Shenzhen Wardmay Technology Co., Ltd
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Wardmay®

NVR4.0 USER MANUAL

--- HD NVR

Thank you for purchasing our products, if you have any questions or requirements, please feel free to contact us.

We will update the contents of user manual based on product function add or change, which will be issued in new version without prior notice. The user manual only provides guidance for users. Images, chart and other attachment used in this document are only used to illustrate the feathers and usage.

The user manual is applicable to HD NVR below:

Model	Name
WDM-TSNVR8804C3/POE	POE NVR
WDM-TSNVR8808C/POE	POE NVR
WDM-TSNVR8816C/POE	POE NVR
WDM-TSNVR8808D4	NVR
WDM-TSNVR8816D4	NVR
WDM-TSNVR8832C3	NVR
WDM-TSNVR8836M	NVR
WDM-TSNVR8836H	NVR

Catalogue

1. Product Overview

1.1. Introduction

NVR4.0 series are the latest professional monitoring storage devices which have been developed and launched by our company, adopting Hisilicon video processing chipset,integrating excellent video encoder video codec algorithm .NVR4.0 series products own four features that are stability,ease of use, intelligence and perfection. Our NVRs use H.264, H.265, H.265+ compression algorithm which support ultralow code rate and super-long cable access and embedded Linux real time operation system,support ONVIF protocal,achieve IPC'S auto search,preview and recording without commissioning; APP one second connection to show picture,let our customer enjoy more perfect experience.

1.2. Features

- **Real time monitoring**
  - VGA/HDMI output simultaneously
  - Electronic Zoom in
  - Screen layout optional
  - Auto search, add, preview and recording.
  - Fast drag to adjust channel sequence
  - All channel 1080P/4K decode

- APP connect and display picture immediately
- Private protocol to access ultralow code rate, super-long cable IPC
- Preview and rotation

◆ **Compression Storage**

- Adopt H.264+, H.265+ video compression technology with lower compressed code
- Snapshot
- USB/Mobile HDD backup
- support different recording strategies including overlay-write and stoping recording.
- Multi-channel Video backup at the same time
- NVR displays the remaining days to record in DiskMange interface.

◆ **Recording Playback**

- real-time video recording, motion detection video recording, I/O alarm recording and intelligent analysis recording.
- Video search
- Remote access and video replay through Seetong App and Seetong client
- Smart playback
- Rewind 30s and fast forward 30s

◆ **Alarm Function**

- Motion detection alarm
- Video Loss alarm
- IPC I/O alarm
- Intelligent Analysis alarm
- Defence Time configuration
- Alarm video recording
- Send alarm email and attachment
- Flashing when alarm event is triggered
- Snapshot when alarm event is triggered
- Push to Seetong App when alarm event is triggered

◆ **Remote configuration Function**

- time synchronization between IPC and NVR
- NVR configure IPC encoding parameter, video capture parameter and audio setting
- NVR configure IPC channel OSD.

◆ **Network Function**

- Adopt device function to remote control without complex setting,achieve network transmition easily
- IP address modify and DHCP

- Choose Seetong's client/mobile APP system for remote control
- Real-time monitoring using Seetong client or Seetong app / remote PTZ control
- Different users can access to NVR at the same time
- Flexible IP address
- Cloud password settings
- IP self-adapt when conflict happens
- Network condition analysis support
- Multiple IP address setting support
- NVR web access support
- Connect to other video surveillance platform with GB28181 protocol

◆ **User Management**

- Customizable local user /network user permission
- HDD abnormal loss alarm
- NVR operation log recording, search and export
- Timing reboot and automatic maintenance
- Support at most 38 users
- Log into Seetong APP using different accounts with special permissions

- Account password get back when lost
- Account password Pattern unlock support

◆ **Other functions**

- Boot wizard
- 8-channel-NVR/16-channel-NVR /32-channel-NVR/36-channel-NVR provide USB mouse reuse feature.
- Different ways of upgrading, including U-disk,Seetong client, Seetong app and self-upgrade.
- U-disk recovery in case that your NVR work abnormally.
- Replace boot logo, background logo, shutdown logo and also expand NVR channels using our logo-replace tool.
- 32-channel-NVR and 36-channel-NVR as well as our H.265 series also support audio
- Multi-language version switch
- Project-Engineering Mode support
- Audio listen through Seetong client and Seetong app
- Modify IP address of ONVIF device, IPC devices upgrade locally and also a batch of IP modification to a series of IPC devices.
- Watch dog and auto reboot after power off and sudden failure
- Display current device capacity of how many device you can add into NVR.
- Switch resolution of NVR to the the lowest when you keep pressing the right-mouse for more than 10 seconds.
- Adjust the UI background color.

2. Operation Instructions

2.1. Mouse operation Instructions

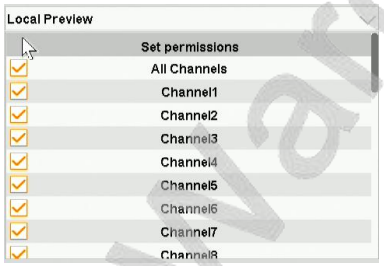
Mouse key	Action	Function	Example
Left Key	Click	Select	1.Select a preview window,playback window and picture 2.Select a button,edit box,combobox, check box
	Double click	Zoom in/out	1.Switch different screen layout during preview 2. Double click on the video recording bar to start video replay
	Drag	Adjust channel distribution, Dialog window position adjust	1.Exchange two channels 2.Drag dialog window to another position
	Keep pressing	Input or delete series of characters	1.Keep pressing on ‘ ← ’ button in a keyboard, you can delete a series of characters
Middle Key	Roll	Change current view	1.Zoom in playback scale; 2.scroll to view ipc device search list 3.scroll to view screenshot search list;
Right Key	Click	Return or open contextmenu	Single click to close current window
	Press Right mouse button for more than 10s	Set NVR resolution to 1920x1080	Press Right mouse button for more than 10s in any dialog. Resolution will be set to 1024x768

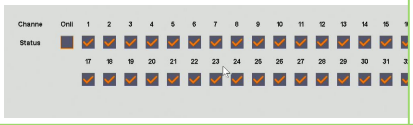
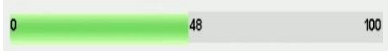
2.2. Input method instruction

Name	Key Instruction	Function instruction
Number	0～9	Input number from 0～9
Character	！ @ # $ % ^ & * ( ) – { } : " | ? ＜＞	Input symbol
English	a～z A～Z	Input English letters
Big/Small		Capital letters/lowercase letters switch
Chinese/English	中	Chinese and English Switch
Delete	←	Delete last character
Page-turning	PageUp/PageDown	Turn to last/next page when current input method is simplified chinese.
Cursor move left/move right	< >	Cursor move left or move right for a character

2.3. Interface Instruction

2.3.1.Interface factor instruction

Widget Type	Icon	Description	Function operation	Example
Button		Button color is set to green as default	Click to open a new dialog window	Wizzard setting, DST setting
		Button turns orange when focused		
Textbox		Common textbox	Used to input characters	Edit channel Name
		Use your mouse wheel to input	Used to input characters	NVR system time setting
Combobox			Click to select an item from a combobox	NVR resolution setting, system language setting
Listbox		A list of items with similar identities	Used to select item in a listbox	NVR Searched devices listbox, NVR Added devices listbox

Radio Button		Current configuration is enabled	Configuration Enable control	Wizzard setting Control
		Current configuration is disabled	Configuration Enable control	Wizzard setting Control
CheckBox			Check one or more items to config	Copy button
Function instruction		A simple description of a configuration		
Slide bar		The number in the middle of the bar represents the current config value	Used to configure an item with the slide bar	Output adjust setting
Config Button			Click to operate in a new window	show preview window control
Page backward/forward		Move your mouse to left or right side of the desktop and your can see the two buttons	Used to switch to the next layout	View layout1
Disabled button		The button can be operated only when the button color is green, or you cannot click on the button		Motiondetection-Zonesetting

2.3.2.Common button introduction

Name	Function	Name	Function
Close	Close user operation window	**Copy**	Copy the channel setting to other channels
Application	Save configuration and put into effect.It won't close current window	**Default**	Set all parameters to default.
Confirm	Save configuration and put into effect. It will close current window	**Check All**	Select all items of current window
Cancel	Cancel just now operation or Close user operation window	**Single check**	Select one item of current window
Details	Explanation to some function	**Activate**	Activate NVR to get online service
Settings	Operation explicit configurations	**More**	Used to list more configurations
Shrink	Used to shrink extra configurations		

2.3.3.Preview window icon instruction

Preview window icon	Instruction	Preview window icon	Instruction
	No record		Recording
	No user remote control		Window remote control
	No motion alarm		Window move alarm

	No I/O alarm detected		IO alarm detected
	No intelligent analysis alarm detected		Intelligent analysis alarm detected
	NVR intercom system closed		NVR intercom system opened
	NVR Broadcast open.		Current channel exceeds NVR's maxium decode capacity

2.4. Menu Instruction

Bottom menu: Audio test(only 32-channel-NVR and 36-channel-NVR support), audio broadcast(only 32-channel-NVR and 36-channel-NVR support), NVR audio switch, snapshot, rotation, zoom in/out, output adjust, PTZ control, system setting, recording plan setting, video replay, system close.

Context menu: IP Camera, System Setting, Playback, Record Setting, Backup, View Layout, Snapshot, IPC Setting, PTZ Control, Photos, Output Adjust, Network detection, Logout

Cloud Status menu: Cloud logging status, Cloud ID and QR code

Special Status menu: Abnormal alarm status, NVR intercom status, Video backup status, NVR I/O alarm status.

2.4.1.Bottom Menu

Move mouse to the bottom of the screen, NVR shows the following menu:

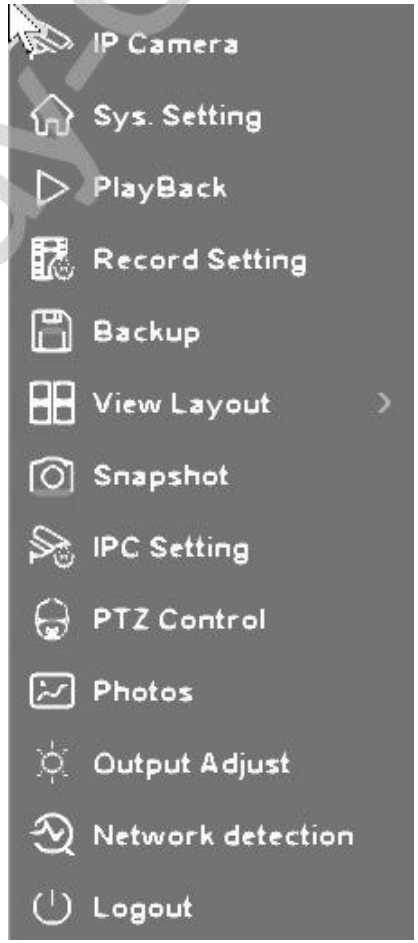
Detailed function list:

Icon	Function Name	Function Description	Remarks
	**Audio test**	Used to simple test NVR audio interface	Only 32-channel-NVR and 36-channel-NVR support
	**Broadcast switch**	Used to broadcast to all connected IPC	
	**Audio on/off**	Used to enable/disable audio	
	**Snapshot**	Used to snapshot on NVR	
	**Rotation**	Used to enable/disable different layout view rotation	

	**Zoom in/out**	Used to amplify some part of the picture	
	**Output adjust**	Used to adjust VGA and HDMI output	
	**PTZ control**	Used to configure PTZ setting	
	**System setting**	Used to configure NVR system setting	
	**Record setting**	Used to configure record plan	
	**Playback**	Used to playback and make backup of the video	
	**Logout**	Used to close or reboot NVR	

2.4.2.Context Menu

Right click on desktop to popup following menu :



2.4.3.Cloud Logging State

Move your mouse to the top of the NVR screen and you'll see the QR code.

2.4.4.Special Status menu

NVR turns into some special status and you'll see this menu which shows current special status, as the following picture shows:

Status menu icon	Function Description	Left click support	The Interface after click
	System abnormal state.This status appears when abnormal incident happened, including IP conflict, Network disconnect, Disk error, Wrong password. It disappears when NVR turns to normal state.	Support	Left click the icon button, the interface shows the explicit abnormal state including IP conflict, Network disconnect, Disk error, Wrong password.

	Audio intercom state. This state appears when you enabled audio intercom state. It disappears when audio intercom disabled.	Support	The icon default state informs that NVR audio intercom enabled and waiting for audio input.NVR has no audio output at the time. After you left click the icon button, The state informs that NVR cannot accept any audio input and audio output is now working.
	Broadcast state. This state appears when you enabled NVR audio broadcast. It disappears when audio broadcast disabled.	Do not support	Used to inform that audio broadcast enabled.
	Video backup state. This state appears when you are making video back-up and hide the interface temporarily. It disappears when video backup ends.	Support	Left click to check current process
	NVR I/O alarm state. This state appears when NVR I/O alarm state triggered. It disappears when there's no I/O alarm after a period	Support	Left click to check NVR I/O alarm information

3. Device Installment

3.1. Installment Attention

As professional monitoring device, when user use our HD NVR, Please read below information before use

1. Device should keep away from moist,high temperature and strong magnetism, please put in well ventilated areas

2. Please use formal normal SATA hard disk.

3. Please confirm equipment ground correction,power supply can't pass operation voltage range of power work and suggest user to use standard power

4. Don't power off during device running, please close our device through system software firstly then outage in case had disk damage

3.2. Hard Disk Installation

Note:switch off power before installation.
Step 1: twist off the sideway sreew of NVR case,take down upper cover plate
Step 2: align screw-socket on HDD and case bottom plate,screw on HDD screw and fix
Step 3: connect hard disk data line to main board and the other to HDD.
Step 4:cover upper cover plate and fix screw

1

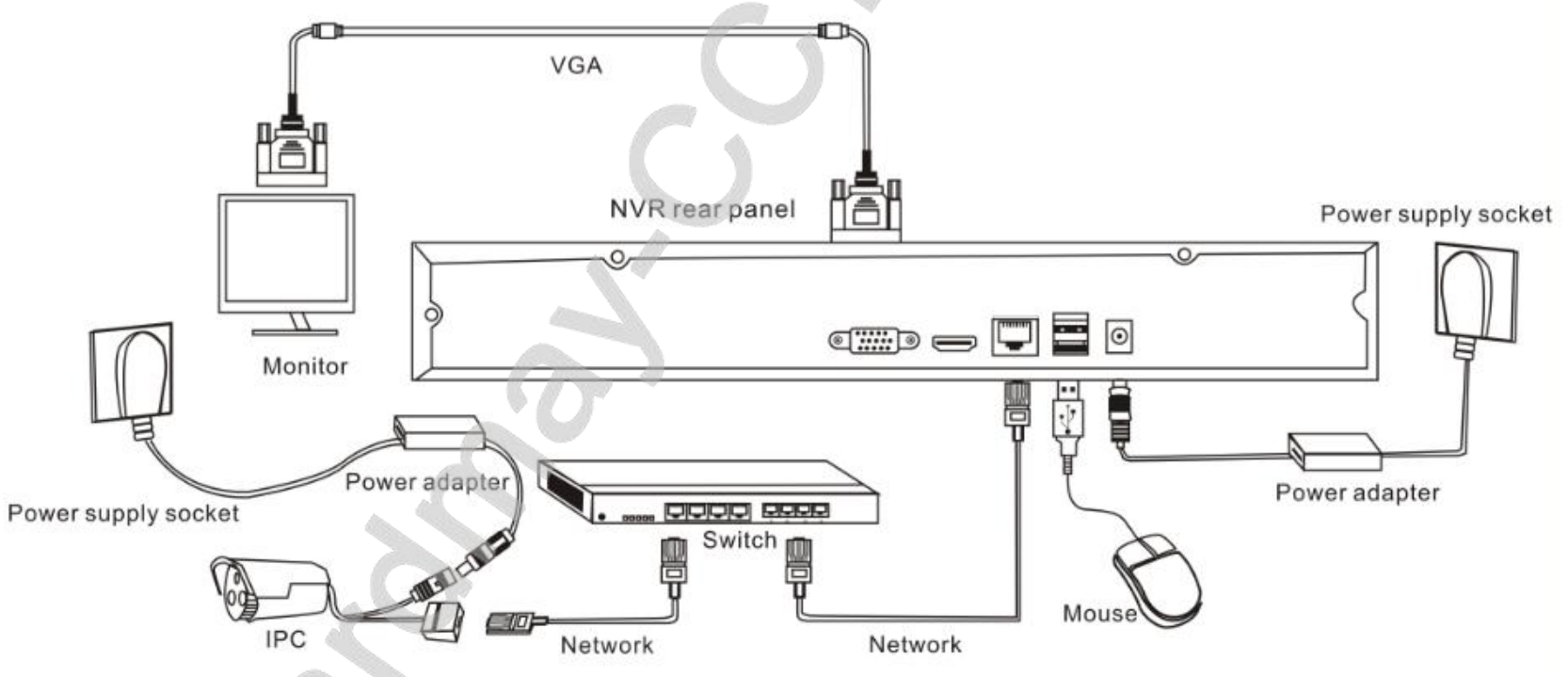
2

3

4

3.3. Connection Peripherals

3.3.1.Basic Device Connection



Non-POE NVR device connection diagram

4. System Function Introduction

4.1. Login/Close Down

4.1.1.Cloud password settings

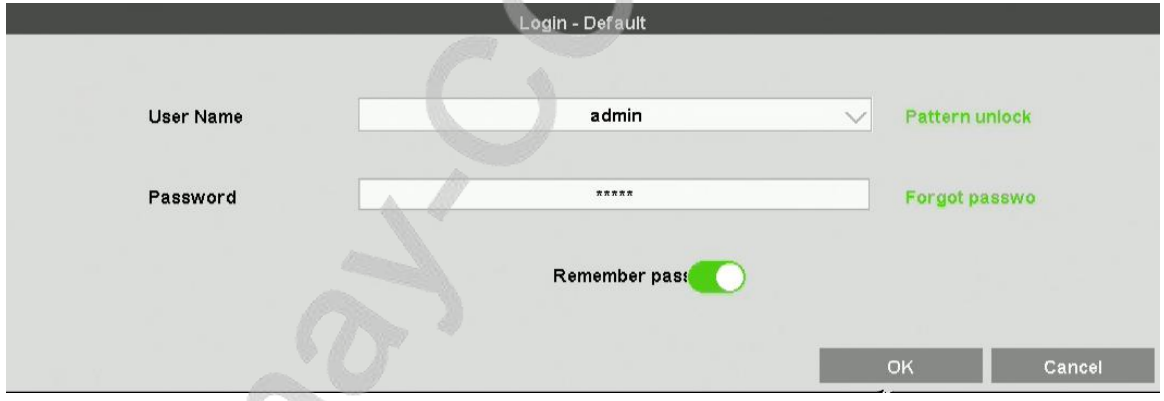
When NVR system starts at the first time with the access of the Internet, the status menu displays a message which says ‘Inactivate: Click to activate’, as the following picture shows:

You need to Left-click here to activate NVR by setting your own password to ensure your NVR is online. As the following shows:

REMARKS: Your own password can only involve letters or numbers and cannot be empty. It also cannot be set to default password ‘123456’

4.1.2.Login

When NVR system starts,it will search and connect IPC devices automatically and then popup login dialog, as the following picture shows:



Operation steps :

1. Left click “user name” select box and select user name. Default:admin;
2. Left click “password ”context box and input user name. Default ;123456;
3. Left click “OK”button to validate your user info.

4.1.3.Forget password

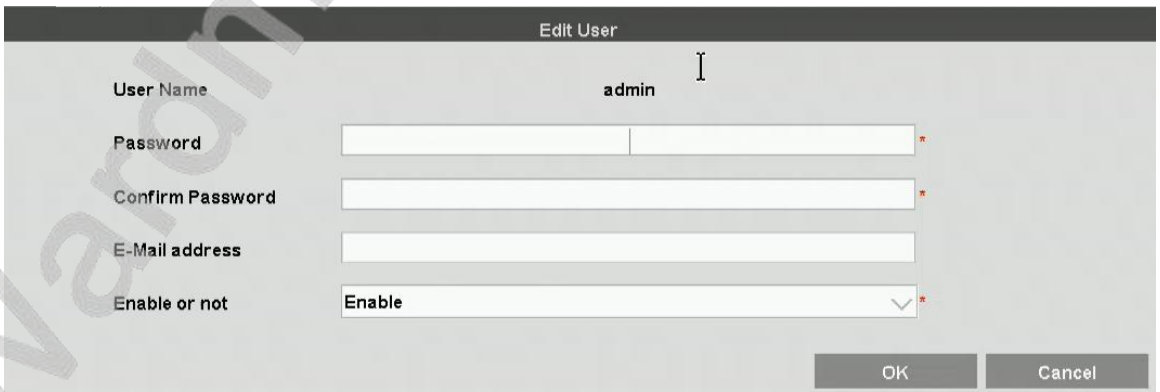
Function instruction: when you forget your own system login password, you’ll need to use this function to get a new password.

Operation steps:

1. Right click on desktop and then select Sys.Setting. Wait for NVR popup login dialog.

2. Left click on Forgot password button and turn to temporary password window, as the following picture shows:

3. Scan the QR code with your seetong APP to get a temporary password consist of lower-case letters and numbers
4. Use the temporary password to login and enter password-edit window, as the following picture shows:



5． Reset your password.

REMARKS: The temporary password loses effectiveness when user logged in or when it's generated for 1 hour.

4.1.4.User Log Out

Function instruction: Log out after you have saved the configuration in case that unidentified user access to your NVR.You can also configure an auto-logout parameter to log out automatically.

Operation steps:manual log out**,** enter system main menu---right click ---select "close system"---click on"logout" button.

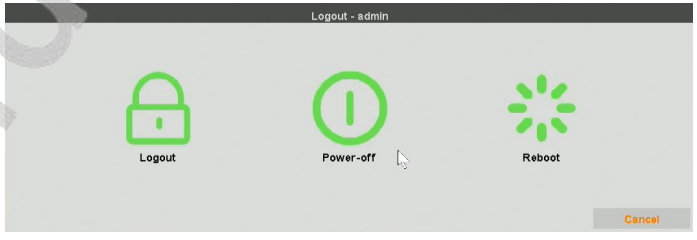
Auto log out,enter main menu---right click---select"system setting"---general,set auto log out time

4.1.5.Close System

Function instruction: Reboot or shut the system down

Operation steps:

1. Left click 'Quit'button in system main menu



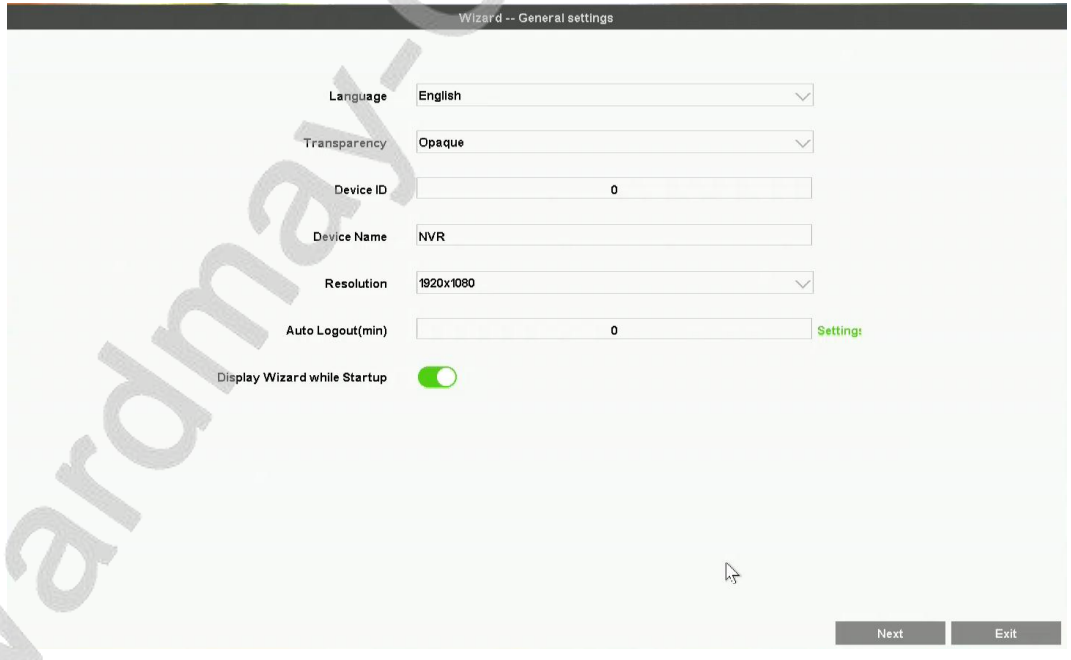
2. Left click 'Shutdown', the system will close

4.2. Boot wizard

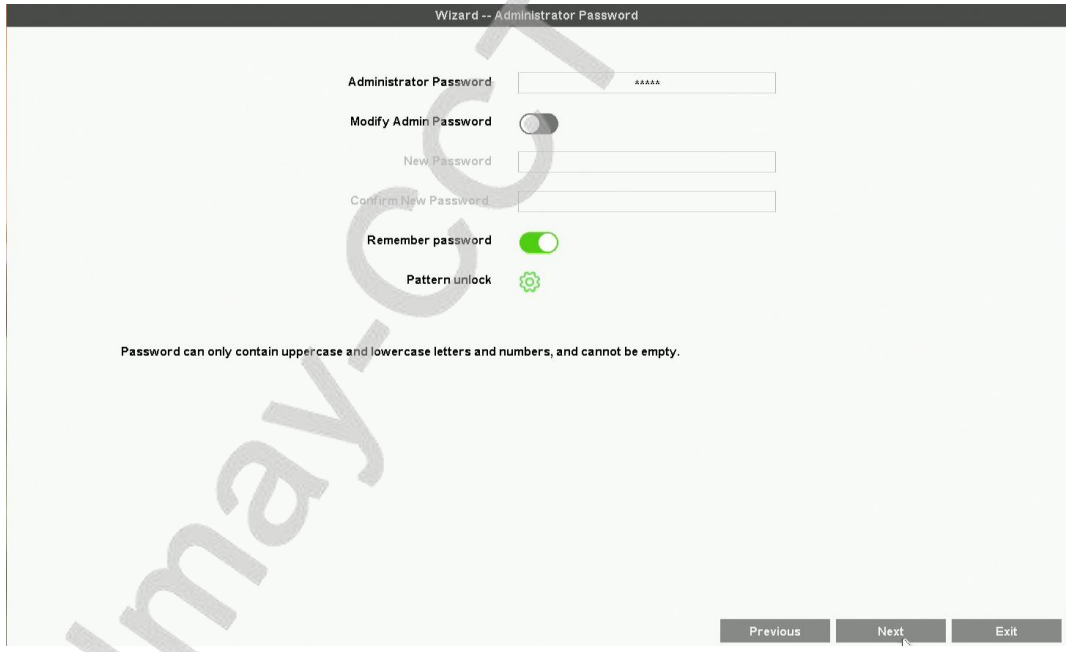
Function instruction: Help user make a basic configuration

Operation steps:

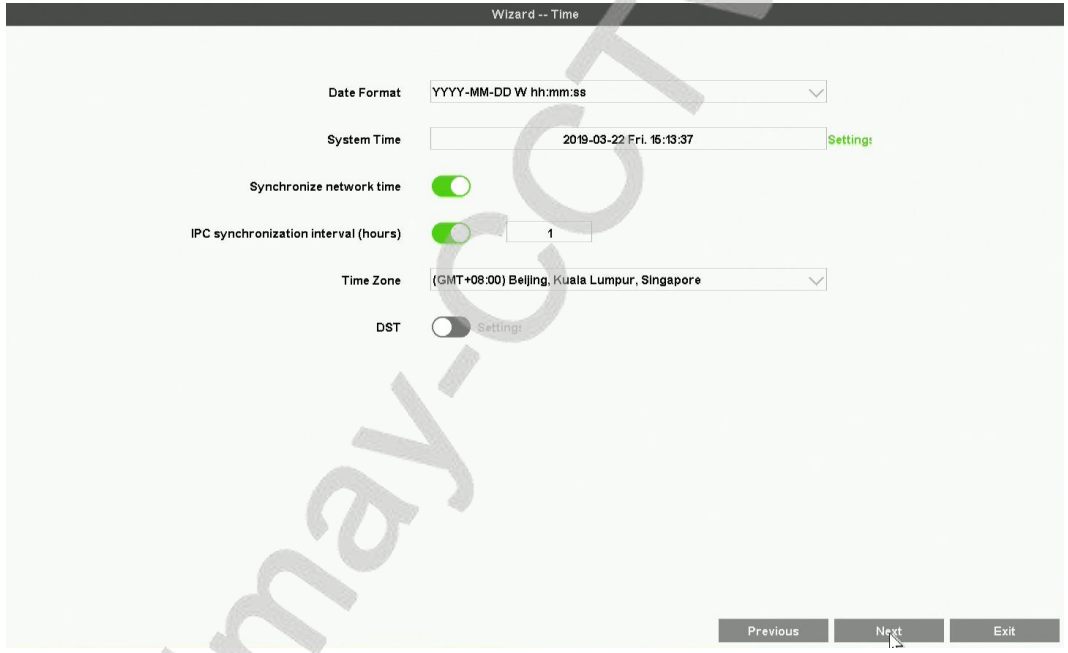
Setting 1: Set up system language,menu transparency,device number,auto logout time and whether the wizard window shows again when reboot.



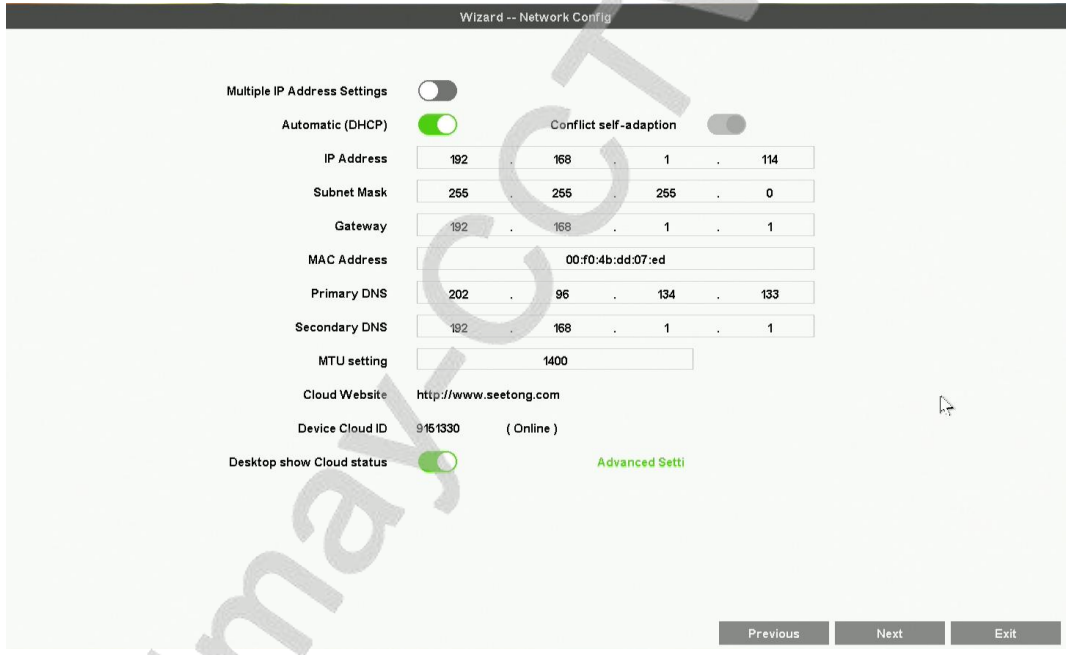
Setting 2: User password settings including admin password modification,whether to remember password and pattern unlock set.



Setting 3: Set up date format, date, time zone, daylight saving time

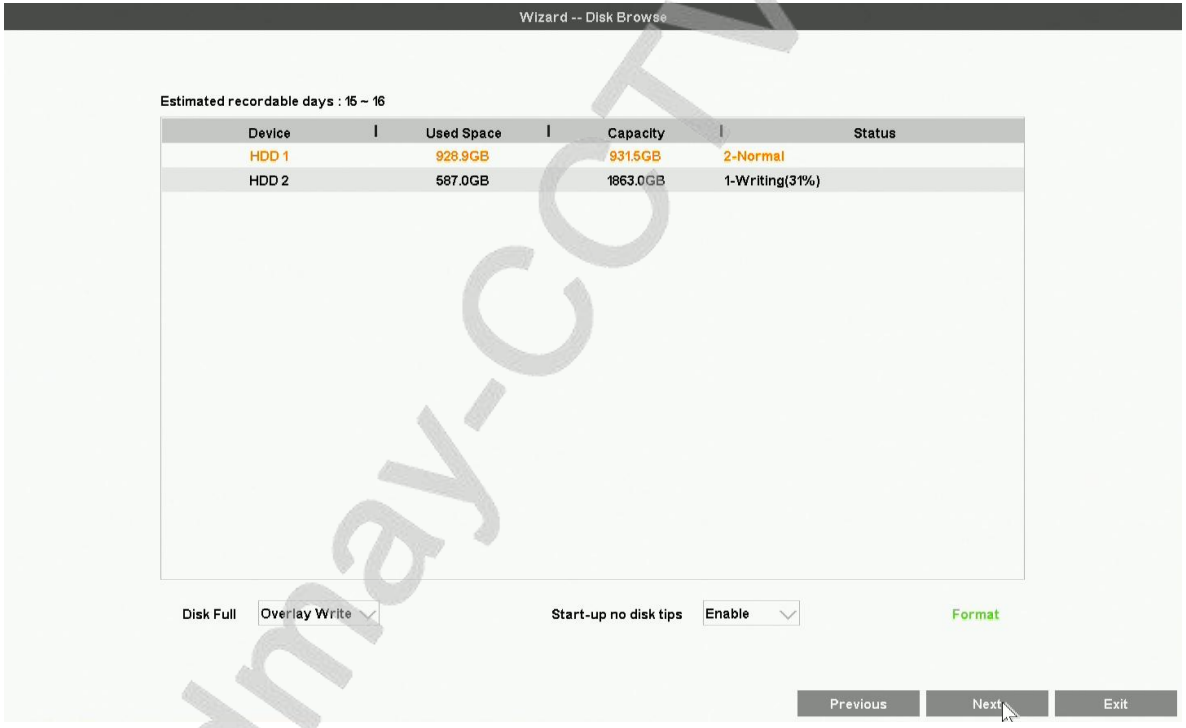


Setting 4: Network settings



Setting 5: Scan QR code to download Seetong app and get NVR's device ID

Setting 6: HDD formatting and recording strategy

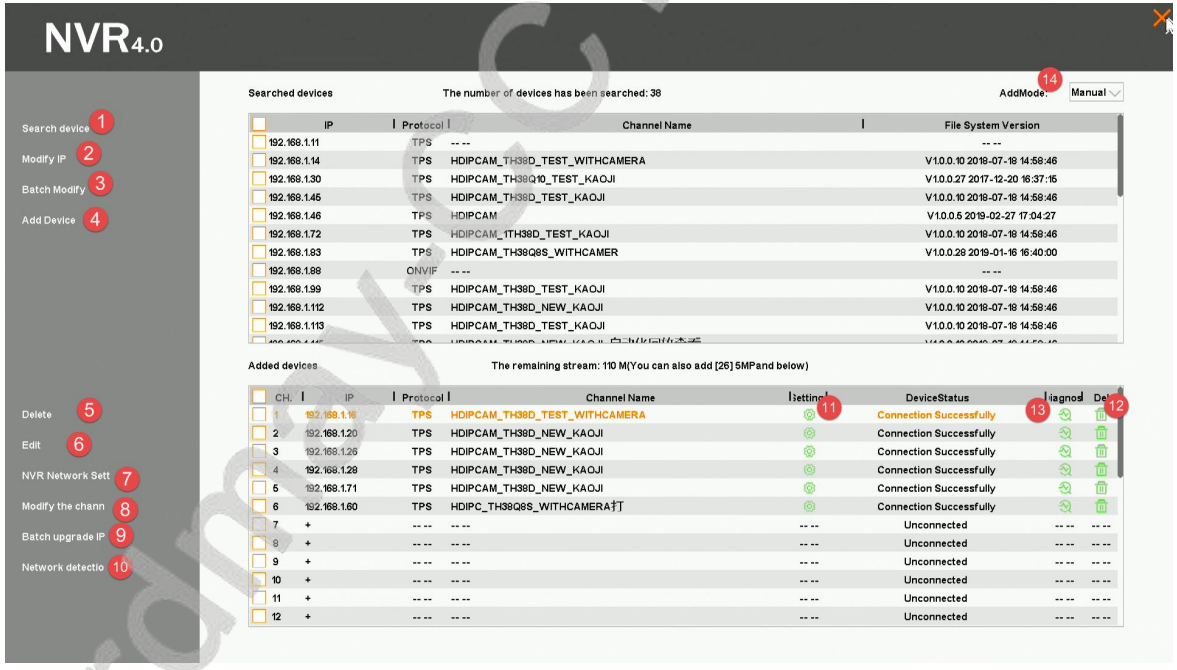


Setting 7: List all IPC devices. Left click ‘OK’ button to finish the wizard.

4.3. Video Management

4.3.1.Basic Functions

Function instruction: Used to add, delete and modify connected IPC devices.



Detailed function list:

Numbers	Function name	Function description	Remarks
1	Search device	Used to search all private protocol IPC devices under the same network	
2	Modify IP	Used to modify the IP address of	

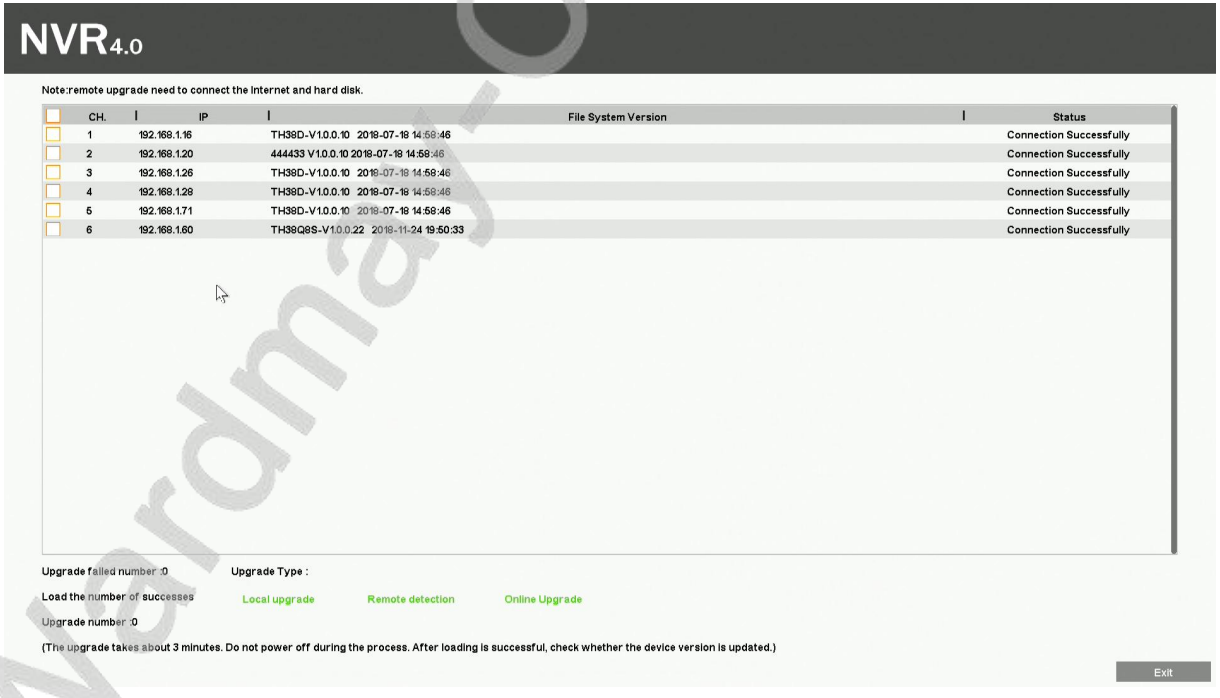
		selected IPC device	
3	**Batch modify**	Used to modify IP address of a series of IPC devices	
4	**Add Device**	Used to add IPC devices to NVR channel	
5	**Delete**	Used to delete selected IPC devices from NVR channel	
6	**Edit**	Used to modify the protocol, connect password of the connected IPC devices	
7	**NVR Network Setting**	Used to configure NVR network setting	
8	**Modify the channel name**	Used to modify IPC channel OSD	
9	**Batch upgrade**	Used to upgrade connected IPC	
10	**Network detection**	Used to diagnose local and remote network problems	
11	**‘setting’ icon button**	Used to configure IPC setting	
12	**‘delete’ icon button**	Used to delete current channel from NVR	
13	**‘diagnose’ icon button**	Used to diagnose current channel network problems	
14	**‘Addmode’ combobox**	Used to select IPC device add mode when you start your NVR.	

4.3.2.Batch Upgrade IPC

Function instruction: Used to upgrade series of IPC devices at one time

Operation steps:

1. Left click ‘IP camera’ in contextmenu.
2. Click ‘Batch Upgrade IPC’ button. System turns to batch upgrade window, as the following picture shows:



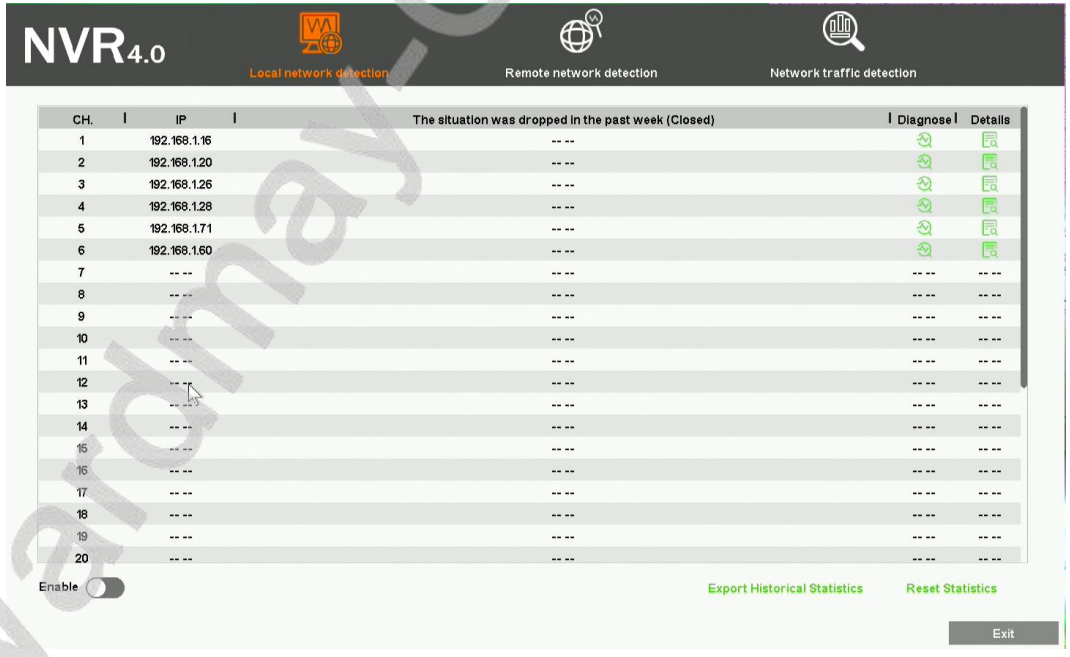
3. Select the IPC devices that you want to upgrade by local upgrade with a u-disk or upgrade online.

4.3.3.Network detection

4.3.3.1. Local Network Detection

Function instruction: Used to analyse the network conditions of IPC devices which has been added to NVR.

Operation steps: Left click ‘IP camera’ in contextmenu. Click ‘Network detection’ button. System then turns to ‘Local Network Detection’ window, as the following picture show:



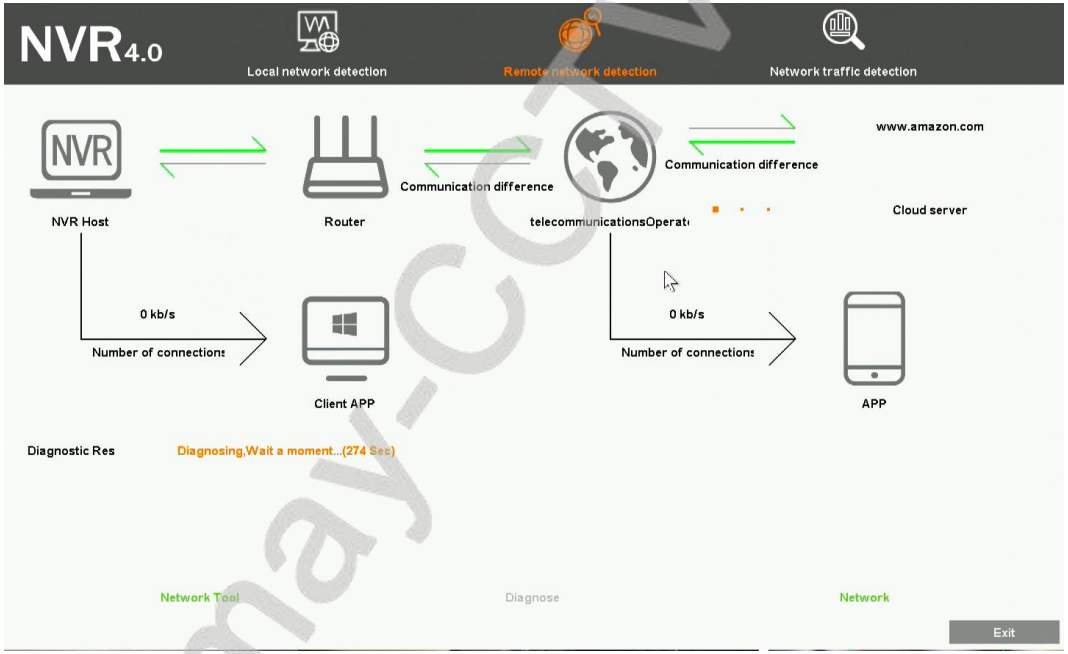
Detailed function list:

Function Name	Function Description	Remarks
'Enable' checkbox	Enable local network detection	You should ensure that you have set up disk on the NVR.
Export Historical Statistics	Export historical statistics to U-disk	
Reset Statistics	Reset all statistics	
'Diagnose' button	Used to diagnose current channel network condition	
'Details' button	Used to display current channel network condition	

4.3.3.2. Remote Network Detection

Function instructions: Used to analyse the network condition of NVR and get you some advices to solve network problems.

Operation steps: Left click 'IP camera' in contextmenu. Click 'Network detection' button. System then turns to 'Remote Network Detection' window, as the following picture show:



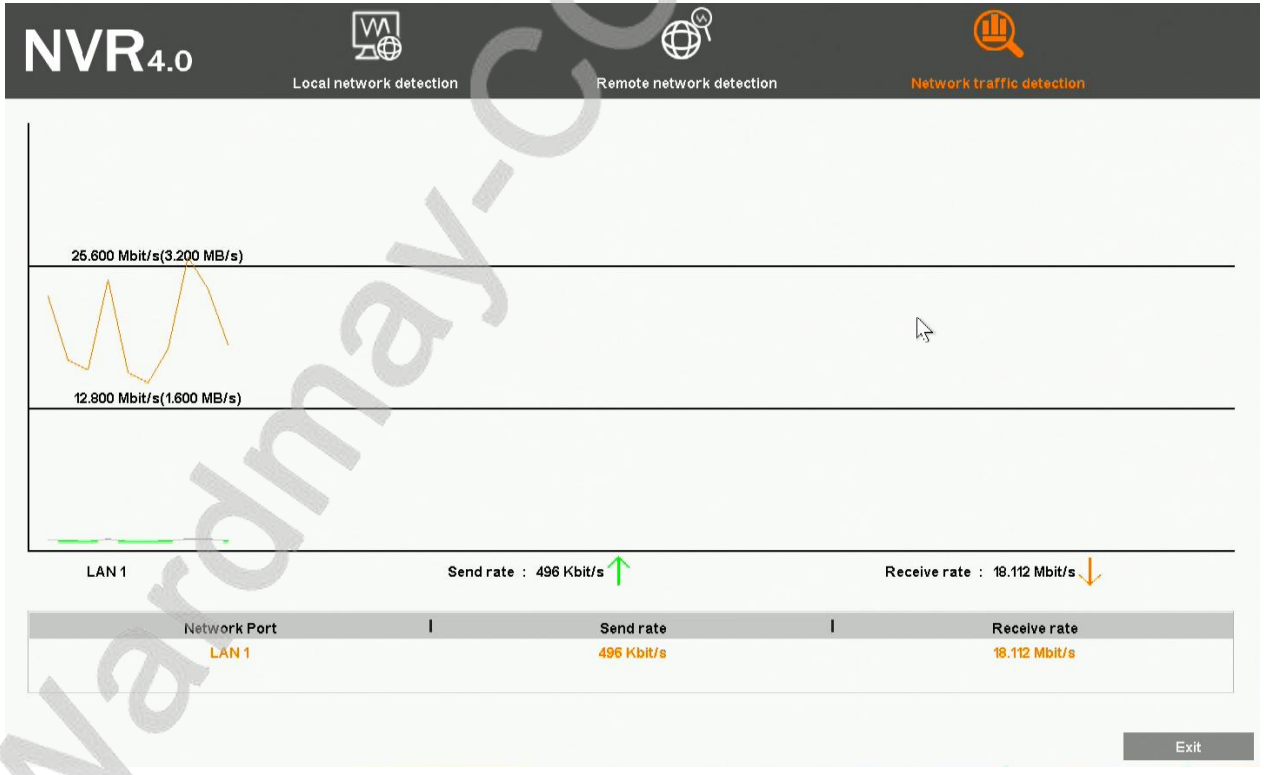
Detailed function list:

Function Name	Function Description	Remarks
Network tool	Used to check whether there's packet loss on the NVR device.	
'Diagnose' button	Used to activate diagnosis to the NVR	
'Network' button	Used to modify network configure of the NVR	
Diagnostic result	Display current network condition of NVR and give you several ways to solve the possible problems.	

4.3.3.3. Network Traffic Detection

Function instruction: Used to show current network flows of the NVR

Operation steps: Left click ‘IP camera’ in contextmenu. Click ‘Network detection’ button. System then turns to ‘Network Traffic Detection’ window, as the following picture show:

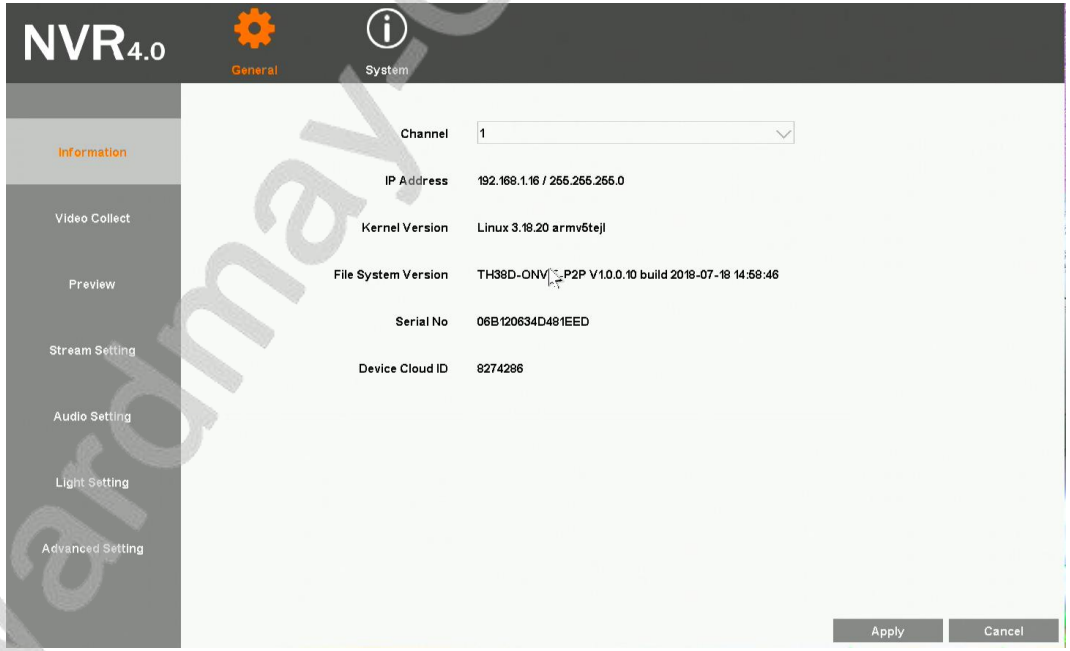


4.4. IPC Setting

4.4.1.Check IPC General Information

Function instruction: Used to check IPC information, such as IPC system kernel version, file system, product serial number,software version and so on.

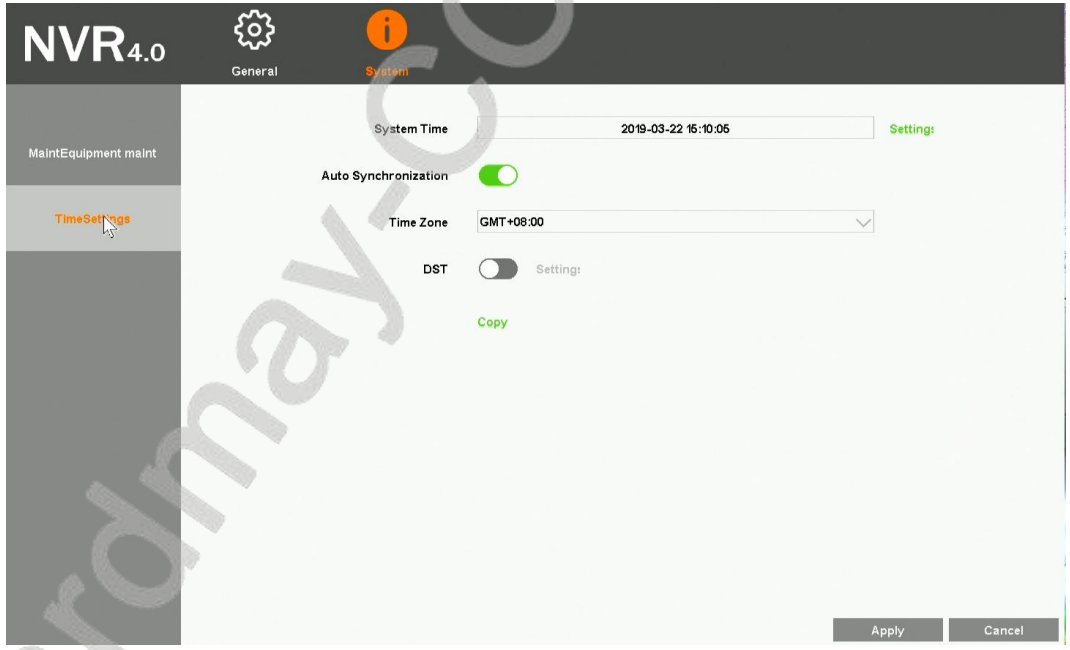
Operation steps: Right-click on desktop, select ‘IPC setting’ and turn to ‘IPC General-Information’ window. As the following picture shows:



4.4.2.Time Setting

Function instruction: Set date, system time, time zone, time synchronization

Operation steps: Right-click on desktop, select 'IPC setting' and turn to 'time' window.



Detailed function list :

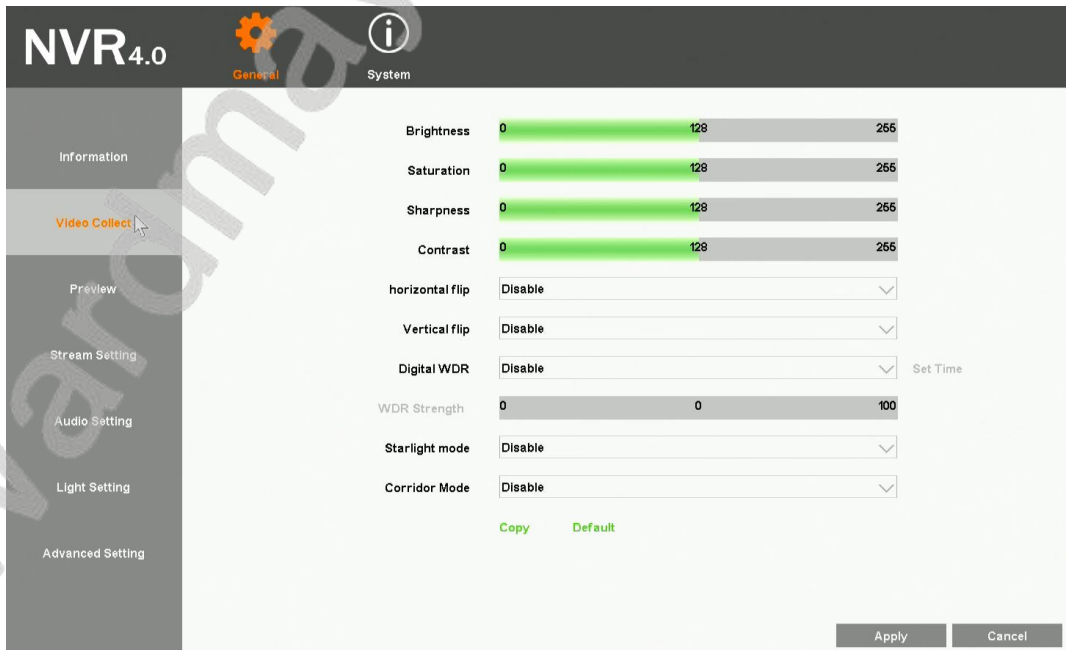
Function Name	Function Description	Remarks
Time Set	Used to set IPC's system time	
Self-Synchronizing	Used to synchronize system time with internet	IPC will proofread with network server only after it

		connect to the internet
Time Zone	Set the time zone of IPC	Choose correct time zone before checking time.
Daylight Saving Time	Used to set IPC daylight saving time's start and end or clock'delay or advance	
Copy	Copy selected channels time to all other channels	

4.4.3.IPC Video Capture Configure

Function instruection: Used to configure IPC Video Capture parameters including brightness, saturation, sharpness, contrast, horizontal flip, vertical flip, WDR mode, star mode, Corridor mode and etc.

Operation steps: Right click on desktop, select 'IPC Setting' and turn to 'IPC Video Capture Configure' window. As the following picture shows:



4.4.4.IPC Preview Setting

Function instruction: Used to configure IPC OSD information, Title Position, Time Position, Time Format and Week Show.

Operation steps: Right click on desktop, select ‘IPC Setting’ and turn to ‘IPC Preview Setting’ window. As the following picture shows:

Detailed function list :

Function Name	Function Description
OSD display	show/hide OSD info
Overlying information	Set overlap additional information, including 'no overlay',overlay resolution',overlay code rate, "overlay resolution and code rate"
Title position	Heading message positon setting, support top left,bottom left,top right,bottom right
Channel Name	Channel name setting, support number,character,capital and small letter and Chinese input
Time position	User set channel overlay position, support top left,bottom left,uppder right, bottom right
Time format	User set channel time format
Show week	Used to control whether to show weekdays of the time format

4.4.5.IPC Stream Setting

Function instruction: Used to Configure encode parameters of main stream and sub stream.

Operation steps: Right click on desktop, select 'IPC Setting' and turn to 'IPC Stream Setting' window. As the following picture shows:

Detailed function list:

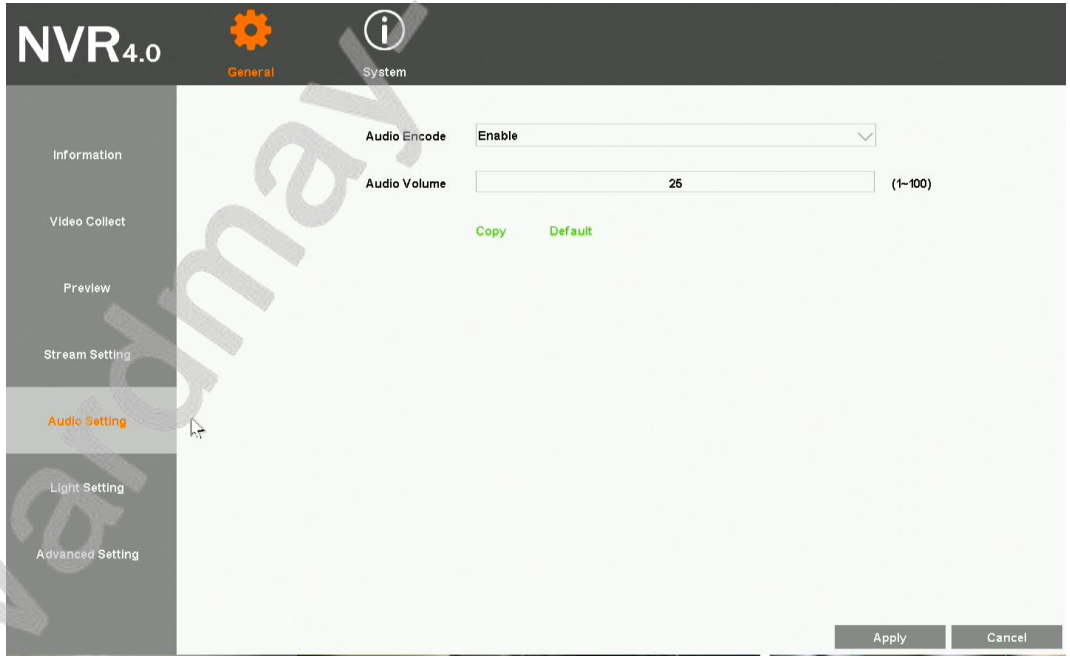
Function name	Function Description
Compression	Main/sub stream encoding format setting,support H.264, H.265,H.265+.
Image resolution	Main/sub stream resolution ratio setting, NVR provide resolution ratio option based on IPC ability level
Bitrate control	Main/sub stream bitrate control setting,support VBR and CBR
Key frame interval	Main/sub stream I-frame interver setting, range from 1-200

Bit rate	Main/sub stream bit rate setting, range from 100~10000kbps
Frame rate setting	Main/sub stream frame rate setting, the larger the frame rate, the fluency is better
Locked Config	Enabled. If the device config are modified by NVR, It'll be binded to device. Otherwise, It'll be binded the most appropriate config.
	Disabled. IPC encode parameters will not change unless NVR local config changes.

4.4.6.IPC Audio Setting

Function instruction: Used to configure IPC audio parametres including Audio Switch and Audio Volume.

Operation steps: Right click on desktop, select 'IPC Setting' and turn to 'IPC Audio Setting' window. As the following picture shows:



4.4.7.IPC Light Setting

Function instruction: Used to configure IPC Light parametres including Light Mode and Light Brightness

Operation steps: Right click on desktop, select ‘IPC Setting’ and turn to ‘IPC Light Setting’ window. As the following picture shows:

4.4.8.IPC Advanced Setting

Function instruction: Used to configure advanced parametres including Full Netcom, WDR mode, Private Data, IRCut mode and etc.

Operation steps: Right click on desktop, select ‘IPC Setting’ and turn to ‘IPC Advanced Setting’ window. As the following picture shows:

4.4.9.IPC Remote Maintenance

4.4.9.1. Upgrade IPC

Function instruction: upgrade IPC using u-disk

Operation steps;

1. Select the channel you want to upgrade. Right-click on desktop and select ‘IPC setting’submenu.
2. Turn to IPC maintainence window
3. Insert U-disk and left-click on ‘upgrade IPC’ button
4. Select the correct fireware, click ‘OK’ button and finish IPC upgrade operation

4.4.9.2. Restart IPC Device

Function instruction: Used to restart IPC through operation on NVR

Operation steps:

1. Select the channel you want to upgrade. Right-click on desktop and select ‘IPC setting’submenu.

2. Turn to IPC maintainence window

3. Left click on ‘IPC reboot immediately’button and finish the operation.

4.4.9.3. IPC Reset Factory

Function instruction:IPC reset factory operation

Operation steps:

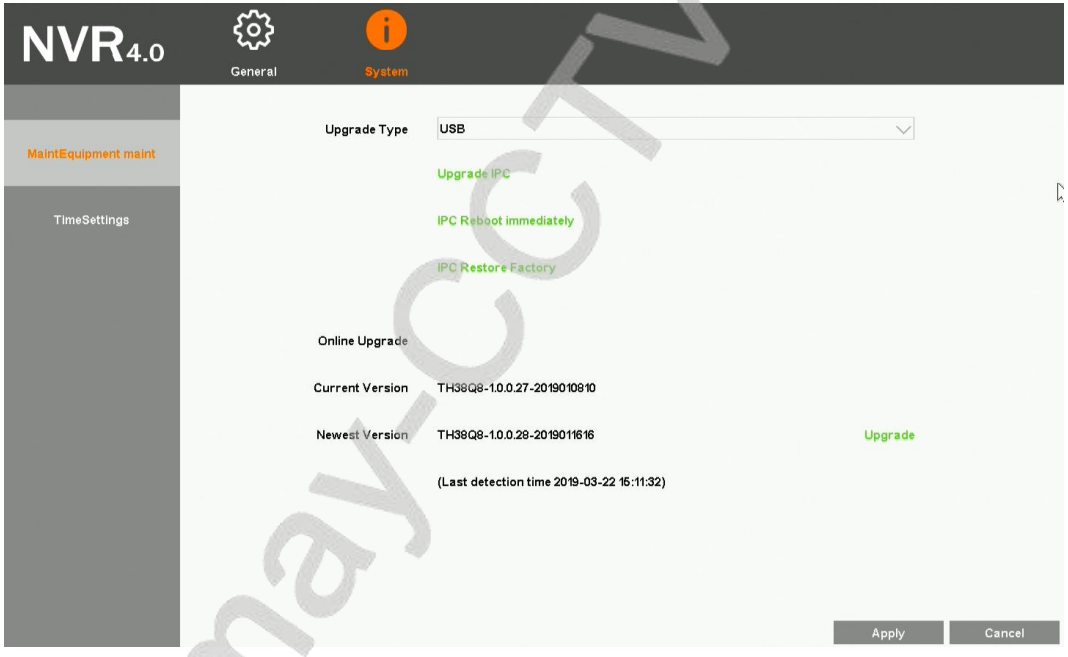
1. Select the channel you want to reset. Right-click on desktop and select ‘IPC setting’submenu.
2. Turn to IPC maintainence window
3. Left click on ‘IPC reset factory’ button and finish the operation.

4.4.9.4. Remote Upgrade

Function instruction: IPC upgrade through web server online.

Operation steps:

1. Select the channel you want to upgrade. Right-click on desktop and select ‘IPC setting’ submenu.
2. Turn to IPC maintainence window
3. Left click on ‘check’ button, if there’s new version on web server, click ‘upgrade’ button and then it’ll download the newest fireware on web server and upgrade automatic.



4.5. Screen Layout

Function instruction: Used to adjust different screen layout, including view 1/2/4/6/8/8(corridor mode)/9/10/16/24/25/36

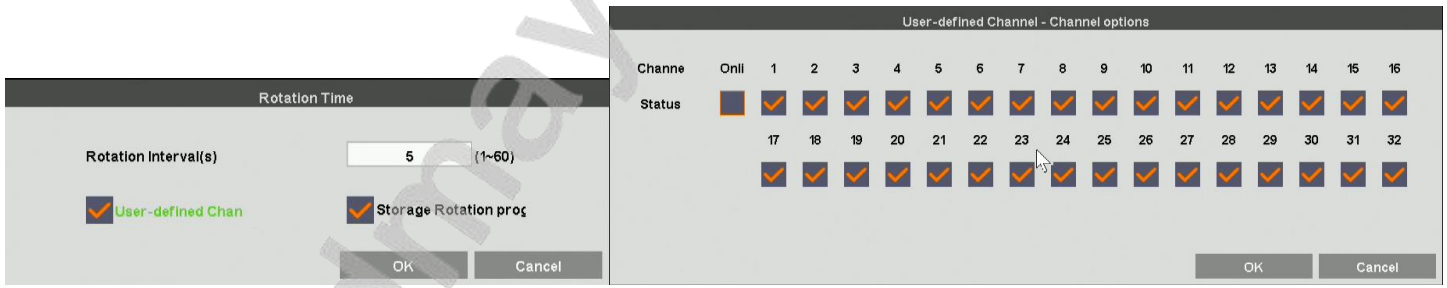
Operation steps: Right-click on desktop and select ‘View Layout’ submenu. Then, you can change different screen layout.

4.6. Rotation

Function instruction: Take turns to preview video stream according to current screen layout

Operation steps:

1. Move mouse to bottom menu and click on the rotation icon, as the following picture shows:



2. Check out the channels that you want to rotate and you can also save your current rotation configure.
3. Click ‘OK’ to start rotation.
4. Click on the rotation icon again will stop current rotation operation.

4.7. Electronic zoom in and zoom out

Function instruction: Zoom in/out part of the region to get details of the video stream.

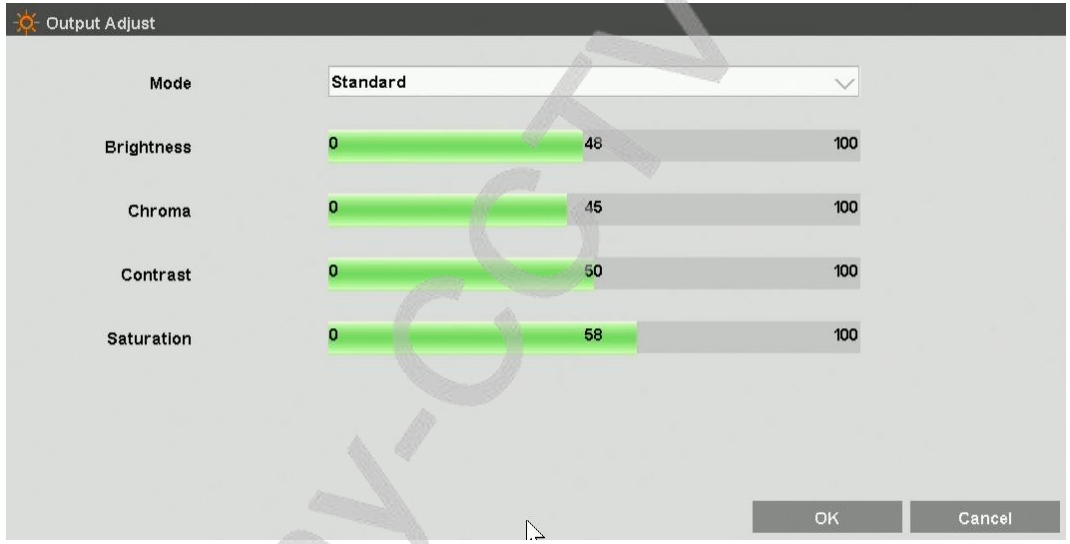
Operation steps:

1. Select a channel that you want to zoom in
2. Move mouse to bottom menu and click on the magnifier icon
3. Scroll mouse middle button to zoom in or out.
4. Click single picture or drag the green area to zoom in
5. Right-click to terminate zoom-in operation

Remarks: Zoom in/out is effective only in 4-channel-NVR, 8-channel-NVR, 16-channel-NVR, 32-channel-NVR and 36-channel-NVR

4.8. Output Adjust

Function instruction: Used to set different output effects, as the following picture shows:



Operation steps:

1. Move mouse to bottom menu and click on the ‘output to adjust’ icon
2. Left click the combobox which include 4 modes.
3. Select ‘custom’ mode and you’ll be able to adjust the parameters on your own.
4. Click on ‘OK’ button to save current configuration and close the window.

4.9. Screenshot

Used to snapshot any frame picture of real time video monitoring or replay and manage the pictures

4.9.1.Snapshot Capture

Function instruction: real-time video monitor picture capture, frame picture capture in replay, linkage alarm picture capture and store them into HDD

Operation steps:

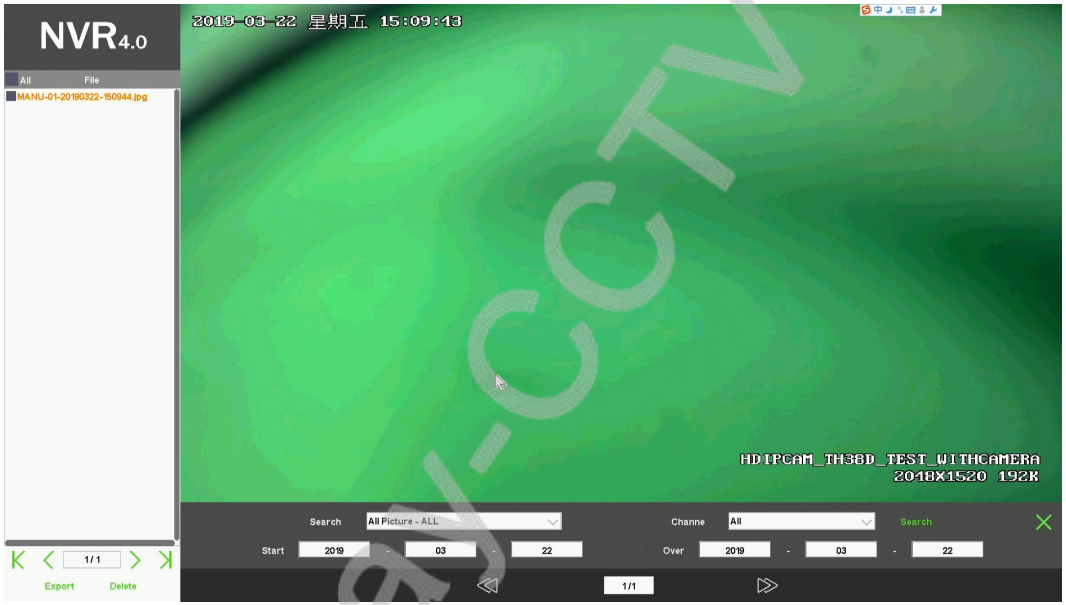
1. Right-click on desktop and select snapshot capture. Mouse pointer will become ‘tongs’ shape
2. Left click on screenshot video window, you’ll get a jpg picture.

4.9.2.Picture Management

Function instruction: Manage screenshots and there are three types of screenshots, manual screenshots, alarm screenshots and video screenshots

Operation steps:

1. Left click ‘picture management’in contextmenu, system open picture management window as the following picture



2. Left click’search type’combobox and select one type, default is ‘all screenshots’

3. Click’channel’ combobox and choose the channel number of screenshot, default is channel 1.

4. Left click’start/end’date editbox,input time quantum of screenshot, default is your system time.

5. After finishing the search condition setting, Left click’search’ button,system will show eligible screenshot result in the list on the right.Select an item and you’ll see the screenshot.

6. Select a picture and then click ‘delete’ button, you’ll be able to delete picture files.

4.9.3.Picture Export

Function instruction: Backup screenshot file into U-disk or move them into HDD, as the picure shows:

Operation steps

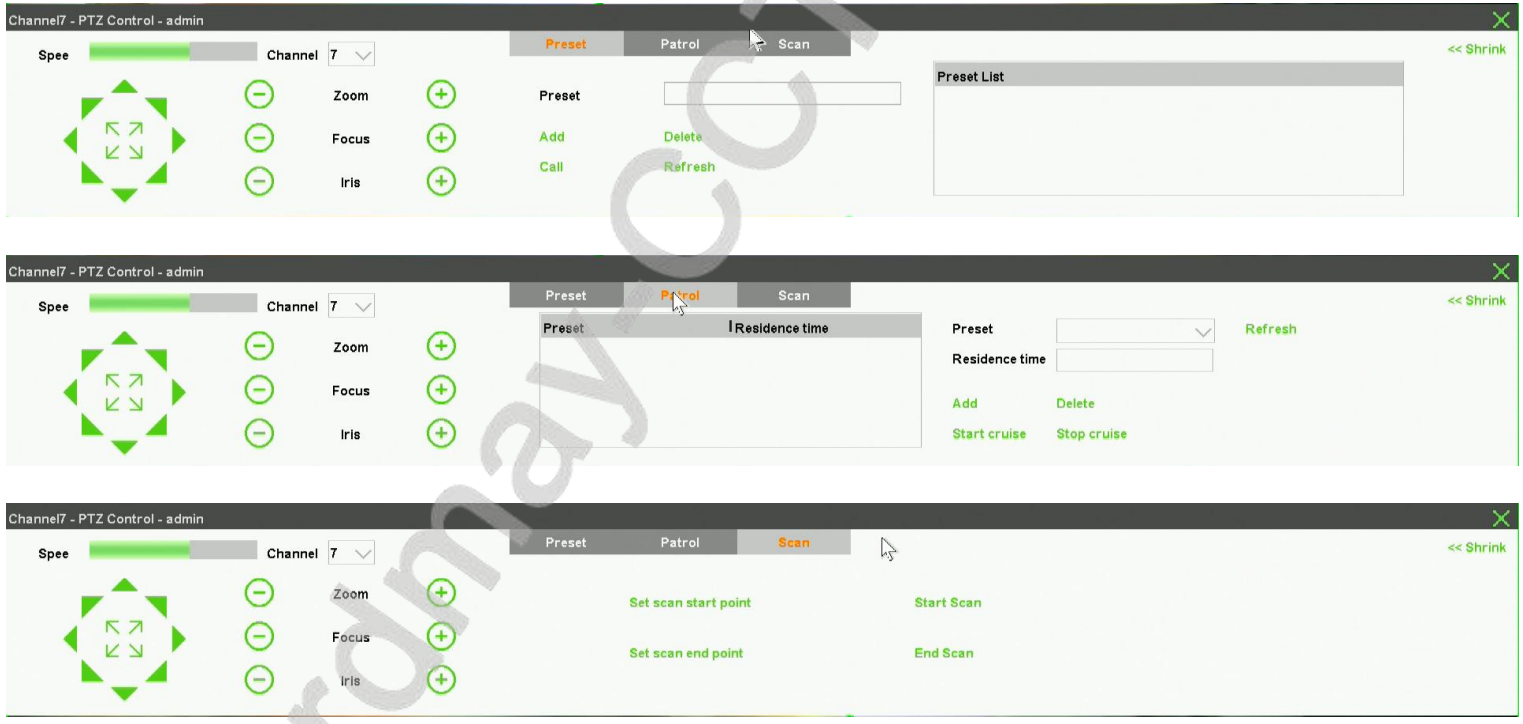
1. Insert U-disk into USB interface on NVR
2. Left click any picture’s checkbox, or select all checkbox to backup picture
3. Left click’Picture Export’ button,wait until backup finish.

4.10. PTZ Control

Function instruction: Used to configure PTZ control including ‘Zoom’, ‘Focus’, ‘Iris’and so on.

Operation steps: Move your mouse to the bottom menu and click on the ‘PTZ control’ icon button and turn to PTZ control interface. As the following shows:

Remarks: You must ensure that your IPC device itself support PTZ control.



4.10.1. Preset point setting

Function instruction: Used to add, delete, modify preset points of PTZ IPC devices.

Detailed function list:

Function name	Function description	Remarks
Preset point editbox	Used to add or display preset point	The preset point range is limited between 1 to 255 when IPC device is connected with tps private protocol. Otherwise, there's no limit to the point.
'Add' icon button	Used to add preset point to the list	
'Delete' icon button	Used to delete preset point from the list	You can alse delete preset point by entering the value directly.
'Call' icon button	Used to use the selected preset point	
'Refresh' icon button	Used to synchronize the list with IPC device	
Preset point listbox	Used to display preset point	

4.10.2. Patrol setting

Function instruction: Used to configure patrol path and Residence time.

Detailed function list:

Function name	Function description		Remarks
Patrol path list	Preset point	Show all preset point on the patrol path	

	Residence time	Show residence time of each preset point	Default is 5 seconds
'Preset point' combobox	Used to display all preset points		
'Refresh' icon button	Used to synchronize the list with IPC device		
Residence time	Used to configure residence time		
'Add' icon button	Used to add preset point to the patrol list		
'Delete' icon button	Used to delete preset point from the patrol list		
'Start Cruise' icon button	Start patrol		
'Stop Cruise' icon button	Stop patrol		

4.10.3. Scan setting

Function instruction: Used to configure scan start point and scan end point.

Detailed function list:

Function name	Function description	Remarks
Set scan start point	Set current IPC position as scan start point	
Set scan end point	Set current IPC position as scan end point	
Start scan	IPC will scan between start point and end point over and over	
End scan	Stop scan	

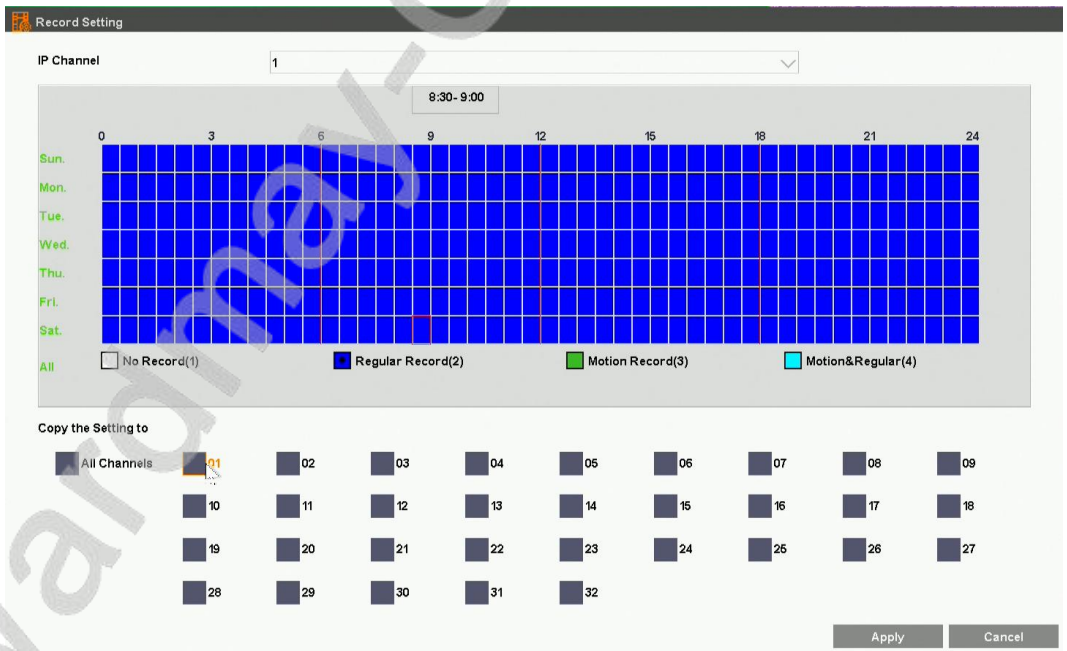
4.11. Recording Function

4.11.1. Set Recording Plan

Function instruction: set recording plan

Operation steps:

1. Left click ‘recording plan’ in contextmenu or in bottom menu, system will open a new window as the following shows:



2. Left click ’No Record’ or ‘Regular Record’ or ‘Motion Detect Record’ or ‘Motion & Regular Record’ and drag to make a recording plan you’d like.

You can also click on the button on the left to make a simple and rapid recording plan.

3. After finishing your recording plan setting, you can copy current configuration to other channels.

Remarks: When you set current record plan to 'Motion Detect Record', NVR will automatically record only when motion incident happens.

When you set current record plan to 'Motion & Regular Record', NVR will make motion record when motion incident happens and make regular record when there's no motion incident.

4.11.2. Playback Recording

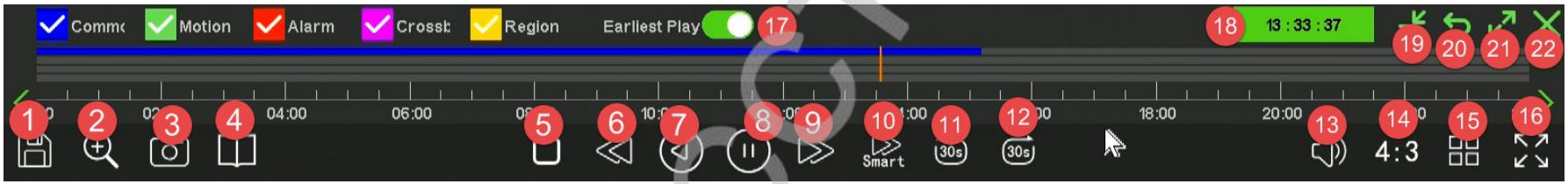
Function instruction: Used to search video recording data.

Operation steps:

1. Left click 'playback' buttom in the bottom menu or in contextmenu, system will open video replay window.
2. Left click calendar and date, orange color indicate that there's video recording data while gray indicate there's no video recording data.
3. Select the record type, channel you want to search. There's 3 types of record type, common, motion, alarm. The color of Common video is blue while alarm is red and motion is green.
4. After finishing your setting, double-click on the video recording bar to play the video recording data.

4.11.3. Playabck Control

Function instruction: Used to operate on video recording data, such as playback, suspend, fast backward, smart fast backward, speed, slow, backup, start/close audio, screenshot, full screen playback, playback window proportion adjustment, rewind down 30s, fast forward 30s.



Serial number	Name	Explaination	Serial number	Name	Explaination
1	**Backup**	Enter backup interface	13	**Audio**	start/close video audio
2	**Digital Zoom**	Zoom in record video	14	**Aspect ratio**	Cut 4:3/16:9 playabck screen ratio
3	**Screenshot**	Capture to recording playback	15	**1/4 screenlayout switch**	playback recording
4	**Time fast forward**	Fast forward by time	16	**Full screen**	Playback full screen
5	**Stop**	Stop playback	17	**Earliest Play**	If ticked, NVR will automatically start playback from 10 minutes ago.
6	**Fast backward**	Recording back fastly	18	**Time slice**	Set record playback time point
7	**Choose Fast backward**	Choose back fastly	19	**Timeline zoomout**	Zoom out playback timeline

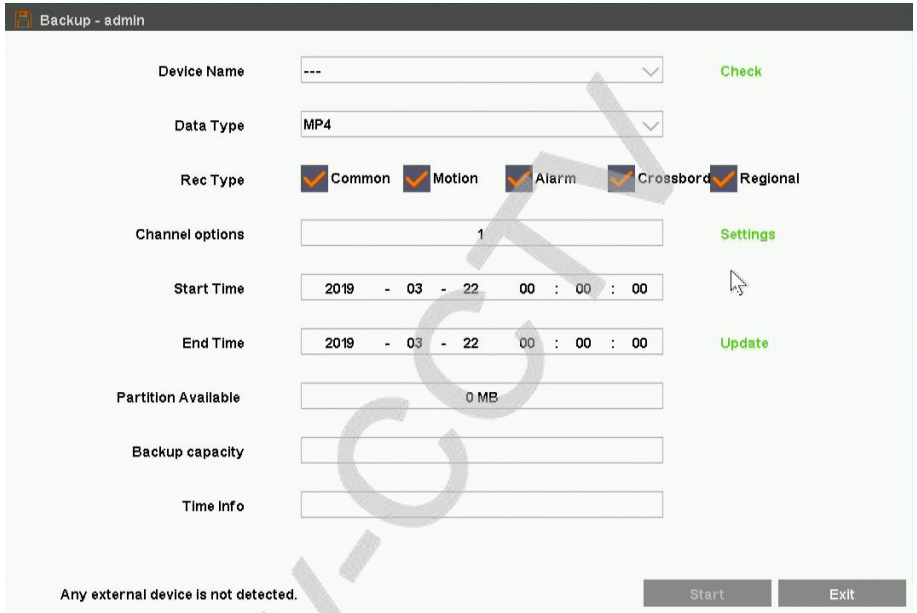
8	**Play/Suspend**	Click to play/suspend	20	**Timeline reset**	Reset playback timeline
9	**Speed**	Video fast forward	21	**Timeline zoomin**	Zoom in playback timeline
10	**Smart fast forward**	Different play speed between regular record and motion record	22	**Close**	Exit playback page
11	**Rewind down 30s**	Rewind down 30s			
12	**Fast forward 30s**	Fast forward 30s			

4.11.4. Video Backup

Function instruction: Back up video files to U-disk or HDD

Operation steps:

1. Left click ‘backup’ button in video playback toolbar,system will open a new dialog as the following picture shows:



2. Left click data type's pull down option, choose backup video format, default format: MP4

3. Mouse choose alarm types including Common, Motion, Alarm, Crossborder, Regional. Default alarm type consists of all the alarm types.

4. Left click' setting' button, choose video backup channel.

5. Left click start and end time, click update button after time setting, can check certain time quantum need capacity size.

6. Insert USB into NVR interface when backup, click'check' button in single page, system will detect USB

7. Click'start' to backup selected video, time information will show backup's timing.

REMARKS: Install media player and you'll be able to check the video back-ups.

4.12. System Settings

4.12.1. General Setting

Function instruction: general function setting like language, transparency , output resolution, wizard, auto log out time

Operation steps: Left click ‘system setting’ in contextmenu or in bottom menu, system opens a new dialog as the following picture shows:

Detailed Function List

Function Name	Function Description

Language	Set NVR system language,support Chinese/English and so on
Transparency	Set user interface transparency,support transparent/translucence/opacity
Device Name	Default device name is 'NVR', used to 28181 connect
Resolution	Set the resolution from NVR to display, support 3840×2160, 2560x1440, 1920×1080, 1440x900, 1366x768 ,1280×1024,1024×768 and so on. The default resolution is 1920x1080
Auto Lock Time	Set auto lock time (minute)
Start Show Guide	After checking the function, it will show wizard window when system starts.
Boot wizard	Open wizard configure window

4.12.2. Time Setting

Function instruction: set time, date format, time zone setting, time synchronize, as the following picture shows:

Operation steps:

1. Left click system setting in main menu or context menu, system will open setting window.

Detailed Function List

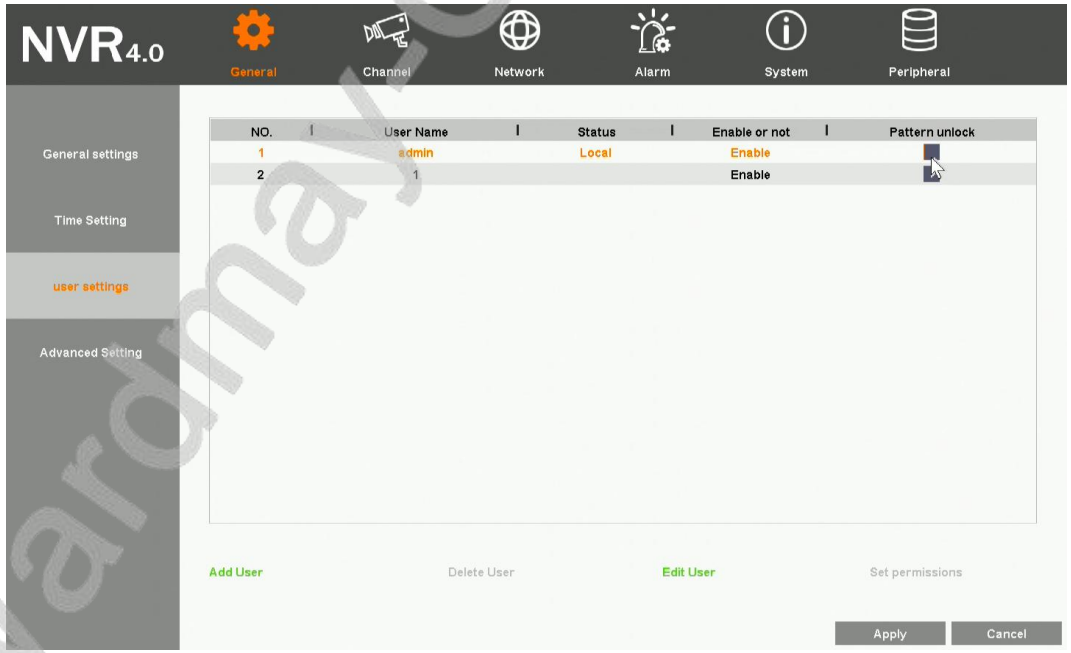
Function Name	Function Description	Remarks
Date Format	Set date format such as YYYY-MM-DD W hh:mm:ss/YYYY-MM-DD hh:mm:ss/MM-DD-YYYY W hh:mm:ss/MM-DD-YYYY hh:mm:ss	
System Time Set	Set NVR's date	Include year,month,week, hour,minute, second
Auto gain network time	After check the function, NVR will proofread time with network server and save	After connecting network, NVR will proofread time with network server
Time Zone	Set NVR's time zone	Choose zone before network time proofread, or else cause time deviation
Daylight Saving Time	After checking the function, start daylight saving time	
"Set"button	Set daylight saving time start and end	

4.12.3. User Setting

Function instruction: Used to administrate local user and network user

Operation steps;

1. Left click ‘system setting’ in contextmenu or in bottom menu
2. Left click ‘user’ function on the left of system setting window.



Function List:

Function Name	Function Description	Remarks
User List	Show local and network user list	
“Add”Button	Add new user name and password,check if it is available	Add the same user name
“Edit”Button	Edit existing user information,like password	Admin user can’t close
“Delete”Button	Delete new added user information	Admin user can’t delete
Set Permission	Set user permission	admin user own all permission
Pattern unlock	Set pattern lock for user	

Local user permission list

Local user permission	Permission explaination
System setting	Own all operation permission
Manual recording	0wn channel start/close and manual recording operation permission
Playback	Own channel recording playback operation permission
Preview	Own channel preview permission
PTZ control	Own PTZ control/ call preset/call route operation permission
File management	Own snapshot picture operation permission
Recording backup	Own recording backup operation permission
Close system	Own shutdown/restart operation permission
Email notice	Own alarm linkage send email operation permission

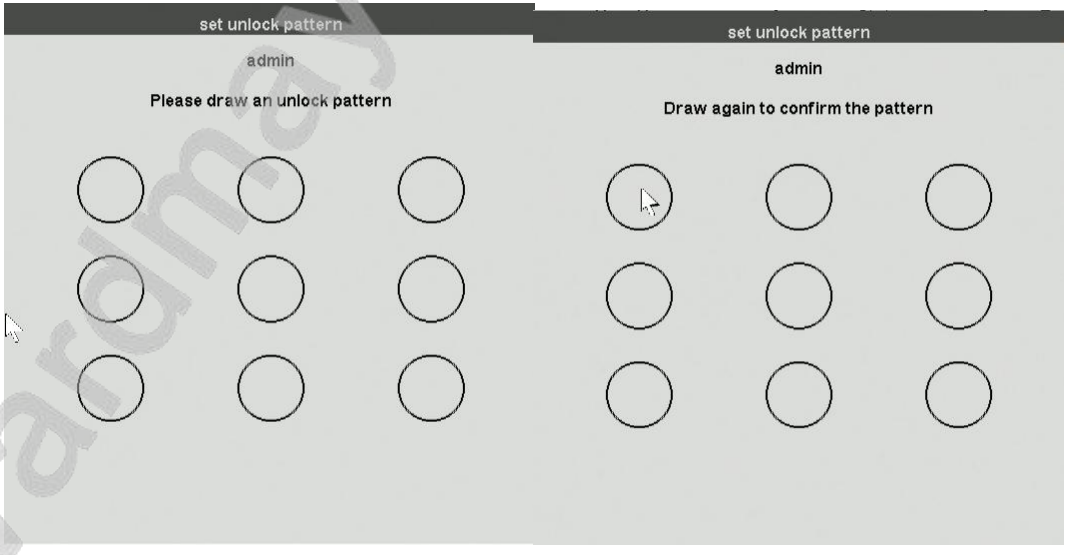
Network user permission list

Network user permission	Permission Explaination
System setting	Own remote system setting permission
Manual recording	Own remote set manual recording permission

Voice talkback	Own remote voice talkback operation permission
Remote playback	Own remote playback operation permission
Remote priview	Own remote connection/remote monitoring selected channel operation permission
PTZ control	Own remote PTZ control operation permission
Remote update	Own remote update operation permission
Close system	Own remote close system permission

Pattern unlock operation steps:

1. Left click ‘system setting’ function in contextmenu and turn to ‘General-User Name’, tick ‘Pattern unlock’.
2. Configure your own pattern lock according to the hint and confirm your pattern lock. As the following picture shows:



4.12.4. RS232 Setting

Function instruction: Used to set serial port parametres.

Operation steps:

1. Left click ‘system setting’ function in contextmenu or in bottom menu and turn to system setting dialog.
2. Turn to RS232 setting

Function list:

Function Name	Function Description	Remarks
Baud rate	Used to set baud rate	
Data-bits	Used to set data-bits	

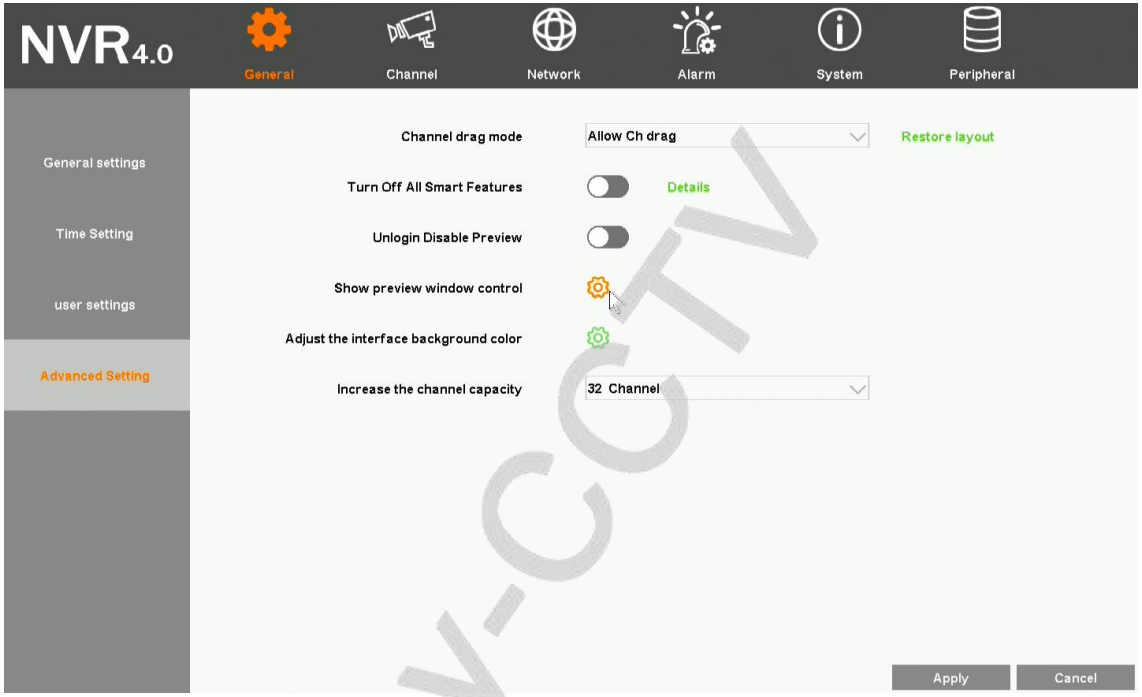
Stop-bits	Used to set stop-bits	
Parity	Used to set parity	
Flow control	Used to set flow control	
Transport method	Used to set transparent transportation	

4.12.5. Advanced Setting

Function instruction: Used to set preview mode, channel drag mode, disable smart features, disable unlogin preview, increase the channel capacity.

Operation steps:

1. Left click ‘system setting’ function in contextmenu or in bottom menu and turn to system setting dialog.
2. Turn to Advanced Setting dialog, as the following picture shows:



Detailed Function List:

Function Name	Function Description
Preview Mode	Used to set preview mode, including Real time mode and Smooth mode
Channel drag mode	Used to set channel drag mode, including directly switch channel stream, channel stream binding with channel number and no channel drag.
Turn off all smart features	If you tick the checkbox, NVR will turn off all intelligent configurations including adding IPC devices automatically, IPC config lock, NVR IP address conflict self-adaption and IPC IP address adaption.
Unlogin disable preview	If you tick the checkbox, you cannot see any video picture when you logout.
Show preview window control	'Desktop display time'. Used to control whether to display NVR system time on the desktop

	‘Desktop show cloud status’. Used to control whether to display NVR cloud state on the top of the desktop
	‘Desktop display round robin status. Used to control whether to display NVR layout view rotation on the left top region of the desktop.
	‘Desktop display channel serial number’. Used to control whether to display the channel number at the top right corner of each channel
	‘Desktop display channel icon’. Used to control whether to display the channel icon at the left bottom corner of each channel.
Adjust the interface background color	Used to adjust interface background color and bright. Come in affect when NVR reboot
Increase the channel capacity	Used to change the maxium channel capacity of NVR

4.12.6. Preview Setting

Function instruction: Used to set IPC stream parameters and OSD settings.

Operation steps

1. Left click ‘system setting’ function in contextmenu or in bottom menu, then system open a new dialog.
2. Left click into ‘channel preview setting’ in system setting window, system will open preview setting dialog as the following picture shows:

Detailed Function List:

Function Name	Function Description
IP Channel	Show the channel number of current setting
OSD Display	show/hide OSD info
Overlying information	Set overlap additional information, including 'no overlay',overlay resolution',overlay code rate, "overlay resolution and code rate"
Title position	Heading message positon setting, support top left,bottom left,top right,bottom right
Channel Name	Channel name setting, support number,character,capital and small letter and Chinese input
Time position	Used to set channel overlay position, support top left,bottom left,uppder right, bottom right
Time format	Used to set channel time format

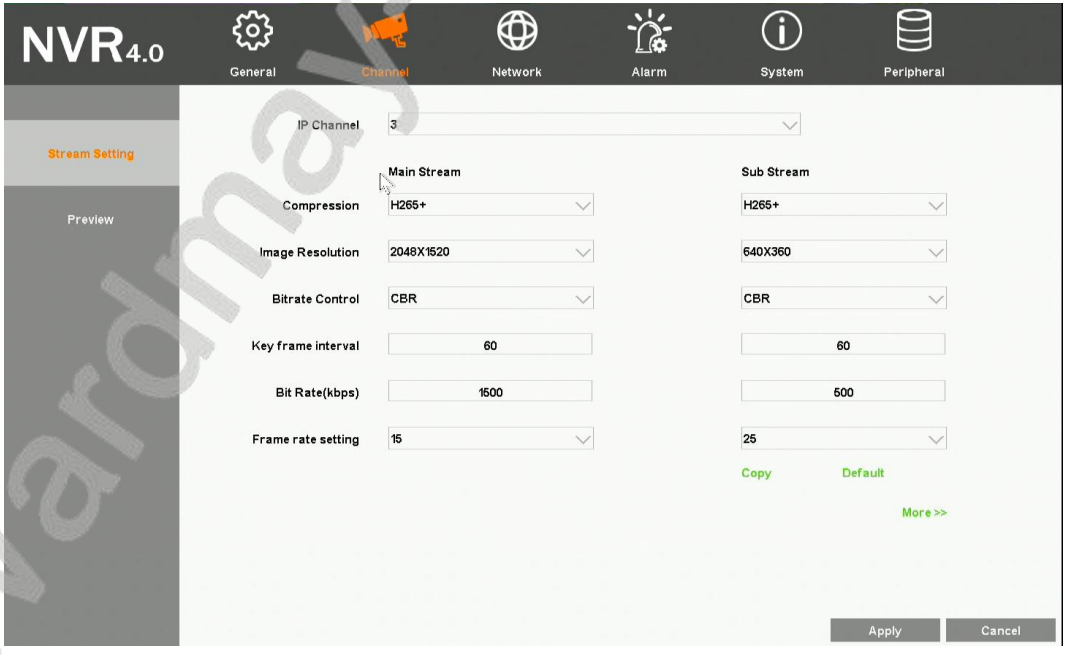
Show Week	Used to set whether to show week information of the IPC OSD

4.12.7. Stream Setting

Function instruction: set system channel's main stream rate and sub stream parameter

Operation steps;

1. Left click 'system set'in contextmenu or in bottom menu,then system open a new window.
2. Left click'channel'in system interface,system open a new dialog as the following picture shows:

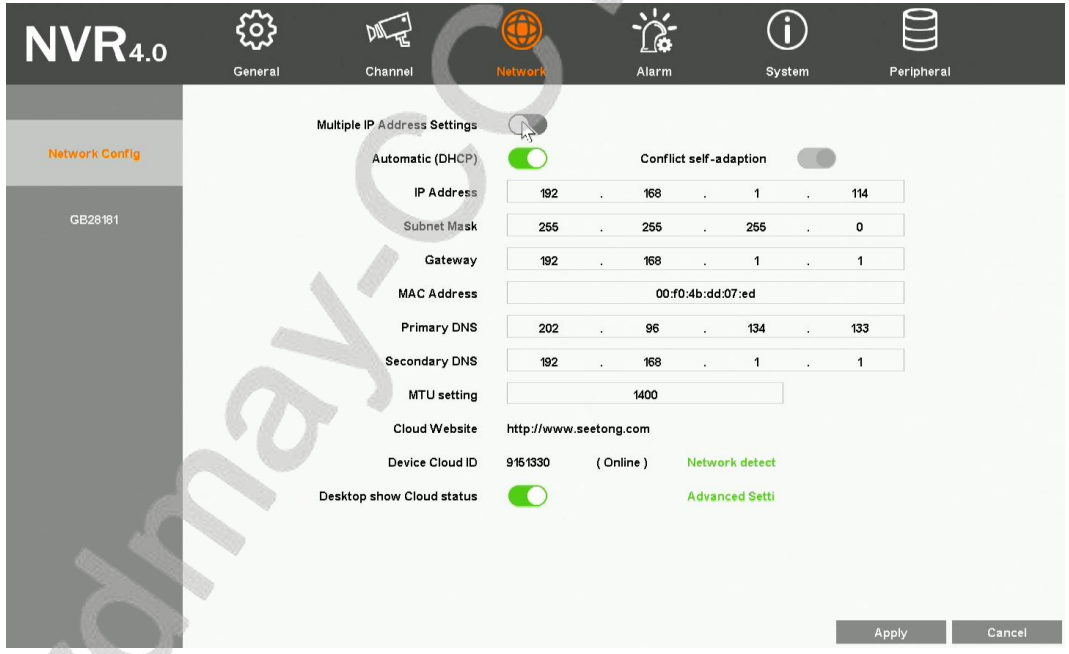


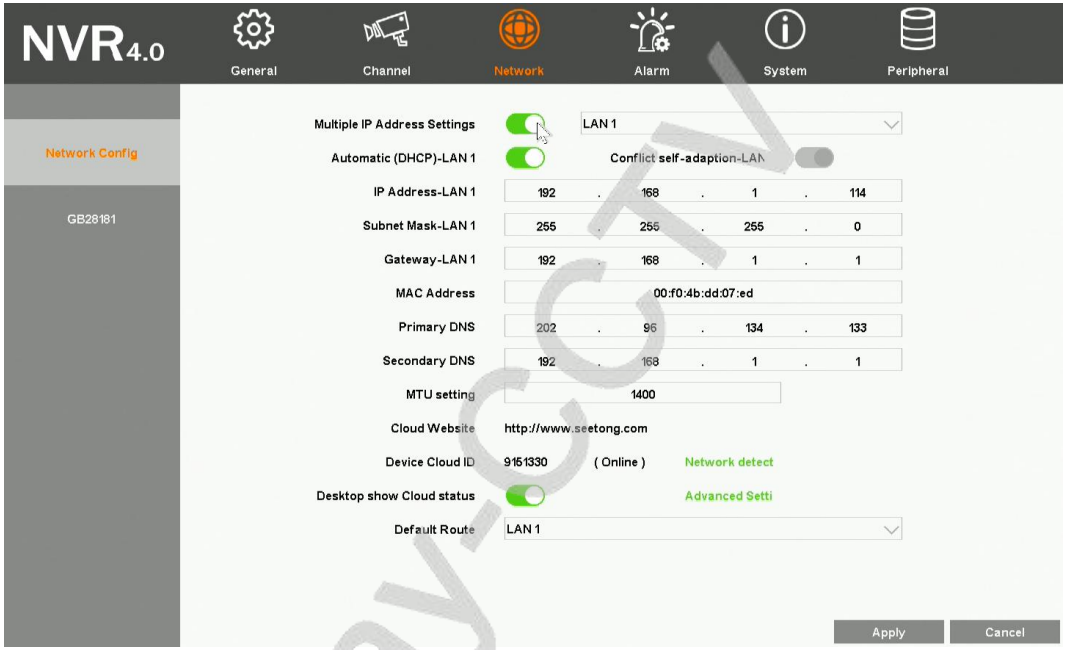
Detailed function list

Function name	Function Description
IP channel	Set current channel number
Compression	Main/sub stream encoding format setting,support H.264, H.265,H.265+.
Image Resolution	Main/sub stream resolution ratio setting, NVR provide resolution ratio option based on IPC ability level
Bitrate control	Main/sub stream bitrate control setting,support VBR and CBR
Key frame interval	Main/sub stream I-frame interver setting, range from 1-200
Bit rate	Main/sub stream bit rate setting, range from 100~10000kbps
Frame rate setting	Main/sub stream frame rate setting, the larger the frame rate, the fluency is better
Locked Config	Enabled. If the device config are modified by NVR. It'll be binded to device. Otherwise, It'll be binded the most appropriate config.
	Disabled. IPC encode parameters will not change unless NVR local config changes.

4.12.8. Network Setting

Function instruction: Configure network parameters and check out NVR device ID and P2P state. As the following picure shows:





Operation steps:

1. Left click‘system setting’ in contextmenu or in bottom menu.
2. Left click ‘network’,system will open network configure dialog.

Detailed Function List:

IP Name	Function Description	Remarks
Multiple IP Address Setting	Used to give NVR device an extra IP address	
IP Address	Used to set/modify NVR’s IP address	
Subnet Mask	Used to show NVR’s subnet mask information	

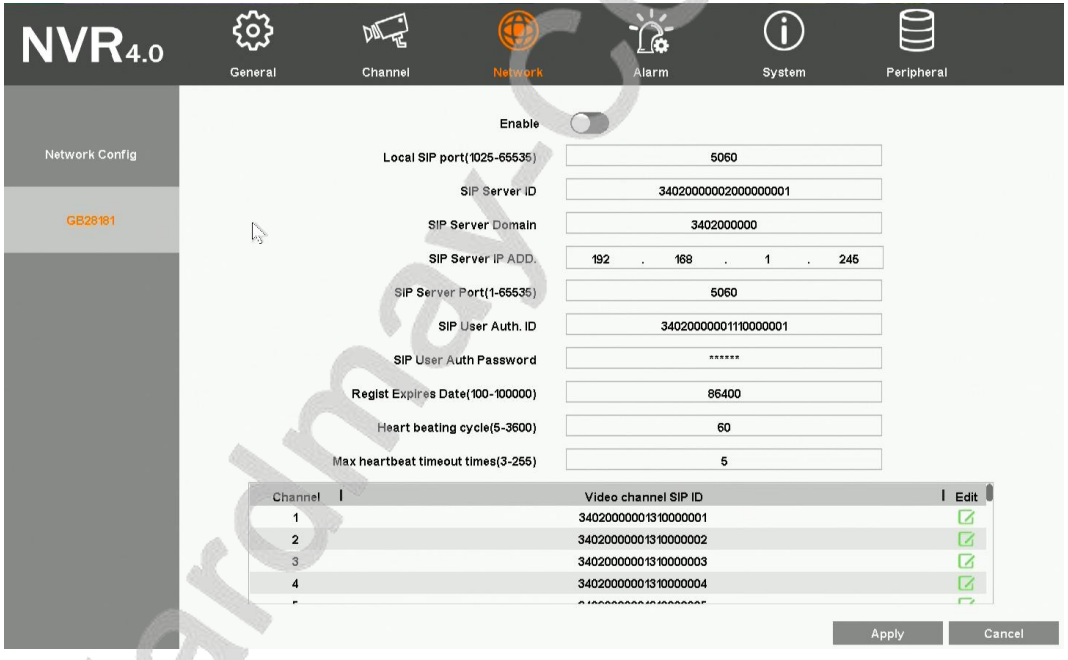
Gateway	Used to show NVR's gateway address	
Primary DNS	Show NVR primary DNS information	
Secondary DNS	Show NVR secondary information	
MAC ADDRESS	Used to show NVR MAC address information	
Auto acquire IP（DHCP）	Used to gain IP address automatically	When USE DHCP, you can't modify IP address manually
IP Self-adapt	Used to self-adapt IP address when IP conflict occurs	
Cloud Number	Show NVR device ID	
Website	Show website of cloud platform	
Cloud State	Show NVR P2P state	You can remote access to NVR device only when the Cloud State is 'online'
Cloud desktop show	Control whether you would like to see P2P state at the top of desktop	
Default Route	Used to select the gateway for NVR to surf on the internet	
Network detection	Used to diagnose NVR and IPC network condition.	When NVR hasn't been activated, this position is replaced as a 'Activate' button.
Activate	Used to activate NVR when it hasn't been activated. Then, you'll be able to enjoy cloud service	When NVR has been activated, this position is replaced as a 'Network detection' button
Advanced setting	Used to change HTTP port number to solve some cloud abnormal problem	

4.12.9. GB28181 Setting

Function instruction: NVR connect to surveillance platform with 28181 protocol.

Operation steps:

1. Left click ‘system setting’ in contextmenu or in bottom menu
2. Left click ‘Network-GB28181’ and turn to 28181 configure dialog, as the following picture shows:



Detailed function list:

Function Name	Function Description
Enable	If ticked, NVR will start 28181 service
Local SIP port	Used to set Local SIP port
SIP Server ID	Used to set SIP Server ID

SIP Server Domain	Used to set SIP Server Domain
SIP Server IP ADD	Used to set SIP Server IP ADD
SIP Server Port(1-65535)	Used to set SIP Server IP ADD
SIP User Auth ID	Used to set SIP User Auth ID
SIP User Auth Password	Used to set SIP User Auth Password
Regist Expires Date(1-100000)	Used to set Regist Expires Date
Heart beating cycle(5-3600)	Used to set Heart beating cycle
Max hearbeat timeout time(3-255)	Used to set Max hearbeat timeout time

4.12.10. Email Setting

Function instruction: set email alarm parameter

Operation steps:

1. Left click ‘system setting’ in contextmenu or in bottom menu.
2. Left click’alarm’ in system setting window, click ‘OK’ button after finishing email configuration.

Detailed Function List:

Funciton Name	Function Description
Email Service	select email server name,including smtp.163.com, smtp.qq.com, smtp.mail.yahoo.com, smtp.126.com, smtp.qiye.163.com. You can alse customize smtp email address
Port	Set email server port number, default is 25
TLS usability	Control whether start email service's encryption: support smtp.qq.com and smtp.mail.yahoo.com after you select 'Enable'
User name	Mail sender's username
Password	Mail sender's password. Attention! You should use authorized code as your password if you choose qq mailbox, 126 mailbox or 163 mailbox company version.
Send interval	Mail send interval, default is one minute, you can't send any other email in one minute
Recipient List	List all receivers'mail address
Receiver Address	Input receiver's mailbox
"Modify"button	Modify the mail address in the recipient list
"Add"button	Add a new mail address to the recipient list
"Delete"button	Delete a mail address from the recipient list
Mail test	Used to check whether the mail sender address and mail receiver address are usable

4.12.11. Motion Detection Alarm

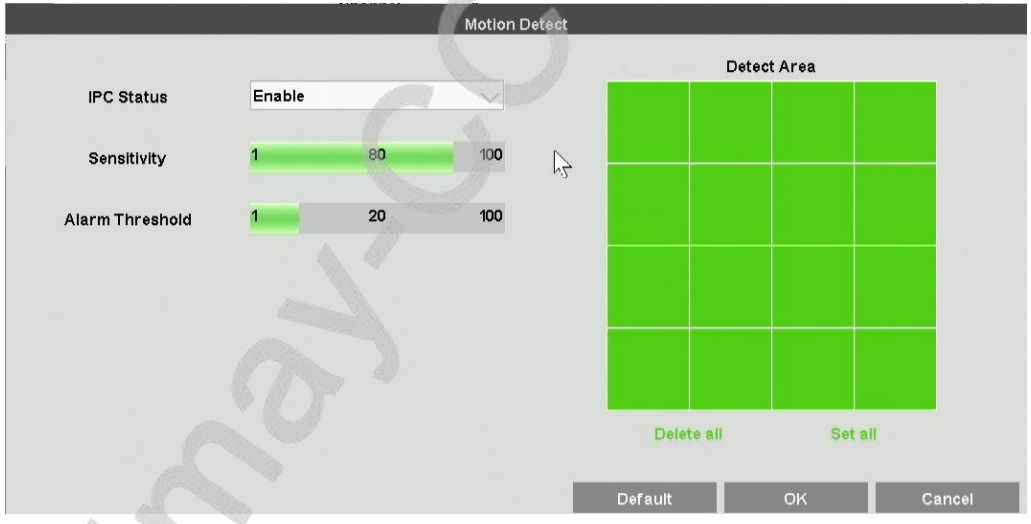
Function instruction: when Motion detected, NVR will trigger motion alarm.

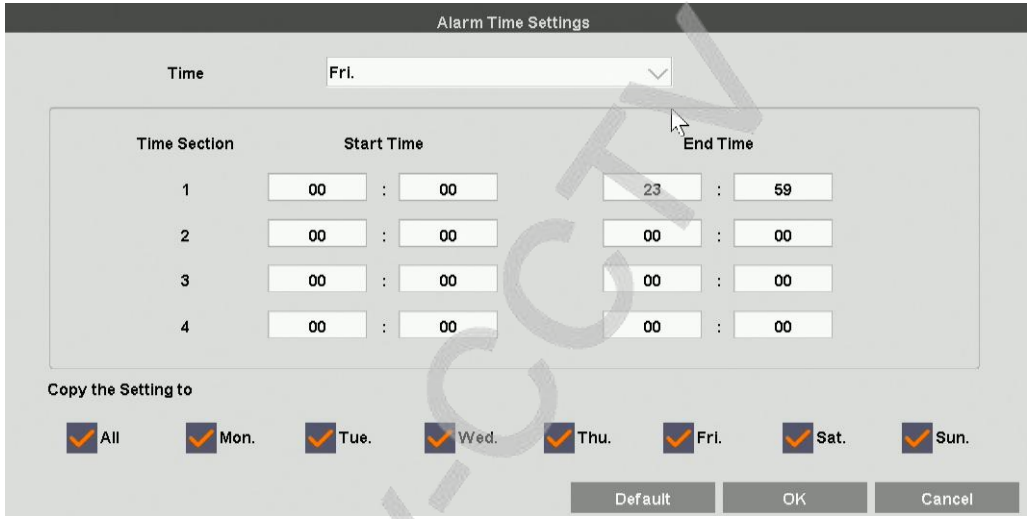
Operation steps:

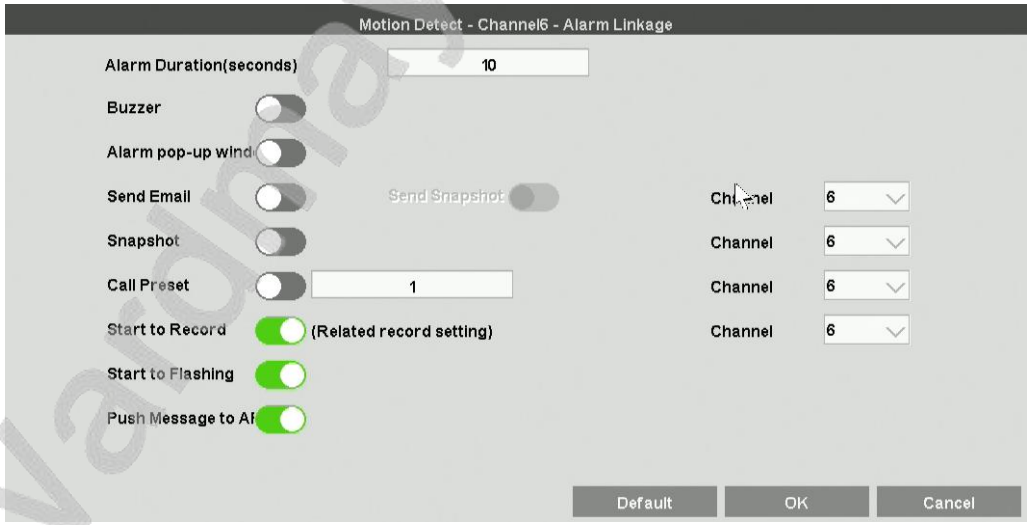
1. Left click 'system setting'' in the contextmenu or in bottom menu.
2. Left click 'Motion detection'option in system setting window, system will open motion detection dialog. Tick off the Enable checkbox and start motion

alarm

3. Left click ‘setting’button, then you’all be able to change motion area of IPC device.







4. Left click'alarm linkage' button, you'll be able to configure alarm items in the dialog.

Detailed Function List:

Function Name	Function Description	Remarks
Alarm lasting time setting	Used to set how long the motion alarm lasts	
Buzzer alarm	Control whether to activate buzzer alarm	
Alarm pop-up window	NVR change current lay-out to whick include all motion devices	
Email alarm	Control whether to send email when motion alarm detected	
Send screenshot	Control whether to add attachment when sending an email	
Snapshot image	Control whether to grab images when motion alarm detected	
Call preset	Control whether to adjust PTZ device current position when motion detected	
Start recording	Control whether to record when motion alarm detected	
Flashing	Control whether to flashing when motion alarm detected	
Push Message to APP	NVR send alarm message to your APP when alarm incident happens	

4.12.12. Video Lost Alarm

Function instruction: NVR will trigger alarm after detecting video lost

Operation steps:

1. Left click ‘system setting’ in contextmenu or in bottom window.
2. Left click ‘stream lost’ in system setting window, system turns to a new dialog. Tick off the Enable checkbox to start video lost alarm.
3. Left click ‘alarm linkage’ button., you’ll be able to configure alarm items in the dialog

Detailed Function List:

Function Name	Function Description	Remarks
Alarm lasting time setting	Used to set how long the motion alarm lasts	
Buzzer alarm	Control whether to activate buzzer alarm	
Alarm pop-up window	NVR change current lay-out to whick include all motion devices	
Email alarm	Control whether to send email when motion alarm detected	
Call preset	Control whether to adjust PTZ device current position when motion detected	
Push Message to APP	NVR send alarm message to your APP when alarm incident happens	

4.12.13. Local I/O Alarm Setting

Function instruction: Used to receive alarm input and to process alarm linkage.

Operation steps:

1. Left click ‘system setting’ in contextmenu or in bottom menu.

2. Left click ‘Local I/O Alarm Setting’ and configure ‘Defence Time’, ‘Alarm Linkage’. As the following picture shows:

Detailed function list:

	Function Name	Function Description
Alarm Input	Alarm type	Used to open or close alarm input
	Defence time	Used to set local alarm time schedule
	Alarm linkage	Used to set local alarm linkage including buzzer, email, snapshot, preset call, flashing and etc.
	Default	Set all parametres to default
	Copy	Copy current channel configuration to other

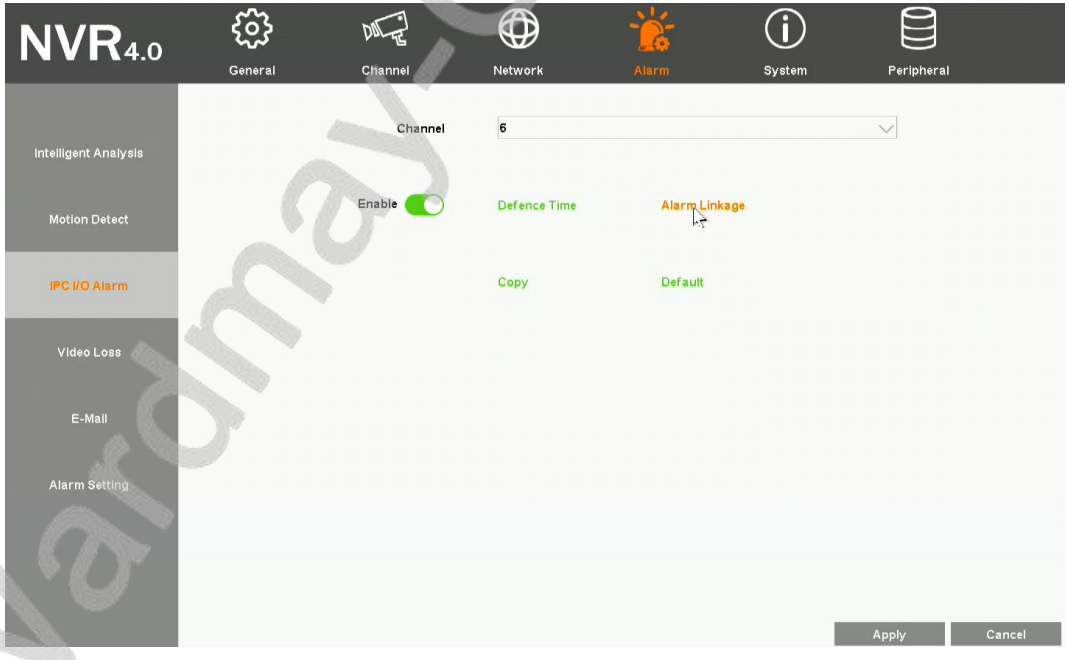
		channels
Alarm Output	Alarm output channel	Used to select channel
	Delay	Used to set alarm output delay
	Default	Set all parametres to default
	Copy	Copy current channel configuration to other channels

4.12.14. IPC I/O Alarm Setting

Function instruction: NVR process alarm linkage when receive I/O alarm message from IPC devices.

Operation steps:

1. Left click ‘system setting’in contextmenu or in bottom window
2. Left click ‘IPC I/O Alarm Setting’ and configure ‘Defence Time’, ‘Alarm Linkage’. As the following picture shows:



Detailed function list:

Function Name	Function Description	Remarks
Alarm lasting time setting	Used to set how long the motion alarm lasts	
Buzzer alarm	Control whether to activate buzzer alarm	

Alarm pop-up window	NVR change current lay-out to whick include all motion devices	
Email alarm	Control whether to send email when motion alarm detected	
Send screenshot	Control whether to add attachment when sending an email	
Snapshot image	Control whether to grab images when motion alarm detected	
Call preset	Control whether to adjust PTZ device current position when motion detected	
Start recording	Control whether to record when motion alarm detected	
Flashing	Control whether to flashing when motion alarm detected	
Push Message to APP	NVR send alarm message to your APP when alarm incident happens	

4.12.15. Intelligent Analysis Alarm

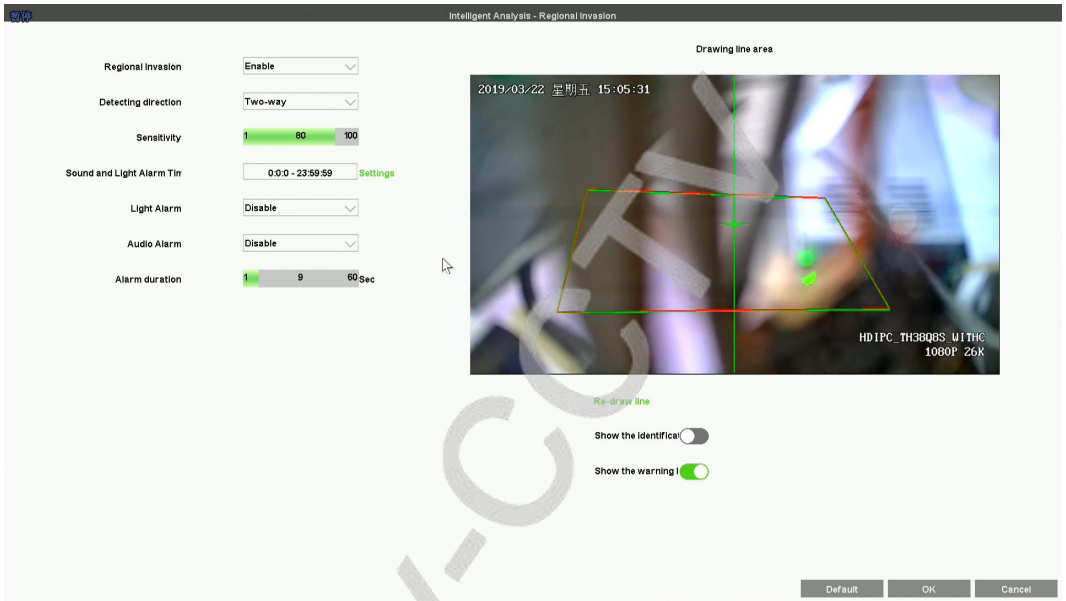
Used to configure IPC Intelligent Analysis parametres including Regional Invasion Alarm and Cross-Border Alarm

4.12.15.1.Regional Invasion Alarm Setting

Function instruction: Used to configure Regional Invasion Alarm parametres.

Operation steps:

1. Left click ‘System setting’ in contextmenu or in bottom window.
2. Left click ‘Alarm-Intelligent Analysis’ and then turn to Regional Invasion Alarm dialog, as the following picture shows:



Detailed function list:

Function Name	Function Description	Remarks
Regional Invasion	Turn on/off regional invasion alarm	
Detection Direction	Two-Way. That means that both going into the alarm area and going out side of the alarm area will trigger alarm incident.	
	Enter. That means that only going into the alarm area can trigger alarm incident.	
	Leave. That meas that only going out side of the alarm area can trigger alarm incident.	
Sensitivity	Used to control the sensitivity of regional invasion alarm.	
Sound and Light Alarm time	Used to set a period during which IPC can trigger alarm.	

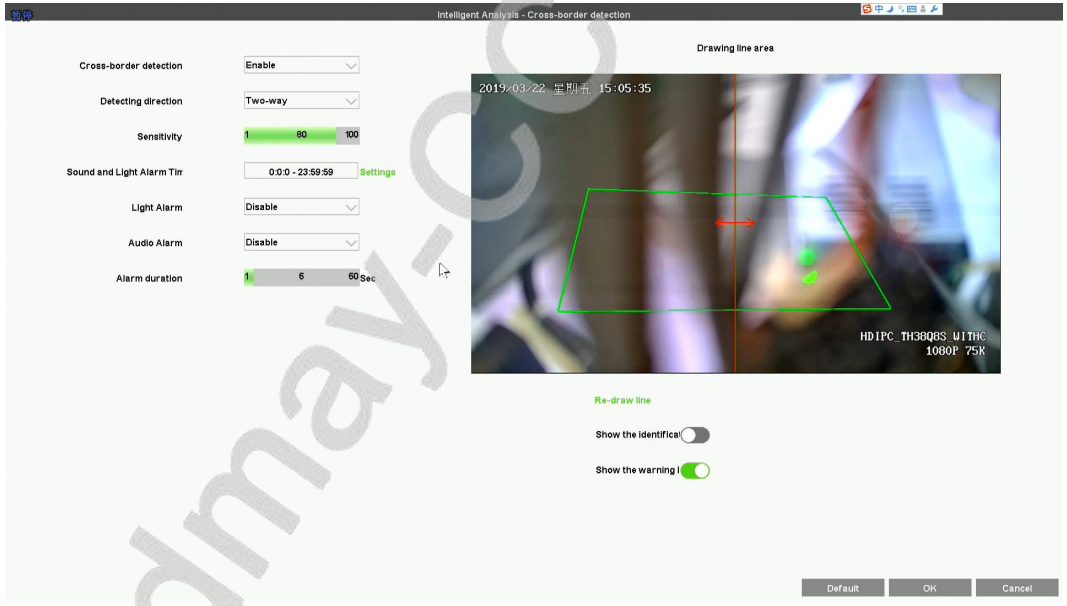
Light Alarm	Used to control whether the light flash when alarm triggered	
Audio Alarm	Used to control whether the audio has output when alarm triggered	
Alarm duration	Used to control how long the alarm last when triggered	
Redraw line	Used to reset the alarm region	
Show the identification	Used to control whether IPC display a checkbox on the source object which triggers alarm incident.	
Show the warning line	Used to control whether IPC display the region boundry line	

4.12.15.2.Cross-Border Alarm Setting

Function instruction: Used to configure Cross-Border Alarm parametres.

Operation steps:

1. Left click ‘System setting’ in contextmenu or in bottom window.
2. Left click ‘Alarm-Intelligent Analysis’ and then turn to Cross-Border Alarm dialog, as the following picture shows:



Detailed function list:

Function Name	Function Description	Remarks
Cross-border detection	Turn on/off cross-border detection alarm	
Detection Direction	Two-Way. That means that the alarm can be triggered from both side of the cross-border line.	

	One-Way. That meas the alarm can be triggered from only one side of the cross-border line.	
Sensitivity	Used to control the sensitivity of regional invasion alarm.	
Sound and Light Alarm time	Used to set a period during which IPC can trigger alarm.	
Light Alarm	Used to control whether the light flash when alarm triggered	
Audio Alarm	Used to control whether the audio has output when alarm triggered	
Alarm duration	Used to control how long the alarm last when triggered	
Redraw line	Used to reset the alarm region	
Show the identification	Used to control whether IPC display a checkbox on the source object which triggers alarm incident.	
Show the warning line	Used to control whether IPC display the cross-border line	

4.12.16. Advanced Alarm Setting

Function instruction: Used to configure alarm switch, buzzer switch, abnormal alarm push to mailbox, abnormal alarm push to APP.
Operation steps:

1. Left click ‘system setting’in contextmenu or in bottom window.
2. Left click ‘Alarm-Alarm Setting’ and turn to Alarm Setting dialog, as the following picture shows:

Detailed function list:

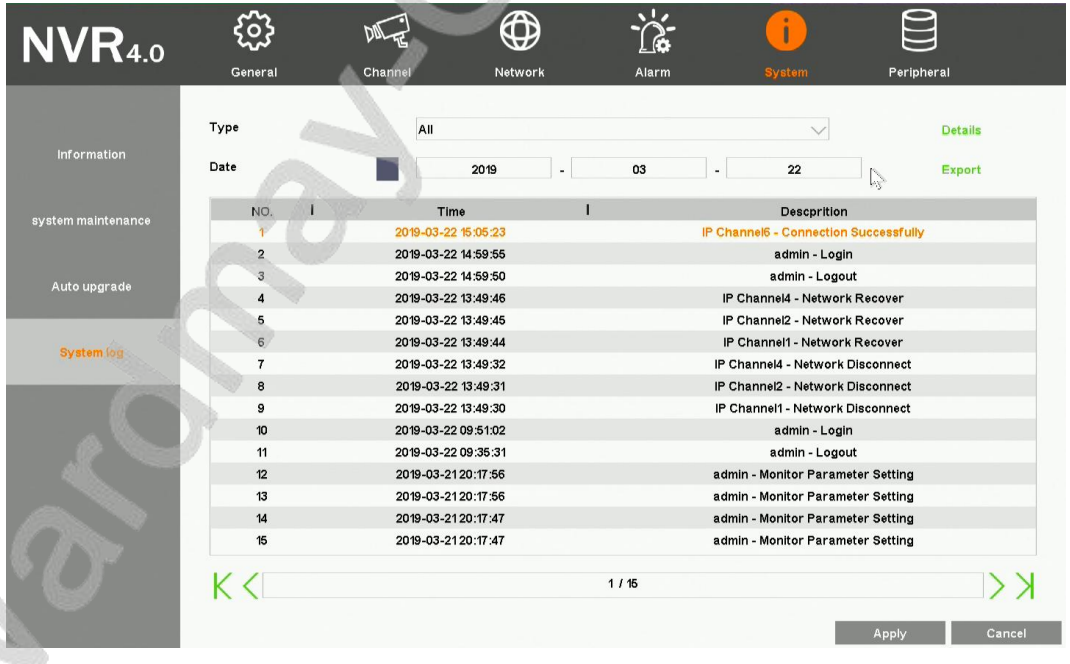
Function Name	Function Description	Remarks
Turn off all alarms	Control NVR whether to open alarm switch	
Open the buzzer	Control whether buzzer works	
Abnormal alarm push to mailbox	Control whether to enable email sending when alarm incident happens	
Abnormal alarm push to APP/Client	Control whether to enable APP push when alarm incident happens	

4.12.17. System Log

Function instruction: Used to search and export NVR's log information

Operation steps:

1. Left click 'system setting'in contextmenu or in bottom window.
2. Left click'system-log' in system setting window. The system turns to a new dialog as the following picture shows:



3. You can search log by changing 'type' and 'date' settings.For detail info, click on 'Details' button.
4. Left click'export' button,you can export selected item in the list to your u-disk or other storage devices.

4.12.18. System Maintenance

Function instruction: Maintain the NVR system, including restart system according to schedule,upgrade using u-disk, reset factory, import/export

Operation steps;

1. Left click ‘system setting’in contextmenu or in bottom menu
2. Left click ‘maintain’in system setting window, system turns to ‘system maintenance’.

Detailed Function List:

Function Name	Function Description	Remarks
Reboot Setup	Restart system according to schedule	Default state is close
Update type	Different way to upgrade system	
Update	Used to upgrade system by u-disk	Do not power off when updateing, or else NVR can’t restart
Export	Export current configuration to storage devices	
Import	Import configuration from u-disk to NVR system	
Reset factory setting	Simple recovery, recover system configuration except Network settings and Cloud password setting	
	Complete recovery, completely restore all system configuration to factory settings	

4.12.19. System Basic Information

Function instruction: Used to show NVR system information,including product model,device ID,product serial number, software version, hardware

version,website, QR code

Operation steps;

1. Left click ‘system setting’in contextmenu or in bottom menu.
2. Left click ‘system information’ in system setting window, system turns to ‘information’ dialog.

4.12.20. Auto Upgrade

Function instruction: Used to upgrade through web server online.

Operation steps:

1. Left click ‘system setting’ in contextmenu or in bottom menu.
2. Left click ‘auto upgrade’ in system setting window, system turns to ‘Auto upgrade’ dialog.

REMARKS: You must ensure that your NVR have connected to the Internet.

Detailed Function List:

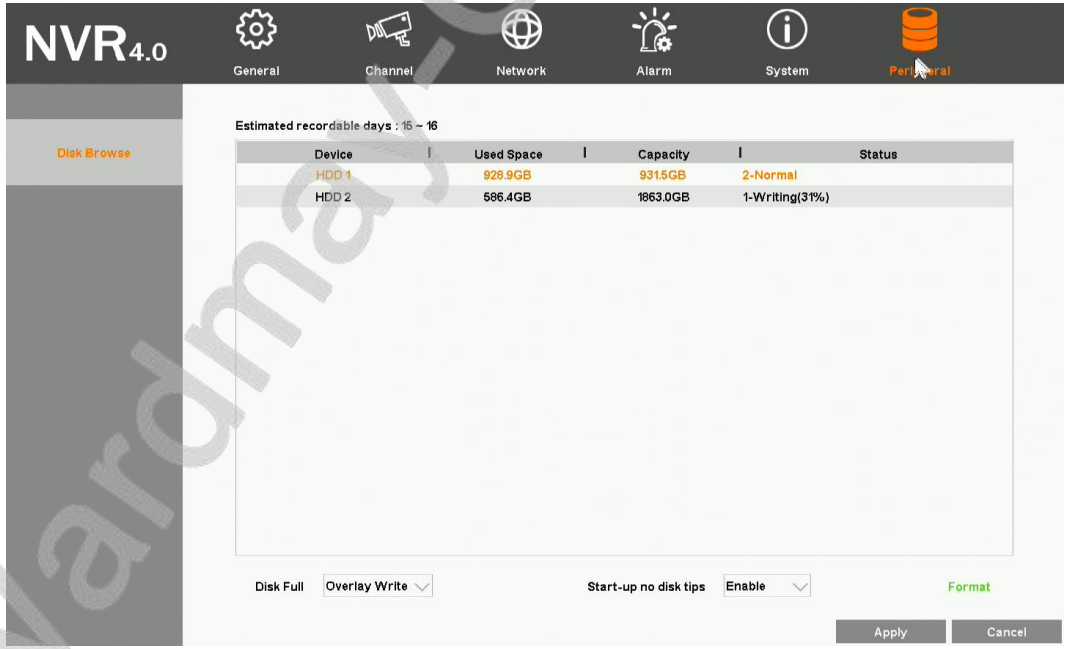
Function Name	Function Description	Remarks
Check	Used to check whether there’s new version on the remote server	The dialog shows ‘The current version is up to date’ if there’s no latest version. Besides, The dialog shows the latest version if there’s new software version
Upgrade	Left click to update to latest version	Be sure that your NVR have already connected to Internet before upgrade.
Auto upgrade	Used to upgrade automatically	
Upgrade time	Used to set auto-upgrade time	This setting come into effect only when you Tick off ‘Auto upgrade’

4.12.21. Storage Device

Function instruction: Used to check disk information, HDD formatting

Operation steps:

1. Left click ‘system setting ‘ in contextmenu or in bottom menu.
2. Left click ‘Device’ in system setting window, system turns to ‘Device’ dialog as the following picture shows:



3. Select one item in the storage device list. Click ‘Formatting’ button to format HDD. For large-disk NVR， you need to choose all disks that you want to format. And then click ‘Formatting’ button to format HDD. As the following picture shows:

4. We also provide different strategies when your HDD is full. ‘Overlay Write’ will continue to record and overlap the earliest video recording data. You can also select ‘stop recording’ as your strategy that NVR stops recording as soon as the HDD is full.

5. Appendix

5.1. Hard Disk Capacity Calculation

Code Rate	Recording File Size/Day/Channel
1000kbps	10G
2000kbps	20G
3000kbps	30G
4000kbps	40G
5000kbps	50G

5.1.1.Hard Disk Total Capacity Corresponding Video Days Calculation

HDD total capacity	Chanel Number	Resolution Ratio	Video Days
8T	8	960P×8	80 days
8T	8	1080P×8	50 days
8T	16	960P×16	40 days
8T	16	1080P×16	25 days
8T×2	25	960P×25	50 days
8T×2	25	1080P×25	32 days
8T×2	36	960P×36	35 days
8T×2	36	1080P×36	22 days

Remarks: the above data is calculated by H.264 & low rate bite, when onvif IPC access NVR, the video days will reduce half.

HDD total capacity	Chanel Number	Resolution Ratio	Video Days
8T	8	2MP× 8	125 days
8T	8	5MP×8	83 days
8T	16	2MP×16	62 days
8T	16	5MP×16	41 days
8T×2	25	2MP×25	80 days
8T×2	25	5MP×25	53 days
8T×2	36	2MP×36	55 days
8T×2	36	5MP×36	37 days

Remarks: the above data is calculated by H.265+ & low rate bite, with single channel 2MP 4GB~8GB/Day, 5MP 6GB~12GB/Day

5.2. NVR general specifications

Model	Decode ability		Playback ability	GB28181 protocol support	Buzzer support	Talk support
TS8108D7	View1：1*3MP View4：4*D1 View9：8*D1		1*3MP	Support	Not support	Not support
TS8116D7	View1：1*5MP@20fps View2：1*5MP+1*2MP View4：1*5MP+3*D1	View8：1*5MP+7*D1 View9：9*D1 View16：16*D1	1*5MP or 2*2MP	Support	Support	Not support
TS8232C4	View1：1*4K View2：2*5MP View4：4*2MP@25fps	View8：1*5MP+7*D1 View9：9*D1@25fps View25：25*D1 View32：32*360P	1*4K or 4*2MP or 2*5MP	Support	Support	Support
TS8836M/TS8436M	View1：1*4K View2：2*5MP View4：4*4MP@20fps or 4*2MP@25fps View8：1*5MP+7*D1	View9：9*D1 View36：36*D1	1*4K 30fps or 2*5MP or 4*4MP@20fps or 4*2MP@25fps	Support	Support	Support
TS8104A	View1：1*4K View2：2*5MP	View4：4*4MP@15fps	1*4K 30fps or 2*5MP or 4*4MP@15fps or 4*2MP@25fps	Support	Support	Not support
TS8108A	View1：1*4K View2：2*5MP	View4：4*4MP@15fps View8：1*5MP+7*D1 View9：8*D1@25fps		Support	Support	Not support
TS8116A	View1：1*4K View2：2*5MP View4：4*4MP@15fps	View：1*5MP+7*D1 View：8*D1@25fps View：16*D1		Support	Support	Not support

5.3. FAQ

1. **What is NVR default user name and password?**
   user name : admin, password: 123456

2. **What should I do when I forgot my password?**
   Step 1: Click 'Forgot password' button on the log-in interface and turns to 'Temporary password QR code' interface.
   Step 2: Scaning the temporary password QR code through Seetong App and you will get a temporary password.
   Step 3: Enter the temporary password and reset your password.

3. **Why can I see nothing when I start the system?**
   Step 1:Check NVR if it has electricity, user can check mouse lamp,ethernet port and so on, we suggest use NVR standard power
   Step 2: Check display resolution, our NVR default resolution: 1920x1080. When the maxium resolution of display is less than NVR, there is no interface output. You can keep pressing Right mouse button for more than 10 seconds and NVR output resolution will be set to 1024x768.
   Step3:Check interface if there is output after deleting all outside device and power on by itself, our NVR support VGA output and HDMI signal

4. **After starting interface, it prompts 'NO HDD'**
   Step 1:Confirm NVR to connect regular hard disk without fault
   Step 2:Confirming NVR's power is enough, we suggest customer to use standard power.
   Step 3:Confirming NVR HDD power interface and SATA interface is normal

5. **How to deal the condition that I have no Cloud ID?**
   Step 1:NVR only can gain cloud ID after the NVR device is activated when connecting internet, it can check cloud ID through moving mouse to the margin top of main interface
   Step 2:Enter NVR's main interface, click right key,enter'system setting-system-basic information', check product serial number if it is legal,the illegal serial number begin with "FFFFFFFF********"

6. **Why I cannot find my IP camera when I use the search function?**

Step1:Check NVR if it is connected to cable, we can check Ethernet port flicker to judge

Step2:If user can't search ONVIF IPC, please confirm ONVIF IPC and NVR are in the same network segment, make sure that IPC supports ONVIF 2.1 and above version.

7. It Prompts that channel have run out of resources

Step1:The total bandwidth of NVR is limited, when channel run out of resources, please reduce relative channel code rate

8. When IPC devices are added to multi-channel NVR, my NVR is choppy and sometimes lag. How to deal with this condition?

We strongly suggest user to use gigabit switch when you use a multi-channel NVR(channel number > 16).

9. The new NVR interface is a little bit dazzling. Can I adjust the brightness and color of the new UI ?

Step 1: Log in, right click to open contextmenu, turns to System setting interface.

Step 2: Turns to 'General-Advanced setting', open 'Adjust the interface background color' configuration.

Step 3:Adjust the brightness.