

The fence is only support fence AI multi-object cameras, when the detection area is found person or car, it will alarm. When happens the fence alarm, user can choose many event actions to alarm.

🛠 System	Channel Record Alarm Network System	×
 > General > Motion Detection > Video Loss 	Minusion Line Crossing Double Virtual Fences Object Left Object Removed Signal Bad Loiter Intrusion Line Crossing Double Virtual Fences Object Left Object Removed Signal Bad Loiter Multi Loiter Abnormal Speed Converse Illegal Parking Personnel Count Fence Enter Area Leave Area Advanced	
 Intelligent Analysis Alarm In 	Event Actors []]Detection Area 😁 Schedule	
⊳ Abnormal Alarm ⊳ Alarm Out	Push message to APP Image: Comparison of the compariso	
	Enable Camera Alam Out C	

Figure 7-42 Fence

Figure 7-42 Fence detection area



Enable limit target type, choose the type(person or car, person, car). Enable video stream draw line, when detect the car or person, it will show the blue frame to mark the target.

Use the mouse to draw the detection area, user can draw serval areas depending on the real condition.



7.3.5 Alarm In

This fuction requires access to a camera that supports external alarm in.

There two types alarm in, one is the NVR's alarm in, another is the camera channel's 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 7-44

🗙 System	Channel Record Alarm	Network System	
⊳ General			
Motion Detection	Alarm in		
	Enable Alarm in		
▶ Intelligent Analysis	Normal State		
	PortName		
 Abnormal Alarm 	Event Actions 🛗 Schedule		
	Rhahmessage to APP GE RPopup message to monitor Enable Amm Out Enable Event Recording	nul DRazer	

Figure 7-44 Alarm in screen

Figure 7-45 Camera alarm in

🗙 System	Channel Record Alarm	Network	System		
⊳ General					
Motion Detection	Channel				
▶ Video Loss	Alam in				
⊳ Intelligent Analysis	Alarm Type				
→ Alarm In	Enable				
 Absormal Alarm 	Event Actions 🛗 Sch				
	■Push message to APP ■Popup message to monitor Airm Out Alum Time(s)(0:Contruous) Output D Charan Alum Out Alam Record	□Email □Ful Screen 0 1 2 3 4 €	□Buzzer □ Cloud Storage	*	



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.

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 7.2.1 Record Schedule Figure 7-22 Step 5 set the record schedule.

Step 7 Click Apply to save alarm in settings.

7.3.6 Abnormal Alarm

Abnormal alarm includes disk alarm, IP conflict and network disconnected.

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 7-46

Operation Description after disconnected

🛪 System	Channel Record Alarm Network System	x
⇒ General	Alanarmai Alarm	-
Motion Detection	Enable Abnormal Alarm	
	Abnormal Type	
 Intelligent Analysis 		
⊳ Alarm In		
	⊋Push message to APP ⊡Email ⊡Buzzer ®Popup message to monitor	
> Alarm Out	Enable Alarm Out	
	Apply	

Figure 7-46 Abnormal alarm screen

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.



7.3.7 Alarm Out

7.3.7.1 Alarm Out

Choose one output ID as the output interface.

🛠 System	Channel Record Alar	m Network System	×
> General	Alarm Out Camera Alarm O		
Motion Detection	PortNumber		
⇒ Video Loss	Port Name		
> Intelligent Analysis	Valid Signal		
> Alarmin	Alarm Output Mode		
> Airm Out			

Figure 7-47 Alarm out

7.3.7.2 Camera Alarm Out

This function requires access to a camera that connected to an external alarm out device

	_				
🛠 System	Channel Record Alarm	Network System		×	
> General	Alarm Out Carrors Alarm Out				
> Motion Detection	Chamel				
	Output 10				
> Intelligent Analysis	Name				
> Alarm in	Valdsignal Alarm Oxford Minda	Cose			
> Abnormal Alarm	Alam Time(s)(0 Continuous)				
				Apply	

Figure 7-48 Camera Alarm out



Table 7-13	Camera	Alarm out

Parameter	Description	Setting
Alarm Output	ID of the alarm output channel. NOTE The number of alarm output channels depends on the device model.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Name	Alarm output channel name.	[Value range] 0 to 32 bytes
Valid Signal	 Close: An alarm is generated when an external alarm signal is received. Open: An alarm is generated when no external alarm signal is received. 	[Setting method] Select a value from the drop-down list box. [Default value] Close
Alarm Output Mode	 When the device receives I/O alarm signals, the device sends the alarm information to an external alarm device in the mode specified by this parameter. The options include the switch mode and pulse mode. NOTE If the switch mode is used, the alarm frequency of the device must be the same as that of the external alarm device. If the pulse mode is used, the alarm frequency of the external alarm frequency of the external alarm device can be configured. 	[Setting method] Select a value from the drop-down list box. [Default value] Switch Mode
Alarm Time(ms) (0: Continuous)	Alarm output duration. The value 0 indicates that the alarm remains continuous valid.	[Setting method] Enter a value manually. [Default value] 0 [Value range] 0 to 86400 seconds
Manual Control	Control the alarm output.	N/A



7.4 Network Management

Set the Network Parameter, 802.1X, DDNS, E-mail, Port Mapping, P2P, IP Filter, SNMP 3G/4G and PPPOE, Network Traffic 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 7-49

🛠 System	Channel Record Alarm	Network System
	P Port Pv4 CCTV	
	DHCP	G
	IP Address	
⊳ Email	Subnet Mask	
▷ Port Mapping	Default Gateway	
	Obtain DNS Automatically	(]
> P Filter	Preferred DNS Server	
	Altenate UNS Server	
> SNMP		
⊳ 3G/4G		

Figure 7-49 Network management screen

7.4.1 Network

Set **DHCP** and **DNS** manually or automatically.

7.4.1.1 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.



Operation Steps Step 1 Click Apply to save IP settings.

7.4.1.2 Port

Operation Steps

Step 1 Click Port page to access the port setting screen, as shown in Figure 7-50

X System	Channel Record Alarm Ne	twork System		x
	P Port POE			
	HTTP Port			
▷ DDNS	HTTPS Part			
▹ Port Mapping	RTSP Port			
⊳ Email	Control Part			
▶ P Filter				
⊳ SNMP				
⊳ 3G/4G				
▷ PPPOE				
▶ POE Status				
▷ Network Traffic				
			Apply	

Figure 7-50 Port setting screen

Step 1 Set the HTTP port, HTTPS port, RTSP port and Control port.

Step 2 Click Apply to save port settings.

7.4.1.3 IPv4CCTV (Only for Some Models)

The no PoE device has two LANs, LAN1 and LAN2.

Operation Steps

Step 1 Click **Ipv4 CCTV** page to access the LAN2 setting screen, as shown in Figure 7-51



🗙 System	Channel Record Alarm Network System	×
	P Port PH4CCTV	
	P Address 192 . 168 . 10 . 253	
▶ DDNS	Subnet Mask 255 . 255 . 0	
⊳ Email	Default Gateway 192 . 188 . 10 . 254	
▷ Port Mapping		
▶ IP Filter		
▷ SNMP		
> PPPOE		

Figure 7-51 IPv4 CCTV

Step 2 Input the IP address, subnet mask, default gateway.

Step 3 Click Apply to save the settings.

LAN1 and LAN2 can connect to different network, so that NVR can add more cameras. LAN1 usually connect to the external network, it is default gateway. LAN2 connect to internal network.

7.4.1.4 PoE

Operation Steps

Step 1 Click **PoE** page to access the PoE setting screen, as shown in Figure 7-52



Figure 7-52 PoE Screen

🛠 System	Channel Record Alarm N	letwork System	×
	P Port PoE		
⊳ 802.1X	Auto Manage For PoE Camera		
▶ DDNS	IP Address		
▹ Port Mapping	Subnet Mask		
⊳ Email	Default Gateway		
⊳ P Filter			
⊳ SNMP			
⊳ 3G/4G			
▷ PPPoE			
▹ PoE Status			
▷ Network Traffic			
		Apply	

 $Step 2 \quad The \, \underline{\sf NVR} \, will \, \underline{\sf de} ploy \, IP \, addresses \, to \, the \, cameras \, which \, connect \, {\sf PoE} \, immediately.$

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

7.4.1.5 Wi-Fi Parameter (Only for Some Models)

Operation Steps

Step 1 Click Wi-Fi Parameter page to access the Wi-Fi Parameter setting screen, as shown in Figure 7-53

🛠 Setting		×
 Network 		
> 802 W		
> DDNS		
> E-mail		
s (PHP		
> P2P		
> PFiler		
> \$14/F		
		4004

Figure 7-53 Wi-Fi Parameter



Step 2 Set the parameters of Wi-Fi Step 3 Click Apply to set PoE camera IP address successfully.

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.

7.4.1.6 Wi-Fi Network (Only for Some Models)

Operation Steps

Step 1 Click Wi-Fi Parameter page to access the WiFi Parameter setting screen, as shown in Figure 7-54

🛠 Setting	Channel Record Alarm N	rtwork System	

Figure 7-54 Wi-Fi Network

7.4.2 802.1 X

Operation Steps

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



🗙 System	Channel Record Alarm Ne	twork System		х
▷ Network	802.1%			
	Enable 802.1X	3		
> DDNS	User			
▹ Port Mapping	Password			
⊳ Email				
▷ P Filter				
⊳ SNMP				
⊳ 3G/4G				
▷ PPPOE				
▶ POE Status				
▹ Network Traffic				
			Apply	

Figure 7-55 802.1 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.

7.4.3 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 on next to Enable to enable the DDNS function. It is disabled by default, as shown in Figure 7-56



🗙 System	Channel Record Alarm Network System	×
	TONS	
	Enudoe C3	
		dan s
	Domain Name dur. drins.net	
> Port Mapping	User Usernanie	
	Test	
> SNMP		

Figure 7-56 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.

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

7.4.4 Port Mapping

7.4.4.1 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 7-57



🗙 System	Channel Record Alarm	Network System		×
> Network	Port Mapping NAT Port			
⊳ 802.1X	Port Mapping Enable	ġ		
▶ DDNS	Mode			
» Email	HTTP Port			
	Data Port			
	Client Port			
⊳ IP Filter	Port range [1025-65534]			
SNMP				
5 3G/4G				
> DDDOE				
▶ Network Traffic				
			Appl	

Figure 7-57 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.

7.4.4.2 NAT Port

NAT port (network address translation) user can through NAT port to access the channels of NVR. User can set the start port, and it will generate the end port automatically. We will view the NAT port when we access the channel through clicking $\angle e^{\cdots}$ icon at Web interface.



Figure 7-58 NAT Port

🗙 System	Channel Record Alarm	Network System	×
▷ Network	Port Mapping NAT Port		
⊳ 802.1X	Start Port		
⊳ DDNS	End Port		
► Port Mapping	Port range [40001-65534]		
⊳ Email			
⊅ P2P			
⊳ P Filter			
⊳ SIMP			
⊳ 3G/4G			
> PPPOE			
▹ POE Status			
▶ Network Traffic			
			Apply

7.4.5 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. User can use two mailbox to send information.

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 7-59



🗙 System	Channel Record Alarm	Network System	×
▷ Network	Email Server 1 Email Server 2		
⊳ 802.1X	SMTP Server		
▷ DDNS	SMTP Server Port		
▹ Port Mapping	Username		
> Email	Password		
	Email Sender		
> P2P	Alarm Receiver 1		
▶ P Filter	Alarm Receiver 2		
▷ SNMP	Alarm Receiver 3		
⊳ 3G/4G	SSL Encryption		
> PPPOF	Sending interval(0–600s)		
▶ POE Status			
▷ Network Traffic			
			Apply

Figure 7-59 E-mail setting screen



SMTP Server		
SMTP Server Port		
Username		
Password		
Email Sender		
Alarm Receiver 1		
Alarm Receiver 2		
Alarm Receiver 3		
SSL Encryption		
Sending interval(0-600s)		
	Test	



- 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, set sending interval.
- Step 7 Click Apply to save settings.

7.4.6 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 7-60

	/	+	/	+	+
/	NORDEN®	Setup Wizard		×	
	PROHDEN	Enable P2P	0	PROHBEN	
-		Status P2P ID	Online B011003AGCV911E9R		
					/
/	► NORDEN®			NORDEN	
1		App Name – It is available on App	Eyeguard Store and Google Play.		
					+
/	►NORDEN®			NORDEN	
/			Previous Next	Cancel	

Figure 7-60 P2P screen

Step 2 Click **O** 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.



7.4.7 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 7-61.

🛠 System	Channel Record Alarm Network System	×
⊳ Network	P Filter	
⊳ 802.1X	Enable P Filter 🔹	
> DDNS	Rule Type Black List 🗸	
▶ Port Mapping	Black List(Following network segments are forbidden)	
⊳ Email	Start IP End IP Edit	
▷ SNMP		
⊳ 3G/4G		
▶ PPPOE		
▶ POE Status		
▶ Network Traffic	+ -	
		loolu
		44xy

Figure 7-61 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 7-62







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

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

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.

7.4.8 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 7-63

🛪 System	Channel Record Alarm Network System	x
▷ Network	<u>simpivij2</u> simpivi3	
⊳ 802.1X	SWPV1 CO	
> DDNS	SIMPV2C D	aa
▶ Email	Write Community	
▷ Port Mapping	Read Community	
> P2P	Trap Port 102	
▷ P Fiter	Trap Community	
> SM/P		
	And	

Figure 7-63 SNMP settings screen

Operation Steps

Step 1 Click on next to SNMPV 1 to enable the function . The interface is shown as Figure 7-64



Figure 7-64 SNMPV 1/2 interface



Step 2Input the parameters of protocol.Step 3ClickApplyto save settings or clickCancelto cancel settings.

7.4.9 3G/4G

User can use modem to connect to data network. Operation Steps

Step 1 Plug the modem to NVR, and enable the 3G/4G function, as shown in Figure 7-65

System	Channel Record Ala	rm Network System	
Network	3G/4G		
	Enable	۲	
DDNS	Status	Disconnected	
Email	Access Mode		
Port Mapping	APN Dial Number		
P2P	Usemame		
IP Filter	Password		
SNMP	IP Address		
PPPOE			

Figure 7-65 3G/4G setting screen

- Step 2 The status is connected to set the other parameters.
- Step 3 Choose access mode, the default is AUTO. There are five modes can be chosen, such as AUTO, LTE, TD-SCDMA, WCDMA, GSM/GPRS.
- Step 4 Input the APN, dial number, username, password, IP address. At auto mode, all these parameters can be obtained automatically.



Step 5 Click Apply save settings.

Modify the access mode, if the status is all disconnected in five minutes, please unplug the modem to restart the modem immediately.

Users are familiar with the relevant network (different service provider parameters are different) and modem information before manually switching to other modes, we recommend access mode to choose auto.

When using the 3G / 4G function, you need to manually close the PPPoE function. Only one function can be used at a time.

If the Internet access type is LTE (4G network), you do not need to dial the number, user name and password.

7.4.10 PPPoE

PPPoE point to point protocol Ethernet, user use the PPPoE to access network immediately, as shown in Figure 7-66

X System	Channel Record Alarm	Network. System	×
⊳ Network	PPPoE		
⊳ 802.1X	Enable PPPoE	G	
▷ DDNS	Username		
▹ Port Mapping	Password		
⊳ Email	IP Address		
> P2P			
▷ IP Filter			
⊳ SNMP			
⊳ 3G/4G			
> FPROE			
▶ PoE Status			
▷ Network Traffic			
			Apply

Figure 7-66 PPPoE

Step 1 Enable the PPPoE function.

Step 2 Input the usename, password(Network operator provides).

Step 3 Click Apply to save settings, and the IP is obtained automatically.

Step 4 User input the IP to access NVR web immediately.


7.4.11 PoE Status (Only for Some Models)

User can view the status of PoE intuitively, as shown in Figure 7-67



Figure 7-67 PoE Status

There are two rates, transmit rate and receive rate.

7.5 System Management

View the device Information and set General information, User Account, Security Center, Layout, Logs, Maintenance and Auto Reboot 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 7-68



🗙 System	Channel Record	Alarm	Network	System	×
	System Network	Channel	Disk	Alarm	
⊳ General	Device ID		B01100	I3AGCV911E9R	
▷ User Account	Device Name		Devic		
	Device Type		NVR		
	Model		ENR-(14032-N-FK	
▷ Auxiliary Screen	Firmware Version	•		B32.0000.158.0.1.37.1.R01	
	U-boot Version		14030	9091134	
> Maintenance	Kernel Version		150310	X093B18	
▷ Auto Reboot	Face Detection Ve	rsion	Not A	tivated	
	HDD Number				
	Channels Supporte				
	Alarm In				
	Alarm Out				
	Audio In				
	Audio Out				

Figure 7-68 System setting screen

7.5.1 Information

View the device ID, device name, device type, model, firmware version, kernel version, face detection version, HDD volume, channel support, alarm in, and alarm out, audio in, audio out in information screen, as shown in Figure 7-69

Device ID	B011003AGCV911E9R
Device Name	Device
Device Type	NVR
Model	ENR-04032-N-FK
Firmware Version	v4.6.0832.0000.158.0.1.37.1R01
U-boot Version	140309091134
Kernel Version	1503 1D093B18
Face Detection Version	Not Activated
HDD Number	4
Channels Supported	32
Alarm in	16
Alarm Out	4
Audio In	1
Audio Out	1

Figure 7-69 Information-system interface

Network: status, IP address, subnet mask, default gateway, MAC address, DHCP, preferred DNS server, Alternate DNS server, total band width, received packets, and so on, as shown in Figure 7-70



istem <u>Notwork</u> Channi	l Disk Alarm	
Status	Online	
IP Address		
Subnet Mask		
Default Gateway		
MAC Address	00:1E:A4:00:42:85	
DHCP		
Preferred DNS Server		
Alternate DNS Server		
Total Bandwidth	100.00 Mbps	
Received Packets	7.76 Mbps	

Figure 7-70 Information-network interface

Channel: channel, name, status, video format, resolution, bitrate (kbps), and so on, as shown in Figure 7-71

System	Network	Channel Disk	Alarm		
Channel				Resolution	Bitrate(kbps)
				1920*1080/704*576	4096/1024
	Chamel12			1920*1080/704*480	4096/1024
	Channel/29				4096/1024
				1920*1080/704*480	4096/1024

Figure 7-71 Information-channel interface

Disk: disk name, capacity, used, SN, disk model, status, and so on, as shown in Figure 7-72



lystom	Notwork Ch	annel Disk	Alarm		
Channel					Bitrate(kbps)
				1920*1080/704*576	
	Channel 12			1920*1080/704*480	

Figure 7-72 Information-disk interface

Alarm: channel, name, mode, enable, recording channel, and so on, as shown in Figure 7-74

Figure 7-73 Information-alarm interface

System	Network	Channel	Disk Alarm	
Char			Mode	Recording Channel
Loca		Sensor 2		
Loca		Sensor 3		
Loca		Sensor 4		
Loca	i–>1		Close	

7.5.2 General

7.5.2.1 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 7-74



🛠 System	Channel Record Alarm Netv	work System		х
▶ Information	System Date And Time Time Zor	ne DST Sync Camera T	ime	
> General	Device Name			
⊳ User Account	Output Resolution	1920x 1080		
 Security Center 	Language	English		
⊳ Layout	Temperature Unit	Celsius		
⊳ Logs				
▶ Maintenance				
» Auto Reboot				
			Apply	
			Αφύγ	

Figure 7-74 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 Set the temperature unit.
- Step 5 Click Apply to save settings.

7.5.2.2 Date & Time

Operation Steps

Step 1 Click Date and Time page to access the date and time setting screen, as shown in Figure 7-75



🎗 System	Channel Record Alarm	Network System	_
▷ Information	System Date And Time Tim	ne Zone DST Sync Came	era Timo
	Date Format	DD/MM/YY hhmm:ss	
	Time Format		
Security Center	Enable NTP	•	
⊳ Layout	NTP Server	time.windows.com	
> Logs	Sync Time Frequency (sec)	86400	
s Maintonance	Date		
A de Debeet	Ime		
P AULO REDUCT	- Time modification will cause the c	hamel to reconnect	
	- Time modification will affect vide	o query	

Figure 7-75 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 4After 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.

7.5.2.3 Time Zone

Operation Steps

Step 1 Click Time zone page to access the time zone setting screen, as shown in Figure 7-76



🛠 System	Channel	Record Ala	rm Network	Syst	em	x
▷ Information	System	Date And Time	Time Zone		Sync Camera Time	
≽ General	Time 2	one			adras, Mumbai, New Delhi ~	
▶ User Account						
 Security Center 						
▶ Layout						
⊳ Logs						
▶ Maintenance						
▹ Auto Reboot						
						Apply

Figure 7-76 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.

7.5.2.4 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 7-77



🛠 System	Channel Record Alarm Network System	х
> Information	System Date And Time Time Zone. DST Sync Camera Time	
	Endole Daylight Saving Time 🕜	
	Start Time Mar v Last one v Sun v 100 v	
▹ Security Center	End Time Oct v Last one v Sun v 100 v	
⊳ Layout	Offset Time 1Hour V	
		ļ
⊳ Maintenance		
▷ Auto Reboot		
	Apply	

Figure 7-77 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.

7.5.2.5 Sync Camera Time

User enable the sync camera time, the channels will show the sync time, and can set the frequency of check.

🗙 System	Channel Record Alarm Network System	×
> Information	System Date And Time Time Zone DST Sync Camera Time	
▶ General	Sync Camera Time 💽	
⊳ User	Frequency of Checks. Minimum 10s 300s	
▹ Security Center		
▶ Auto Sequence		
Auxiliary Screen		
⊳ Logs		
▷ Maintenance		
▷ Auto Restart		
		Apply



7.5.3 User Account

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

7.5.3.1 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 7-78

🛠 System	Channel Rec	ord Alarm Network			×
> Information	User Adv.Se	otting Phone Number Allowed			
⊳ General		Username	Group	Operate	
		admin	Super admin		
 Security Center 					
⊳ Layout					
▶ Maintenance					
▷ Auto Reboot					
				Add	

Figure 7-78 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 7-79



Г	AddUser				2
	Username				
	Password				
	Confirm Password				
	Group	Administ	trators		
	Change password reminder	Never		~	
	Expire date	۲			
	S Live Proview		Channel		
	D 17	2	CH1	^	
	Self 2	2	CH2		
	🧧 Playback	2	CH3		
		2	CH4		
		2	CH5		
	🧕 Device Management	2	CH6		
	Suctam Managamant	2	CH7		
	System Management	2	CHB	v	
	😼 Al Recognition				
	Thermal	Live Pre	view		
	🛃 Thermal	Live Pre	view		

Figure 7-79 Add user screen

Input a username, password and confirm password, choose group and change password reminder, set the expire date.

The password should include letter, character and number, at least two types. The password should be $6\sim32$ characters.

- Step 1 Select a Group from the drop-down list box.
- Step 2 Select a Change password reminder value from the drop-down list box.
- Step 3 Enable the expire date to set the new user's authority time.
- Step 4 Select the operation privileges and channels in the list of the add user screen.
- Step 5 Click OK The user is set successfully.

The default user is Administrator and cannot be deleted or modified. Select a user from user list and click to edit, or click into the delete a user.



7.5.3.2 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 7-80

🗙 System	Channel Record Alarm Network System	x
> Information	User Adv.Setting Phone Number Allowed	
⊳ General	Enable Double Authentication	
	Enable Setup Wizard	
 Security Center 	Enable Auto Login	
	Auto Logout Time (min) 5	
	Montor channe(s) when logout	
▶ Maintenance		
▷ Auto Reboot		
	Apply	

Figure 7-80 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 Choose monitor channels when logout, the default is all channels.
- Step 4 Click Apply to save settings.

7.5.3.3 App Verification

Add the digital number to white list, when the user login the cellphone App to manage the NVR, it must be input one series number in the white list to test and verify to keep the security.



🗙 System	Channel Record Alarm Network System	х
▶ Information	User Adv.Sotting Phone Number Allowed	
⊳ General	Enable White List	
► User Account	D Phone Number Status Remark Edit	
▹ Security Center		
⊳ Layout		
⊳ Logs	Fhore Mathem	
▶ Maintenance		
⊳ Auto Reboot		
	Cincel	
	+ -	
	Apply	

Figure 7-81 Phone number allowed

Up to 20 phone numbers can be added, and can modify the remarks for them. Tick the numbers, click "-" to delete the numbers. Click Apply to save settings.

7.5.3.4 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 7-82



🛠 System	Channel Record Alarm	Network System	×
▷ Information	Pastword Pattern Unlock S	ecure Email Secure Question	
⊳ General	Old Password		
▶ User Account	New Password		
	Confirm Password		
⊳ Layout	- Valid password range [6-32] char	acters.	
	- At least 2 kinds of numbers, lower	case,uppercase or special character con	tained.
⊳ Maintenance	 Only these special characters are 	supported %#\$*+~=_%&"(),/'.;<>?^ -[}	
▷ Auto Reboot			
			Apply

Figure 7-82 Password modification screen

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

The password should include at least two kinds of letter, character and number. The password should be $6\sim32$ characters. Only special characters (! $@#&*+=-\%&''(),/'.:;<>?^|~[]{})$ are supported,

Step 3 Click Apply to save modified password settings.

7.5.3.5 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 7-83



🛠 System	Channel Record Alarm Ne	stwork System	x
> Information	Password Pattern Unlook Soci	re Email Seaure Question	
> General	Password		
▶ User Account	Enable Pattern Linlock	0	
Security Center	Pattern Unlock	Pattern Setting	
▶ Layout			
▶ Logs			
▶ Maintenance			
▹ Auto Reboot			
		Apply	

Figure 7-83 Pattern unlock screen

Step 2 Input the password, enable pattern unlock.

- Step 3 click **Setting Pattern** to set an new pattern unlock.
- Step 4 Draw the pattern, then it will remind to draw the confirmation pattern again.
- Step 5 Click OK to save the pattern unlock.

7.5.3.6 Secure Email

Set the email to receive the verification code to create new password, as shown in Figure 7-84

🛠 System	Channel Record Alarm Network System	×
	Password Pattern Unlock Secure Email Secure Question	
	Password Cassword	
	E-mai ******Ggmail.com	
▷ Maintenance		
		Ē

Figure 7-84 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 settings

7.5.3.7 Secure Question

Set the questions to create new password, as shown in Figure 7-85

Figure	7-85	Secure	Ouestion
			2

🛠 System	Channel Record Alarm Ne	twork System	×
> Information	Password Pattern Unlock Secur	e Email Secure Question	
⇒ General	Password		
	Question one	The brand and model of your favorix	
	Question one answer		
▷ Auto Sequence	Question two		
Auxiliary Screen	Question two answer		
⊳ Logs	Question three	Your favorite city 🗸 🗸	
⊳ Maintenance	- Please enter at least 1 characters for t	he answer	
b Auto Restart	– Please enter up to 32 characters for th	ne answer	

- 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.

7.5.4 Layout

Set viewing video mode, dwell time in display screen. The layout is set multiple pages to auto sequence.

Operation Steps

Step 1 Click **Layout** in the main menu or menu of the system management screen and choose **Layout** to access the display screen, as shown in Figure 7-86



🛪 System	Channel Record Alarm Network System	×
▷ Information	Layout	
⊳ General	Layout List + Layout Name: 1x1 Dwell Time(sec): 5	∠ Edit @ Delete
⊳ User Account		
Security Center		
> Layout		
⊳ Logs		
⊳ Maintenance	1.Device 2. (hannali?	
▷ Auto Reboot	3. Channel29 4. dfghj	

Figure 7-86 Auto Sequence screen

Step 2 Click "+" to add a new layout. The default layout is one splitting screen.

+ Add Layout		×
Channel	Layout Name	Dwell Time(sec) 5
[1]Device [2]Channel12 [3]Channel29		
	1. Device	
(-Empty	2. Channelf2 1. Channelf2 2. dfghj	
		OK Crincel

Figure 7-87 Add a new layout.



- Step 3 Input the layout name, 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 Choose the mode of splitting screen at the page bottom; set the display mode of channels by dragging channel to the specific location, or choose the location first, then click the channels to place. One splitting screen can play several channels, the auto sequence is playing as the set pages, for example the first split screen is set two pages (channel 1 and 2), the second split screen is set one page (channel 3), when enable to auto sequence, the showing is channel 1 and channel 3, then show channel 2 and channel 3.

Step 5 Click Apply to save dwell settings.

User can add up to 16 layouts.



7.5.5 Auxliary Screen (Only for Some Models)

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 7-88

🛠 System	Channel Record Alarm Network System						
▷ Information	Aurillary Screen Auto Sequence						
⊳ General	Enable Auxiliary Screen	G					
⊳ User	Output Resolution						
Security Center	Decoding ability (main + auxiliary)						
h Auto Sequence	Layout Mode	Display1					
	Displayed Channel						
 Auxiliary Screen 	Enable tour	۲					
▶ Logs							
▹ Maintenance							
⊳ Auto Restart							
				Apply			

Figure 7-88 Auxiliary screen

- $Step 3 \quad Set the Output Resolution, Decoding Ability (main + auxiliary), Layout Mode, Display Channel.$
- $Step 4 \quad {\sf Enable tour to set} \, {\bf Auto} \, {\bf Sequence} \, {\sf of} \, {\sf auxiliary \, scree \, as \, shown \, in} \, .$



🛠 System	Channel Reco	rd Alarm	Network	System		×
▷ Information	Auxiliary Screen	Auto Sequence				
⊳ General	Channel	Mode	Display1	✓ Dwell Time	K 1/32	н
⊳ User			Display1 Display4		>	<
Security Center	CH3 CH4		Display8 Display9			
▷ Auto Sequence	CH5 ^E		Display16			
▶ Maintenance				CH1		
▷ Auto Restart						

Figure 7-89 Auto sequence of auxiliary screen

Step 5 Click Apply to save settings.

The auxiliary screen shows different channels with main screen, and the auto sequence show all channels. The auxiliary screen will show the personnel counting information if it is enabling.

7.5.6 Logs

7.5.6.1 System Log

Search for logs information and export the information of logs.

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 7-90



X System	Channel Re	cord Alarm	Network Sy			×
▷ Information	System Log E	vent Log				
⊳ General	Start Date			Start Time		
N. User Annount	End Date			End Time	06:47:12	
	Туре	Operation Log		Searc	h Export	
 Security Center 		Start Time	Channel	Log Type	Information	
⊳ Lavout	1 14/0	15/202106:47:01		Login	[admin] 127.0.0.1 login	
				Logout	[admin] 127.0.0.1 logout	
				Login	[admin] 127.0.0.1 login	
				Logout	[admin] 127.0.0.1 logout	
▶ Maintenance		6/202104:59:46			[admin] 127.0.0.1 login	
		15/202104:49:03		Logout	[admin] 127.0.0.1 logout	
Auto Reboot					[admin] 127.0.0.1 login	
				Logout	[admin] 127.0.0.1 logout	
					[admin] 127.0.0.1 login	
				Logout	[admin] 127.0.0.1 logout	
				Login	(admin) 127.0.0.1 login	
				Logaut	[admin] 127.0.0.1 logout	
		15/202103:58:29		Login	(admin) 127.0.0.1 login	
				Logout	[admin] 127.0.0.1 logout	
		5/202103:04:53		Login	[admin] 127.0.0.1 login	

Figure 7-90 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 flash disk.
- Step 6 the logs can save to flash disk and hard disk at the same time, the newest logs is save to flash disk, and the old logs will be transferred to hard disk.

7.5.6.2 Event Log

The event logs are divided to more detail type, user can find the information quickly. The operation is same as system logs, please refer to chapter 7.5.6.1



Fiaure	7-91	Event

Information	System Log Ev	ent Log					
⊳ General	Start Date			Start Time			
 Llear Account 	End Date			End Time			
P LISE PULLER	Туре			Searc		Export	
Security Center		Start Time	Channel	Log Type		Information	
Lavort	1 14/0	5/202106:29:52	Channel02	Motion Detection	Channel12		
> Layour			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
> Maintenance		5/202106:27:59	Channel02	Motion Detection	Channel12		
		5/202106:26:07	Channel02	Motion Detection	Channel12		
> Auto Reboot			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
		5/202105:40:30	Channel02		Channel12		
			Channel02	Motion Detection	Channel12		
			Channel02	Motion Detection	Channel12		
	15 14/0	5/202104:49:00	Channel02	Motion Detection	Channel12		

7.5.7 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 7-92

Figure 7-92 Maintenance screen

🛠 System	Channel Re	cord Alarm	Network Sys	stem			×
▷ Information	Maintonance						
⊳ General	45	\sim	C		e.l.	-^	
▶ User Account	()		\supseteq	Ð	Ē	E,	
 Security Center 	Shutdown	Reboot	Logout	Reset	Import Configur.	Export Configur.	
⊳ Layout	A	<i>f</i>	tł	M			
⊳ Logs	لې) FW Update	(لېک) Cloud Uodate	L@ Save running log	Network Packet			
> Mointenance							
> Auto Reboot							

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



		Update		Х
USB Flash Name				🛏 🕼 🛍
	Nam	e	Modify Date	Size
	Location:			
	Selected Directory :			
			at OK	Cancel

Figure 7-93 Firmware update

- Step 3 Click import configuration or export configuration to view the message **" Are 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.

When the NVR finishes updating, the device would restart.

Network packet capture: the NVR is plugged the USB disk, click the network packet capture, and set the relevant parameters of the packet capture. The captured data can be downloaded and used for device problem analysis.

FW Update, firmware update; user plug in the U disk with the update software, choose the file to update.

Save running log: user should plug in the U disk to save the running log.

7.5.8 Auto Reboot

Operation Steps

Step 1 Click **Auto reboot** in the main menu or menu of the system management screen and choose **Auto reboo**t to access the maintenance screen, as shown in Figure 7-94



🛪 System	Channel	Record	Alarm	Network	System		×
▷ Information	Auto Rebo	oot					
⊳ General	Enable	Auto Reboot		0			
⇒ User Account	Reboo	ot Time		Per Day	♥ 0:00		
▹ Security Center							
⊳ Layout							
⊳ Logs							
⊳ Maintenance							
> Auto Reboot							
							inclu
							44xA

Figure 7-94 Auto restart screen

- Step 2 Enable the function, restart time is showing as figure Per Day × 000 ×
- Step 3 Restart the NVR per day, week or month.
- $Step 4 \quad Select the restart time from the drop-down list.$



8.WEB Quick Start

The functions of Web are another form of UI system setting, all functions can be referred to chapter 7 UI system setting.

8.1 Activation

If you don't set the password at UI interface, user need activate the device, as shown in Figure 8-1

	Engli	sh •
	@	
	NVR-	
	Input Username	
Π	Input Password	

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 Activation

pas	sword
	55

Step 4 Set the question of recovery the password.



← Question (Recovery the passwo	ord)
The brand and model of your favorite car	
Your favorite team	
Your favorite city	
Finis	st i

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

8.2 Login and Logout



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 Firefox/Chorme, 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.

Figure 8-3 Question



Login

Step 1 Open IE browser, enter the IP address of the NVR (default value: 192.168.1.200) 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.

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 2 Click Login to access the homepage, as shown in Figure 8-5

Figure 8-5 Homepage interface

►NORDEN®	\odot	Ð	Q	¥.:.	C.	Fi.	¢	4	د ه	G	G
Device								۵			
[1] Channel01											
🖸 [2] PTZ				NO-VIDEO			NO-VIDEO				
[3] Channel03	►										
[4] Channel04	►									-	I
[5] Channel05											
[6] Channel06											
[7] Channel07											
[8] Channel08											
[9] Channel09				NO-VIDEO			NO-VIDEO				
[10] Channel10											
[11] Channel11											
(12) Channel 12											
[13] Channel13				3 26							



Logout

exit?" Click ок

To logout of the system, click 💽 in the upper right corner of the homepage. The pop-up message shows "Do you want to 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 6-7 shows the overall layout of the interface. For descriptions of the interface, please refer to Table 8-1

►NORDEN®	۲	Ð	Q	÷::	C]	[=]]	ø			4	د ه	G	G
Device										۵			
[1] Channel01													
[2] PTZ													
[3] Channel03	•			NO-VIDEO				NOINDLO					
[4] Channel04	•											~	
[5] Channel05													
[6] Channel06													
[7] Channel07													
[8] Channel08													
[9] Channel09				NO-VIDEO				NO-VIDEO					
[10] Channel10													
111 Channel 11													
[12] Channel12													
C [13] Channel13				— 56					-				

Figure 8-6 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	Device's 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.

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 8-7

nternet Options	<u>? × </u>
General Security Privacy Content Connections Programs Adv Select a zone to view or change security settings.	/anced
Internet Local intranet Trusted sites Restricted sites Trusted sites Titus cone contains websites that you Sites	
trust not to damage your computer or your files. You have websites in this zone. Security level for this zone Allowed levels for this zone: All - [- LOW	You can add and remove websites from this zone. All websites in this zone will use the zone's security settings.
Minimal safeguards and warning prompts are provide Most content is downloaded and run without prompts All active content can run Appropriate for sites that you absolutely trust	d s Agd this website to the zone: Agd Agd Websites:
	*.hisilicon.com
	*.hisiicon.com *.huaweidevice.com *.huaweidevice.com *.huaweimarine.com

Figure 8-7 Adding a trusted site



Step 1 In Internet Explorer, choose **Tools > Internet Options > Security > Customer level**, and set Download unsignedActiveX 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 8-8

lect a zone to view or change security settings.	Cattlena
Internet	Seconds ActiveX controls and plug-ins ActiveX controls and plug-ins O Disable O Disable O Enable
This zone is for Internet websites, except those listed in trusted and restricted zones.	Allow Scriptlets Disable O Enable Prompt Advection constraints for Adding V controls
Security level for this zone Custom Custom settings. - To change the settings, click Custom level. - To use the recommended settings, click Default level.	Accentacl profiliping for Accentals Disable Enable Inary and script behaviors Administrator approved Disable Enable Enable Enable Inclaw video and animation on a wetprace that does not used
Custom level Default level	*Takes effect after you restart Internet Explorer
Reset all zones to default level	Reset to: Medium-high (default)

Figure 8-8 Configuring ActiveX controls and plug-ins

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

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 8-9



►NORDEN®	\odot	•	Q	÷::	C.	[=]	¢		4	۵ ۱	G 6
Device		2022-0	7-13 1	16:11.5	0 Wed		2022-07-13 16:11:50 Wed		Cha	nnel04	Į.
[1] Channel01		÷.							C	1	
[2] PTZ		-							2	1	4 5
[3] Channel03										•	
[4] Channel04	1	100							40		
[5] Channel05								1.100	-		
[6] Channel06						-			٢	^	7
[7] Channel07									<	S	> Ĭ
[8] Channel08									L	~	L
[9] Channel09				NO-VIDEO			NO-VIDEO		E		5.0
(10) Channel10									Ľ.	9	i sta i
[11] Channel11									¢	9	®
(12) Channel 12									đ	р	Ð
[13] Channel13				- 26				Ť	\odot	٢	• …

Figure 8-9 Real-time videos interface

8.3.3 Channel Operation

Descriptions

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

Table 8-2	Descriptions	of	homepage
-----------	--------------	----	----------

Buttons	Button Description	How to operate
Ô	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.



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 8-10. Table 8-3 describes the operations.



Figure 8-10 PTZ control interface



Table 8-3	Device	parameters
-----------	--------	------------

Buttons	Button description	How to operate
1 × 1	Direction key	Click button to controlomni-directional movement of the PTZ.
5	Speed slider	Drag the slider to adjust the value of PTZ rotation speed.
[‡]	Zoom in	Click buttons to adjust the focal length.
[###]	Zoom out	
\bigcirc	Iris+	Click buttons to adjust the aperture
\$	Iris-	
Ð	Far focus	Click buttons toadjust the focal length.
Ð	Near focus	
	Auto focus	Click button to focusautomatically.
۲	Home preset	N/A
•	Preset	The camera is set the tour , click the button and dome camera rotate as the setting.
	More	More settings, scan and tour

8.3.5 Sensor Setting

Descriptions

The sensor setting can adjust scene, brightness, sharpness, contrast and saturation, click setting, as shown in Figure 8-11. Table 8-4 describes the operations.



to access image





Figure 8-11 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.
\odot	Contrast	Click button to adjust the transparency of the image.
	Saturation	Click button to adjust the chromatic purity of the image.

Click more will be access to system sensor setting. As shown in Figure 8-12, more detail please refer to chapter Figure 4-7



►NORDEN®	•● Q @ ji <u>幸</u>	★ 스 C= D
👥 Channel	Sensor Setting	
Camera Encode Sensor Setting OSD Phyacy Zone ROI Microphone Human Thermometer	2022-07-13 16:15:02 Wed Channel BjChan •	
Smart Intelligent Tracking	Image Scene Noise Reduction Enhance Image Set Pseudocolor FFC Control	
Record Alarm Network System	Scene Default • Brightness *	
	Default Apply	

Figure 8-12 Sensor setting interface

8.3.6 Layout

Click at the bottom left conner of real-time videos interface, the buttons indicate 1 screen, 4 screens and \blacksquare \blacksquare 9 screens from left to right. More PoE port will be 16 screens.

8.4 Playback

8.4.1 Video Playback

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

Procedure

Step 1 Click O in the function navigation bar, the video playback interface is displayed, as shown in Figure 8-13



► NORDEN®	\odot	Ð	QĒ		[= 1]	¢			٠	చ త	G
Device		022-07-1	3 09:46:34		-				Channel	05	
🛃 [1] Channel01	•			-	and WO	-					
[2] PTZ	•	2		and the second	42.0	Links					-
[3] Channel03		1		25-1							
[4] Channel04		8		A DESCRIPTION OF		AL.					
[5] Channel05	•	A. Hereit		- 6 5	Car V						
[6] Channel06	•										
[7] Channel07	•										
< 2022/7				IO-VIDEO			NO-VIDEO				
Sun Mon Tue Wed Thu	Fri Sat										
3 4 5 6 7											
10 11 12 13 14											
17 18 19 20 21 24 25 26 27 28	22 23 29 30	■ II	₩ ₩ 0 :	🔲 🎛 💥	-		8 10 OF	b O 12b O 24b			
31 1 2 3 4				. 30	40 .	13/07/2022 09:46:35		. 110			
16:15:45		CH3 CH4									
Schedule Record Manual Record											

Figure 8-13 Video playback

- Step 2 Select a channel. Click a device in the device list. A selected device is marked with ► An unselected device is marked with ►
- 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 record, 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 8-14 shows the control bar of video playback.





:reversed.



:play/pause.





:types of time bar.

user can operate the record as same as live video.

8.5 Alarm Search

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

8.5.1 Channel Alarm

Procedure

Click O in the function navigation bar, the channel alarm interface is displayed, as shown in Figure 8-15

Figure 8-15 Channel alarm interface

►NORDEN ^a	•	Ð	Q	. É	C]	[=]	ø			ه ه	G	• 6•
Device		ID		Start time			Channel	Туре	Information	Ope	rate	
[1] Channel01												
[2] PTZ												
[3] Channel03												
[4] Channel04												
[5] Channel05												
[6] Channel06												
Start Time												
12/07/2022 16:16:36												
End Time												
13/07/2022 16:16:36												
Alarm In Camera Alarm In Motion Detection												
Camera Tamper												
Video Loss Intelligent Analysis												
+ Z Abnormal Alarm												
Search				Total Num	bert O							


- $Step 1 \quad Choose the alarm type to search.$
- Step 2 Click Search, the result will be displayed as shown in Figure 8-16

► NORDEN®	۲	Ð	Q 🖾	C]	[=]	¢			<u>ه</u>	e	ß
Device		ID	Start t	ime		Channel	Туре	Information	Ope	rate	
[2] PTZ			13/07/2022	16:16:27		Channel03	Motion Detection	Channel03	Ð	¥	
[3] Channel03			13/07/2022	16:16:14		Channel03	Motion Detection	Channel03	Ð	¥	
[4] Channel04			13/07/2022	16:16:03		Channel03	Motion Detection	Channel03	Ð	*	
[5] Channel05			13/07/2022	16:15:46		Channel03	Motion Detection	Channel03	Ð	¥	
[6] Channel06			13/07/2022	16:15:11		Channel03	Motion Detection	Channel03	Ð	¥	
[7] Channel07			13/07/2022	16:14:40		Channel03	Motion Detection	Channel03	Ð	¥	
Start Time			13/07/2022	16:13:57		Channel03	Motion Detection	Channel03	Ð	¥	
12/07/2022 16:16:36			13/07/2022	16:12:34		Channel03	Motion Detection	Channel03	Ð	¥	
End Time			13/07/2022	16:12:13		Channel03	Motion Detection	Channel03	Ð	¥	
13/07/2022 16:16:36			13/07/2022	16:11:54		Channel03	Motion Detection	Channel03	Ð	¥	
Camera Alarm In			13/07/2022	16:10:58		Channel03	Motion Detection	Channel03	Ð	¥	
Motion Detection Camera Tamper			13/07/2022	16:10:19		Channel03	Motion Detection	Channel03	Ð	¥	
Video Loss			13/07/2022	16:10:07		Channel03	Motion Detection	Channel03	Ð	¥	
+ Abnormal Alarm	912			10-00-20		Channel03	Motion Datection	Channal03	¢		
Search		1<< 1	/ 36 >> Total I	Number: 71	ŧ						

Figure 8-16 Channel alarm result

	E		
Click	 << 1 /6 >> 	t	to select the page of alarm list.
Every pa	age show 20	▼	shows the rows shown in every page

8.6 Attendance (Only for Some Models)

8.6.1 Attendance Data

Click to enter attendance data interface, as shown in Figure 8-17



► NORDEN [®] Attendance	Data Attendance Mana	igement	Back					▲ 스 G G
Attendance Library	Attendance Summa	ary						⊥ Export
	Job Number	Name	Department	Required Times	Actual Times	Absence	Late	Early Leave
ļ								
Time								
Today +								
Custom time period								
Start Date 13/07/2022								
End Date								
1310/72022								
Search Type								
Attendance Summary *								
Reset Search		Every p	age show 20 •					

Figure 8-17 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.

8.6.2 Attendance Management

In attendance management, user can set attendance rule, library and check point, as shown in Figure 8-18

Attendance Data Attendance Management Back 4 4 G G Attendance Rule Settings nce Library Working Time: e Check P 🔲 Sunday 💆 Monday 😴 Tuesday 🖉 Wednesday 😴 Thursday 😴 Friday 🔳 Saturday Workday Setting Before start-work t 90 min to After start-work time 30 k-in valid time Before end-work ti... 30 min to After end-work time 240 min Check-out valid time: - If employee does not check in when starting work, mark as absent

Figure 8-18 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.

►NORDEN® (•	Ð	_Q 🖾 👊	ei 🜣			♠ 스 단 B
Device		ID	Start time	Channel	Туре	information	Operate
[2] PTZ			13/07/2022 16:16:27	Channel03	Motion Detection	Channel03	⊕ ±
[3] Channel03			13/07/2022 16:16:14	Channel03	Motion Detection	Channel03	⊕ ±
[4] Channel04			13/07/2022 16:16:03	Channel03	Motion Detection	Channel03	⊙ <u>*</u>
[5] Channel05			13/07/2022 16:15:46	Channel03	Motion Detection	Channel03	• ±
[6] Channel06			13/07/2022 16:15:11	Channel03	Motion Detection	Channel03	⊕ <u>+</u>
[7] Channel07			13/07/2022 16:14:40	Channel03	Motion Detection	Channel03	⊕ ±
Start Time			13/07/2022 16:13:57	Channel03	Motion Detection	Channel03	⊕ ±
12/07/2022 16:16:36			13/07/2022 16:12:34	Channel03	Motion Detection	Channel03	⊕ <u>*</u>
End Time			13/07/2022 16:12:13	Channel03	Motion Detection	Channel03	⊕ <u>*</u>
13/07/2022 16:16:36			13/07/2022 16:11:54	Channel03	Motion Detection	Channel03	⊕ <u>*</u>
Camera Alarm In			13/07/2022 16:10:58	Channel03	Motion Detection	Channel03	⊙ <u>*</u>
Motion Detection Camera Tamper			13/07/2022 16:10:19	Channel03	Motion Detection	Channel03	⊕ ±
Video Loss			13/07/2022 16:10:07	Channel03	Motion Detection	Channel03	⊕±
+ Abnormal Alarm			13/07/2022 12:00:30	Channel03	Motion Dataction	Channal03	ۍ ب ۲

Figure 8-19 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 o 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 8-20



► NORDEN® Attendance	Data Attendance Management	Back				▲ 스 I 단 B
Attendance Rule Set	Attendance Check Point Settin	gs				
Attendance Library		Attendance				
	Channel	Library	Similarity	Enabled	Operate	
	Channel01		80%	Start	۷	
	Channel02		80%	Start	۷	
	Channel03		80%	Start	۷	
	Channel04		80%	Start	۷	
	Channel05		80%	Start	۷	
	Channel06		80%	Start	۷	
	Channel07		80%	Start	۷	
	Channel08		80%	Start	۷	
	Channel09		80%	Start	۷	
	Channel10		80%	Start	۷	
	Channel11		80%	Start	2	

Figure 8-20 Attendance check point setting

Step 2 Click 🔟 to edit check point setting, as shown in Figure 8-21

Attendance Check Point Settings Channel Channel Channel03 Enable Similarity Attendance Library Attendance Library I All libraries I Default Lib I employee 1 OK Channel

Figure 8-21 Check point

 $Step 3 \quad \text{Enable the function, set similarity and tick the library, all face detection cameras can be set the check points$

Step 4 Click OK to save the setting.



8.7 AI Recognition (Only for Some Models)

At AI recognition interface, we can set the **Real time Comparison**, **Smart search**, **Archives library**, **Comparison** configuration.

8.7.1 Real Time Comparison

Real time comparison can compare human face, vehicle license plate, and AI(include riding, vehicle, full body)

8.7.1.1 Human Face

At real time comparison interface, click the Let to enter the human face comparison interface, choose the cameras with face recognition function to play live video, the snapshot of camera will compare with libraries, the result shows as in Figure 8-22



Figure 8-22 Human face comparison

Click the "+" can add the snapshot to face library immediately.

8.7.1.2 Vehicle License Plate

At real time comparison interface, click the to enter the vehicle license plate comparison interface, choose the cameras with license plate recognition function to play live video, the snapshot of camera will compare with libraries, the result shows as in Figure 8-22





Figure 8-22 Vehicle license plate

Click the "+" can add the snapshot to license plate library immediately.

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.

8.7.1.3 Vehicle and Full Body

At real time comparison interface, click the **NO** to enter the vehicle license plate comparison interface, choose the AI recognition cameras to play live video, the snapshot of camera will compare with libraries, the snapshot to vehicle and full body will show at the bottom of page, the result shows as in Figure 8-24.



Figure 8-23 Full body



8.7.1.4 Real Time Body Temperature Filter

The real time body temperature will show the snapshot of device, it shows the over temperature and snapshot to human face. Snapshot will show the char such as no mask (the mask detection configuration can be set at comparison configuration interface)

Figure 8-24 Body temperature



8.7.2 Smart Search

At smart search interface, user can search the human face, vehicle license plate, full body, car, body temperature.

8.7.2.1 Human Face Search



Figure 8-25 Human face search



- Step 1 Choose human face search at smart search interface.
- Step 2 Tick the face recognition camera channels, set the start time and end time.
- Step 3 Choose the condition (by picture or by feature), the picture can choose from the file folder.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 The detail picture can be used to search or add to library.
- Step 7 Click play button of video to play the recording of snapshot.

8.7.2.2 Vehicle License Plate Search

a AlRecog	nition			Shirt Search				
C Select								
1 1 2 2 3 3 4 4		Channello	27/04/2020 14:10:13		VUES YDE	DefailtUb	Never expire	+ 0 0
0 [2] (34		Otametto	27/04/2020 14:6:6	K\$18 XN0	KSIB XND	DefaitUb	Nover expire	+ 0 0
110u		Ownel®	27/04/2020 14:19:20		KRIVIN			+0.0
1 0 (5) Ou		Deretti	27.054.0000 14.9604	5337 YW5	BYIZ WYE	Detaglia	Neur suize	+0.0
0 0 1000	mc106	Cherrol			A SECTION			+0.0
		OwnerD	27/04/0001 14 10:00		COVER AVAIL	Defection	New arrive	
		0	27/04/2020 14 6 20	KYER W7W				
10 HOw		Carriero	17 (54) 2000 14:00		AS52 9Y7			
		Care o	27/94/2000 H-1040		Whenere			
	Time	Chance	27/04/2020 90/0040		113956		NEVO DIGRE	+ 0 9
		Committe	27/04/2020 14:16-44		EPU72 YKV			+00
StartTime		(Jamelt)			EYEOUZX			+00
					AKIB BZL			+ 0 0
		Owner(0	27/04/2020 14.16.43		GYIZ RZB			+00
		Ound	27/04/2020 14:050		EW69XZM			+0.0
License platelja	ptional)	Curre/D	27/04/2020 14:18:52		PZ65 P'/0			
		Oramelto			PZ65 BYV			+ 0 0
Rest					4 4	34 N		

Figure 8-26 Vehicle License Plate search

- Step 1 Choose vehicle License Plate at smart search interface.
- Step 2 Tick the vehicle license plate recognition camera channels, set the start time and end time.
- Step 3 Input the license plate optionally.
- $Step 4 \quad Click ``Search'' to search the snapshot of license plate.$
- Step 5 The result will show at the page, click ``+" add to library.

8.7.2.3 Full Body Search







- Step 1 Choose full body search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Set the gender, click cycling or no cycling .
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 Click play button of video to play the recording of snapshot.

8.7.2.3 Vehicle Search

Figure 8-28 Vehicle search



- Step 1 Choose vehicle search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Tick the color
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 Click play button of video to play the recording of snapshot.

8.7.2.5 Body Temperature Search

Figure 8-29 Body	temperature	search
------------------	-------------	--------

Real-time	compariso	n Smart Search Archiv	es Library Comparison Cont	Iguration Back			Consider stars	
102.150.5 184		Search result						
		Norther	Capture Photo	Librery Photo	Information	Temperature	Cepture Time	
Channel22					Chemoriel			
Chernel05			6		Stanger		100000000000000000000000000000000000000	
Chimaite								
Channell5								
Charnelle	- 21		100		Chemoriki			
Concession in the local division of the loca	- 21		102		Starpe		2000/05/08 12 12 10	
	-							
C Clarateon								
Chamate			100		ChennolEt			
Chernet5			28		Santos		2000/02/08 12 12 12	
Cternatt								
Chernel12								
					Stempolet			
Start Time 24220/33/04 40:00:17					Stelle		2000/05/08 \$2 12 40	
EndTime								
2020/03/13 10:30-17			Press.		Chancel@1			
Person Typer			0.0		Shanger		2008/05/08 12 12 44	
Tomporature Type								
(D(apliced)					Channel B1			



- Step 1 Choose body temperature search at smart search interface.
- $Step 2 \quad Tick the AI \, recognition \, camera \, channels, set the start time \, and \, end \, time.$
- Step 3 Choose the person type, temperature type, input ID optionally.
- Step 4 Click "Search" to search the temperature.

8.7.2.6 Personnel Count

If the AI camera connect to NVR, the NVR can obtain the data of camera directly. Set the statistical type (day, month, year), choose the time to search. The result can be showing by line graph, histogram, or list, as shown in Figure 8-31

) NI	ORDEN [®] Real-time co	omparison Smart Search	Archives Library	Comparison Configuration	Back		ه ه	G• Gø
£	9	•				1 Export	<u>e</u> 1	
NO.	[1] Channel01							
\$65	[2] PTZ	•						
	[3] Channel03							
	[4] Channel04							
÷.	[5] Channel05							
JWL,	[6] Channel06							
	[7] Channel07	•						
	[8] Channel08	•						
	[9] Channel09							
	[10] Channel10							
	[11] Channel11	•						
	Statistical Type							
	Day							
	Date 13/07/2022							
	Reset Search	n						

Figure 8-30 Personnel count

8.7.3 Archives Library

At archives library, user can add or edit the face library, license plate library.

8.7.3.1 Face Library

	DRDEN [®] Re	al-time comparison	Smar	t Search	Archives Library	Comparison Conf	iguration	Back			▲ 스 E G
1	Face Library		+ Add	× Delete	🗄 Import 🏦 Export	t O Refresh 🛛 Fil	ter				= 88
NO.	Select All										
	💙 Default Lit		•	Name	Gender	Birthday	ID	Face Library	Туре	Expire date	Operate
			144	1>>	Total Number	0					

Figure 8-31 Face library



Click "+" to add face library. Click "Add" to add person enroll. Tick the person, click "Delete" to delete the person. Click "Import" to add the person batch. Click "Export" to export the all person in library. Click operate icon to edit or delete the chosen person. Snapshot in real time video, put the cursor on picture such as

+ 🚬 Q

, 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.

8.7.3.2 License Plate Library



Figure 8-32 License plate library

Click"+" to add license plate library.

Click "Add" to add plate to library.

Tick the plate, click "Delete" to delete the license plate.

Click "Import" to add the license plate batch.

Click "Export" to export the all-license plate library.

Click operate icon to edit or delete the chosen license plate.

8.7.4 Comparison Configuration

At comparison configuration interface, user can set the comparison of human face/license plate/temperature.



►NORDEN [®]	Real-time comparison	Smart Search	Archives Library	Comparison Configuration	Back		ا ک ک	G• 🕼
1								
NO	Channel		Register D	etect Library	Stranger Detect Library	Similarity	Operate	
₽ °	Channel01		Default Lib		Default Lib	80%	۷	
•	Channel02		Default Lib		Default Lib	80%	۷	
(iii)	Channel03		Defa	ult Lib	Default Lib	80%	۷	
	Channel04		Defa	ull Lib	Default Lib	80%	۷	
	Channel05		Defa	ull Lib	Default Lib	80%	۷	
	Channel06		Defa	ult Lib	Default Lib	80%	∠	
	Channel07		Defa	ult Lib	Default Lib	80%	۷	
	Channel08		Deta	ult Lib	Default Lib	80%	۷	
	Channel09		Defa	ult Lib	Default Lib	80%	۷	
	Channel10		Deta	ult Lib	Default Lib	80%	∠	
	Channel11		Deta	ull Lib	Default Lib	80%	∠	
	Channel12		Defa	ult Lib	Default Lib	80%	۷	
	Channel13		Deta	ull Lib	Default Lib	80%	۷	
	Channeld#		Dofe	off 1 its	Dobull 1 ib	oner		

Figure 8-33 Face comparison



At face comparison interface, user can set different channels' strategy, such as similarity, display comparison result, face library, enable alarming, event action, arming time, as shown in Figure 8-33



-NORDEN	Real-time comparison	Smart Search	Archives Library	Comparison Configuration	Back		ه ځ B	6
1								
NO	Channel		Re	gistered detection library		Unregistered detection library	Operate	
₽ ^r	Channel01			Default Lib		Default Lib	۷	
	Channel02			Default Lib		Default Lib	∠	
(iii)	Channel03			Default Lib		Default Lib	۷	
	Channel04			Default Lib		Default Lib	۷	
	Channel05			Default Lib		Default Lib	۷	
	Channel06			Default Lib		Default Lib	۷	
	Channel07			Default Lib		Default Lib	۷	
	Channel08			Default Lib		Default Lib	۷	
	Channel09			Default Lib		Default Lib	۷	
	Channel10			Default Lib		Default Lib	۷	
	Channel11			Default Lib		Default Lib	۷	
	Channel12			Default Lib		Default Lib	۷	
	Channel13			Default Lib		Default Lib	۷	
	Channeld			Dofout Lib		Default Lib	1	

Figure 8-35 License comparison

At face comparison interface, user can set different channels' strategy, such as similarity, display comparison result, face library, enable alarming, event action, arming time, as shown in Figure 8-33

A means the library is deleted.

Figure	8-36	Temperature	comparison
--------	------	-------------	------------

► NO	IRDEN [®] Real-time comparison Smar	t Search Archives Library	Comparison Configuration	Back	オ 3 13/07/2022 16:34:57 Motion Detection	G 🖬 🕹 🗭 😡
1	Temperature Configuration Sch	edule Linkage				
1	Abnormal temperature measure	• • •				
	Low temperature threshold(0.1-1	35.9 °C				
fiit	High temperature threshold(0.1	100 °C				
	Normal temperature(0.1-100)	36 ℃ - 37.3 ℃				
				Refrest	n Apply	

At temperature comparison interface, user can set low temperature threshold, high temperature threshold, normal temperature, as shown in Figure 8-36



Figure 8-37 Strategy

2	Edit Strategy		x						
	Channel	Channel11		Ľ	Edit Strategy				×
	Similarity	+ 80			Channel	Channe			
	Register Stranger				Registered Unregister.				
	Display comparison resul Face Library	Face Library Default Lib ano			License Plate Lib		Licen	se Plate Lib EU EUA fault Lib	
					Enable Alarm				
	Enable Alarm	lacksquare			Event Actions	Se	tting		
	Event Actions	Setting			Arming Time	Se	tting		
	Arming Time	Setting							
		OK Cancel					OK	Cance	

Mask detection configuration: enable mask detection, set the mode (wear mask, no mask). Set confidence degree, the default value is 90. Click "apply" to save the settings.

Figure 8-38 Mask detection configuration

)-NO	RDEN [®] Real-time comparison	Smart Search	Archives Library	Comparison Configura	ation Back			٠	۵	e	G
1	Mask Detection Configuration	Schedule	Linkage								
NO.	Enable Mask Detection	•									
	Mode	No Mask									
艜	Confidence Degree		•	+ 90							
					Refresh	Apply					

Enable mask alarm linkage, set the event action and schedule.

Figure 8-39 Schedule linkage

► N	ORDEN [®] Real-time comparison	Smart Search Archives Library	Comparison Configuration	Back	a a sala 🔺	4 B B
-	Mask Detection Configuration	Schedule Linkage				
Ľ	Enable Alarm	•				
9		Schedule				
#	Buzzer	•				
	Push message to APP					
	Pop up message to monitor					
	Email	•				
	Full Screen	•				
	Cloud Storage	•				
		•				
	Enable Alarm Out	•				
				Refesh Apply		

The alarm information is relevant to mask detection configuration.



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

►NORDEN® ()) Q	Ľ.		5	÷ 🜣				٠	۵	G	G
Channel												
	Camera	Proto	col Managen	nent								
Encode Sensor Setting		Channel	IP Address	Port	Model	Protoco	Firmware Version	Operate				
OSD		CH1	103.243.46.90	30001		Private		2.0				
Privacy Zone ROI	•	CH2	103.243.46.90	30002		Private		∠ø				
Microphone <	-	• CH3	192.168.2.49	30001	ENC-STBGF-00R-33	Private	v3.6.0825.1004.175.0.30.2.3	∠e… ∠e…				
Human Thermometer		CH5	192.168.2.210	80		ONVIF		2.0				
Intelligent Tracking		CH6	192.168.2.44			ONVIF		2.©				
Record	-	CH7	192.168.2.20	80		ONVIF		∠ @				
🙍 Alarm		CH9	192.168.2.12	80		ONVIF		2.0				
S Network					Add Devices	Search	Refresh Delete I	atch Update				
O System					Use	mame ad	min Password ·····					

Figure 9-1 Camera interface

Step 1 Input username and password (the default value both are admin), and click automatically.

add cameras

Click To Add

Step 2 Click Search to search cameras at the same LAN as NVR, as shown in . Choose the camera, input username and password, click **Add** to add new camera.

Figure	9-2	Device	search
--------	-----	--------	--------

	D	IP Address	Port	Model	Protocol	Firmware Version
1	1	192.168.99.14	30001	ENC-HVD7M-40R-69	Private	t3.6.0804.1004.3.0.8.12.0
2	2 19	92.168.70.177	30001	ENC-HCB5F-30R-69	Private	v3.5.0819.3900.172.0.31.0.10
3	3 19	92.168.70.176	30001	ENC-HBUAM-100R-69	Private	v3.5.0819.3900.172.0.31.0.10
■ 4	1	92.168.10.249	30044		Private	v3.5.0819.1004.3.0.33.3.0
5	5 19	92.168.10.208	30001		Private	t3.6.0825.1004.3.0.13.4.0
6	5 19	92.168.10.127	80		ONVIF	
7	7 19	92.168.10.126	80	ENC-HBL5O-00R-70	ONVIF	
a 8		192.168.10.8	30001	ENC-HBU8M-60R-70	Private	t3.6.0804.1004.3.0.6.90.0





Figure 9-3 Modify device parameters

Modify device parameters					×
Channel Name	Channel06				
IP Address	192.168.0.232				
Protocol	Private_SSL				
Port	20001				
Username	admin				
Password	•••••	7.55			
Remote Channel	CH-1				
		Can	cel	ок	

Step 8 Clic to add camera manually, click the added channel to copy information to add, so that user just modify some information quickly, as shown in Figure 9-4

Man	ually Add Devices							×
	Channel		IP			P	rotocol	
	CH1	192	2.168.32.196:3	0001		F	Private	
	CH2	192	2.168.32.222:3	0001		F	Private	
	CH3	19	92.168.32.5:30	001		ŀ	Private	
	CH4	192	2.168.32.175:3	0001		F	Private	
	Channel		32					
	IP Address		192.168.32.5					
	Protocol		Private					
	Port		30001					
	Username		admin					
	Password		•••••		זחל			
	Remote Channel		CH-1					
						ОК	Cance	el

Figure 9-4 Modify device parameters

Step 8 Click

to access web immediately.





Figure 9	-5 Modify IP	
IP Address		
Subnet Mask		
	ОК	Cancel

- : 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.

9.1.1.1 Protocol Management

Set the protocol management, user can add different protocol cameras to NVR

Figure 9-6 Protocol management

Camera	Protocol Management				
Cus	stom Protocol	Custom	Prot	locol 1	
Prof	tocol Name	Custom			
Stre	sam Type	ØMain SI	tream	n sub S	tream
Тур	•	RTSP			
Port		554			
Pat	h				

Step 1 Click Channel > Camera > RTSP Connection.

- Step 2 Choose the custom protocol from the drop-down list, there are 16 kinds of protocols can be set.
- Step 3 Input the protocol name.
- Step 4 Tick main stream and sub stream. The main stream shows image on full screen live video. The sub stream shows image on split screen. If you just tick main stream and the channel will not show image on split screen.
- Step 5 Choose the type of protocol, the default value is RTSP.
- Step 6 Input the port, it depends the IP camera.
- Step 6 Input the path, it depends the manufacturer of cameras.
- Step 8 Click Apply to save the settings.



9.1.2 Encode

Step 1 On the **System Setting** screen, choose **Channel > Encode** to access the encode interface, as shown in Figure 9-7

Encod	e	
	Channel	[1]Channel01 ·
	Stream Information	Main Stream 🔹
	Video Encode Type	H265 -
	Audio Encode Type	G711A •
	Resolution	4000x3000 *
	Frame Rate(fps)	20 •
	I Frame Interval(Frame)	40 *
	Bitrate Type	CBR •
	Bitrate(kbps)(500-4096)	4096 *
		Copy Apply

Figure 9-7 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.

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 9-8



Figure 9-8 Image interface

	Channel	[3]Channel29 ×
4/05/2021 09:4		
Ale		
e Scene Exposu Scene	ire White Balance DayNight Noise R	eduction Enhance Image
e Scene Exposu Scene Brightness	ire White Balance DayNight Noise R Default *	eduction Enhance Image
e Scene Exposu Scene Brightness Sharpness	ire White Balance DayNight Noise R Default *	eduction Enhance Image
a Scene Exposu Scene Brightness Sharpness Contrast	ire White Balance DayNight Noise R Default & A @	eduction Enhance Image

Step 1 Select a channel and scene from drop-down list.

- Step 2 Set image parameters, like scene, brightness, sharpness, contrast and saturation.
- Step 3 Other parameters are camera's senor setting, user can refer IP cameras' settings.
- Step 5 Click Copy to choose other camera to copy settings. Click Apply to save the settings.

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.
- Scene: It includes indoor, outdoor, default. Mirror includes normal, norizontal, vertical, norizontal + v

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.

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 9-9 OSD interface



- Step 1 Select a channel and scene from drop down list.
- Step 2 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 2 Click Copy to choose other camera to copy settings. Click Apply to save the settings.

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 9-10



Figure 9-10 Privacy interface



- Step 1 Select a channel from drop-down list.
- Step 2 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 3 PTZ can be used for adjusting the IP dome cameras.
- Step 4 Click Copy to choose other camera to copy settings. Click

to save the settings.

Apply

9.1.6 ROI

ROI(Region of interest), choose channel, stream, area ID and draw the area. Set the level, there are five levels can be chosen. Set area name, click "Apply" to save the settings.

			5				
n Channel							
Camera							
Encode	ROI						
Sensor Setting	22/07/2	20 06159:04 Vol.		Channel	[28]Channel28		
OSD	C. molt			Stream	Sub Stream		
Privacy Zone				Area ID			
Microphone				Enable	•		
Human Thermometer				Level			
Smart				Area Name			
Record	- Note: Ma	x size 50%					
🚊 Alarm	- Right clic	k to remove the zones drawn	W008.00				Apply
S Network	- Only spe	cen characters are supported (@#3-	0001				
 System 							

Figure 9-11 ROI

9.1.7 Microphone (Only for Some Models)

User can set the microphone parameters of channel.

Figure 9-12 Microphone

n Channel		
Camera Encode	Microphone	
Sensor Setting OSD	Channel	[1]Channel01 •
Privacy Zone	Microphone	-
ROI	Microphone Type	Line In ·
Microphone	Microphone Volume	
Smart <		Apply
Record		
🚊 Alarm		
S Network		
O System		



9.1.8 Human Thermometer (Only for some Models)

User can set the parameters of human thermometer cameras, such as parameter configure, thermal mapping, thermal calibration, the detail please refer to the UI settings.



Figure 9-13 Human thermometer

9.1.9 Smart (Only for Some Models)

At smart interface, user can set AI multiobject, license plate recognition, face detection.



Figure 9-1-9 Smart



9.1.10 Intelligent Tracking (Only for Some Models)

This function only can be used for high speed dome camera. It works with PTZ function.

►NORDEN®	€	Q	ţ.	C:	[=]	¢	-				5 G	÷ G
📑 Channel												
Camera Encode Sensor Setting OSD Privacy Zone ROI	In	telligent Tr Ch Int Ca	acking annel elligent Track libration Coel	ing Micient	[4]Chann.		<u> </u>					
Microphone Human Thermometer Smart Intelligent Tracking		Tra	ice Magnify ne Of Duratio	m(s)	-•		— + 0 — + 0		Apply			
Record Alarm Network System												

Figure 9-15 Intelligent tracking

The detail information please refer to UI configuration setting.

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 9-16



Figure 9-16 Record schedule interface



Step 1 Select a channel. Step 2 Enable the record, then enable record audio. Step 3 Enable ANR, when the IP cameras support the ANR, if the cameras are disconnected to NVR, the NVR can copy the loss video recording from SD card installed in cameras. Set the record schedule, you can drag the mouse to choose area, click to choose all day or all week, you can Step 4 also click one by one to set the schedule. Or dray the mouse cursor to choose. User can set the alarm recording to save the space of disk. Refresh Step 5 Click to return the previous settings. Step 6 Click to choose other camera to copy settings. Click Apply to save the settings. to choose other cameras to copy settings. Click "Apply" to save the settings. Click"copy" step 7 Apply Copy

9.2.2 Disk

Step 1 On the System Setting screen, choose Record > Disk to access the disk interface, as shown in Figure 9-17



Figure 9-17 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 Choose the disk group from drop-down list, there are four disk group.
- Step 5 Enable the recording overwrite, set the expired time. (If the expired time is 0, it means the disk is full, then the recording will be rewrite. It the expired time is 5 days, the recording video will be rewrite when is to five days.)
- Step 6 If the recording overwrite is disable, user need to set the expired time, it is up to 90 days.



9.2.3 RAID (Only for Some Models)

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.

►NORDEN®	€	Q	Ē	C]	[51]	ø				٠	۵	G+ (8
🛒 Channel													
Record	R	AID											
Record Schedule													
Disk		ID	RAID Na	ime	Capacity	Status	Туре	HDD Members	Operate				
Storage Mode													
RAID													
S.M.A.R.T													
Cloud Storage													
Disk Calculation													
FTP:													
🚊 Alarm													
S Network									Create				
🗿 System													

Operation Steps

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

Create RAID				2	X
RAID Type		RAID 5 🔫			
	Name	Capacity	Hotsp	are Disk	
	Disk1	2TB			
	Disk2	6TB			
	Disk3	6ТВ			
	Disk4	ЗТВ			
	Disk5	2TB		•	
	Disk6	2TB			
	Disk7	1TB			
	Disk8	2TB			
			ок	Cancel	

Figure 9-18 Create 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.





RA	ID-md0							×
	RAID Name		RAID-md0		Туре	RAID 5		
	Capacity		6TB		Members	Disk1,2,3,4,5		
	ID	Name	Capacity	Status	Туре	Hotspare Disk	Operate	
		Disk1	2TB	Active	RAID 5			
		Disk2		Active	RAID 5			
		Disk3		Active	RAID 5			
		Disk4		Active	RAID 5			
		Disk5		Spare	RAID 5	Yes	ŵ	
		Disk6			HDD			
		Disk7			HDD		+	
		Disk8			HDD			

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 Figure 9-20

►NORDEN®	Ð	Q		ei) 🔄	¢						٠	د پ	۵ ا	ه ه د	ه ک (G	▲ 스 G-	د ا	ه ۵ G	ه ۵ G	ه ۵ G	ه ۵ G	د ا	ه ۵ G	♠ 占 G•	هد ا	هد ا	▲ 스 [G-	هد ا ا	♠ 스 [G-	▲ 스 ঢ	هد ا	♠ 스 [G-	▲ 스 (G- (♠ 스 [G-
💻 Channel																																		
Record			1000																															
Record Schedule		5.M.A.R.I	WDDA																															
Disk		Disk	Disk4 -																															
Storage Mode		Disk SN	WD-WX52D32	D564D		Disk	Model	WDC WD	40EFZX-68AWUN0																									
RAID		Temper	ature 29°C			Work	ing Time	6.0 Hour																										
		Disk He	alth GOOD																															
Cloud Storage																																		
Disk Calculation		ID	Attribute Name	Status	Value	Worst	Threshold	Туре	Raw Value																									
			raw-read-error-rate	ок	100	253		prefail	0x000000000000																									
a Alarm			spin-up-time	ОК	100	253		prefail	0x00000000000																									
) Network			start-stop-count	ок	100	100		old-age	0x020000000000																									
System			reallocated-sector-count	ок	200	200	140	prefail	0x00000000000																									
			seek-error-rate	ок	100	253		old-age	0x000000000000																									
			power-on-hours	ок	100	100		old-age	0x060000000000																									
			spin-retry-count	ок	100	253		old-age	0x00000000000																									

Figure 9-20 S.M.A.R.T

The disk of Western Digital can be viewed by WDDA, as shown in Figure 9-21



	۲	€	Q	÷	C]	[=]	¢			
👮 Channel										
Record				14/0004						
Record Schedule Disk Storage Mode RAID SMART Cloud Storage			S.M.A.R.T Disk Disk Warr	SN	Disk4 WD-WX52 0	* 2D32D564D		Disk Model Advisory	WDC WD40El	FZX-68AWUN0
Disk Calculation			D	Attribute	Name				Status	Raw Value
				Lifetime	Power On R	eset Allert			Normal	1.00
Alarm				Power O	n Hours Aler				Normal	6.00
S Network				Head Lo	ad Lifetime (ount Alert			Normal	2.00
O System				Current	Temperature	Alert			Normal	29.00
				Total Life	time Worklo	ad Alert			Normal	0.03
				Total Wo	rkload Rate	Mert			Normal	39.73
				Power O	n Reset Rate	Alert			Normal	0.17

Figure 9-21 WDDA (Supplied for Some Models)

9.2.5 Disk Calculation

There are two modes to calculate the captivity of disk, as



shown in.

Figure 9-22 Disk calculation

►NORDEN®	Ð	Q	÷::	C:	[5]]	ø	8			٠	۵	G	G
🛒 Channel													
Record		isk Calcul	ation										
Record Schedule Disk Storage Mode RAID S.M.A.R.T Cloud Storage Disk Calculation	v	Ci Ci Ei Ri	urrently total c alculation Mod quect to save t ecording time te required dis	amera(s) b. te time per day ik space	. 17 30 Mbp Computin 0	is 1 • Day	• •• 24						
FTP Alarm S Network System													

9.2.6 Storage Mode

User is based on need to distribute the channels to different disk group, and use disk capacity reasonably.



Figure 9-23 Storage Mode

Storage N	lode										
	Mode Selection	0	Gro	up							
	Disk Group										
	Channel	1	2	3	4	5	6	7	8		
		9	10	11	12	13	-14	15	16		
											Apply
Group	Disk		Char	nnel					Used Space	Capacity	
	Disk1		1-1	16					985GB	1000GB	
	Disk2		17-	32					733GB	4.0TB	
	Disk3		33-	48					753GB	4.0TB	
	Disk4		49-	64					2.9TB	3.0TB	

Operation Steps

- Step 1 Choose the disk group.
- Step 2 Select the channel to record to disk group.
- Step 3 Click Apply to save the settings.
- Step 4 The group list will show the detail information.

9.2.7 Cloud Storage (Only for Some Models)

User copy the authorization code path to browser to enter Google Drive interface. Google send the code, and user input the code to authority NVR, so the device can set the alarm recording to Google drive.

Cloud Storage	
Enable	
Cloud Type	Google Drive 🔻
Certification Status	Authentication failed
Authorization code path	https://accounts.google.com/o/oau
Authorization code	Send 9:57

Figure 9-24 Cloud Storage



User should enable the alarm of cloud storage at first so that the Google drive can receive the recoding. Cloud storage can only be set at motion detection and intelligent analysis interface.

9.3 Alarm

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

9.3.1.1 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 and buzzer duration time, as shown in Figure 9-25

Figure 9-25 General interface

		Genera	al 						
			Enable Alarm Duration Time Buzzer duration time	10s 30s	•				
								Refresh	Apply
Step 3	Click	Apply	to save settings. C	Click	Refre	esh	to return to the previou	us settings	

9.3.1.2 IO Control Push

Procedure

- Step 1 On the **System Setting** screen, choose **Alarm > General > IO Control Push** to access the general interface.
- Step 2 Enable the IO control push, as shown in Figure 9-26



 Channel Record Alarm 	General	IO Control Push		
General Motion Detection Camera Tamper Video Loss		Enable Alarm In Mode	T · · NO ·	
Intelligent Analysis Alarm In Abnormal Alarm Alarm Out		Disabled Items Push message to APP Email		
Network System				Refresh Apply

Figure 9-26 IO control push interface

- Step 3 Choose one alarm in and mode (N/C, N/O).
- Step 4 Tick the disable items, click "Apply" to save setting.

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 9-27

Motion Detection	
Channel	[1]Channel01 -
Enable	
Event Acti 🔛 Area	1 Schedule
Buzzer	
Push message to APP	
Pop up message to monitor	
Full Screen	
Email	
Cloud Storage	
Alarm Out	
Alarm Time(s)(0:Continuous)	
Output ID	
Channel Alarm Out	
Alarm Record	
	Copy Apply

Figure 9-27 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, push message to APP, pop-up message to monitor, full screen, Email, cloud storage, alarm out (the back panel), channel alarm out (the port of cameras), and alarm record.
- Step 5 Click Area to access the motion detection area setting, as shown in .



Figure 9-28 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. Copy

Step 7 Click

to choose other camera to copy settings. Click Apply

to save the settings.

9.3.3 Video Loss

Procedure

On the System Setting screen, choose Alarm > Video Loss to access the video loss interface, as shown in Figure Step 1 9-29



🛒 Channel		
Record	Video Loss	
🙍 Alarm		
General	Channel [1]Chan *	
Motion Detection	Enable C	
Video Loss Intelligent Analysis	GEvent Act. 🌐 Schedule	
Alarm In	Buzzer	
Abnormal Alarm <	Alarm Out 🛛 🦲	
S Network	Push message to APP	
O System	Pop up message to monitor 🛑	
🖵 Local	Email	
	Alarm Record	
	Copy Apply	

Figure 9-29 Video loss interface

Step 2 Click drop-down list to choose channel.

- Step 3 Enable the video loss alarm.
- Step 4 Set eve<u>nt activity and schedule please refer to Figure 5-1</u> motion detection settings.
- Step 5ClickCopyto choose other camera to copy settings. ClickApplyto save the settings.

9.3.4 Advanced Intelligent Analysis (Only for Some Models)

Procedure

Please refer to chapter 7.4.1 video loss settings, interface displayed as shown in Figure 9-30

Perimeter Single Virtual Fence Double Virtual Fences Object Left Signal Bad Advanced Channel • E Schedule Buzzer . Push message to APP . Pop up message to monitor • Full Screen • Email • • Cloud Storage Alarm Out Output ID Channel Alarm Out • Alarm Record •

Figure 9-30 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 9-31

Alarm In		
Alarm In		[1]Alam In 🛛 -
Enable		
Alarm Type		N/O +
Name		Sensor 1
Event Acti	Schedule	
Buzzer		
Push message	to APP	
Pop up messag	ge to monitor	
Email		
Alarm Out		
Alarm Time(s)(0:Continuous)	
Output ID		
Alarm Record		
		Apply

Figure 9-31 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 save settings.

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 9-32



Abnormal Alarm	
Enable	
	, · · · · · · · · · · · · · · · · · · ·
Event Acti	
Buzzer	
Push message to APP	
Pop up message to monitor	
Email	
Alarm Out	
Alarm Time(s)(0:Continuous) 0	
Output ID 1 2 3 4	
	Refresh Apply

Figure 9-32 Abnormal alarm interface

- Step 2 Enable the button, tick alarm type.
- Step 3 Set name, default is Sensor 1.
- Step 4 Set event activity and schedule please refer to motion detection settings.
- Step 5 Click Apply to save settings.

9.3.7 Alarm out

Set the alarm out, the camera alarm out.

Figure 9-33 Alarm out

and the second							
Channel							
Record							
🚊 Alarm	Alarm Out	Camera Alarm Out					
General Motion Detection		Alarm Out Name	[1]Alarm Out -				
Video Loss Intelligent Analysis Alarm In		Valid signal Alarm Output Mode	Close - Switch Mode -				
Abnormal Alarm Alarm Out					Refresh	Apply	
S Network							
System							



Figure 9-34 Camera alarm out

Alarm Out	Camera Alarm Out				
	Channel	[1]Channel01			
	Output ID				
	Name				
	Valid signal	Close			
	Alarm Output Mode	Switch Mode			
	Alarm Time(ms)(0:Continuous)				
				Refresh	Appi

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 9-35

IP PC	ORT				
	Network Card Name DHCP IP Address Subnet Mask Default Gateway	Network Ca * 192.168.32.163 255.255.255.0 192.168.0.1			
	Obtain DNS Automatically Preferred DNS Server Altenate DNS Server	144.144.144 192.168.1.1			
				Refresh	Apply

Figure 9-35 Network interface

Step 2 Choose network card from the drop-down list. Network card I is LAN1, network card II is LAN2, as shown in Figure 9-36



Figure 9-36 Network card II

IP PORT		
Network Card Name	Network Ca 💌	
IP Address	192.168.10.253	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.10.254	
		Refresh Apply

- Step 3 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 4
 Click
 Image: matching the state of the st
- Step 5 Set PORT and POE manually, input the information about these.
- Step 6ClickRefreshto restore previous settings. ClickApplyto save the settings.

9.4.2 DDNS

Step 1 Click **DDNS** in the network interface, choose **Network > DDNS** to access the DDNS interface as shown in Figure 9-37

Figure 9-37 DDNS interface

🛒 Channel		
Record	DDNS	
🚊 Alarm		
S Network	Enable C	
Network	Protocol no_jp *	
	Domain Name dvr.ddns.net	
Email	User	
Port Mapping	Password	
P2P	Test	
IP Filter		
802_1X	Refresh Apply	
SNMP		
Web Mode		
System		
G Local		


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

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

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 9-38

Apply

to save the settings.

- Email SMTP Server 0 SMTP Server Port Port Mapping Email Sender Email for password rec IP Filter Narm Receiver 1 802 11 n Receiver 2 SNMP Web Mode SSL Encryption Syste Test Local Apply
- Figure 9-38 E-mail interface

- Step 2 Set SMTP server and SMTP server port manually.
- $Step 3 \quad Set \, sender \, E\text{-mail}, user \, name \, and \, password \, manually.$
- Step 4 Set E-mail for receive alarm the message.
- Step 5 Set E-mail for retrieve the password the message.
- $Step \, 6 \quad Click\, \underline{SSL\, Encryption\, drop-down\, list\, to\, enable\, safeguard\, of\, email.}$
- Step 7 Click Refresh to restore previous settings. Click Apply

to save the settings.



9.4.4 Port Mapping

9.4.4.1 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 9-39

►NORDEN®	🗩 Q 🖽 🖪	ei: 🌣	ا ک ک	G • G ∂
L Channel				
Record				
Alarm	Port mapping NAT Port			
S Network	Enable Port Mapping			
Network	Mode	Auto -		
DDNS	HTTP Port			
Email	HTTPS Port			
Port Mapping	RTSP Port			
P2P	Control Port			
IP Filter				
802.1X			Refresh Apply	
SNMP				
Web Mode				
3G/4G				
PPPOE				
Platform Access				

Figure 9-39 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 4ClickRefreshto restore previous settings. ClickApplyto save the settings.

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

9.4.4.2 NAT port

NAT (Network Address Translation), user can browse the web of camera by NAT port. There are five port can be assigned to each camera. Input the start port, the system will compute the end port automatically.



Figure 9-40 NAT port

Channel				
Record				
🚊 Alarm	Port Mapping	NAT Port		
S Network	s	lart Port	50002	
Network		nd Port		
DDNS				
Email		ort range [40001-65534]		
Port Mapping				Defeat
P2P				Reffesh
IP Filter				
802.1X				
SNMP				
Web Mode				
3G/4G				
PPPOE				
System				

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 9-41

P2P		
Enable	-	
Status	Offline	
	B011003ADKT7B194K	
App Name	InView Pro 4	
- It is available on App Store and Google Pla	iy.	Refresh Apply

Figure 9-41 P2P interface

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

Step 3ClickRefreshto restore previous settings. ClickApplyto save the settings. Step 4 After the Inview Pro 4 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.



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 9-42

Figure 9-42 IP filter interface

IP Filter					
	IP Filter		(•	
	Rule Type			Black List 👻	
	Black List(Follow	ing network segments are forbidden)		+ -	
		Start IP	End IP	Edit	
				Refresh	Apply

- Step 2 Click **Enable** to enable the IP filter function.
- $Step \ 3 \quad Click \ drop-down \ list of \ rule \ type \ to \ choose \ black \ list \ or \ white \ list.$
 - Click 🕂 , view the pop-up windows to set black list or white list, as shown in 7.5.4
 - Click to delete the list.

Step 4

Figure 9-43 Black or white list interface

Add Ip Segment		×
Start IP		
End IP		
	Cancel	ОК



 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.

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.

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 9-44



Figure 9-44 802.1X interface

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 9-45



Figure 9-4	5 SNMP	interface
------------	--------	-----------

SNMP				
SNMPV1	-			
SNMPV2C				
Write Community	b			
Read Community	a			
Tran Address	192 168 32 79			
Trap Port	102.100.02.70			
Trap Community	10222			
	C			
SNMPV3				
Read Security Name a				
Security Level	viv. 👻			
Auth Algorithm	MD5 -			
Auth Password	•••••			
Encry Algorithm	AES 🔻			
Encry Password	•••••	hat		
Write Security Name b				
Security Level	+ virc			
Auth Algorithm	SHA 🔫			
Auth Password				
Encry Algorithm	AES +			
Encry Password				
			Refresh	Apply

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 SIMP 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.			
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.			

Table 9-1 SNMP parameters



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.

9.4.9 Web Mode

Step 1 Click **Web Mode** in the network interface, Web mode interface is displayed, as shown in Figure 9-46

Figure 9-46 Web mode interface

🛒 Channel	
Record	Web Mode
🚊 Alarm	
S Network	нттря
Network	Modifying the settings device will restart! Refresh Apply
DDNS	
Email	
Port Mapping	
P2P	
IP Filter	
802.1X	
SNMP	
Web Mode	
O System	
G Local	



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.

Apply to save the settings.

9.4.10 3G/4G

	Figure 9-47 Web 3G/4G		
3G/4G			
Enable			
Status	Disconnected		
Access Mode			
APN			
Dial Number			
Username			
Password			
IP Address			
		Refresh Appl	у

- Step 1 The user plugs the modem to NVR.
- Step 2 Enable the 3G/4G.
- Step 3 When the status is connected, user can set the access mode, AUTO is recommended.
- Step 4 If choose other access mode, user should input the parameter correctly.
- Step 5 Click Refresh to restore previous settings. Click

----End

9.4.11 PPPoE

User can use PPPOE function to manage the NVR conveniently.



Figure 9-48 PPPoE

PPPOE		
Enable	-	
Username		
Password		
IP Address		
		Refresh Apply

- Step 1 Enable the PPPoE.
- Step 2 Input the username and password.
- Step 3 The IP address is obtained automatically.
- Step 4
 Click
 Refresh
 to restore previous settings. Click
 Apply
 to save the settings.
- Step 5 User use the IP address to access NVR immediately.

9.4.12 PoE Status (Only for Some Models)

User can view the POE status at this interface, as shown in Figure 9-49.

►NORDEN®	€	Q Ø			
🛒 Channel					
Record					
🚊 Alarm		POE Status			
S Network					
Network DONS Email Port Mapping P2P IP Filtor 802 IX SNMP Web Mode 3G/4G PPPOE POCE Status		POE Power Con	Router Connected Disconnected Powering Connecting sumption Sum: 1.6W / Ma	00W 00W 10W 00W	
O System					

Figure 9-48 PPPoE



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 9-50.

System Network Channel Disl	< Alarm
Device ID	B011003AEKE754Z8N
Device Name	Device
Device Type	NVR
Model	ENR-02016-N-SPK
Firmware Version	v3.6.0825.1004.175.0.30.2.3
U-boot Version	150401072130
Kernel Version	150316053827
HDD Number	
Channels Supported	
Alarm In	
Alarm Out	
Audio In	
Audio Out	

Figure 9-50 Device information interface

 $Step 2 \quad Set the device name according to \ Table 9-2$

Table 9-2Device 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]
Model		modified.
Firmware version		
HDD volume		
Channel support		



Parameter	Description	Setting
Alarm in		
Alarm out		
Audio in		
Audio out		

Figure 9-51 Network

System Network Channel Disk Alarm	
Status	Online
IP Address	192 168.0 51
Subnet Mask	255 255 0 0
Default Gateway	192.168.0.1
MAC Address	00.1E:A4:00:42:85
DHCP	
Preferred DNS Server	192.168.0.1
Alternate DNS Server	8.8.8
Total Bandwidth	100 00 Mbps

Figure 9-52 Channel

stem Net	work Channel	Disk Alarm			
Channel	Name	Status	Video Format	Resolution	Bitrate(kbps)
CH1	Device	Offline	H265/H265	2560*1440/704*576	4096/1024
CH2	Channel12	Online	H265/H265	1920*1080/704*480	4096/1024
СНЗ	Channel29	Online	H265/H265	1920*1080/704*576	4096/1024
CH4	Device	Online	H264/H264	1920*1080/704*576	2048/1024

Figure 9-53 Disk

System	Network	Channel	Disk	Alarm		
Disk	Capacity	Used		SN	Disk Model	Status
Disk1	218	901GB		WD-WXE1A791JKF4	WDC WD21PSRX-89AH1	Normal



Figure 9-54 Alarm

System	Network	Channel	Disk	Alarm			
	Channel			Name	Mode	Enable	Recording Channel
	Local<-1			Sensor 1	N/O		
	Local<-2			Sensor 2	N/O		
	Local<-3			Sensor 3	N/O		
	Local<-4			Sensor 4	N/O		
	Local->1				Close		

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 9-55

Figure	9-55	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.

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



Figure 9-56 System interface

E Channel						
Record	Svetem D	ate And Time	Time Zone	nst		
🚊 Alam				201		
S Network	Dev	ice Name	Device			
O System	Outp	out Resolution	1920x1080 -			
Information	Lang	juage				
					Refr	ish Apply
User						
Password						
Logs						
Maintenance						
Auto Restart						
🖵 Local						

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 .
- 6.Click NTP Sync button to disable synchronize time.
- 7.Async date and time interface

Figure 9-57 Date and time

Channel			
Record			
🚊 Alarm	System Date And Time Time Zone	DST Sync Camera Time	
S Network	Data Cormat	DDBBI/VV bhomese a	
System	Time Format	24H *	
Information General User Account Security Center Logs	Enable NTP NTP Server Sync Time Frequency (sec) Time	* me windows.com * 664005 * 17/05/02/102-47/07	
Maintenance Auto Reboot			Refresh Apply

Step 4 Set the time zone.

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

1.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 9-58 Time zone setting interface



Figure 9-58 Time zone

🛒 Channel							
Record							
🚊 Alarm	System	Date And Time	Time Zone		Sync Camera Time		
S Network		Timo Zona		(GMT)	-5 30) Nadras, Mumbai, New Delbi v		
System							
Information						Refresh	
Conoral							
User Account							
Security Center							
Logs							
Maintenance							
Auto Reboot							

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 9-59. The button is disable by default.

Figure 9-59 DST setting interface

🛒 Channel											
Record											
🚊 Alam	System Date And Time Time	Zone C	DST	Sync C	nera Time						
S Network	Enable Devlicits Saving Tirr	-									
System	Shart Time	av Maria		1	(See						
Information	Stat Time	mar		Lastone	Sun						
General	End time			Lastone	Sun						
User Account	Unset Time	1 Hour									
Security Center								Refre	sh	Apph	
Logs											
Maintenance											
Auto Reboot											

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.



🛒 Channel							
Record							
🚊 Alarm	System	Date And Time	Time Zone	DST	Sync Camera Time		
S Network		Sunc Camora Tim		-			
System		Fromonou of Chor	r der Minimum 10e	2000-			
Information		Prequency of Crie	AS. MILIIIIUII 105	30005			
						Refresh	Apply
User							
Security Center							
Logs							
Maintenance							
Auto Restart							



Enable sync camera time, the cameras of NVR management will be showing the same time. Set the frequency of checks (minimum 10s).

Step 7 Click Apply to save the DST setting. Click Refresh to return to previous setting.

9.5.3 User Account

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 9-61



Figure 9-61 User interface

Step 2 Click Add to add a new user, as shown in Figure 9-62

Figure 9-62 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 Enable the expire date to set the new user's authority time.
- Step 7 Select channels to manage.
- Step 8 Click OK , the message "Add success" is showed. If the password is not meet the rule, it would show





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 9-63



🛒 Channel								
Record								
🚊 Alarm	Us	er Adv.Setting	Phone Number Allo	wed				
S Network		Enable D	ouble Authentication	-				
System								
Information						Re	Iresh	Apply
General								
User Account								
Security Center								
Logs								
Maintenance								
Auto Reboot								

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.

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9.5.3.3 App Verification

Add the digital number to white list, when the user login the cellphone App to manage the NVR, it must be input one series number in the white list to test and verify to keep the security.

Channel				
		•		
			×	
		Phone Number		
		Remark(optional)		
			Cancel	

Figure 9-64 Phone Number Allowed

9.5.4 Security Center

9.5.4.1 Password

Procedure

Step 1 On the **System Setting** screen, choose **System > Security Center** to access password interface, as shown in Figure 9-65

	Password	Secure Email Se	ecure Question	
		Old Password	ب	
		New Password	Θ	
		Confirm Password		
				Refresh Apply
Step 2 Step 3	Input old password, ne Click Apply to s	w password an save settings.	nd confirm password. Click Refresh to return	to previous setting.
	DTE			
	Valid password range [6-3	32] characters.		

Figure 9-65 Password interface



 $Only special characters are support ! @#&*+=-%&''`(),/'.:;<>?^|~[]{}.$

9.5.4.2 Secure Email

The secure email can receive the verification code of NVR, if user forgot the password accidentally.

Password Secure Email	Secure Question
Password	
E-mail	
	Refresh Apply

9.5.4.3 Secure Question

User can modify the password to login the NVR if user forgot the password and answer correctly the secure questions.

Password Secure Email	Secure Question
Password	and a second
Question one	The brand and model of your favorite car *
Question one answ	er
Question two	Your favorite team 🔹
Question two answ	er
Question three	Your favorite city *
Question three ans	wer and the second s
- Please enter at least 1 characters for - Please enter up to 32 characters for	he answer Refresh Apply



9.5.5 Logs

9.5.5.1 Logs

Procedure

Step 1 On the System Setting screen, choose System >Logs to access logs interface, as shown in Figure 9-66

Channel					
Record					
Alarm	Logs Eve				
Notwork					
	Start	8/09/2020 06 18 21 End 09/09/2020 06 1	8.21 Type Operat	ion Log 🔹	Search Export
System					
formation		Start Time	Channel	Log Type	Information
eneral		09/09/2020 05 25:27	Channel12	Online	[admin] 127.0.0.1 001c27110d22
ser		09/09/2020 05:24:48	Channel11	Online	[admin] 127.0.0.1 001c271207bf
curity Contar		09/09/2020 05:18:53	Channel12	Online	[admin] 127.0.0.1 001c27110d22
<		09/09/2020 05:18:53	Channel11	Online	[admin] 127.0.0.1 001c271207bf
Alba		09/09/2020 05:05:23	Channel12	Online	[admin] 127.0.0.1 001c27110d22
aintenance		09/09/2020 05:03:37	Channel12	Online	[admin] 127.0.0.1 001c27110d22
uto Restart		09/09/2020 05 03 35	Channel11	Online	[admin] 127.0.0.1 001c271207bf
		09/09/2020 05 02:02	Channel11	Online	[admin] 127.0.0.1 001c271207bf
		09/09/2020 05:02:01	Channel12	Online	[admin] 127.0.0.1 001c27110d22
		09/09/2020 05:02:00	Channel19	Onlino	[admin] 127.0.0.1 001c270e46aa
		09/09/2020 04:58:16	Channel10	Online	[admin] 127.0.0.1 001c27fff333
		09/09/2020 04:40:06	Channel12	Onlino	[admin] 127.0.0.1 001c27110d22
		00/00/2020 04:20:23		Longit	ladmin] 192 168 0 254 Innout

Figure 9-66 System log 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.

9.5.5.2 Event

Procedure

Step 1 On the **System Setting** screen, choose **System** > Logs > Event to access logs interface, as shown in Figure 9-67



Channel					
Record					
Alarm	System Log Event	Log			
Network					
System	Start 16/05/2021 0	13 10 33 End 17/05/2021 03 10 33 Ty	pe All •	All • Sei	arch Export
- Cylann					
Information		Start Time	Channel	Log Type	Information
General			Channel04	Video Loss	Device
Jser Account			Channel01	Perimeter	Device
Security Center			Channel01	Perimeter	Device
			Channel01	Perimeter	
laintenance			Channel01	Perimeter	Device
uto Rehort			Channel02	Motion Detection	Channel12
			Channel01	Video Loss	Device
			Channel01	Perimeter	
			Channel01	Perimeter	Device
			Channel01	Perimeter	Device
			Channel01	Perimeter	Device
			Channel01	Perimeter	Device
			Channel01	Perimeter	Device
			Channel01	Perimeter	Device
	1 1 13	>>I			Every page show

Figure 9-67 Event log interface

- Step 2 Set start and end time from calendar.
- Step 3 Select event type from drop-down list.
- Step 4 Click **Search** to acquire log information.
- Step 5 Click **Export** to export the event logs.

9.5.6 Maintenance

Procedure

Step 1 On the **System Setting** screen, choose **System >Maintenance** to access maintenance interface, as shown in Figure 9-68

Figure 9-68 Maintenance interface

	Maintenance			
		ê 🗍	<u>0</u>	
	Reboot	Update	Reset	Cloud Update
Step 2	Click Reboot , the pop-up message	would show	you, click	OK to reboot.
Step 3	Click Update , the message shows	Update Please close the window af	Please select upgrade	,choose software from specific location to update.
Step 4	Click Reset , the pop-up message	Click 'OK' to OK	o reset 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.



9.5.7 Auto Reboot

Procedure

Step 1 On the **System Setting** screen, choose **System > Auto Reboot** to access auto restart enable the auto restart, the screen as shown in Figure 9-69

🛒 Channel		
Record		
🚊 Alarm	Auto Reboot	
S Network	Enable Auto Reboot	
O System	Reboot Time Per Day • 0.00 •	
Information		Defrech Apply
General		Kellesi 24949
User Account		
Security Center		
Maintenance		

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 (Supplied for IE Browser)

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

This function is only used for IE browser.

Procedure

Step 1 Click Local Download Config in local interface, as shown in Fig 9-70.



E Channel						
Record	Download C	Config				
🚊 Alarm						
S Network		age download path	C:\Users\Public\Docur	Browse		
O System		leo download path	C:\Users\Public\Docur			
G Local					Refresh	Apply
Download Centig						
<						



 $Step 2 \quad Enter the image download path.$

Step 3 Enter the record download path.

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

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.

Part Number	HDD Brand	HDD model	Capacity
		WD30EJRX-89G3VY0	3T
		WD10EJRX-89N74Y0	1T
		WD40PURX-64GVNY0	4T
	WD	WD20EURS-63S48Y0	2T
		WD20EJRX-89AKWYO	2T
		WD30EURS-63SPKY0	3T
ENR-01004-N-FK ENR-01008-N-FK		WD5000AAKK-001CA0	0.5T
ENR-01004-N-FPK ENR-01008-N-EPK		WD10EZEX-00BN5A0	1T
ENR-02008-N-EPK ENR-02016-N-EK		WD40EJRX-89T1XY0	4T
ENR-02016-N-SPK		WD30PURX-64P6ZY0	3Т
ENR-02032-N-FK ENR-02032-N-SPK		WD60PURX-64WYOY1	6T
ENR-01004-N-PPK ENR-04032-N-FRK		WD82EJRX-89AD9Y0	8T
ENR-04032-N-SPK		WD121EJRX-89S5UY0	12T
ENR-04032-N-GK	WD41PSRX	WD41PSRX	4T/6T/2T/1T
ENR-08032-N-FRK ENR-08064-N-FRK	Seagate	ST2000VX000	2T
		ST2000VX008	2T
		ST4000VX000	4T
		ST3000VX000	3T
		ST4000VX007	4T
		ST3000VX010	4T



		ST31000528AS	1T
		ST6000VX0001	6Т
		ST3000VX010	ЗТ
		ST8000VX0002	8T
		ST6000VN0011	6Т
	Toshiba	DT01ABA100V	1T
ENR-02008-N-EPK ENR-02016-N-SPK ENR-02032-N-SPK ENR-04032-N-SPK ENR-04032-N-GPK	WD	WD121EJRX-89S5UY0	12T
		SC Ha710	12T

**Only 4/8 Bay HDD NVR support RAID

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)