



**VIM Mini Maxx Series
Network Video Recorders
Manual**

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Product Series	Products Models
VI-M-4-1000	4 Channel NVR
VI-M-8-2000	8 Channel NVR
VI-M-16-4000	16 Channel NVR

Responsibility Statement:

- This manual is subject to change and may include some inaccurate or non practical points due to continuous product improvement. We will modify this manual in time and inform the users.
- This manual is for reference only.
- The parts, components and accessories mentioned in this manual do not mean the standard configuration. For detail configuration, please refer to the actual product.
- The pictures, forms and words used in this manual are not to be distributed without prior written approval.

Default Info:

- Default administrator account: admin
- Default administrator password: admin
- Default IP address: 192.168.1.3

Signal Explanation:

Signals	Explanation
	Low or moderate potential risk; it may slightly or moderately injure persons if the risks can't be avoided.
	Potential risks. If this signal is ignored, it may damage the device, lost data, lower device functions or other potential damages.
	Additional info on the contents.

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1. Product Main Functions

Basic Functions

- Supports IP cameras, high-speed dome IP cameras, Internet video servers, and third party IP products.
- Supports Onvif standard protocol.
- Each channel supports dual stream compression.
- Each channel's encoder parameters are adjustable, including resolution, frame rate, bit rate and image quality.
- Each channel supports two modules: timing module and event module.
- Supports fast adding IP channels.

Local Supervision

- Supports VGA and HDMI.
- Supports split preview screen: 1/4/6/8/9/16/25/32.
- Supports quick manual in preview interface.
- Supports camera intelligent analysis processing and built-in intelligent analysis function.
- Supports motion detection/lost video/hidden image detection.
- Supports pan/tilt/zoom control protocol, support setting preset, cruise, scan and pattern.

Hard Disk Files Management

- Display SMART info.
- Set disk property: redundancy, read-only, write, backup.
- Supports disk hibernation.
- Supports raid, settings disk group, and distributing different disks with different record space.

Records and Playback

- Trigger recording methods: manual, timing, port/motion detection/lost video/hidden image/intelligent video alarms.
- Set pre-recording and delay recording after being linked by alarms.
- Query records according to timing/events.

-
- Supports local redundant recording.
 - Supports encrypted recording.
 - Support for 4 recording periods each day. Each period can be set with different trigger mode.
 - Supports holiday scheduling.
 - Smart search for records according to channels, video type, start/end time and file format.
 - Supports various playback modes: event/label/external file/smart/picture playback.
 - Picture snapshot on videos; different records are marked different colors.
 - Supports: pause, rapid play, slow play, jump forward 30s, jump backward 30s, target position by moving mouse.
 - Enlarge or shorten the time bar by mouse roll.
 - Digital zoom in any region of the playback interface.

Backup

- Backup by USB.
- Backup files in batch.
- Backup record clips of playback interface.
- Backup according to channels and time.
- Backup device management.

Alarm and Unusual Situation Management

- Set time for alarm in/out.
- Alarm detection on lost video, motion detection, port, and intelligent analysis. All of these alarms can link: single screen display, sound alert, upload into management center, send emails, alarm output, video recording by any channel.
- Unusual situation detection on: no disk, full disk, error in disk reading and writing, illegal access, IP address conflict, MAC address conflict, no available redundant disk, offline and hot spare error. All these info can link: screen alert info, sound alert, upload into management center.

Other Functions

- Four levels of access control configurable by the administrator account.
- Manually trigger alarm and clear alarms.
- Import and export configuration.

Internet Function (WEB Server)

- Supports TCP/IP/PPPoE/DHCP/DNS/DDNS/NTP/SADP/NFS/HTTPS.
- Built-in WEB server.
- Supports unicast and multicast, unicast supports TCP.UDP.RTP protocol.
- Supports remote query, playback, download, lock and unlock recordings.
- Gain/set/import/export parameters remotely.
- Gain info about device status, system log and alarm status through the built in WEB server.
- Format hard disk, upgrade and reboot the system remotely.
- Alarm port extension by alarm host.
- Manually trigger and stop recording remotely.
- Manually trigger and stop alarm output remotely.
- Control PTZ by using the built in WEB Server.
- Audio intercom and broadcast.

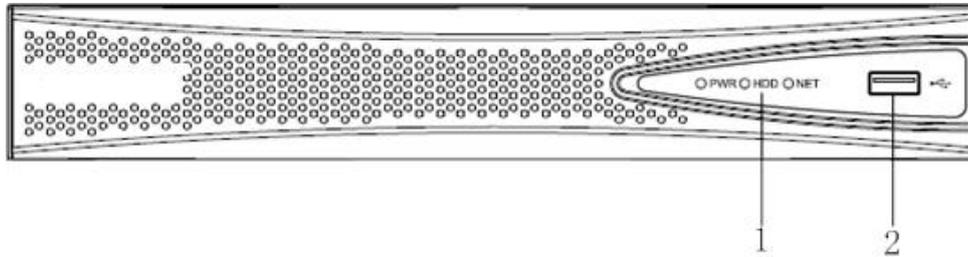
Support on Development

- Original code for some software function.
- Development support and training on user system.

2. Operation Instruction

2.1 Front Panel

The following picture is the NVR front panel.

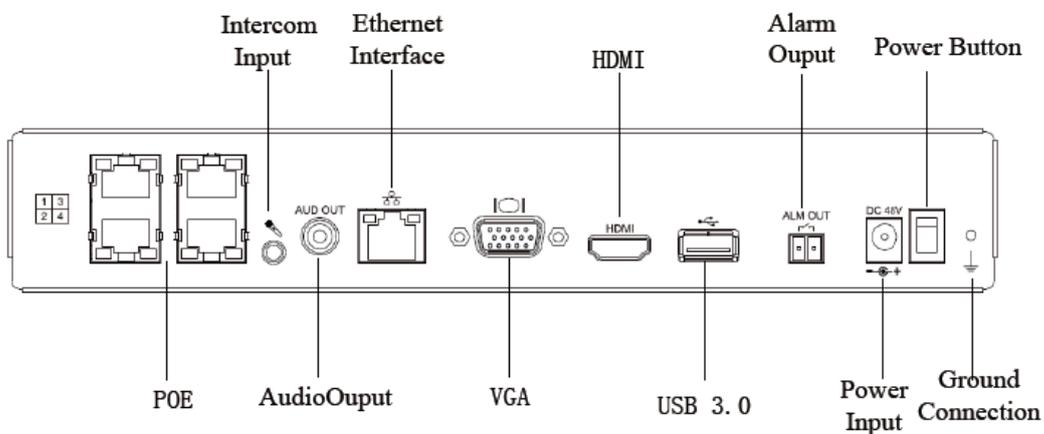


Function list:

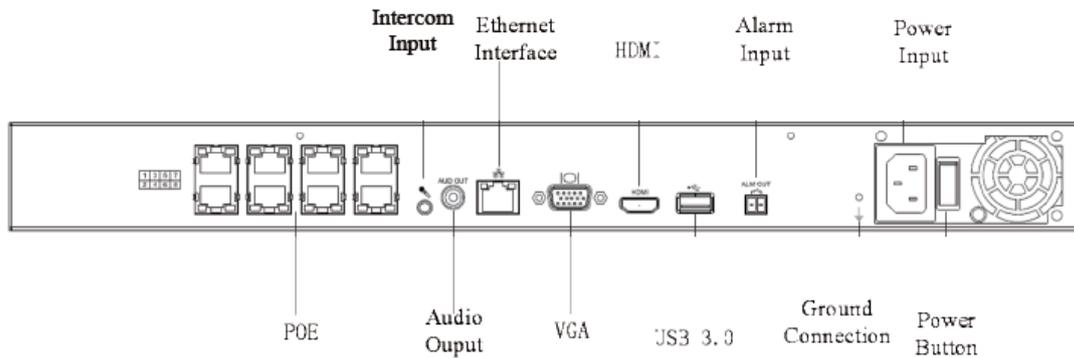
NO.	Type	Name	Explanation
1	Status light	PWR	Power light will light up after the device power on.
		HDD	HDD light will light up when reading and writing to the hard drive.
		NET	Internet light will light up when the device is connected to the internet.
2	Port	USB	USB port can connect mouse, flash disk, portable HDD.

2.2 Rear Panel

NVR (4ch) rear panel picture:



NVR (8ch) rear panel picture:



2.3 Mouse Operation:

For details on mouse functionality, please refer to the following table:

Part on mouse	Behavior	Instruction
Left button	Left click	<ul style="list-style-type: none"> ● Preview interface: click “+” to add device ● Preview interface: click to show fast menu when there is image ● Menu interface: choose and confirm
	Double click	In preview and playback interface, click to swift from single and multi-split screen
	Drag	<ul style="list-style-type: none"> ● Change direction for PTZ ● Set region for mask, motion ● Change the position between two screen
Right button	Click	<ul style="list-style-type: none"> ● Preview interface: click to show menu ● Menu: Exit current menu, back to prior interface
Wheel	Slide up	<ul style="list-style-type: none"> ● Slide to choose options ● Slide to show upper page
	Slide down	<ul style="list-style-type: none"> ● Slide to choose options ● Slide to show lower page
	Press and drag	Swift mouse between main and vice screen.

3. Installation and Connection

3.1 Warning



Warning:

Changing the battery or adapter may cause explosion. If battery or adapter replacement is necessary, please replace with the same type.

Installation precaution:

- Do not put liquid container on NVR.
- NVR should be installed in good ventilation - distance between different NVRs should be more than an inch.
- Working temperature (-10°C~+55°C (14°F~131°F), humidity (10%~90%).
- Please power off the NVR when cleaning.
- Dust may lead to short circuit in humid conditions. It is necessary to clean the board, connector and assembly, device case and fan with Air Duster or equivalent.
- When cleaning the NVR, don't use alcohol, benzene, diluter or other volatile solvents. Using strong and abrasive cleaners can scratch the NVR.
- Please make sure there is enough space for audio/video cable; cable bending radius should be no more than 5 times cable diameter.
- Please make sure NVR has ground protection.

4. Configuration and Operation

4.1 Start Up/Log Out

4.1.1 Start Up



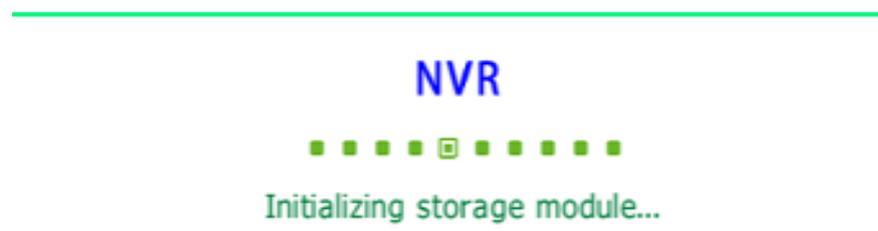
Before starting up the device, please make sure the power input and ground protection is in place.

Before starting up the device, please make sure NVR output interface and monitor is connected.

Please make sure the AC power is stable as damage can be caused by voltage spikes or incorrect voltage.

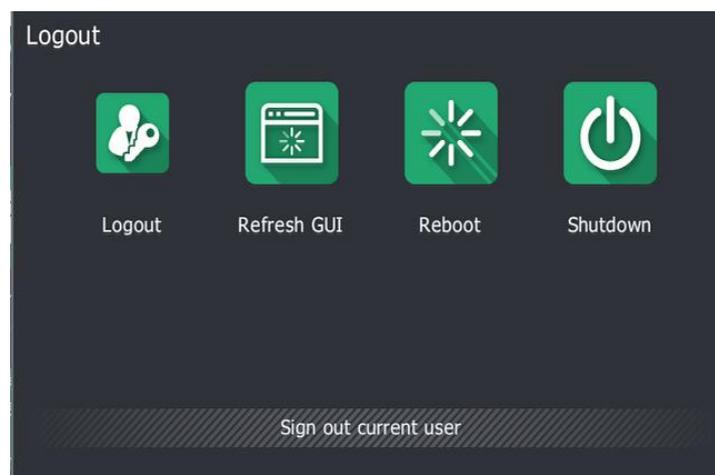
1. Plug in the power cord and turn on the power switch on the rear panel. The NVR will beep at start up.

2. NVR will show the following interface when starting up:



4.1.2 Log Out

1. Choose “main menu ->log out”.

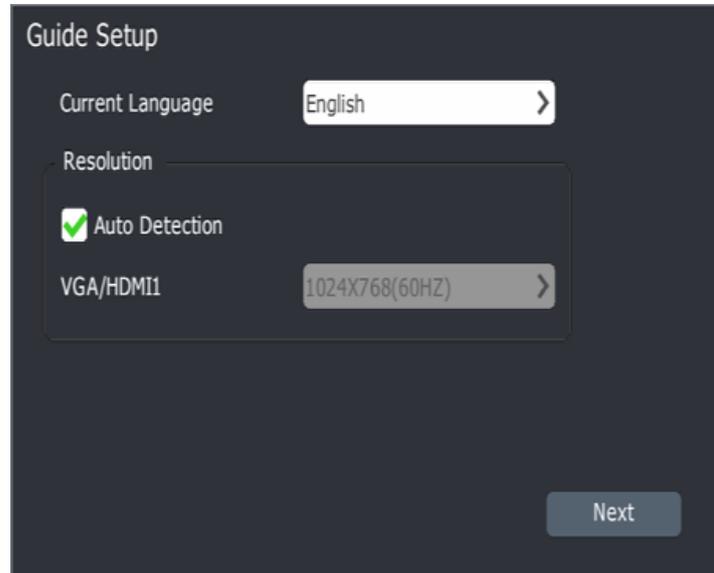


- Do not power off the device when a user is logged in.

-
- To avoid damage to the Operating System, use the Shutdown button to power off the NVR.

4.2 Guide Setup

1. First step: Set the current language, output resolution, and auto detection then click “Next”.



Auto Detection will scan the connected Network for compatible cameras and add them automatically to the NVR.

2. Click “Yes” to continue the Guide Setup.

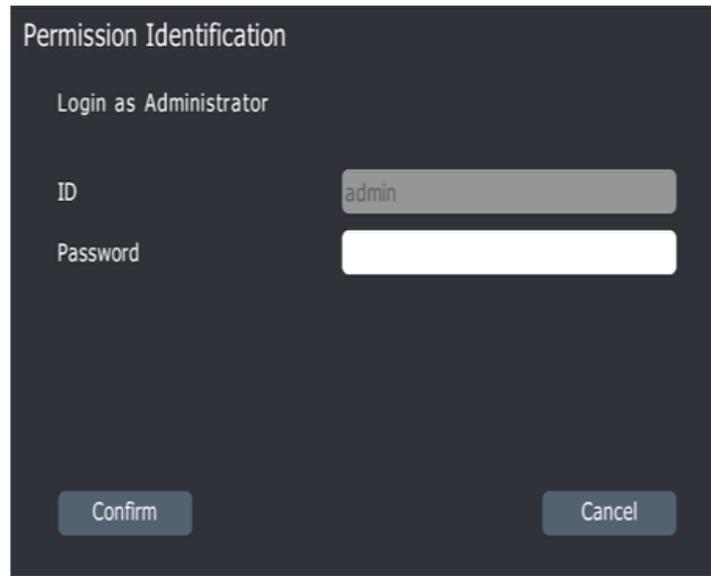




Note: Choose “Yes” to continue running “Guide setup”; choose “No” to skip the “Guide setup”, choose “Never” to skip the “Guide setup” automatically when starting up the system next time.

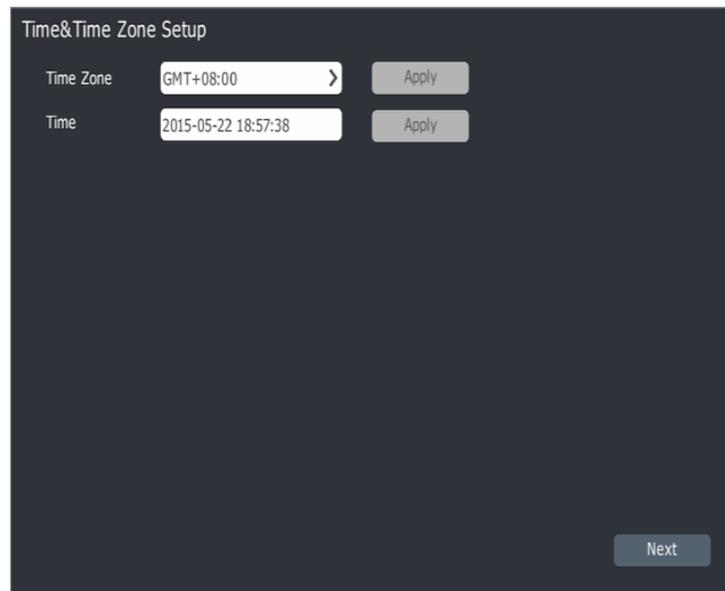
3. After choosing “Yes”, the following interface is displayed:

- Default login information - ID: admin Password: admin.



The image shows a dark-themed dialog box titled "Permission Identification". Below the title, it says "Login as Administrator". There are two input fields: "ID" with the text "admin" and "Password" which is currently empty. At the bottom of the dialog, there are two buttons: "Confirm" on the left and "Cancel" on the right.

4. Click “Confirm” to enter Time and Time zone setting interface:



The image shows a dark-themed dialog box titled "Time & Time Zone Setup". It contains two rows of settings. The first row is "Time Zone" with a dropdown menu showing "GMT+08:00" and a right-pointing arrow, followed by an "Apply" button. The second row is "Time" with a text input field showing "2015-05-22 18:57:38" and an "Apply" button. At the bottom right of the dialog, there is a "Next" button.

Set the appropriate Time Zone and Confirm the Time is accurate.

5. Click “Next” to enter Network Setup interface.

The screenshot shows the 'Network Setup' interface for 'NIC 2'. The MAC Address is 00:50:c2:28:4a:4a. The 'Auto obtain IP address via DHCP' checkbox is unchecked. The 'Manual setup IP address' checkbox is checked, with the following values: IP Address: 010.030.021.047, SubNet Mask: 255.255.255.000, and Gateway: 010.030.021.001. The 'Manual Setup DNS' checkbox is also checked, with Preferred DNS and Reserved DNS both set to 192.168.001.001. An 'Apply' button is located at the bottom right of the configuration area. At the very bottom of the interface are 'Back' and 'Next' buttons.

Set the desired IP address for the NVR.

6. Click “Next” to format the disk. (Hard Drive)

The screenshot shows the 'Format Disk' interface. It features a table with the following data:

Device	Size	Used	Free	Sleep
SATA1	1.82T	--	--	N

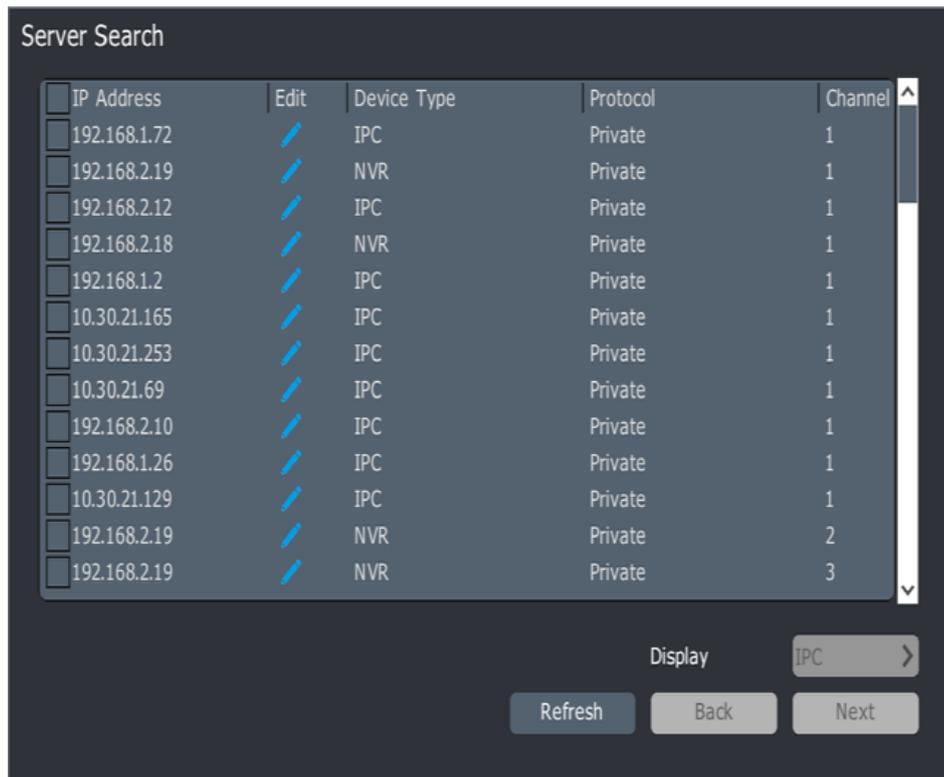
Below the table is a large empty area. At the bottom of the interface are three buttons: 'Initialization', 'Back', and 'Next'.



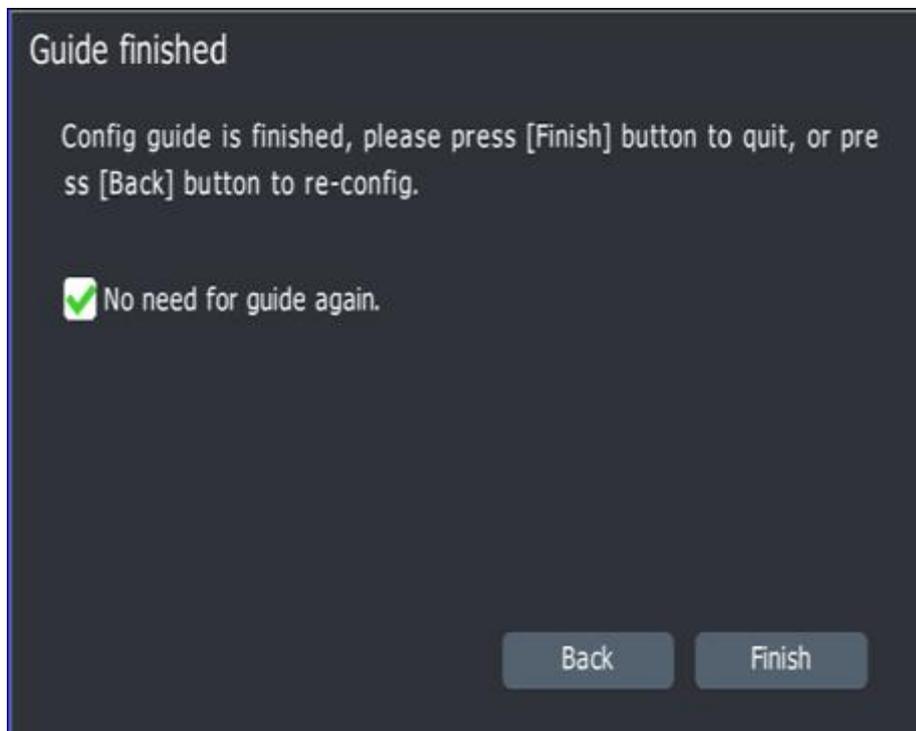
Note:

All Hard Drives must be initialized to enable recording.

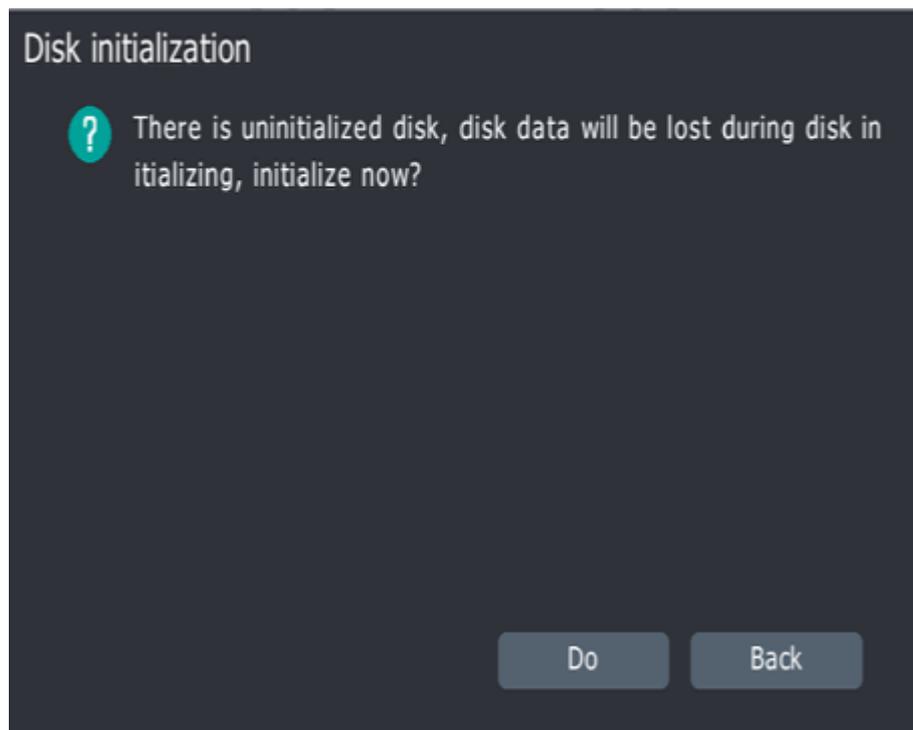
7. Click "Next" to search and add devices.



8. After configuration guide is finished, it will show the following interface:



9. If there is still uninitialized disk, it will show the following interface:

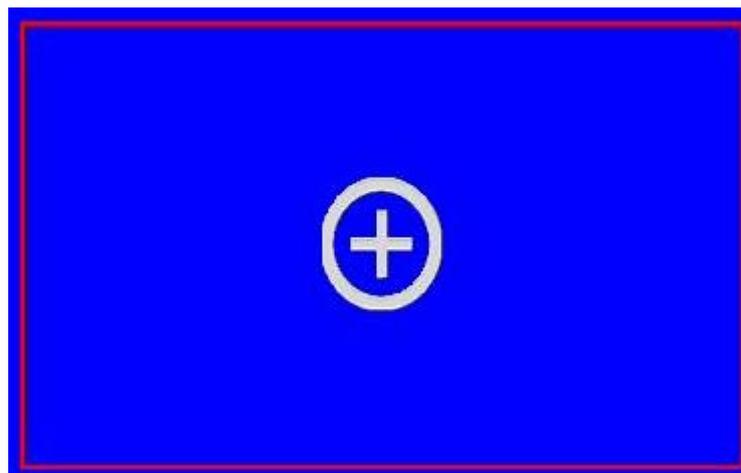


Click "Do"; it will automatically format the uninitialized disks.

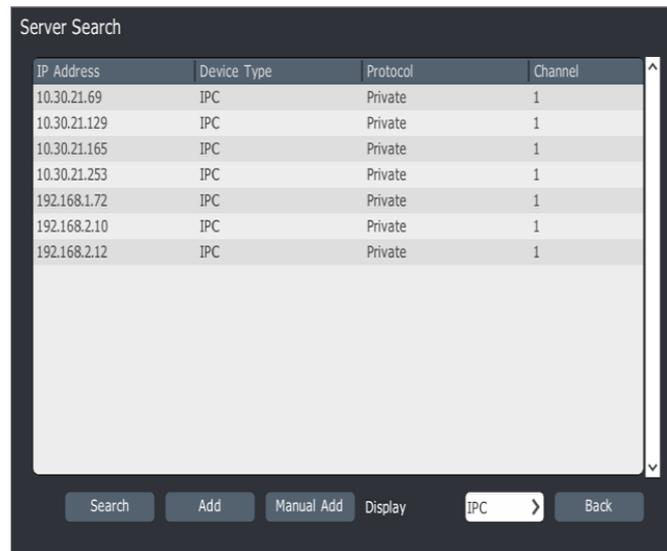
4.3 Channel Management

4.3.1 Add Device

Click "+" to add device.



1. By Clicking “+” in the preview interface, the Server Search pop-up appears as illustrated below:

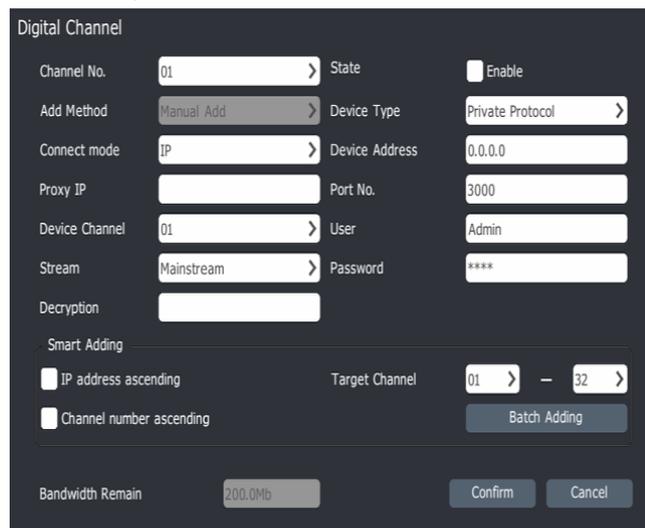


Note:

- Mouse click is not available in searching process.
- The system will automatically add the devices with default port, ID and password. If the info doesn't match the default info, customer can choose “Manual Add”.

2. After searching, double click the IP in the list to add or highlight the device and choose the “Add” button.

3. If the device is not automatically added, then choose “Manual Add”.



4. Input Device IP address, Port number, User name and Password. Click “Confirm” to add the device.



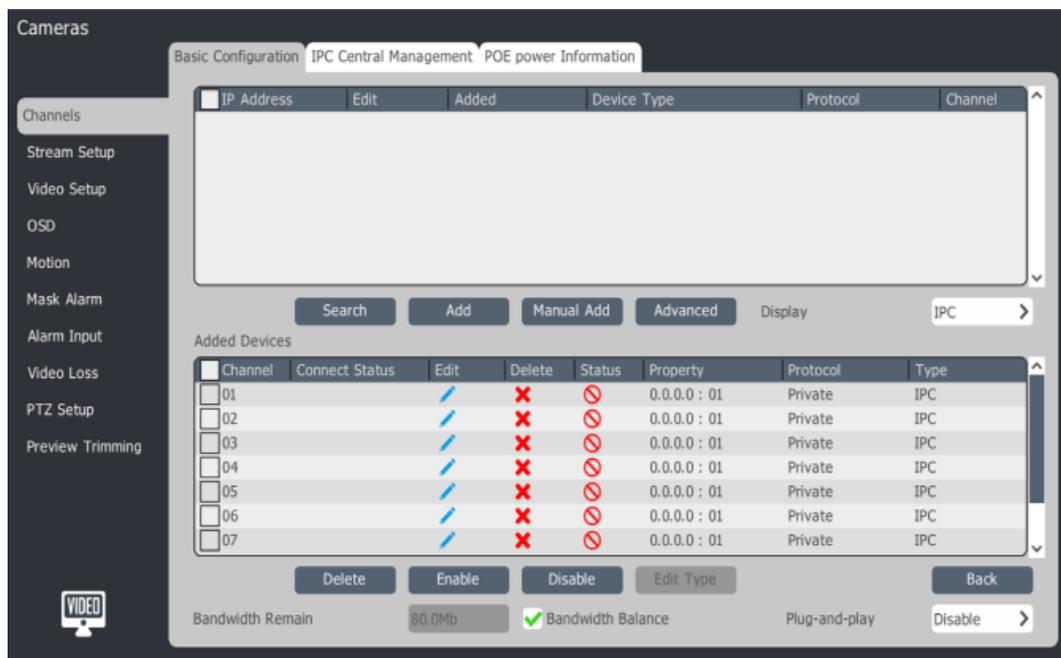
Note:

- For onboard PoE ports, the system will add devices automatically.

4.3.2 Add devices in usual way

1. Choose “main menu->channel management->basic configuration” to enter the

Channel Management interface:



Note:

- After successfully adding the device, the device will show in the “Added Devices” list.

2. In the search result, the sequence is arranged automatically according to IP address. Clients

can click  to change the IP address, illustrated in the following picture:

Modify IP

MAC address 00:50:c2:28:10:69

Original network address 010.030.021.069

New network address 010.030.021.069

SubnetMask 255.255.255.000

Gateway 010.030.021.001

DNS 010.030.021.001

Confirm Cancel

By Clicking **Advanced**, devices can be found by using different search criteria as illustrated below. :

Server Search

IP Address	Server Name	Serial Number	Channel
------------	-------------	---------------	---------

Connect Mode Domain > Search Add Back

2. In the search results, choose the IP address, then click “Add” to add the device into NVR channel, or double click IP address to add the device.



Note:

- By using “Plug and Play”, digital channels can be automatically added.
- Manual Add.

1. In channel configuration/basic configuration interface, click “Manual Add” to enter digital channel interface as illustrated below:

Digital Channel

Channel No. 01 State Enable

Add Method Manual Add Device Type Private Protocol

Connect mode IP Device Address 0.0.0.0

Proxy IP Port No. 3000

Device Channel 01 User Admin

Stream Mainstream Password ****

Decryption

Smart Adding

IP address ascending Target Channel 01 - 32

Channel number ascending Batch Adding

Bandwidth Remain 200.0Mb Confirm Cancel

2. Choose the channel number to add the camera, check the “Enable” box, and choose connection mode according to the camera type.

When changing the device type to RTSP, the URL Address is required as illustrated below:

Digital Channel

Channel No. 01 State Enable

Add Method Manual Add Device Type RTSP

Connect mode TCP URL Address rtsp://

Proxy IP

Device Channel 01 User Admin

Stream Mainstream Password ****

Decryption

Smart Adding

IP address ascending Target Channel 01 - 32

Channel number ascending Batch Adding

Bandwidth Remain 200.0Mb Confirm Cancel

3. Provided the device is ONVIF compatible, change the device type to “ONVIF” as illustrated below:

Digital Channel

Channel No.	01	State	<input type="checkbox"/> Enable
Add Method	Manual Add	Device Type	ONVIF
Connect mode	TCP	Device Address	0.0.0.0
Proxy IP		Port No.	80
Device Channel	01	User	Admin
Stream	Mainstream	Password	****
Decryption			

Smart Adding

<input type="checkbox"/> IP address ascending	Target Channel	01	-	32
<input type="checkbox"/> Channel number ascending		Batch Adding		

Bandwidth Remain 200.0Mb

Confirm Cancel

4. Input the device IP address or URL address, User name and Password, click “Confirm” to finish adding the device. Repeat the process to add other ONVIF compliant devices.



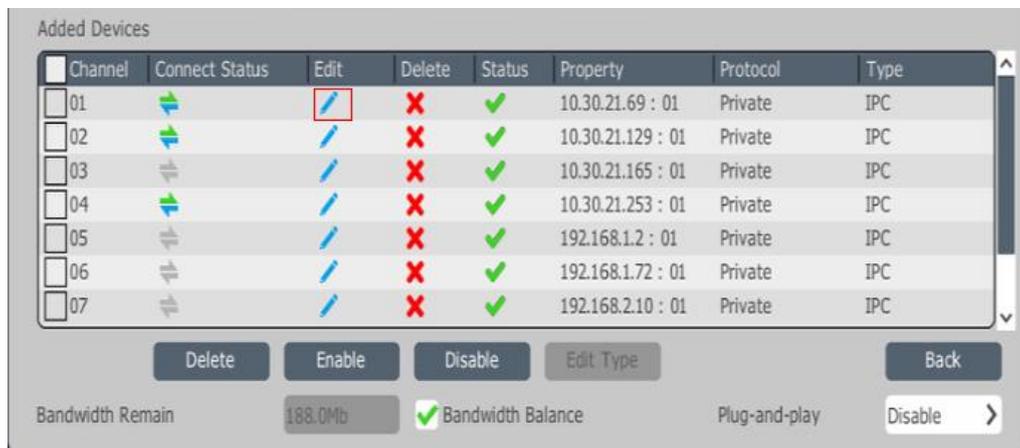
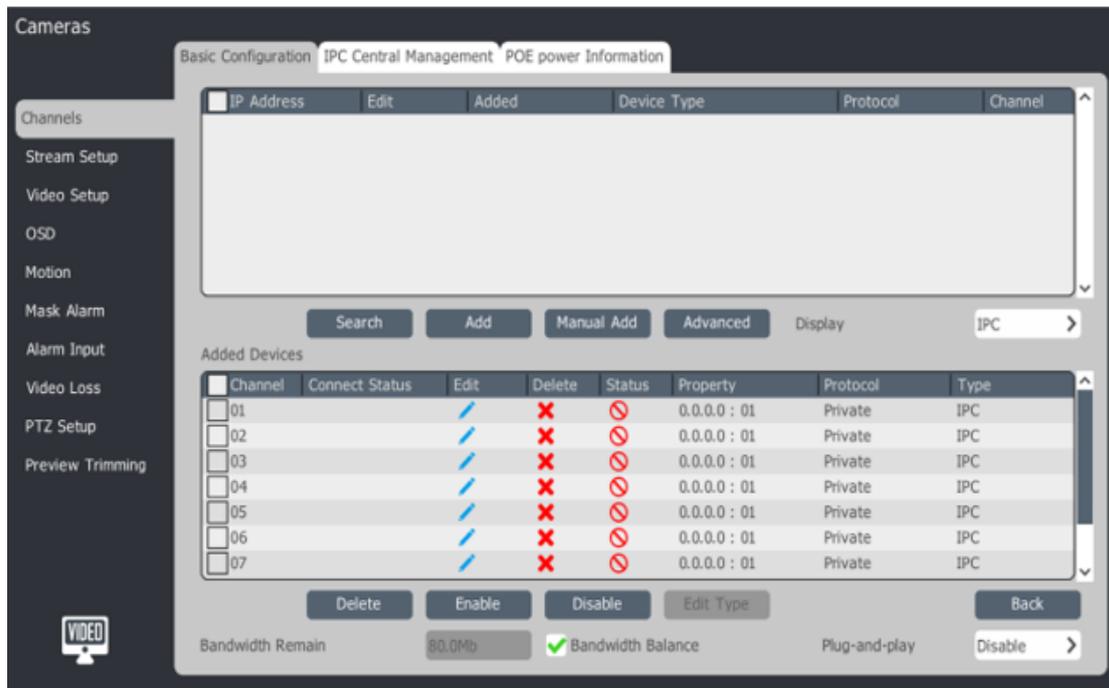
Note:

- If you want to add several cameras at the same time, go to the “device channels” interface and check the box next to the desired cameras and click the “Add” button.
- If you choose to add devices with ascending IP addresses, then the NVR will add the devices until the last octet reaches 255 or the maximum number of channels has been reached.
- If the device type is ONVIF, the default port is 80, user and password is Admin/Admin. For different brand devices, the log in account, password, and port may vary.

4.3.3 Add device in NVR PSE Channel

1. Click  In “channel configuration”->” basic configuration” ->”added Devices list”

2. In “Added Devices” interface, click  or double click channels to enter “Digital channels” interface.



3. Devices can be added to the channel in two ways: “Plug and Play” and “Manual Add”.
- For “Manual Add”, the device should have a valid IP address and be on the same subnet as the NVR.
 - For “Plug and Play”, connect the camera into the onboard PoE port. The system will add automatically.

4.3.4 Plug and Play Set

Users can enable “Plug and Play” to add cameras in the same LAN.

There are three options for "Plug and Play":

- *Disable*: Disables "Plug and Play". Users will have to add cameras manually.
- *Add automatic*: NVR will automatically search and add devices.
- *Automatic found*: In this mode, when you get back to preview interface, the system will automatically search the available devices and show the following interface: you can choose whether you want to add this device or not.

New device found

New device has been found, as shown below

Device MAC address: 00:50:c2:28:12:56

Device IP address: 10.30.21.165

Add to channel: 01

Change Plug-and-play type

Disable Automatic

Confirm Cancel



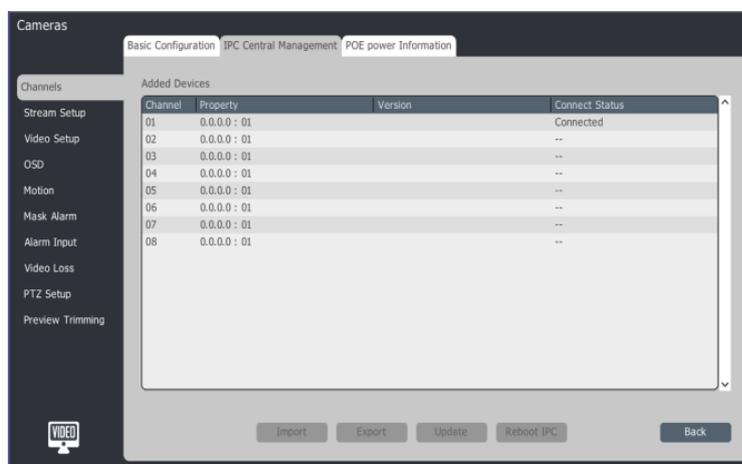
Note:

- "Plug and Play" functionality will automatically clear the "added device" list, and change the camera's IP address in search results.

4.3.5 IPC Central Management

Through IPC Central Management, users can export and import the configurations from cameras, upgrade firmware and reboot selected cameras.

1. Choose "main menu ->channel configuration->IPC central management" to enter the following interface:





Note:

- This interface shows the added camera's channel number, property, version and connection status.

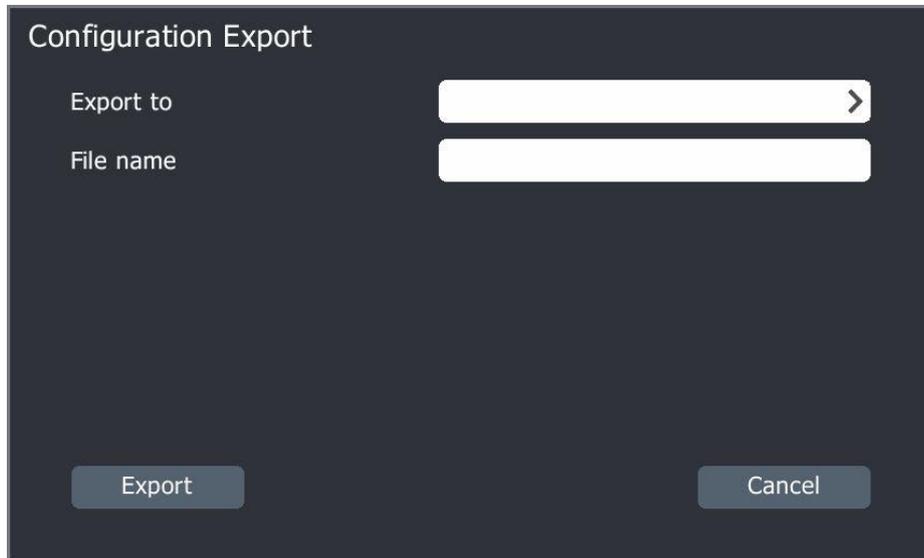
2. Configuration import/export.

a) Choose the camera to import/export from the added list.

b) Click "import".

c) Choose related file to import.

d) Click "export" to enter the following interface:



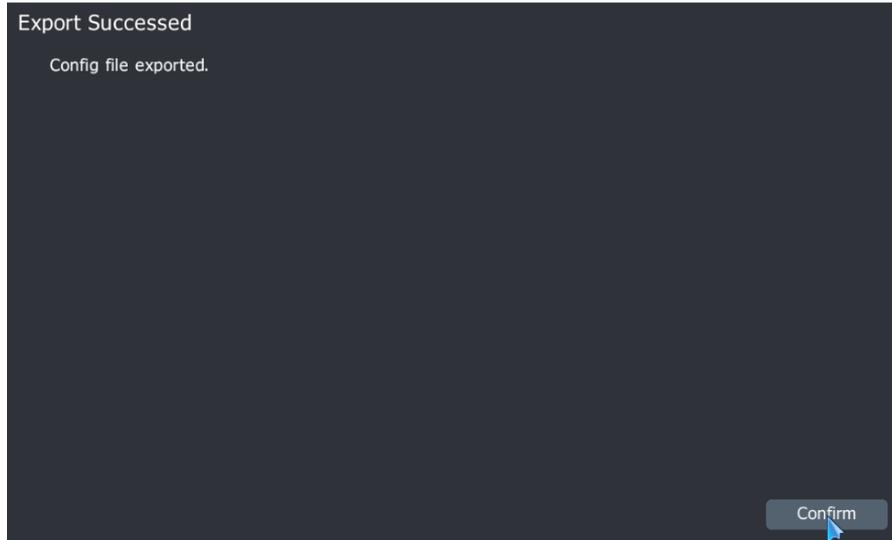
The image shows a dark-themed dialog box titled "Configuration Export". It contains two input fields: "Export to" with a dropdown arrow and "File name" with a text input field. At the bottom, there are two buttons: "Export" and "Cancel".



Note:

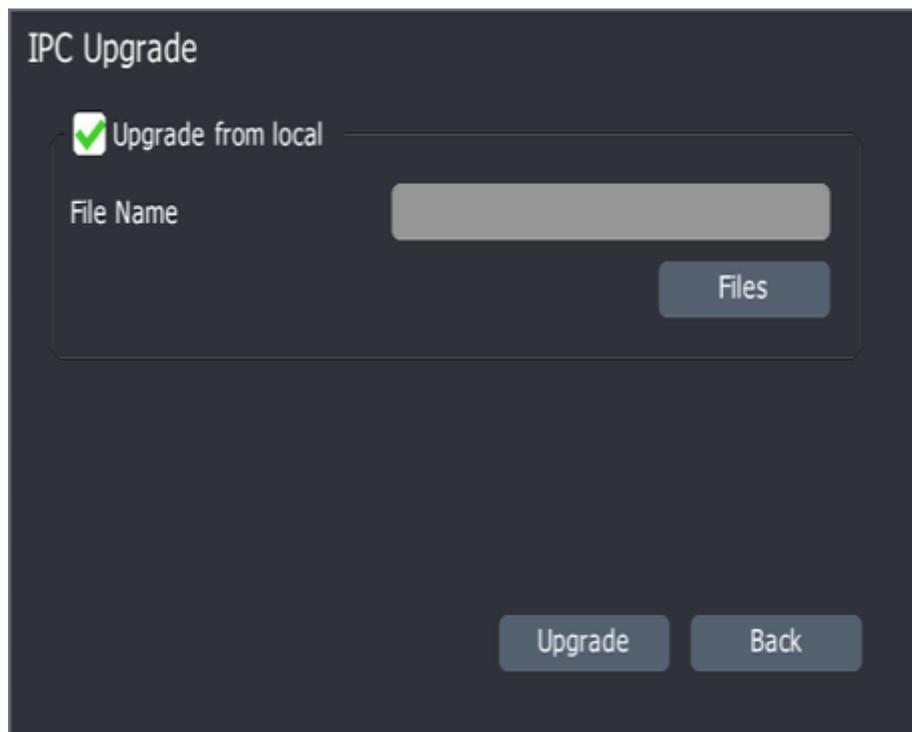
- After the configuration is imported successfully, the camera will reboot automatically.

e) Choose storage place for exporting configuration files. When the configuration is exported successfully, the following message is displayed:



Upgrade by remote access, reboot IPC

- a) Choose the camera for import/export in added list.
- b) Click "Upgrade" to enter the following interface:



- c) Click "Files" to choose upgrade file.
- d) Click "Reboot IPC" to reboot cameras.

4.3.6 PoE Power Info

Only PSE NVRs have this function.

1. Choose “main menu->channel management ->channels->PoE power information”, to enter the following interface:

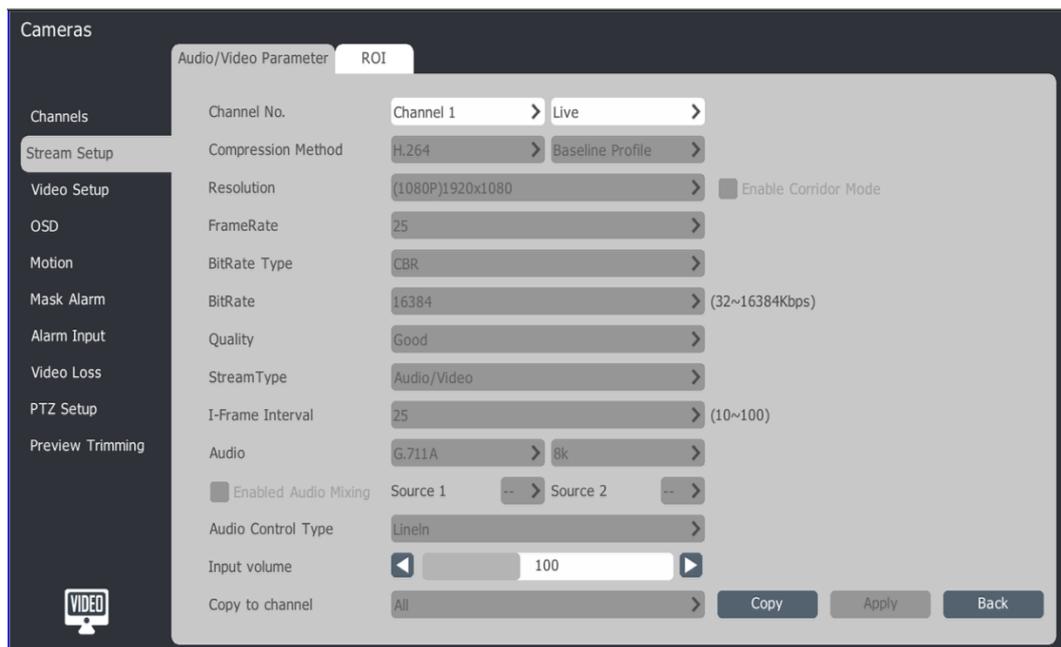


Note:

- “” This logo means PoE supply is working. “” This logo means no cameras are connected or no power.
- “” The info above this logo means real-time power info.

4.3.7 Stream Setup

1. Select main menu-cameras-stream setup.



Video/Audio Parameter

1. Select channel

- Channel No.: video compression type: mainstream (live), mainstream (timing), mainstream (event), sub-stream, timing mode1, timing mode2.
- Compression type: support H.264 and High Profile, Main Profile, Baseline Profile.
- Resolution: Set the resolution of camera.
- Enable corridor mode: Enable this function when the camera resolution is 16:9, after enabling corridor mode the resolution will change to 9:16.
- Frame Rate: Video frames per second.
- Bit rate type: CBR and VBR for option. VBR will change according to pixel density.
- Bit Rate Range: 32-16384Kbps.
- Quality: Best, better, good, normal and poor.
- Stream Type: Video and video/audio.
- I-Frame Interval: I-Frame rate is inversely proportional to the code rate.
- Audio: ADPCM_D(ADPCM_DIV4).G.711A.G.711U for option. Also supports 8K.32K.48K, three audio sampling rates.
- Enable Audio Mixing: When the equipment has a virtual channel (VC) synthesis, the two different channels in the channel can be mixed.
- Audio Control Type: Line-In and Mic-In.
- Input volume: Range is 0-255.



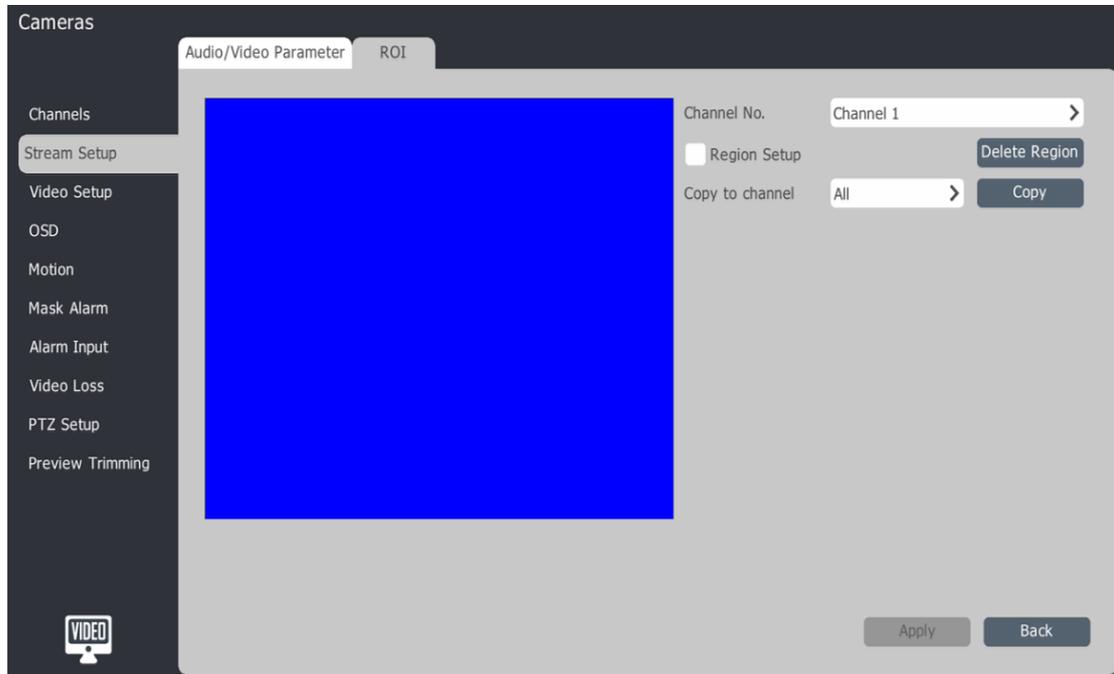
Note:

- Substream used for network transmission and mobile monitoring.
- Corridor mode only available for 1080P/720P/QXGA cameras.

ROI

High quality picture in ROI.

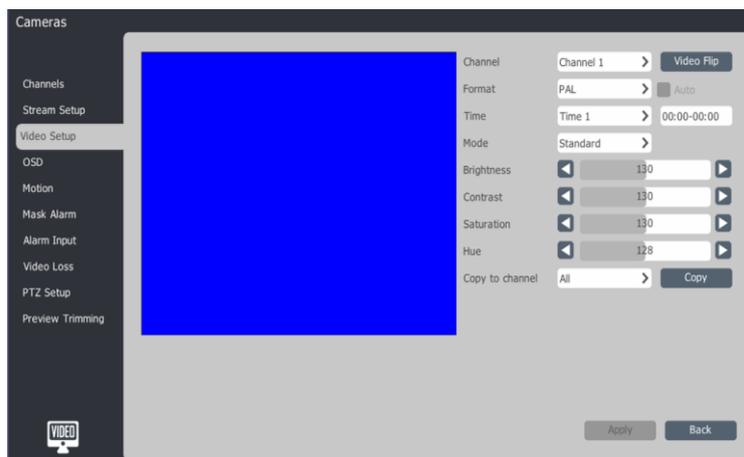
1. Select Region of Interest interface.



2. Select region setup to enable this function. Hold the left mouse button and drag on video to set the key region. The maximum support 4 ROI.
3. Click “Apply” to save the setup.

4.3.8 Video Setup

1. Select main menu-cameras-video setup.



2. Select channel/camera.

3. Set the format, video flip and mode.



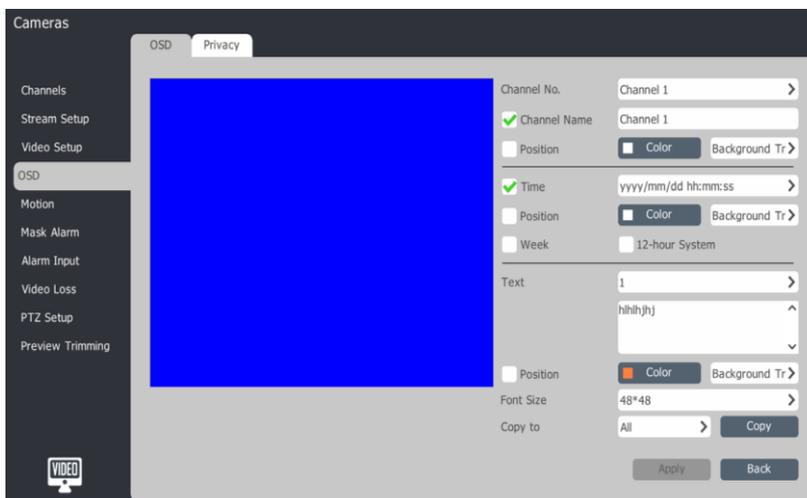
Note:

- Equipment supports four periods and a temporary value. Different time parameters can be set independently provided the time period does not overlap. If the beginning and ending time period is the same, then the time will be disabled.
- There are five video modes: standard, indoor, weak light, outdoor, custom.
- The brightness, contrast, saturation, chroma are adjustable between 0-255.
- Using the copy feature will copy all the channel parameters.
- Use either the mouse wheel or the  and  to increase or decrease the value.

4. Click “Apply” to save.

4.3.9 OSD

1. Select main menu-cameras-OSD.



OSD

1. Select channel/camera.

2. Check the appropriate box and click “Apply”.

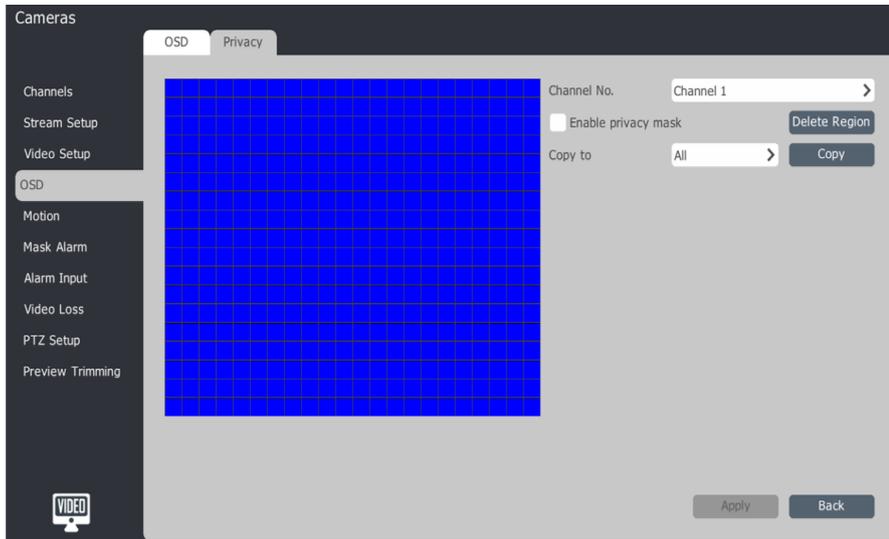
To change OSD position, select the area of the screen you would like the OSD to display.



Note:

- OSD setup includes Channel Name, Week, Hour Format, Date Format, Time Format, OSE Color and Background Color.

Privacy

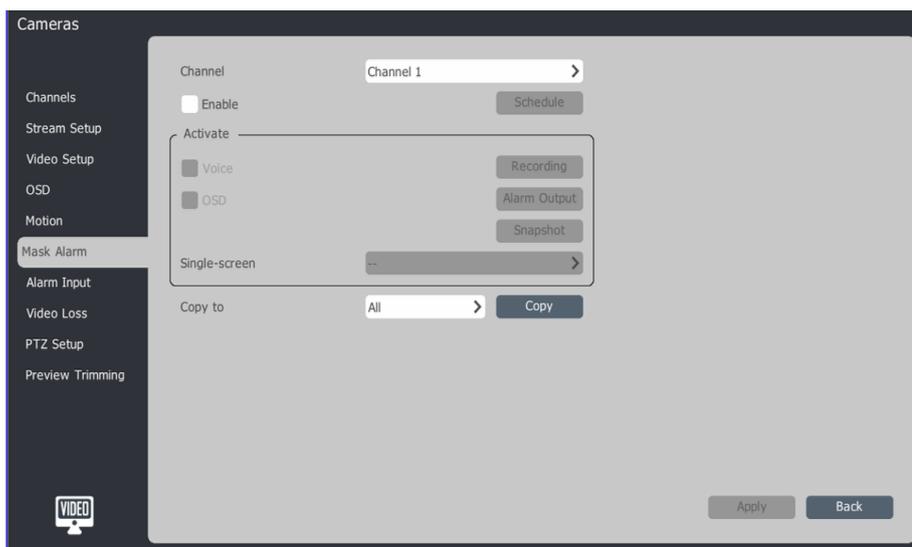


1. Select channel.

2. Left click and drag the mouse to setup privacy mask area.

4.3.10 Mask Alarm

1. Select main menu-cameras-mask alarm.

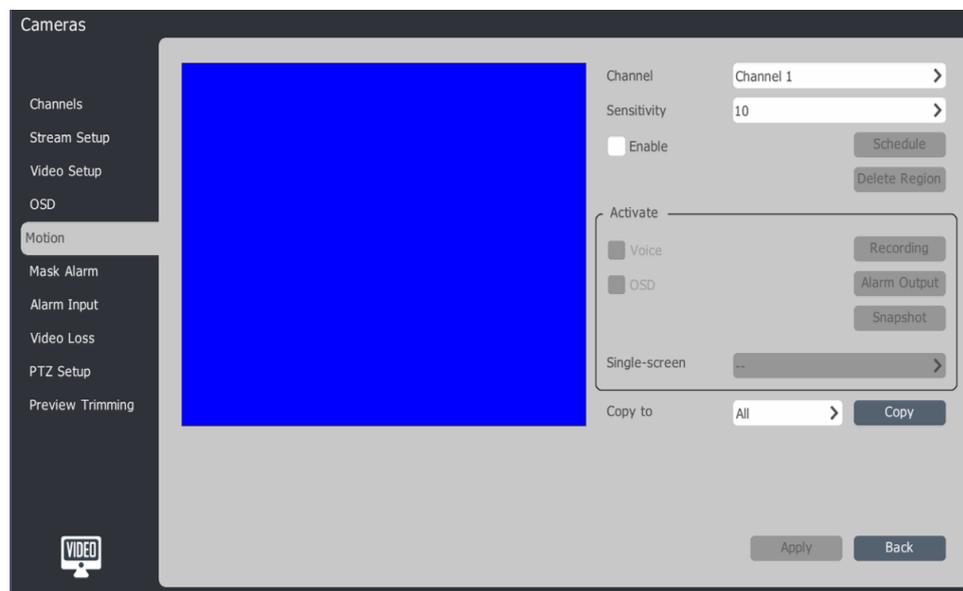


2. Select channel/camera.
3. Check the enable box.
4. Click schedule button and setup time.
5. In the Activate section setup the mask alarm. The mask alarm can be triggered by voice prompt, screen display, recording, alarm output, capture and single picture.
6. Use copy to apply the mask alarm to other channels.

Click “Apply” to save the setup.

4.3.11 Motion

1. Select main menu-cameras-motion.



2. Select channel/camera.
3. Setup the motion schedule time, region and sensitivity.
 - a) Click the enable box.
 - b) Click schedule and setup the schedule and time.
 - c) Left click and drag the mouse to draw the region.
 - d) Select the desired sensitivity. The smaller the value, the more sensitive it is.
4. In the Activate Section, setup motion alarm.

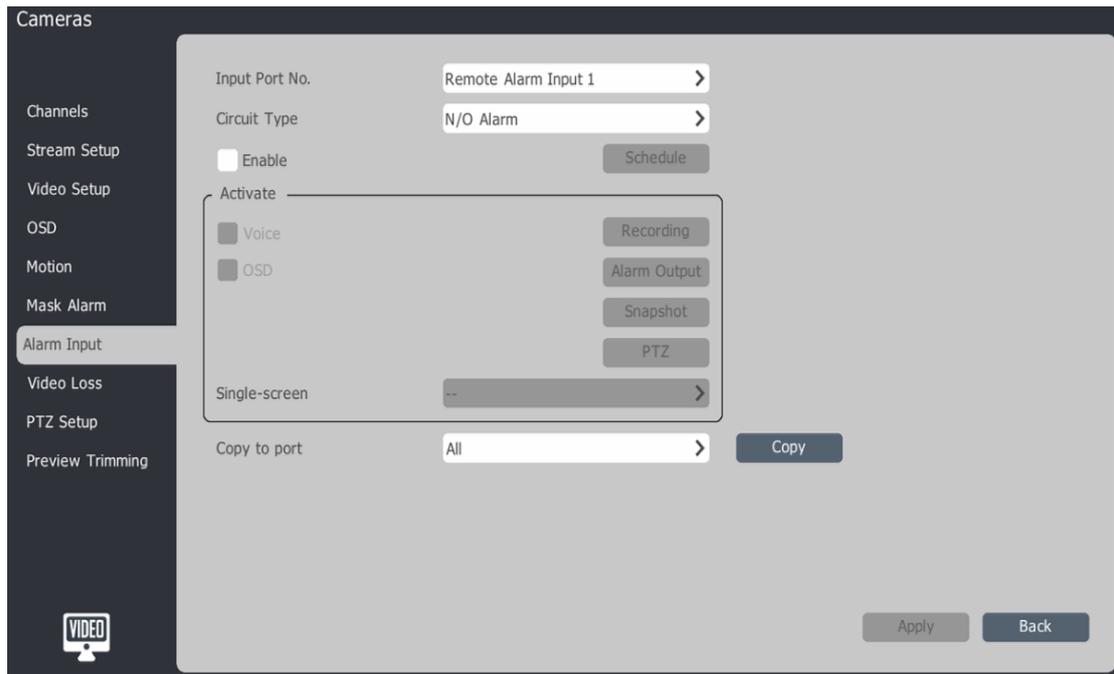
a) The motion alarm can be triggered by voice prompt, screen display, record, alarm output, capture and single picture.

b) Use copy to apply the motion alarm to other channels.

5. Click “Apply” to save.

4.3.12 Alarm Input

1. Select main menu-cameras-alarm input.



2. Select input port number.

3. Select alarm type.

4. Check the enable box, click schedule and setup the alarm input schedule and time.

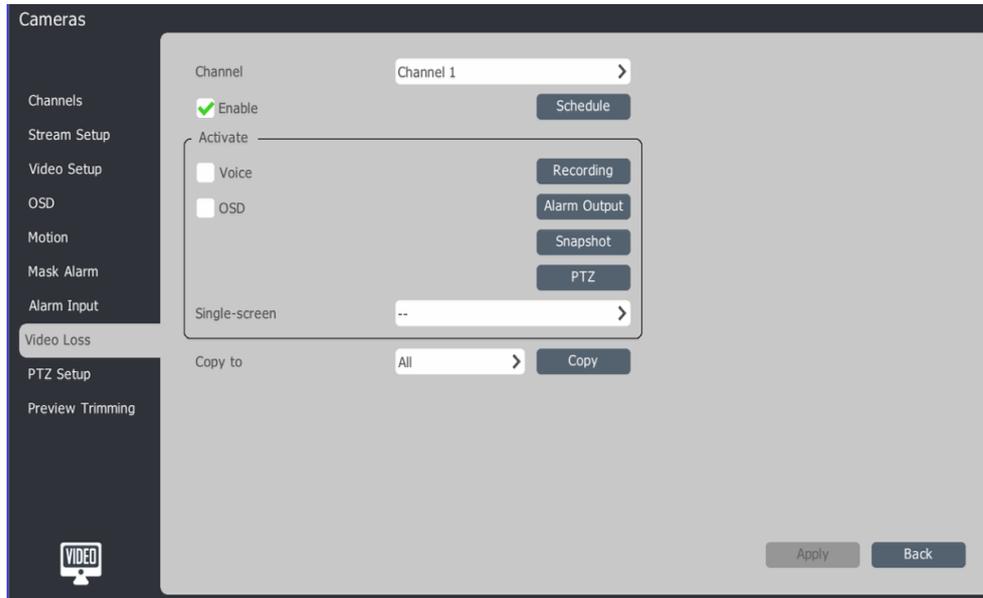
a) In the Activate section, setup the Alarm Trigger. The alarm can be triggered by voice prompt, screen display, recording, alarm output, capture and single picture.

b) Use copy to apply the alarm trigger to other channels/cameras.

6. Click “Apply” to save.

4.3.13 Video Loss

1. Select main menu-cameras-video loss.



2. Select channel/camera.

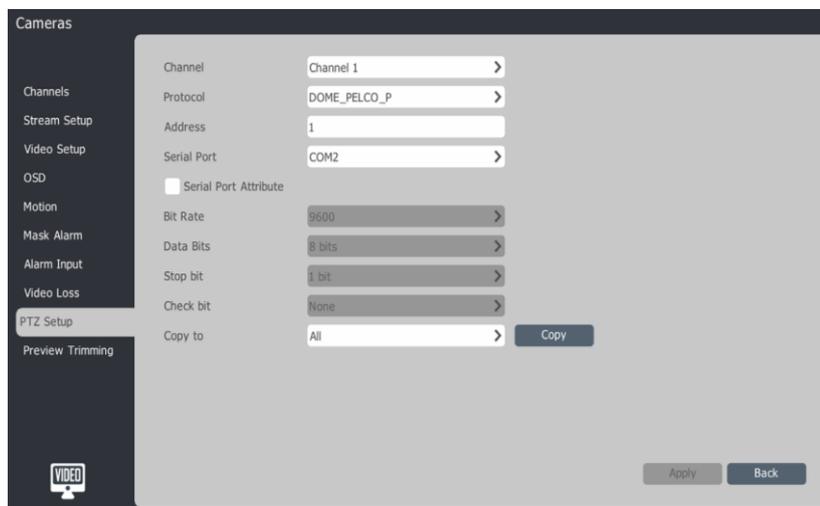
3. Check the enable box and click schedule, then setup alarm input schedule time.

4. In the Activate section, setup the Alarm Trigger. The alarm can be triggered by voice prompt, screen display, recording, alarm output, capture and single picture. Use copy to apply the alarm trigger to other channels/cameras.

5. Click "Apply" to save.

4.3.14 PTZ Setup

1. Select main menu-cameras-PTZ setup.



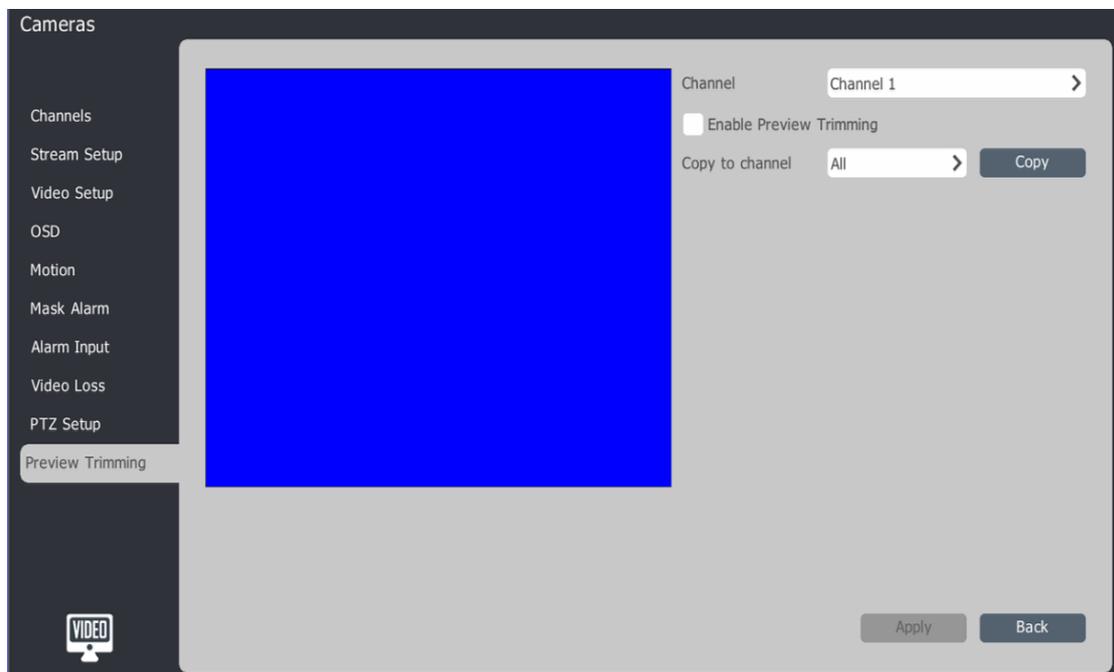
-
2. Select channel.
 3. Select PTZ control protocol, address and port.
 4. Click “Apply” to save parameter.



Users can customize serial port attributes by setting the baud rate of serial port, data bits, stop bits, parity and then copy to other channels.

4.3.15 Preview Trimming

1. Select-cameras-preview trimming.



2. Select channel.
3. Check the box to Enable preview trimming, and then copy to other channel.
4. Click “Apply” to save parameter.

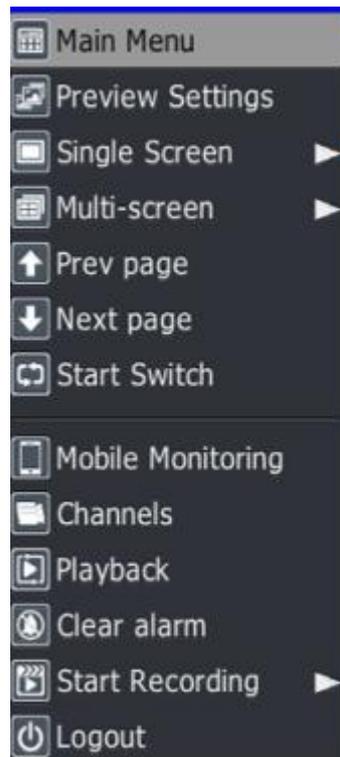
4.4 Preview

4.4.1 Preview

Icon	Description
	Alarm (motion detection alarm, video privacy alarm, port alarm, video loss alarm and IVS alarm)
	Record (timing, manual)
	This channel is on recording and has alarm at the same time.

4.4.2 Menu

Access the NVR menu by right clicking the camera view/grid.



Description:

Name	Description
Main menu	Enter main menu

Preview settings	Enter preview settings screen
Single screen	Select channel and switch to single screen
Multi-screen	Change preview mode
Prev page	Go to the previous page
Next page	Go to the next page
Start switch	According to the preview settings, start switch will toggle to the final screen again from the first screen
Mobile monitoring	Displays a QR code for both IOS and Android
Channels	Go to channel configuration
Playback	Go to playback
Clear alarm	Clear all alarms
Start recording	Enables all day recording and motion recording for all channels/ cameras
Supplementary port	Switch to supplementary port
Logout	Logout, refresh and restart system

Description of supplementary port

Name	Description
Preview settings	Enter the preview settings screen
Single screen	Select the channel and switch single screen
Multi-screen	Change preview mode
Prev page	Go to the previous page
Next page	Go to the next page
Start switch	According to the preview settings, start switch will toggle to the final screen again from the first screen

Main port	Switch to main port from supplementary port
Set to main port	Set the supplementary port to main port

Single Screen

The current view changes to the specified channel.

In the "single screen" menu, select a particular channel.

Multi-Screen

Change display mode, the system supports 1/4/6/8/9/16/25/32.

Scroll

Click previous page switch to previous screen and next page switch to next screen.

4.4.3 Super Menu Description

By sliding the mouse to the right of the display, a task bar appears.

ICON	Description
	Playback
	Record settings
	Preview settings
	PTZ control
	Channels
	Systems settings
	Backup



	Alarm settings
	VCA
	User management

4.4.4 Preview Operation

1. In the preview, select the appropriate channel to display shortcut bar.



2. The shortcut bar supports PTZ control, instant playback, manual capture, manual record, E-zoom, intercom and the ability to edit channel information.

Button	Description
	PTZ control: up, down, left, right and cruise
	Instant playback
	Manual capture
	Start/stop manual record
	E-zoom
	Start/stop intercom
	Check/edit channel information

Instant playback

Plays back the last 5 minutes recorded.

E-zoom

1. Click the magnifying glass.



2. Use the mouse to choose desired area. Doing so will automatically zoom to the selected area.

3. Use the mouse wheel to zoom in and out of the selected area.



Note:

NVR has 8x zoom.

4.4.5 Preview Parameter Setup

1. In preview, select preview settings.

Preview Setup

Preview Performance: High fluency Keep the last frame

Output:

Time Interval(Sec):

Preview:

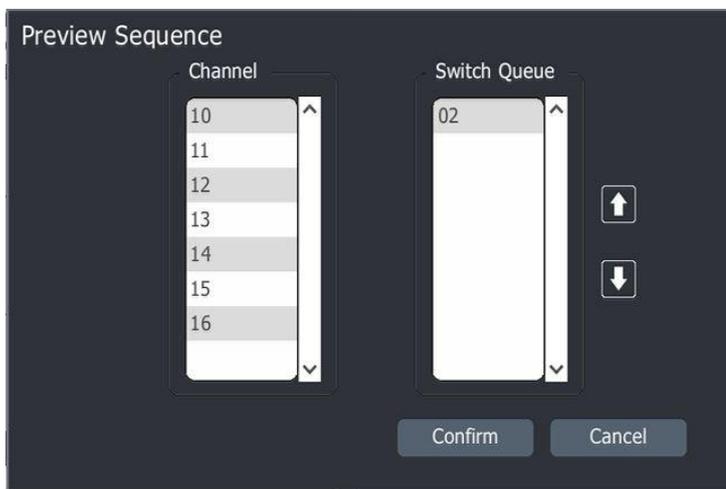
01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16

Alarm cruise interval(Secs):

2. Preview settings.

- Preview: There are three options: 1) The system default option is "Auto" which sets the preview video to sub-stream for all cameras. 2) The best image quality option sets the preview video to mainstream for all cameras. 3) The biggest performance option sets the preview video to the best performance based on an adjustment of mainstream.
- Output: Select video output: HDMI2/BNC.VGA/HDMI.VC.
- Time intervals: Sets the automatic switch time for PTZ Options are: no cruise, 2s, 3s, 5s, 10s, 15s, 30s and 60s.
- Alarm cruise interval: set time interval of single screen alarm linkage. There are 2s, 3s, 5s, 10s and 15s for options.
- Keep the last frame: After the camera is off line, the preview will stay on the last frame with this box checked. Otherwise, it will display "No Video".
- High fluency: With this check box checked, the NVR will adjust according to the network conditions to ensure the fluent video.
- Set preview sequence.

a) Click preview channel/camera



b) Double click channel number to add the channel to the switch channel. Double click the Switch Queue to remove from the preview queue.

- Auto configuration. Click on the "automatic configuration" button to have the system automatically distribute video input channels. Four channels will be set for each preset. For example, the system automatically distributes channel 1, 5, 9, 13 to the first preset;

Channel 2, 6, 10, 14 are assigned to the second preset; Channel 3, 7, 11, 15 assigned to the third preset; Channel 4, 8, 12, 16 are assigned to the fourth preset.

- Only the last one channel can be set to synthesis of virtual channel. It is suggested that VC (virtual synthesis channel) does not exceed the "preview mode" setting of a 3x3 grid. Otherwise, it may cause low frame rate.
- When switching from mainstream to substream in preview "biggest performance" option, the user interface will show with no sound. Based on equipment performance, when the access codes flow reaches the limit, it cannot continue to connect any other streams.

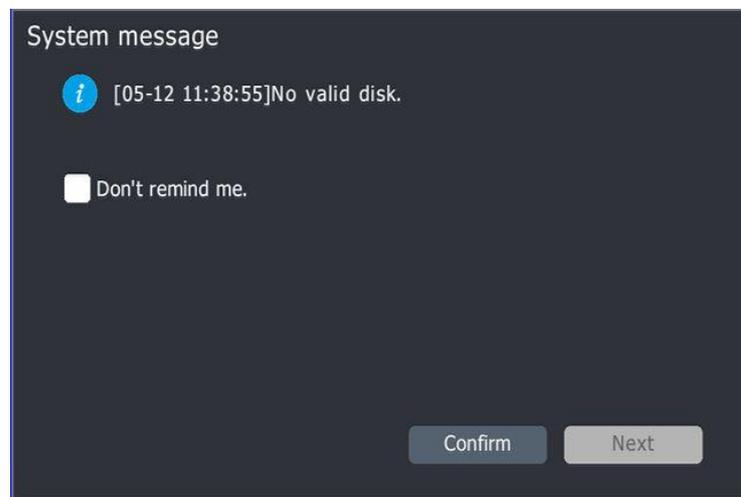
4.4.6 Preview Information

Decoding Performance Limited

When the decoding performance reaches the limit, a message will display "decoding performance has reached upper limit, please manually disable parts of channel". This prompt can be Enabled/Disabled, as shown in the system Settings ->display Settings. By default, this is disabled.

System Abnormal Information

To enable abnormal information, go to system settings-system information-abnormal. When an abnormal event occurs,  will display in the right corner. Then double-click  and the system notice screen will appear.



The user can choose not to display the prompt information, or the user can click "Next" to see the message.

4.4.7 Audio Preview and Intercom

Audio Preview

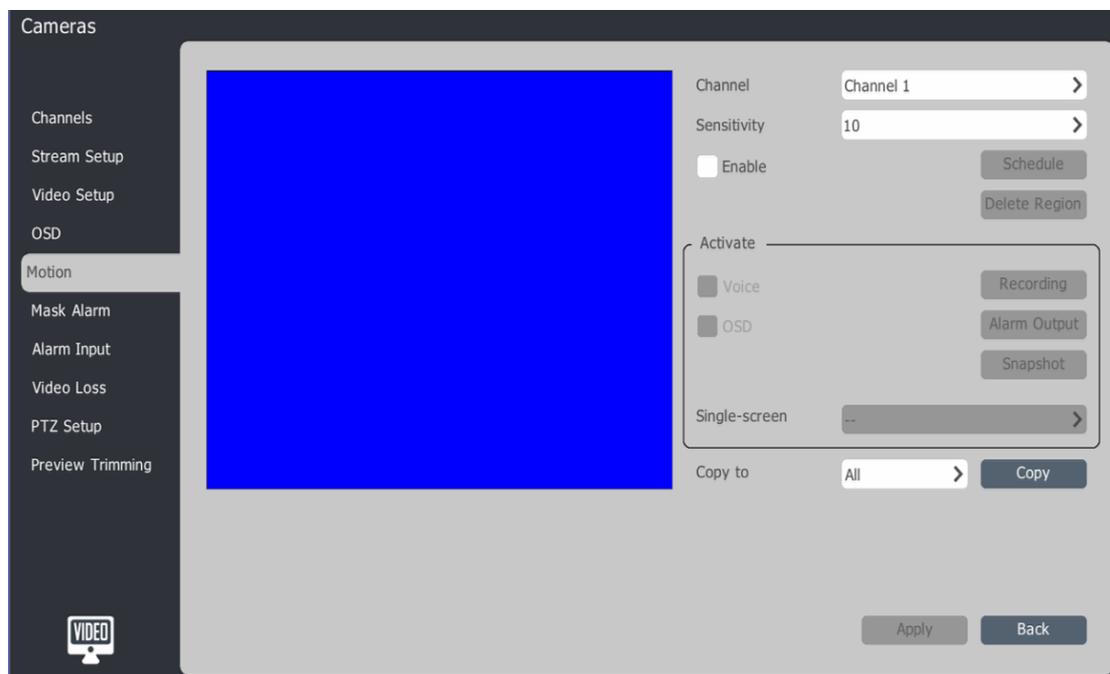
Select one video with the mouse or remote control. The system will play audio automatically.

Intercom

Before using the intercom, speakers and a mic will have to be installed. Users can control the voice intercom equipment interfaced with the NVR by remote control.

4.4.8 One click navigation Back to Preview

In parameter configuration, click  to go to the preview screen.



4.5 PTZ Control

4.5.1 PTZ Parameter Setting



Tips:

- Before setting up PTZ control, please confirm the PTZ(s) are connected to the same network as the NVR and the PTZ decoder configuration parameters are set in the device.
- For IPC serial port parameter Settings, see Section 4.3.14.
- For the NVR the local serial port parameters Settings, see System Setup instructions.

4.5.2 PTZ Control

1. Enter the preview mode, double click mouse to choose targeted channel. Then enter full screen and right click the mouse. Choose “control panel”, and the PTZ control pop-up window interface appears.



2. Choose the channel.

3. PTZ control description:

a) **PTZ Control:** Use mouse to click  to control PTZ going up, down, left and right.

Use mouse to click  to control PTZ diagonally. Click  to start or stop PTZ taking auto-leveling action.

b) **Lens control:** Click  at left side of “Iris “to close the aperture, click  at the right to open aperture. Click  at the left of “focus” to focus objects at a distance and click  at right side to focus close objects. Click  at left side of “zoom” to zoom out and click  to zoom in .

c) **Speed setting:** Select value of speed in the “speed” drop-down list. The larger the value, the faster PTZ runs. The default speed number is L1.

4.5.3 Preset, Cruise and Path Setting and Call

Preset Setting and Call

1. Call preset: Select the preset position number in the "Preset" drop-down list, or input the preset number and click "Call" to move PTZ to the selected preset.
2. Preset setting: Set the PTZ to the desired location and select the preset number in preset drop-down list, or directly enter the preset number. Click "Settings" to set the preset position setting to this number.

Recording and Demonstration Track

Click "began track". The system will automatically record all operations taken by the user before "end track" is clicked. When the user presses the "end track", track recording operation is complete and the system automatically exit track recording status. The user can click on the "demo track" to show the track that was just recorded.

Light, Wiper and Auxiliary Switch Setting

Check the "Light" option box to toggle turning on/off the light of corresponding device of selected channel. Check the "Aux" option box to toggle to the aux switch open/close for the channel corresponding. By using the left mouse button and clicking and holding down the "wiper" button, the wipers start moving on the corresponding channel.

Cruise Path Setting

1. Click "Cruiser Setup" to enter into cruise setting interface.

The screenshot displays the "Cruise Setup" dialog box. It features the following elements:

- Cruise No.:** A text input field containing "01" with a right-pointing arrow button.
- Enable, Call, Stop:** Three buttons located to the right of the Cruise No. field.
- Cruise Point:** A text input field with a right-pointing arrow button.
- Delete:** A button located to the right of the Cruise Point field.
- Property:** A section containing:
 - Presets:** A text input field containing "001" with a right-pointing arrow button.
 - Time(s):** A text input field containing "0" with a right-pointing arrow button, followed by the text "(1~60)".
 - Speed:** A text input field containing "0".
 - New, Setup:** Two buttons located to the right of the Time(s) and Speed fields, respectively.
- Apply, Confirm, Cancel:** Three buttons located at the bottom of the dialog box.

2. Cruise path description:

a) **Cruise Path Information Browser:**

Select the cruise number in "Cruise No." drop-down list. When a certain cruise point is selected, the system will automatically display the preset position, dwell time and call speed corresponding to the Cruise point.

b) **Editing the Cruising Path:**

Select the targeted path number in the "path number" drop-down list. If the path is disabled, then press the "Enable" button to enable the cruise path. Select the targeted preset number in the "preset" drop-down list. Enter the time and speed, then click the "Add" button. To delete a cruise point in the "cruise point" list, select the point from the list and click the "delete" button. To enter the speed and time for a certain cruise point, select the preset position from the preset drop-down list. Click "modify" and then input speed and time.

c) **Enable/Disable the cruise path:**

Select cruise path number in "Cruise No." list and users can enable and disable this cruise.

d) **Call/Stop cruise path:**

When the "call" button is clicked, the device will cruise according to preset path. When the "stop" button is clicked, the device will stop current cruise.

e) **Quit cruise path setting interface**

When the "Apply" button is clicked, all path-editing operations entered into the cruise path interface will be saved in the system. When "cancel" button is clicked, the system will automatically neglect all editing operations and quit path setting interface.

f) **3D Positioning**

By using 3D positioning function, the user can use the mouse to select any area in the screen and the system will automatically control the PTZ zoom into the selected area. (zoom in drawn from left to right and zoom out drawn from right to left).

4.5.4 PTZ Control by USB Keyboard

1. Under the preview mode, press **【↑】** **【↓】** to select the control channel. Press **【P】** and the selected channel will show as a single picture. The top right corner of the screen shows “PTZ ChnXX” displaying the current channel.

2. PTZ control operation

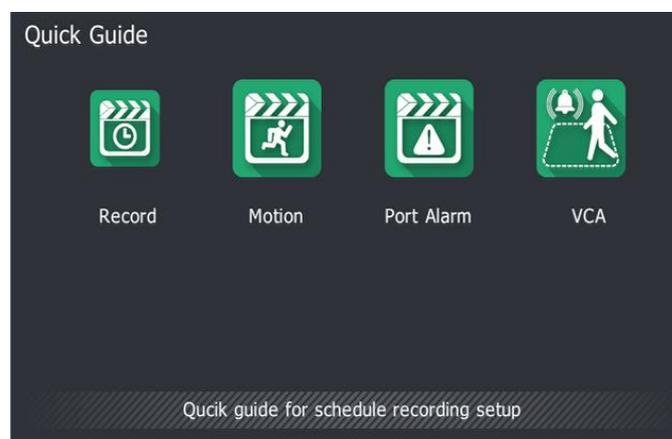
PTZ control: under the PTZ control mode, press **【↑】** **【↓】** **【←】** **【→】** to control the PTZs direction. By pressing the **【OK】** button the PTZ starts auto running at pan range. Press **【OK】** again, the PTZ would stop auto running at pan range.

- Lens control: Under the PTZ control mode, press **【I】** or **【G】** to open the aperture. Press **【Ctrl+I】** or **【Ctrl+G】** to close the aperture. Press **【Z】** or **【B】** for zoom in, press **【Ctrl+Z】** or **【Ctrl+B】** for zoom out. Press **【F】** or **【J】** to focus objectives at distance, Press **【Ctrl+F】** or **【Ctrl+J】** to focus objects at close range.
- Call preset: Under the PTZ control mode, press **【backspace】** and **【preset number】** and then **【OK】** - the PTZ will be called to the selected preset accordingly.
- Speed setting: under the PTZ control mode, press number keys **【1】** ~ **【4】** to set the speed of PTZ motion.
- Control PTZ light, wiper and auxiliary switch: When in the PTZ control mode, press **【W】** or **【Y】** to start / stop the wiper.. Press **【A】** to open the auxiliary switch and then press **【A】** again to close the auxiliary switch. Press **【L】** or **【D】** to turn on / off the light. To quit PTZ

4.6 Record

4.6.1 Quick Guide

Enter the [Main Menu] → [Quick Guide] users can configure up to the four kinds of schedules: Recording, motion detection, video port alarm and video content analysis. Refer to the figure below:



1. Schedule Recording Setup

a) Choose [Main Menu]->[Quick Guide]->[Record], enter [Schedule Recording Setup] as shown below.

Schedule Recording Setup

Channel: All

Time Setup: All Day Customize

Schedule Template: Default

<input checked="" type="checkbox"/> Time 1	00:00 - 23:59	Default
<input type="checkbox"/> Time 2	00:00 - 00:00	Default
<input type="checkbox"/> Time 3	00:00 - 00:00	Default
<input type="checkbox"/> Time 4	00:00 - 00:00	Default

Back Next

b) Click “Next”; enter the interface of schedule recording parameters.

Schedule recording parameters

Channel No.: All

Resolution: (720P)1280x720

FrameRate: 25

BitRate Type: CBR

BitRate: 4096 (32~16384Kbps)

Enable Corridor Mode:

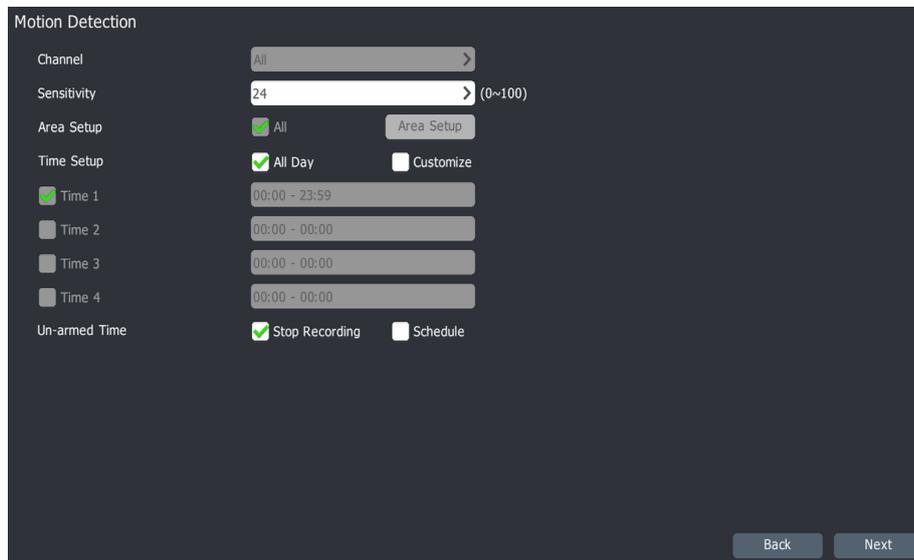
Back Finish

c) Use this page to enable the “Schedule Recording”; these parameters will be used for all channels.

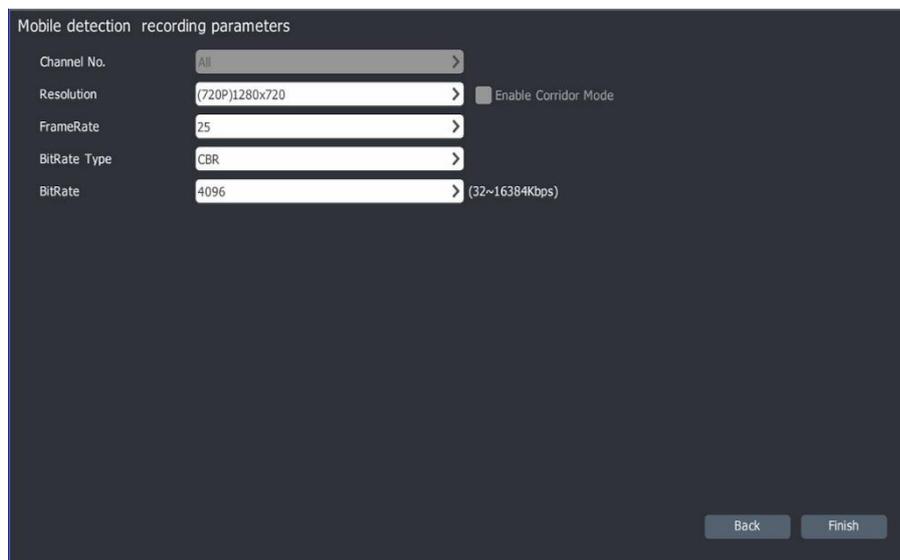
d) Click “Finish” to save the configuration.

2. Motion Detection Recording Setup

a) By choosing [Main Menu]->[Quick Guide]->[Motion], the following window appears as shown below.



b) Under “Motion Detection”, users can set all channels to record based on motion. The motion detection region defaults to the full camera field of view. Click “Next” to enter the [motion detecting video parameter] setting.

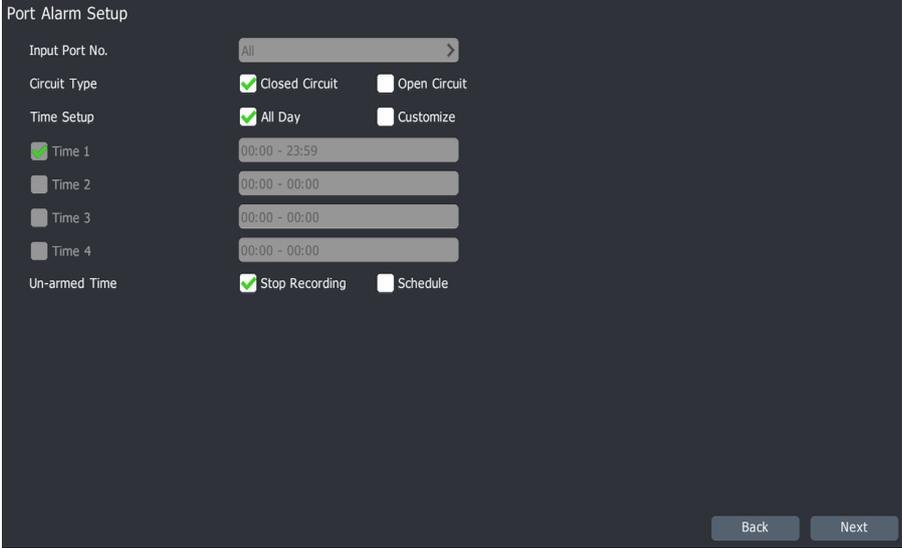


c) Set your “Mobile detection recording parameters” that will be used for all channels.

d) Click “Finish” to save the configuration.

3. Port Alarm Recording Setup

a) By choosing [Main Menu]->[Quick Guide]->[Port alarm], the following window appears as shown below:

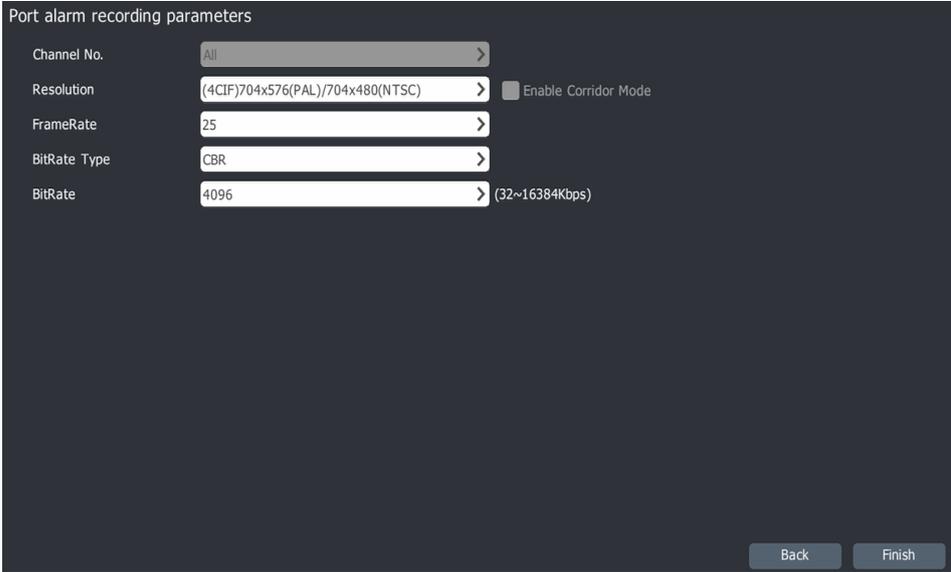


The screenshot shows the 'Port Alarm Setup' interface. It includes the following settings:

- Input Port No.: All
- Circuit Type: Closed Circuit, Open Circuit
- Time Setup: All Day, Customize
- Time 1: 00:00 - 23:59
- Time 2: 00:00 - 00:00
- Time 3: 00:00 - 00:00
- Time 4: 00:00 - 00:00
- Un-armed Time: Stop Recording, Schedule

Buttons: Back, Next

b) Under the “Port Alarm Setup”, users can set alarm circuit type, time period and unarmed time operation. Click “Next” to enter the “Port alarm recording parameters” interface.



The screenshot shows the 'Port alarm recording parameters' interface. It includes the following settings:

- Channel No.: All
- Resolution: (4CIF)704x576(PAL)/704x480(NTSC) Enable Corridor Mode
- FrameRate: 25
- BitRate Type: CBR
- BitRate: 4096 (32~16384Kbps)

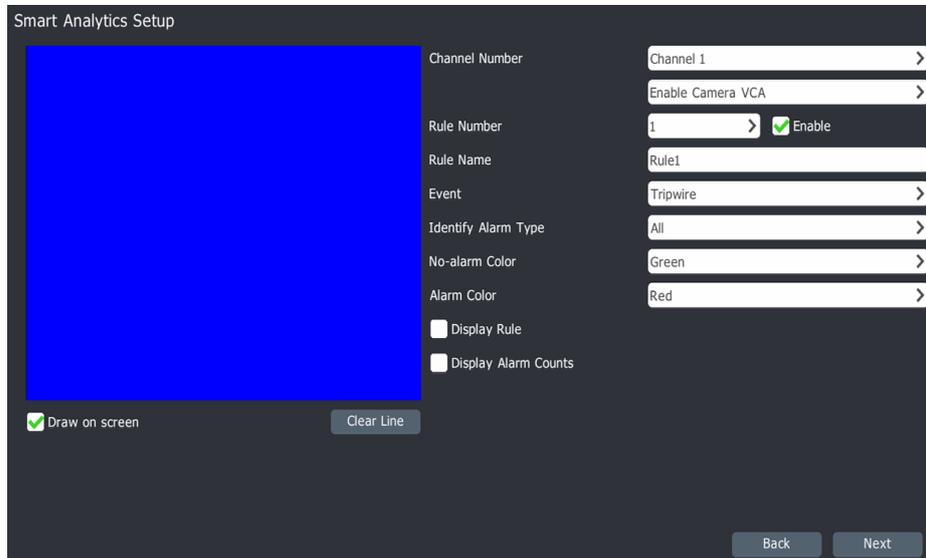
Buttons: Back, Finish

c) Set your “Port alarm recording parameters” that will be used for all channels.

d) Click “Finish”, save the configuration.

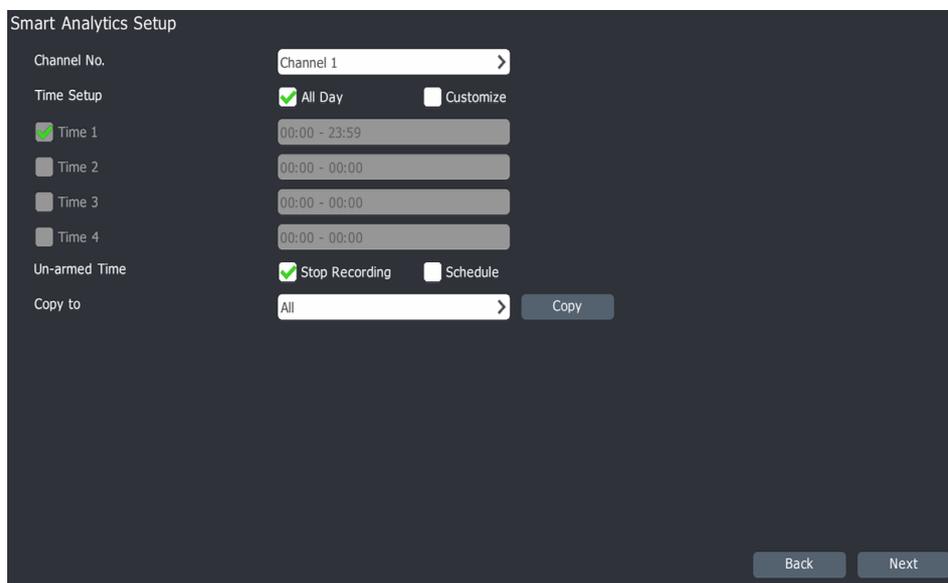
4. Smart Analytics Setup

a) By choosing [Main Menu]->[Quick Guide]->[VCA], the following [Smart Analytics Setup] window appears as shown below:



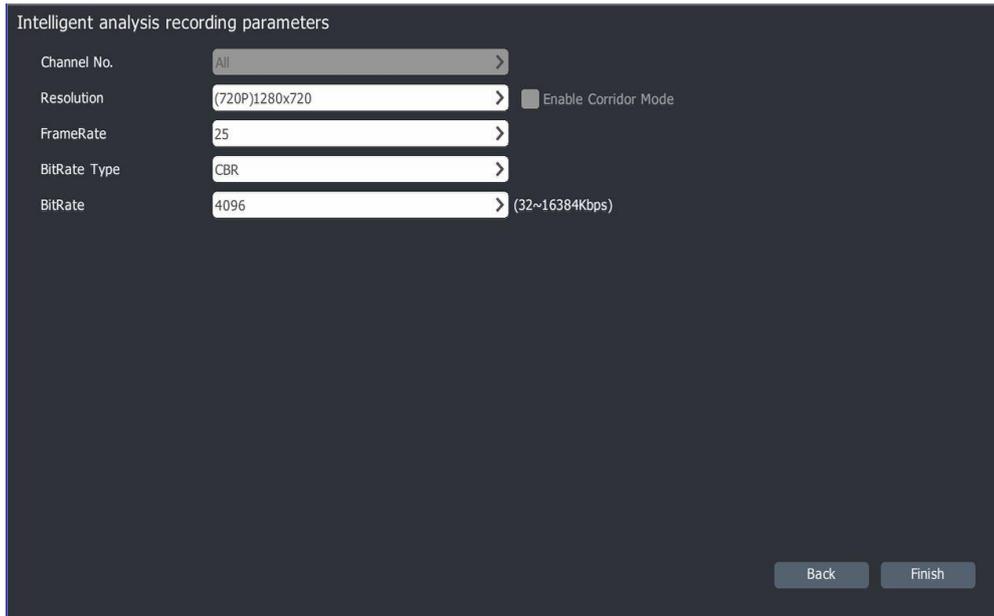
The screenshot shows the 'Smart Analytics Setup' window. On the left is a large blue square representing a camera feed. To its right are several configuration fields: 'Channel Number' (Channel 1), 'Enable Camera VCA' (checked), 'Rule Number' (1), 'Rule Name' (Rule1), 'Event' (Tripwire), 'Identify Alarm Type' (All), 'No-alarm Color' (Green), and 'Alarm Color' (Red). Below these are two checkboxes: 'Display Rule' and 'Display Alarm Counts', both unchecked. At the bottom left, there is a 'Draw on screen' checkbox (checked) and a 'Clear Line' button. At the bottom right, there are 'Back' and 'Next' buttons.

b) Set your VCA parameters under "Smart Analytics Setup". For the detailed configuration, please refer the "VCA" chapter. Click "Next" to "Smart Analytics Setup"



The screenshot shows the 'Smart Analytics Setup' window with time-related settings. 'Channel No.' is set to 'Channel 1'. Under 'Time Setup', 'All Day' is checked and 'Customize' is unchecked. There are four time slots: 'Time 1' (checked, 00:00 - 23:59), 'Time 2' (unchecked, 00:00 - 00:00), 'Time 3' (unchecked, 00:00 - 00:00), and 'Time 4' (unchecked, 00:00 - 00:00). Under 'Un-armed Time', 'Stop Recording' is checked and 'Schedule' is unchecked. The 'Copy to' dropdown is set to 'All' with a 'Copy' button next to it. 'Back' and 'Next' buttons are at the bottom right.

c) Set the time period of the selected channels and the unarmed time operation under "Smart Analytics Setup". The configuration info can be copied to other channels. Click "Next" to enter the "Smart Analytics Parameter" interface.

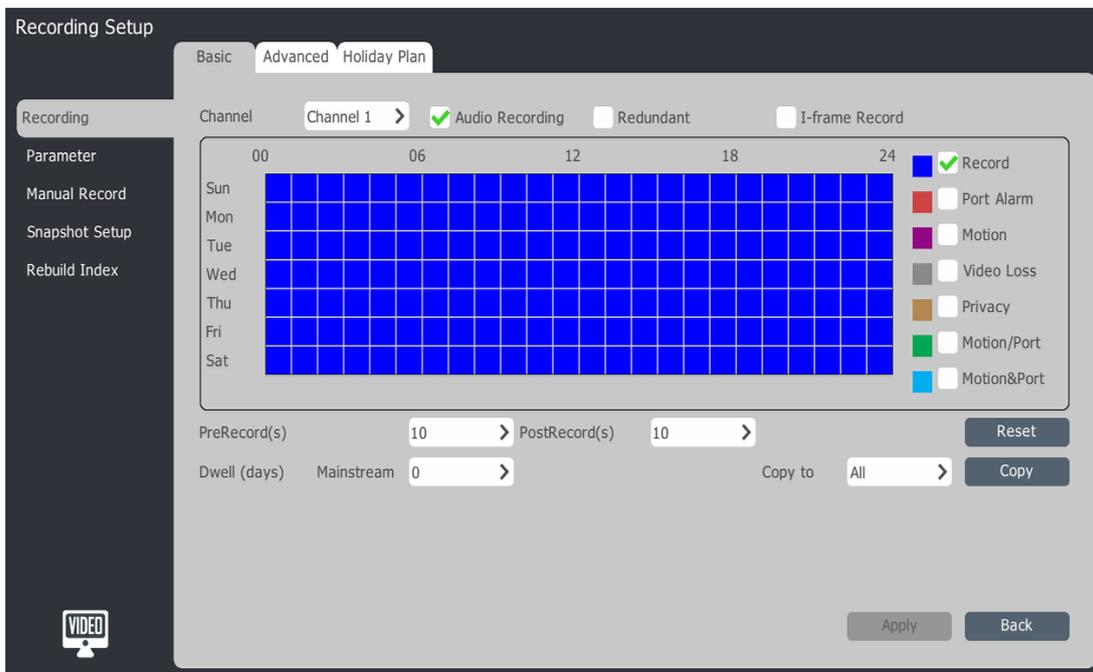


d) Set your “Intelligent Analysis Recoding Parameters” that will be used for all channels. Click “Finish” to save the configuration.

4.6.2 Recording Setup

Basic Setup

1. By choosing [Main Menu]->[Recording Setup]->[Recording]->[Basic] the following recording template setup window appears as shown below:

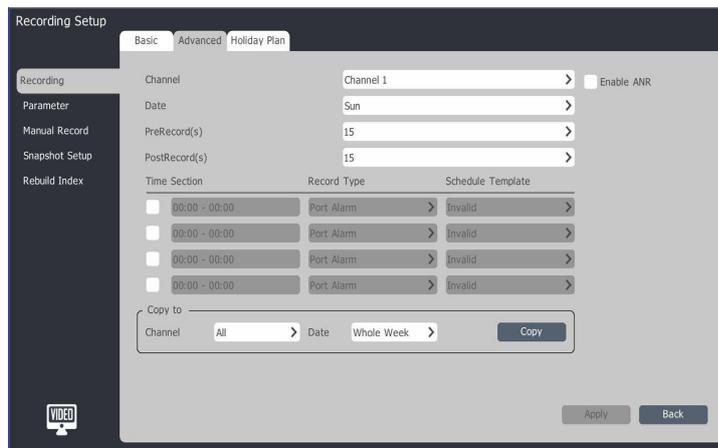


2. Choose the setup channels.

3. Choose whether to enable record “audio”, “redundant” or “I-frame”.
 - If no selection is checked 【Audio Recording】 , the NVR only records video..
 - If system includes a redundant disk and the “Redundant/Snapshot” function is enabled, the video and captured images are saved to both the primary and redundant disk.
 - By enabling the 【I-frame Record】 system option. The system will frame process video files, so that it can save the memory for the non-key region recordings.
4. Recording Template Setup includes seven alarm types: “Record (timing recording)”, “Port Alarm, Motion”, “Video Loss”, “Privacy”, “Motion/Port”, “Motion &Port”.
5. Hold the left mouse button drag to select the time period and check the recording type to be used.
6. Pre-record and Post-record setup
 - Pre-record: Recording is based on pre event. Default is set to 5 seconds before the event.
 - Post-record: Recording is based on post event. Default is set to 5 seconds after the event.
 - Pre-record and Post-record: Combines both Post-record and Pre-record settings.
7. Dwell (days) setup. “0” means no time limitation, the max video retention time is 60 (days).
8. Click “Apply” to save the configuration.

Advance Setup

1. Choose [Main Menu]->[Recording Setup]>[Recording]->[Advanced], enter the window as below:

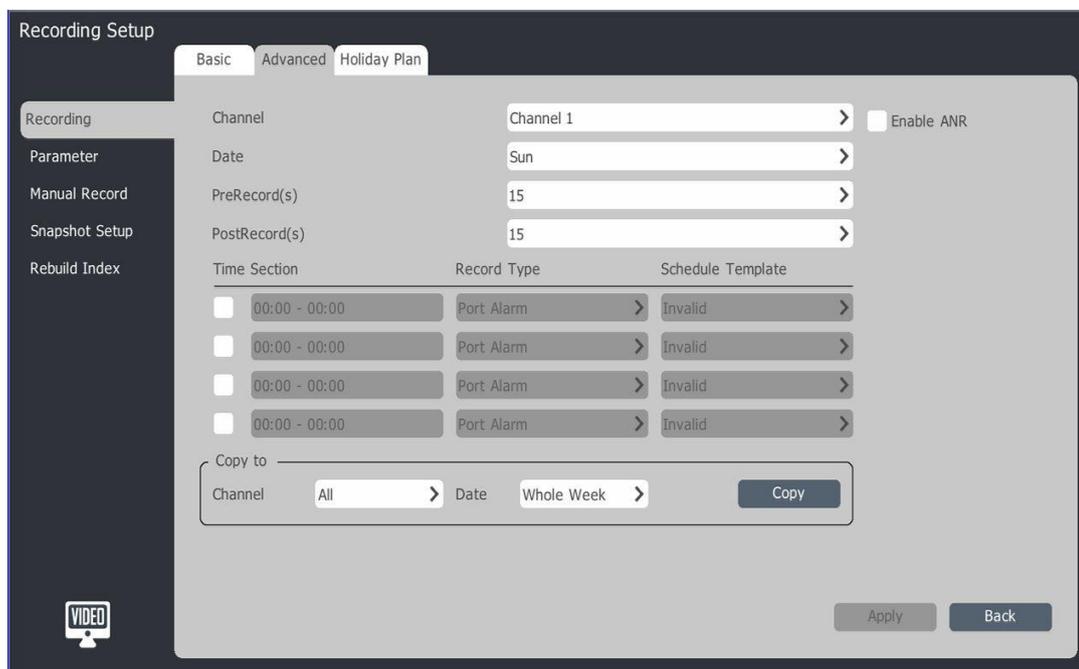


2. Choose the channels to set.
3. Enable ANR. If enabled, the IPC will automatically start the local video when offline. It will automatically upload the local video to NVR once online.
4. Pre-record(s), choose the Pre-record time in the drop-down list.
5. Post-record(s), select the Post-record time in the drop-down list.
6. Time Section - Set desired time period and the Record type for this period. Check the time option box. Enter the start and end time. Select one recording type in the list for the selected time period. Multiple recording types can be set provided there is a corresponding time period.
7. Ability to copy recording template to multiple channels. Select "Channel", "Date", and then copy it.
8. Click "Apply" to save it.

Holiday Plan:

Configure the holiday plan for the current year. Once enabled, it will carry out the plan during the holiday.

1. Navigate to [Main Menu]->[Recording Setup]>[Recording]->[Holiday Plan]. The window appears as below.



- Click on one of the Holiday plans and press “Edit” or double click the Holiday Name and enter the “Holiday setup” directly.

No.	Holiday Name	Status	Start Date	End Date
01	Holiday1	Close	2015/01/01	2015/01/03
02	Holiday2	Close	2015/01/01	2015/01/03
03	Holiday3	Close	2015/01/01	2015/01/03
04	Holiday4	Close	2015/01/01	2015/01/03
05	Holiday5	Close	2015/01/01	2015/01/03
06	Holiday6	Close	2015/01/01	2015/01/03
07	Holiday7	Close	2015/01/01	2015/01/03
08	Holiday8	Close	2015/01/01	2015/01/03
09	Holiday9	Close	2015/01/01	2015/01/03
10	Holiday10	Close	2015/01/01	2015/01/03

- Check the box to “Enable Holiday Plan”, select holiday mode: “by day”, “by month” or “by week”. Input the holiday start date and end date. Click “Confirm” to save.

Holiday Setup

Holiday Name:

Enable Holiday Plan

Mode:

Start Date:

End Date:

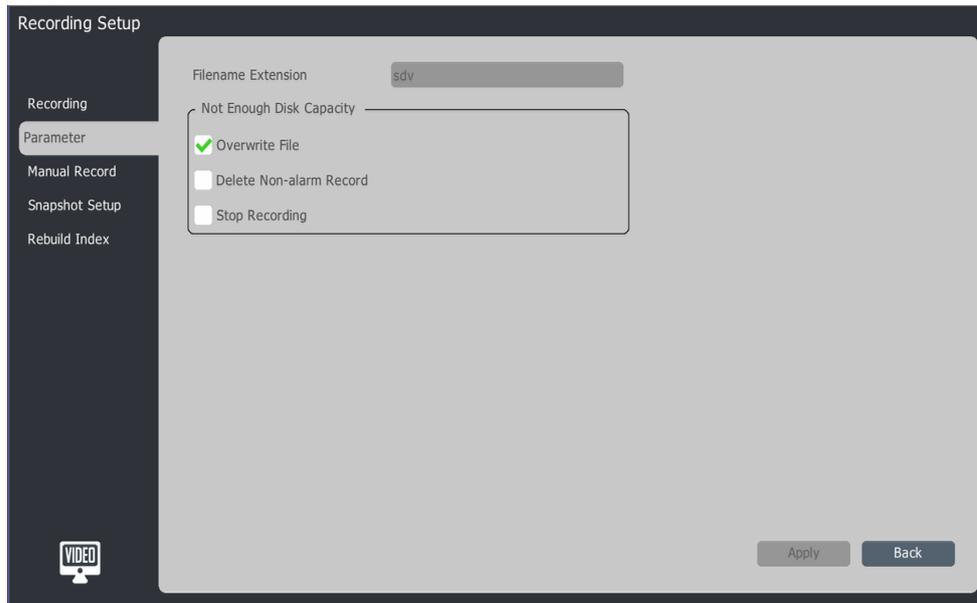


Tips:

- If no special instructions, Sunday is the first day of the week.

4.6.3 Recording Parameter

1. Choose [Main Menu]->[Recording Setup]>[Parameter], the setting page appears as below:

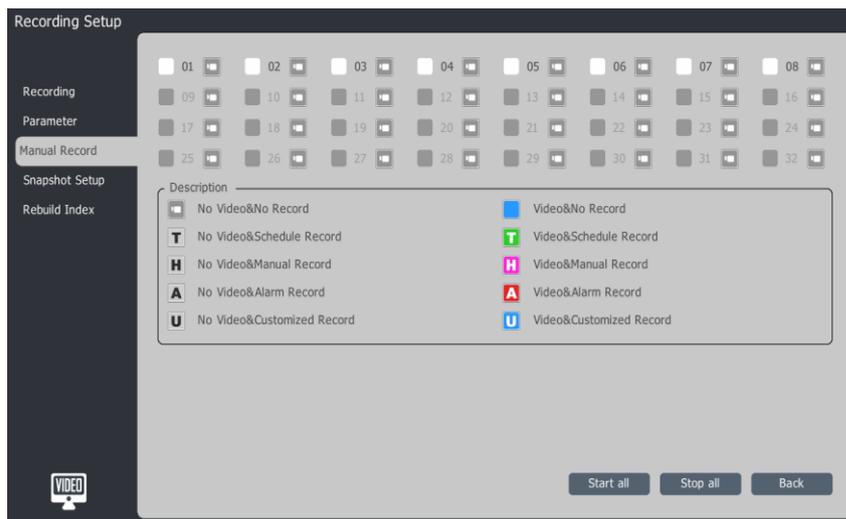


2. Choose the method when disk capacity is not enough, **【Overwrite File】** **【Delete Non-Alarm Record】** **【Stop Recording】** .

3. Click “Apply” to save.

4.6.4 Manual Record

1. Choose [Main Menu]->[Recording Setup]>[Manual Record], the setting page appears as below:



2. Check and Uncheck channels to start or stop the manual recording.
3. Click “Start all” , to start all channels manual recording.
4. Click “Stop all” , to stop all channels manual recording.



Tips:

Icon	Status descriptions
	no video, no recording
	has video, no recording
	no video, under manual recording
	video available and under manual recording
	no video, under schedule recording
	video available and under schedule recording
	no video, under alarm recording
	video available, under alert recording
	no video, under customized recording
	no video, under customized recording

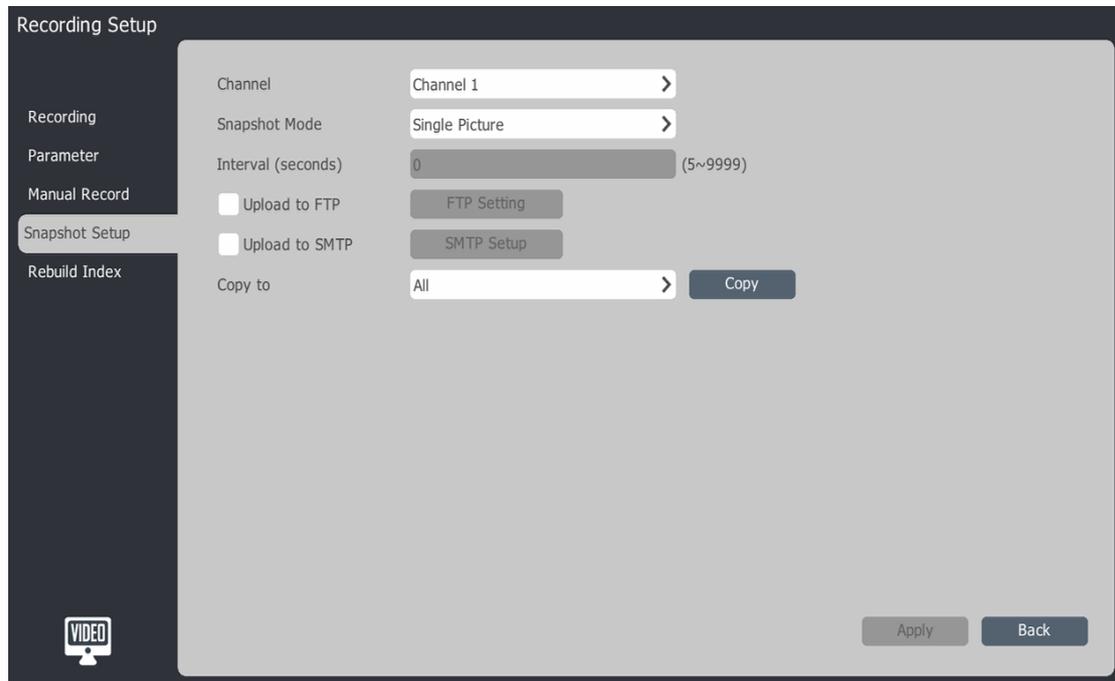


Tips:

- The manual recording can only be stopped manually. If the recording template for some channels is enabled, recording will be based on the template setting after stopping the manual recording.

4.6.5 Snapshot Setup

1. Choose [Main Menu]->[Recording Setup]>[Snapshot setup], the setting page appears as below:



- a) Choose the target channel no. for snapshot setup.
- b) Snapshot Mode: "Single Picture" and "Timing capture".
- c) If timing capture is enabled, then set the interval time in seconds.
- d) Choose whether to upload the snapshot to FTP. Click on the "FTP Settings" button to enter the FTP setting interface.
- e) Choose whether to upload the snapshot to SMTP. Click on the "SMTP Setup" button to enter the SMTP setting interface.
- f) The current channel's snapshot parameters can be copied to other channels.
- g) Click "Apply" to save.



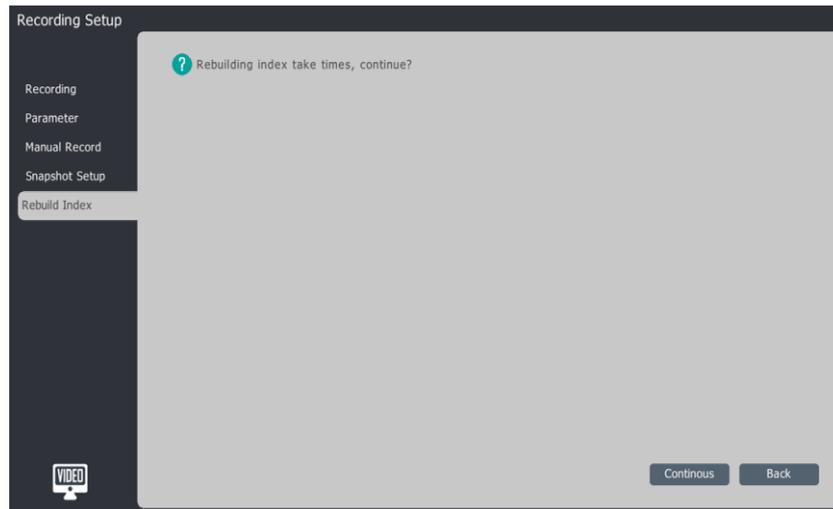
Tips:

The NVR system captures a maximum of 2,000 images in 24 hours.

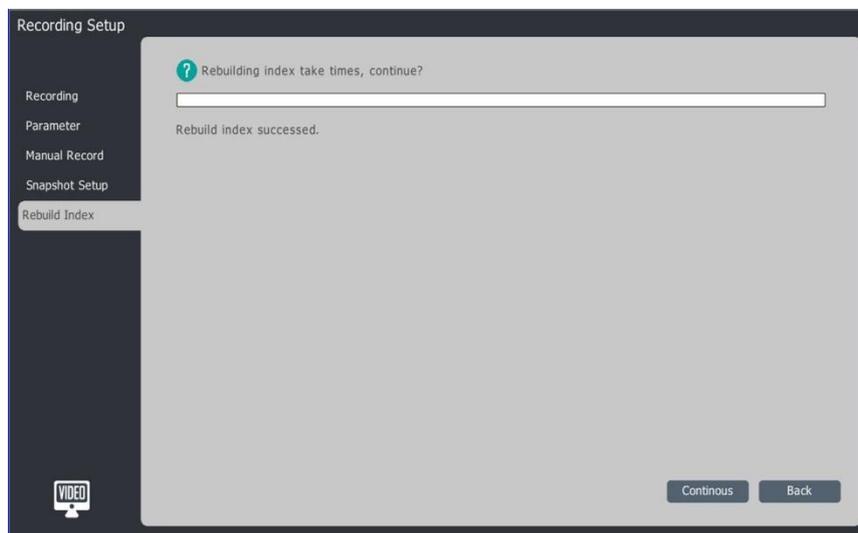
4.6.6 Rebuild Index

When HDD exception or video loss occurs, user can rebuild the index to maximize the recovery of lost video.

1. Choose [Main Menu]->[Recording Setup]>[Rebuild Index], the setting page appears as below:



2. Click "Continuous" to start the operation of "rebuilding the index".



3. Users can exit this page, and the “rebuild index” process will continue in the background.

4.7 Playback

4.7.1 Instant Playback

Under the “Preview” page, playback is only 5 minutes of video for the selected channel.



Under “Preview”, choose the target channel, click “” to enter the Playback page, as above.

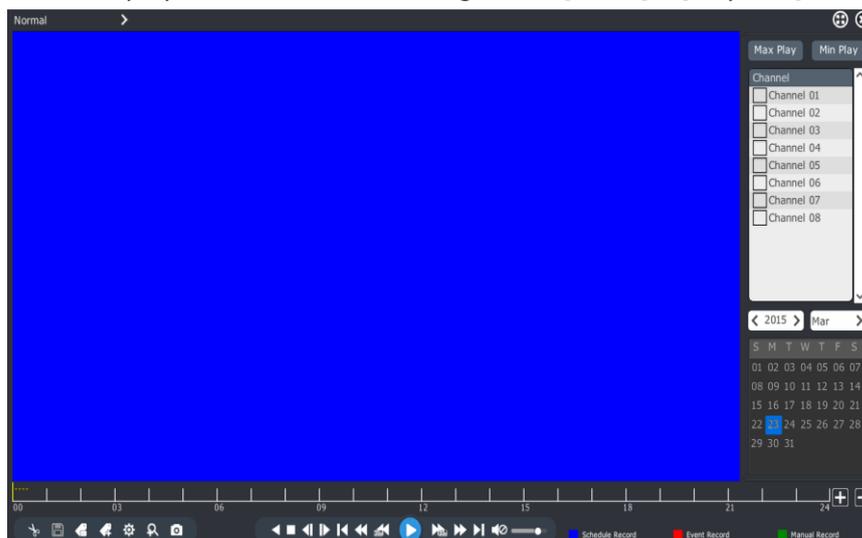
Easy button Menu:

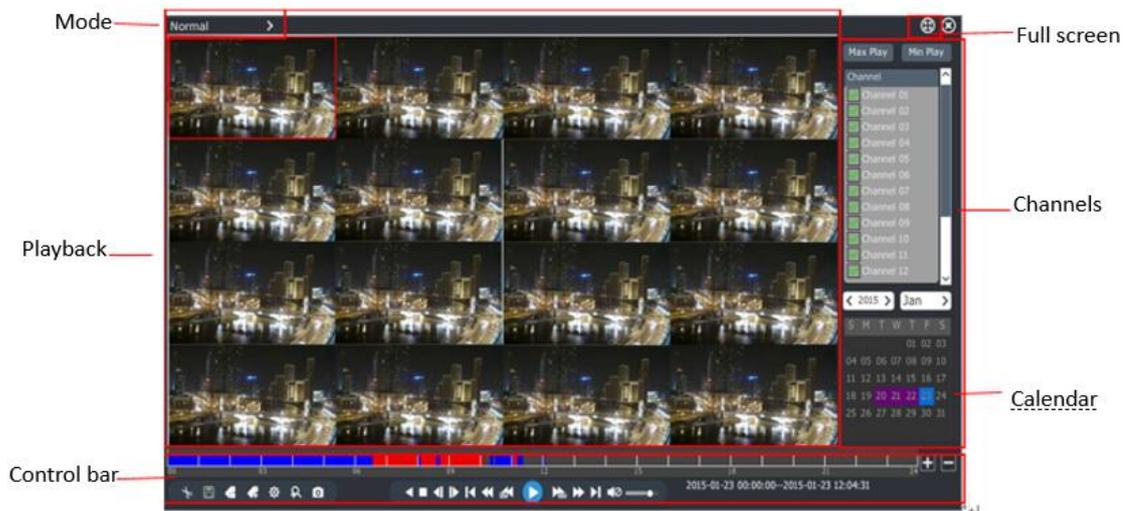


4.7.2 Playback Descriptions

The composition of the playback interface and each function module is as follows:

Enter the playback menu interface: Right click [menu]-> [Playback]





Playback control bar explanation

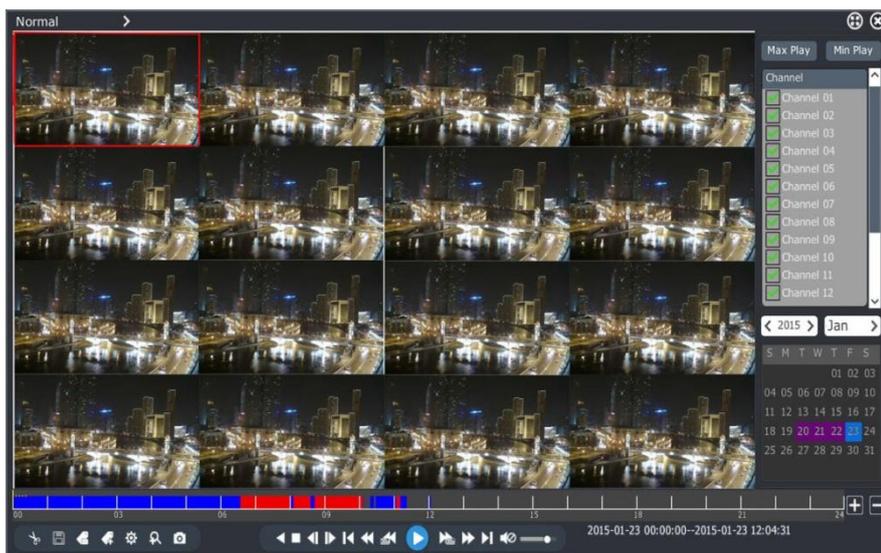
Button	Description	Button	Description	Button	Description
	Open/Close voice		Star/End clips		Lable management
	Save clips		Add default lable		Add customized lable
	Digital zoom in		Tripwire/Perimeter video search		Confirm/Cancel search
	Pause/Backward		Pause/Play		Stop
	Play last 30s		play next 30s		Fast forward
	Slow down play		play by frame		Backward by frame
	Last day		Next day		Playback timeline
	Playback position /Snapshot		Capture		Amplify timeline
	Less timeline				

4.7.3 Normal Playback

The playback operation steps are as follows:

1. Choose [Main Menu]->[Playback], enter the page "Normal playback" page as shown below.
2. Select the video playback channel. The calendar will automatically show the current month of video.
3. Select your playback with a Single click on the playback date.

4. The System automatically plays eligible video files.



1. Other playback operation

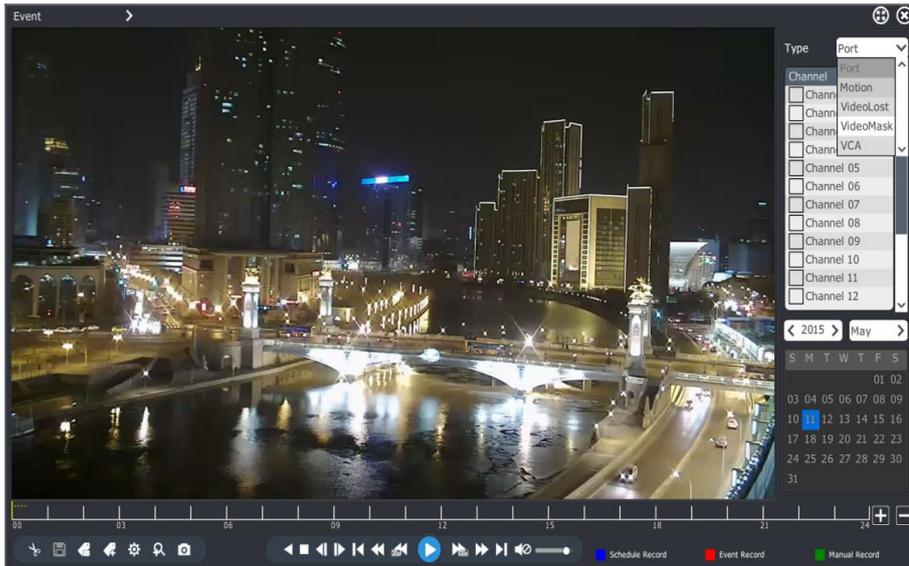
Click”  ”, to enter full screen playback.

Click  or  to select your playback speed.

4.7.4 Event Playback

By event type (port alarm, motion detection, video lost, video mask, VCA), query the video in a certain time period. Play the qualified video from the generated query list. The specific steps are as follows:

1. Choose [Main Menu]->[Playback]. Choose “Event”.
2. Select time type on the upper right corner.
3. Choose the video playback channel.
4. Single click the playback date.
5. The system automatically plays the eligible video files.



Tips:

- During event playback, the player will skip according to the alarm events and skip when there is no alarm event for the video period.

4.7.5 Tag Playback

Tag recordings to help users take note of relevant information during video playback. Once tagged, the user can search video by tag in playback.

Add/Manage Tags

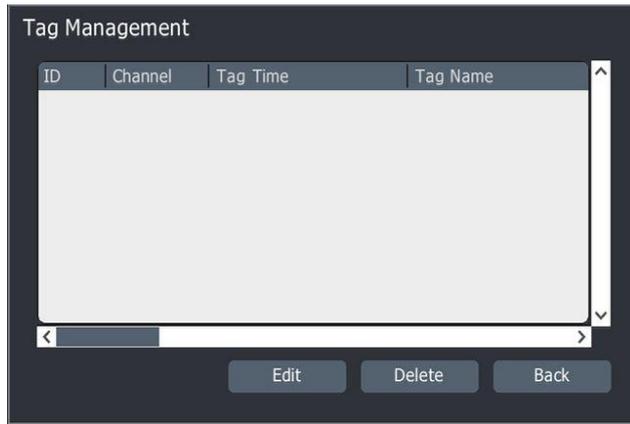
1. Enter Playback page

Click , to add default tags.

Click , and input the tags' name, add "custom tag".

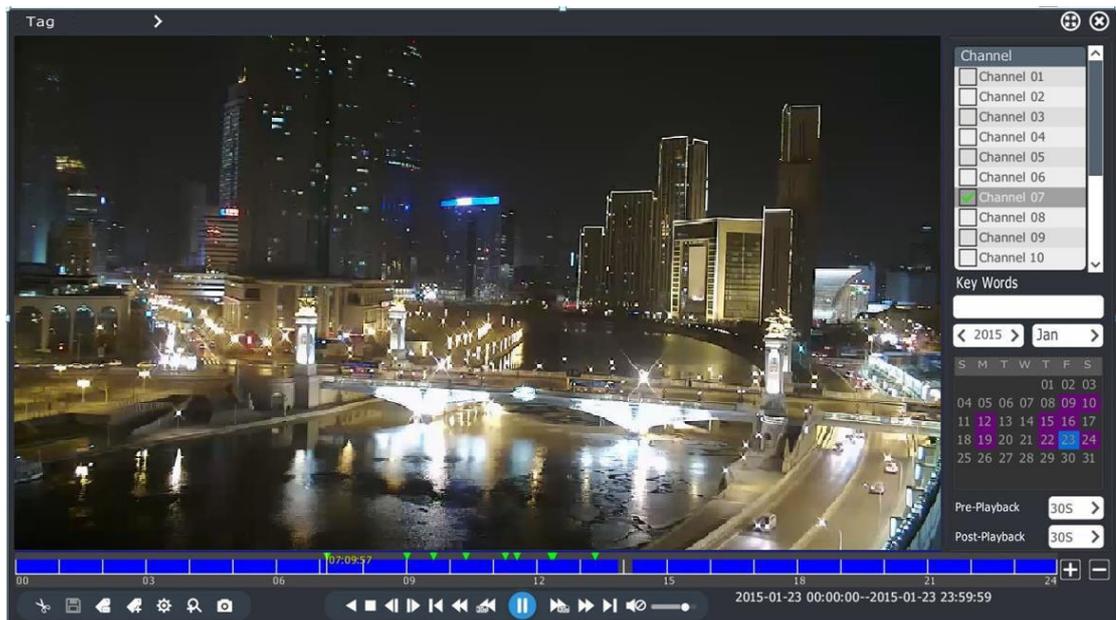
2.Tag management

Click , enter "tag management" page as below. Users can read, edit and delete the added tags.

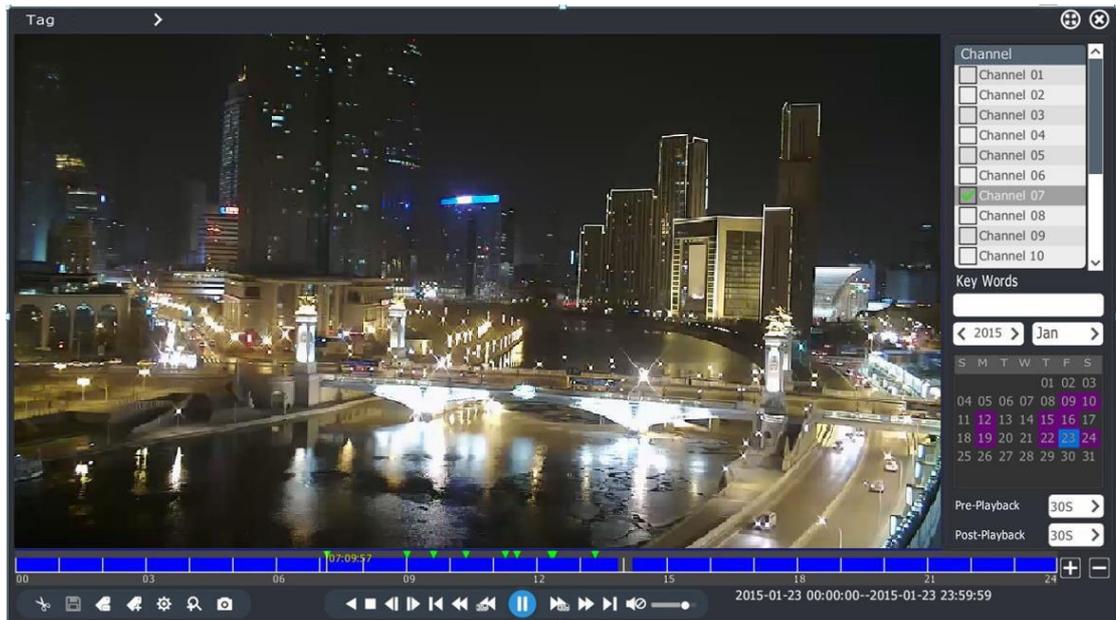


Tag playback operation

1. Enter "Playback" interface, choose "Tag" from upper left drop down and go to the "Tag Playback" as below.
2. Choose the appropriate channel(s).
3. Input keywords of Tag. If nothing is entered, the system will default searching the scheduled date video from selected channels.
4. Select date.



5. When the playback progress bar appears, the tag is highlighted in green. When the mouse moves to it, it automatically displays the tag information, as shown in the figure below.



- Tips:**
- Recording plays from “Pre-Playback” to “Post-Playback”. Select the next tag to continue reviewing tagged recordings.
 - “Pre-playback” and ”Post-playback” can be edited.

4.7.5 Smart Playback

Smart Playback is an intelligent analysis for video and playback. Intelligent analysis currently supports “perimeter “ and “tripwire” analysis only. The specific steps as follows:

1. Enter “Playback” interface, choose “Smart” and go to the “Smart Playback” as below.

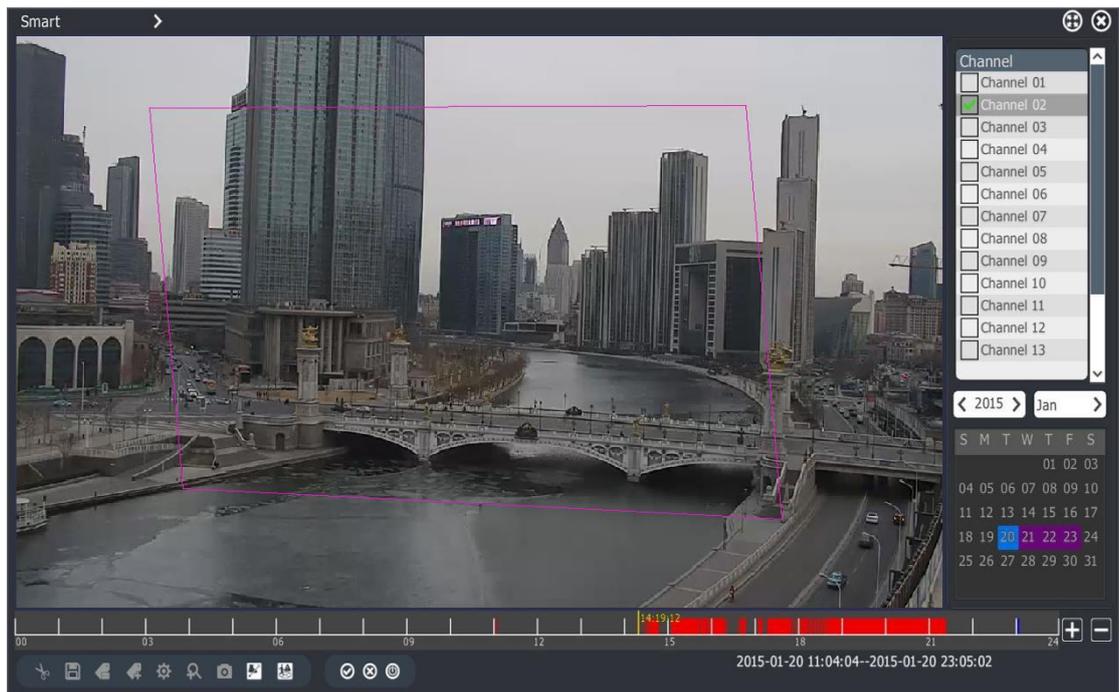


2. Select “channel” and “date” and click the play button to start playback.

- Click on the left bottom icon  or  to enter the line drawing interface for smart playback.



- Draw the line in the video playback.



- Click the  start to search. During the search process, the upper-left corner displays the status of the search with the words "VCA SEARCHING ", at the same time, the progress bar will display the search progress and results.
- When the search process ends, the system will automatically begin to play from the search results.



7. If the other channels or dates are clicked during the search process, the search will automatically stop. Alternatively, click the "stop search" button to manually stop the search.

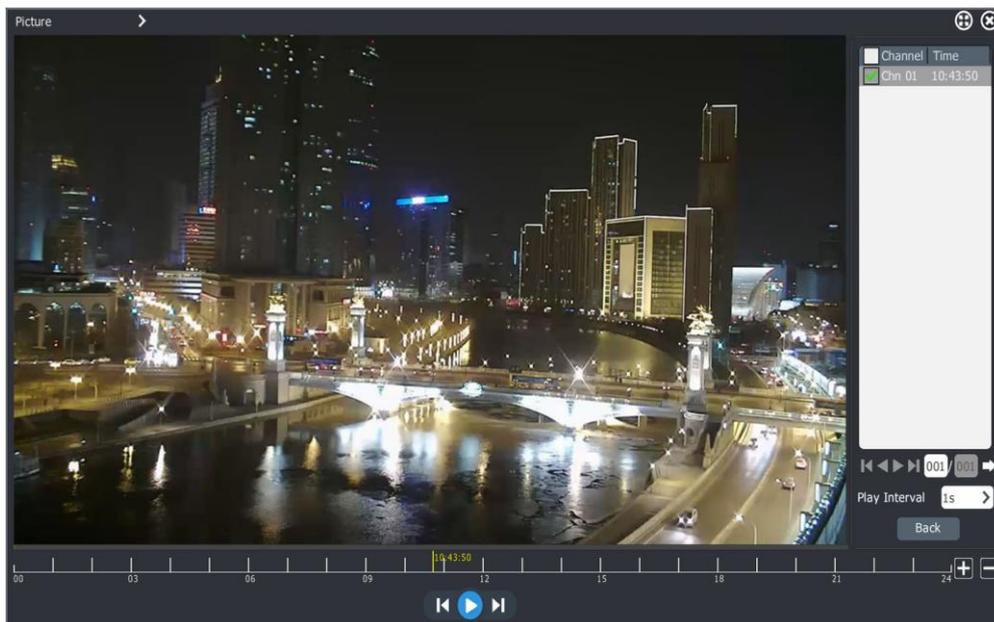


TIPS:

The intelligent playback process only plays video from within the time / date selected.

4.7.7 Picture Viewer

To browse the pictures saved to the hard disk. See illustration below:





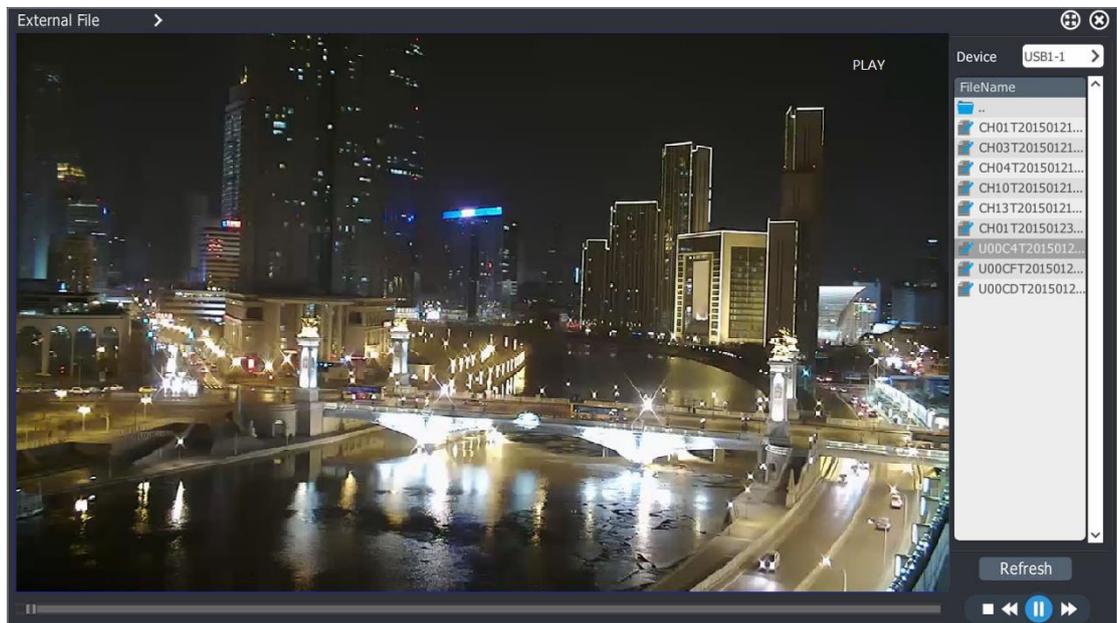
Description

- User may set an interval time between pictures to play in a slide show format automatically.
- Alternatively, users may pause auto play and click the left or right side of the picture to progress forward or back through the pictures.

4.7.8 Playback the Files from External Devices

Playback the recorded files saved to external storage medium, such as USB flash disk, mobile HDD, CD, and etc. Please follow the steps as below.

1. Enter playback interface, and select “External file” from the upper left drop down.



2. Select “Refresh” to read files from the external storage medium.

3. Click the target file to play.



Description

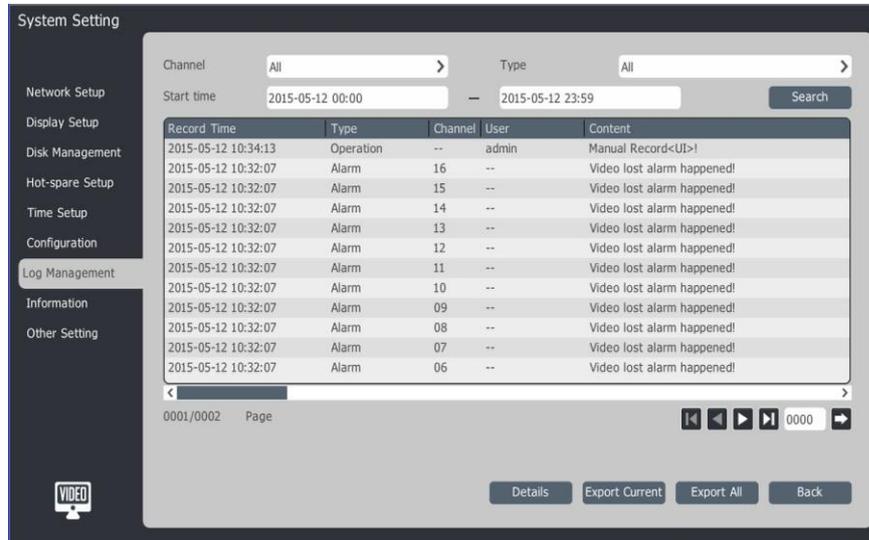
Ensure USB flash disk, mobile HDD or USB CD-ROM are connected to the NVR.

4.7.9 Play by Log Information

Play the files according to log information.

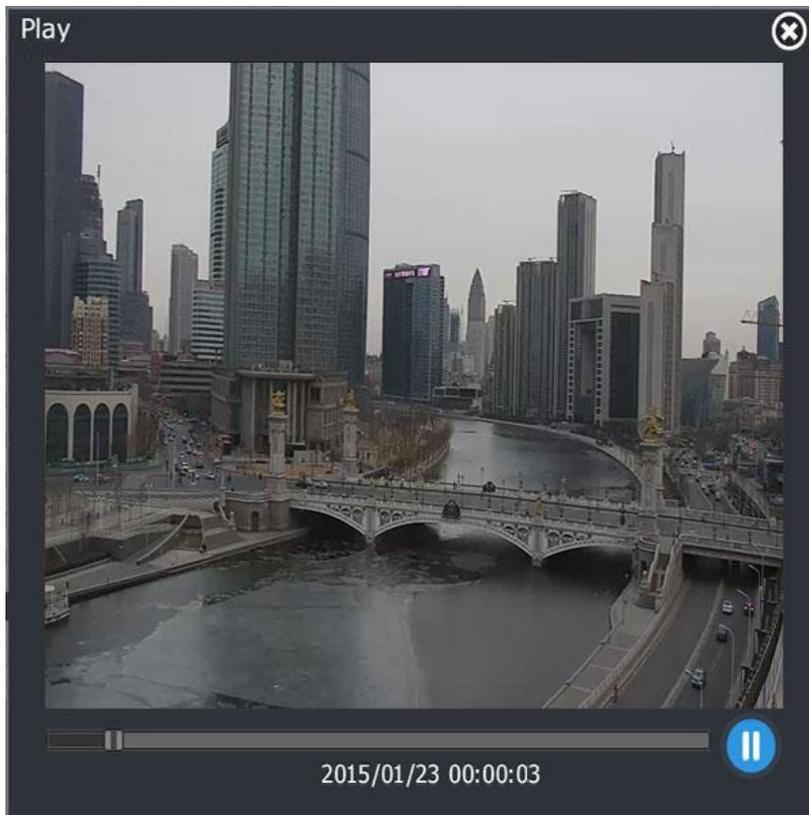
Please follow the steps illustrated below.

1. Select “ Main menu -> System Setting -> Log Management”.



2. Select the “Channel” and set “Type”, “Start time” and then click “Query”.

3. Double click file in the log to enter “Play” interface.





Description

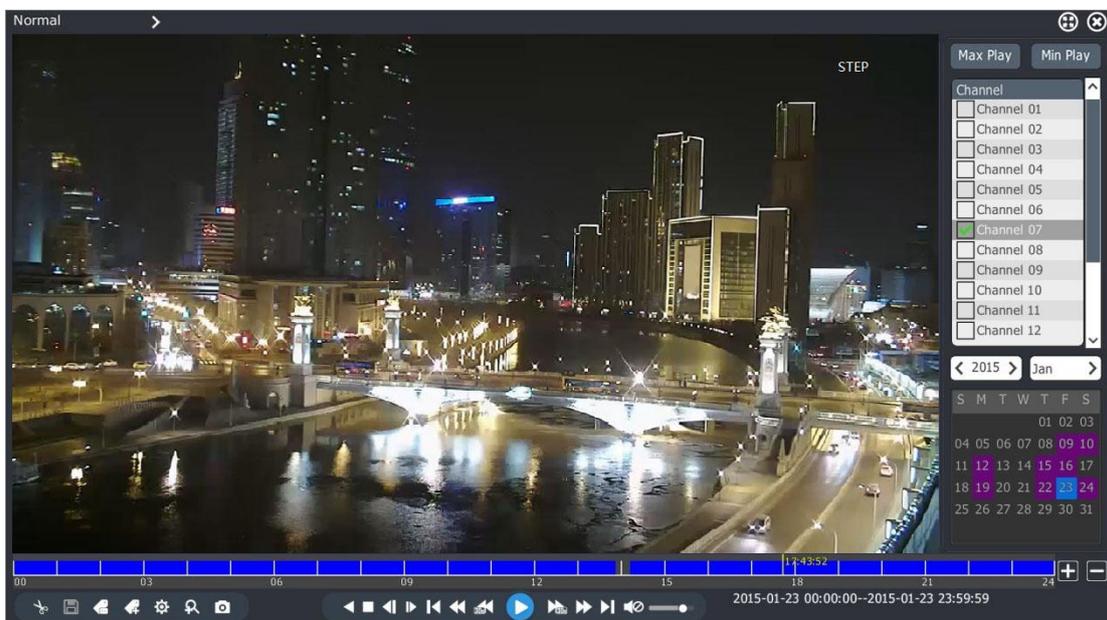
- Move the time bar to control the playback progress.
- The recorded files in the selected channel and time must be available for playback.

4.7.10 Playback assist function

Single frame playback

You can review images by single frame as illustrated below.

Enter the “Playback” interface, and click  or  to progress through “Single frames”. Each click progresses the playback on frame at a time  .



E-zoom

When in playback or when a video is paused, E-zoom will help users to zoom into the selected area.

Please follow the steps illustrated below.

1. Enter playback interface.
2. Click  at the control bar to enter the digital ‘zoom in’ interface.

3. Hold the left mouse button and drag to select the E-Zoom area. Once the area is selected, the system will E-Zoom into the selected red square area.

4. Use the mouse scroll wheel to adjust red square area.



Snapshot

Capture pictures when in playback.

Please follow the steps illustrated below:

1. Enter the playback interface.
2. Click  on the control bar to capture a picture of the current selected channel.



Description

- If you need to save pictures, please ensure the external disk is connected with NVR.

Thumbnail view

In normal, event, tag, or smart playback mode, when you hover the mouse cursor on a certain location of progress bar, the system will display a thumbnail view of the video at that selected time.

Please follow the steps illustrated below:

1. Select one of the modes in the upper left hand corner (referred to above) and start playback.
2. When the mouse is hovered over the progress bar a thumbnail view will appear. (Provided there is over 1 second of playback.)



Description

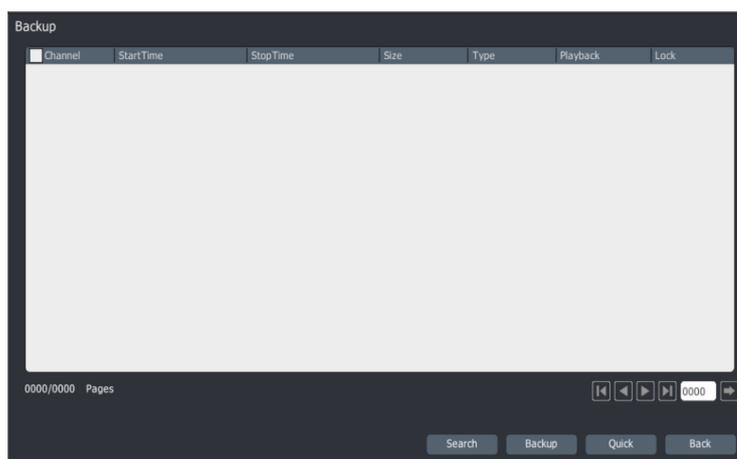
- When there is no recording file where you hover your mouse, the thumbnail view will not be displayed.

4.8 Backup

4.8.1 Backup

Backup recorded files to disk or USB device (USB Thumb Drive, External Hard Drive etc.).

1. Navigate "Main menu"->"Backup":



2. "Search":

Search

Range Record Files >

Channel All >

Type All >

Port All >

Start Date 2015-05-11 12 Recording Clip

Start Time 00:00

End Date 2015-05-11 12

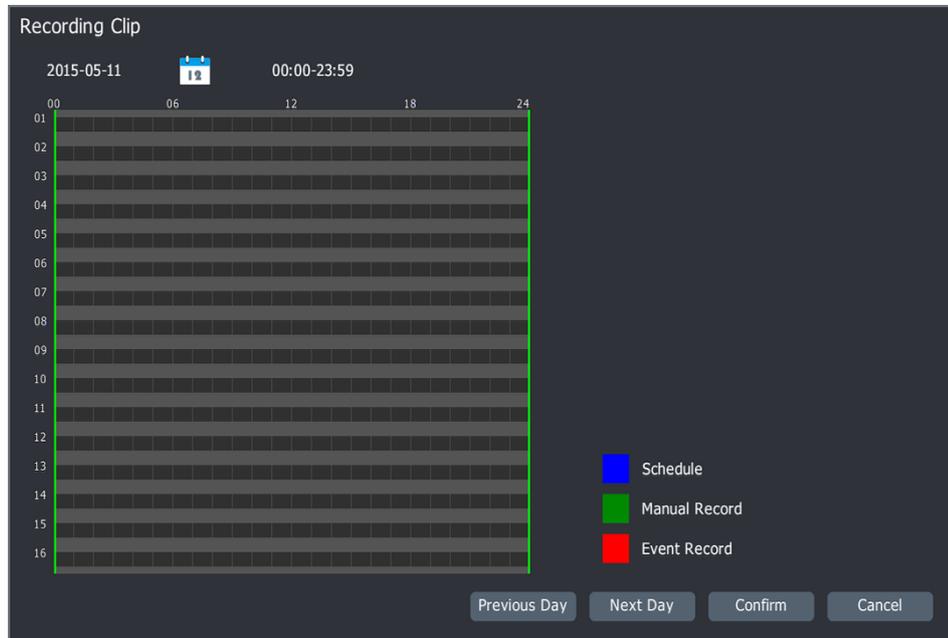
End Time 23:59

Search Today Search

3. After inputting your search condition, click "Search".

Click the "Search Today" button to only search today's recording.

Click the "Recording Clip" button:





Notes:

- Image files cannot support the “Recording Clip” function.

4. “Main menu”->“Backup”:

<input type="checkbox"/>	Channel	StartTime	StopTime	Size	Type	Playback	Lock
<input type="checkbox"/>	15	2015-03-16 15:48:42	2015-03-16 15:52:14	118.12M	Schedule		
<input type="checkbox"/>	7	2015-03-16 15:48:42	2015-03-16 15:52:12	105.17M	Schedule		
<input type="checkbox"/>	10	2015-03-16 15:48:42	2015-03-16 15:52:13	107.77M	Schedule		
<input type="checkbox"/>	5	2015-03-16 15:48:42	2015-03-16 15:52:12	87.76M	Schedule		
<input type="checkbox"/>	8	2015-03-16 15:50:00	2015-03-16 15:52:12	60.81M	Schedule		
<input type="checkbox"/>	14	2015-03-16 15:51:23	2015-03-16 15:51:43	9.91M	Schedule		
<input type="checkbox"/>	5	2015-03-16 15:52:23	2015-03-16 15:56:05	93.43M	Schedule		
<input type="checkbox"/>	7	2015-03-16 15:52:24	2015-03-16 15:56:05	110.04M	Schedule		
<input type="checkbox"/>	10	2015-03-16 15:52:24	2015-03-16 15:56:05	112.23M	Schedule		
<input type="checkbox"/>	14	2015-03-16 15:53:21	2015-03-16 15:56:05	89.05M	Schedule		
<input type="checkbox"/>	15	2015-03-16 15:52:26	2015-03-16 15:56:05	133.67M	Schedule		

0001/0001 Pages 0000

Click “” or double click recording file to play it.

Click “”, lock or unlock the recording file.

5. Choose the desired recording file, and then click the “Backup” button:

Select Target

Target

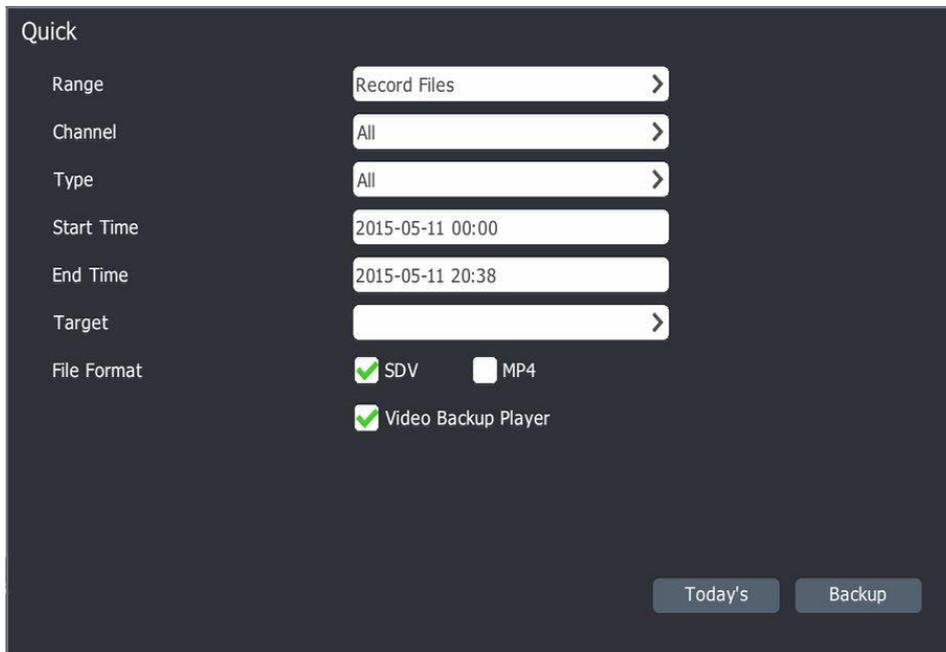
File Format SDV MP4

Video Backup Player

6. Choose “Target” location, file format, video backup player, then click “Apply”.

4.8.2 Quick backup

1. “Main menu”-> “Backup”->“Quick backup”:



The screenshot shows a configuration window titled "Quick" with the following fields and options:

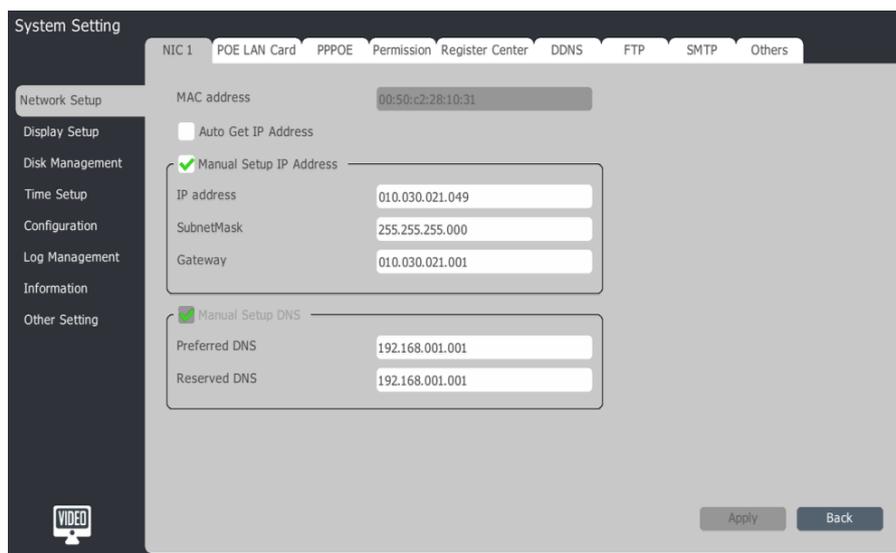
- Range: Record Files
- Channel: All
- Type: All
- Start Time: 2015-05-11 00:00
- End Time: 2015-05-11 20:38
- Target: (empty field)
- File Format: SDV MP4
- Video Backup Player

Buttons at the bottom right: "Today's" and "Backup".

4.9 Network setup

4.9.1 NIC 1

1. “Main menu”->“System setting”->“Network setup”->“NIC 1”



The screenshot shows the "System Setting" interface with the "NIC 1" tab selected. The "Network Setup" section is active, showing the following configuration:

- MAC address: 00:50:c2:28:10:31
- Auto Get IP Address
- Manual Setup IP Address
 - IP address: 010.030.021.049
 - SubnetMask: 255.255.255.000
 - Gateway: 010.030.021.001
- Manual Setup DNS
 - Preferred DNS: 192.168.001.001
 - Reserved DNS: 192.168.001.001

Buttons at the bottom right: "Apply" and "Back".

2. Choose “Auto Get IP Address” or “Manual Setup IP Address”.

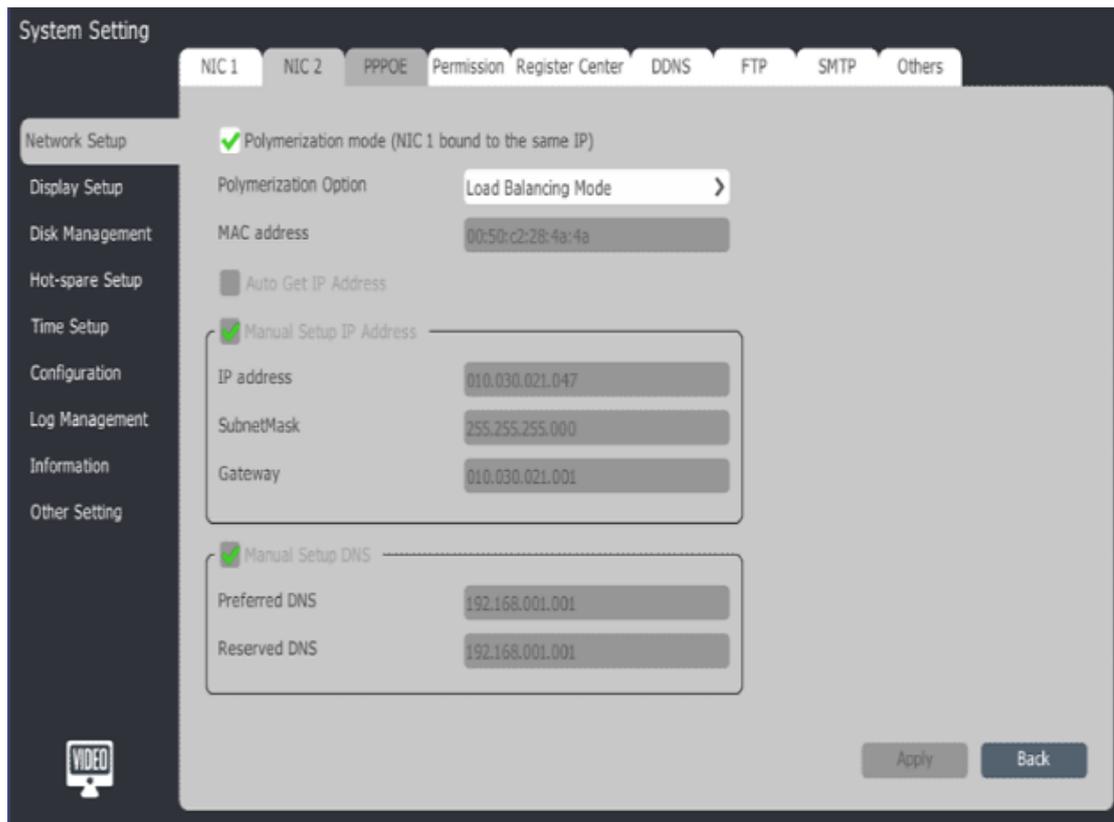
Choose “Auto Get IP Address” and NVR will get IP address from DHCP server after reboot.

3. Choose “Manual Setup IP Address” to set IP address, Subnet Mask, Gateway etc. manually.

4. “Apply” and NVR will reboot automatically.

4.9.2 NIC 2

1. “Main menu”->“System setting”->“Network setup”->“NIC 2”.



2. Enable “Polymerization mode”, you can choose:

Load Balancing Mode, 2 network cards are required for this mode.

Network redundancy, 1 network card be used, the other network card is used standby.

3. If “Polymerization mode” is disabled NIC2 will act the same as NIC1.

4.9.3 PoE LAN Card



Notes:

- Only PoE NVR supports it.

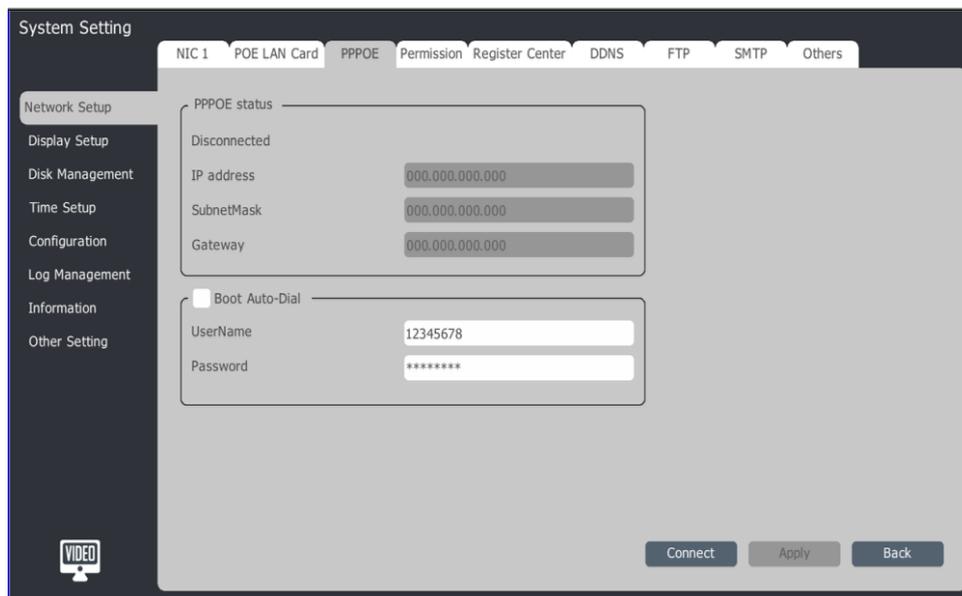
1. "Main menu"->"System setting"->"Network setup"->"PoE LAN Card".

2. The Plug and Play camera's IP address will be changed automatically when the PoE NVR's IP address is changed.



4.9.4 PPPOE

1. "Main menu"->"System setting"->"Network setup"->"PPPOE".



2. Set "Boot Auto-Dial".

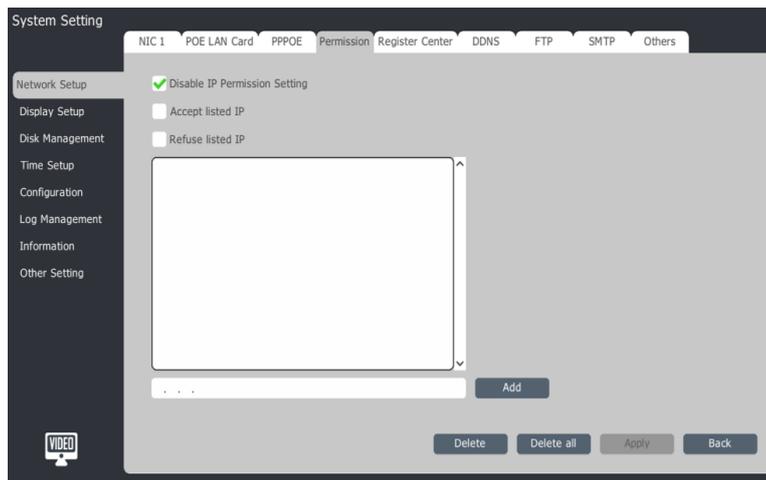
3. Input User Name and Password.

4. Connect.

5. Click “Apply” to save setting information.

4.9.5 IP permission

1. “Main menu”->“System Setting”->“Network Setup”->“IP permission”.



2. “Disable IP Permission Setting”. “Accept listed IP” or “Refuse listed IP”.

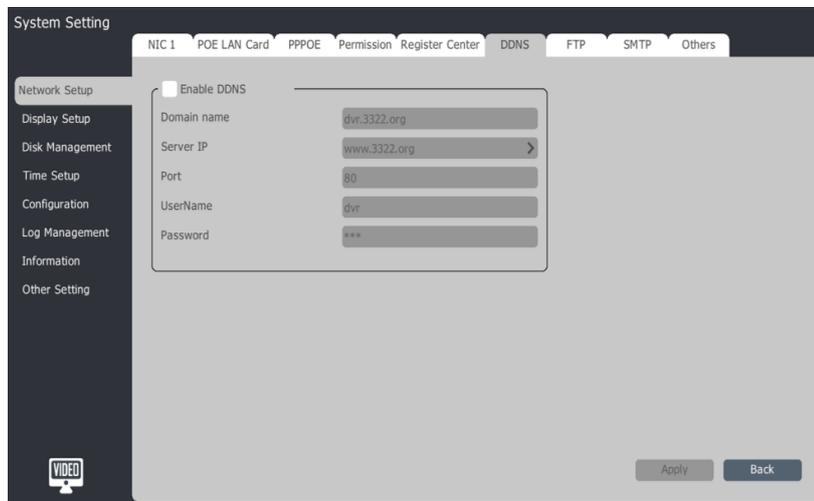
3. Input IP address.

4. Click “Add”.

5. Click “Apply”.

4.9.7 DDNS Setting

1. “Main menu”->“System setting”->“Network setup”->“DDNS”.



2. Click "Enable DDNS".
3. Input Domain name.
4. Input DDNS server's domain name or IP address.
5. Input DDNS server's port number, user name and password.
6. Click "Apply".

4.9.8 FTP Setting

1. "Main menu"->"System setup"->"Network Setup"->"FTP".

The screenshot shows the 'System Setting' interface with the 'FTP' tab selected. The left sidebar lists various settings categories, with 'Network Setup' highlighted. The main content area contains the following fields:

FTP server address	192.168.1.1
Port Number	21
Path	
Username	
Password	

At the bottom right, there are 'Apply' and 'Back' buttons. A 'VIDEO' icon is visible in the bottom left corner.

2. Input FTP Server's address, port number, user name and password.
3. Click "Apply".

4.9.9 SMTP

1. "Main menu"->"System Setting"->"Network setup"->"SMTP".

The screenshot shows the 'System Setting' interface with the 'SMTP' tab selected. The left sidebar lists various settings categories, with 'Network Setup' highlighted. The main content area contains the following fields:

SMTP server address	0
Port Number	0
Username	0
Password	*
Log Mode	off
Receiver address	0
Subject	0

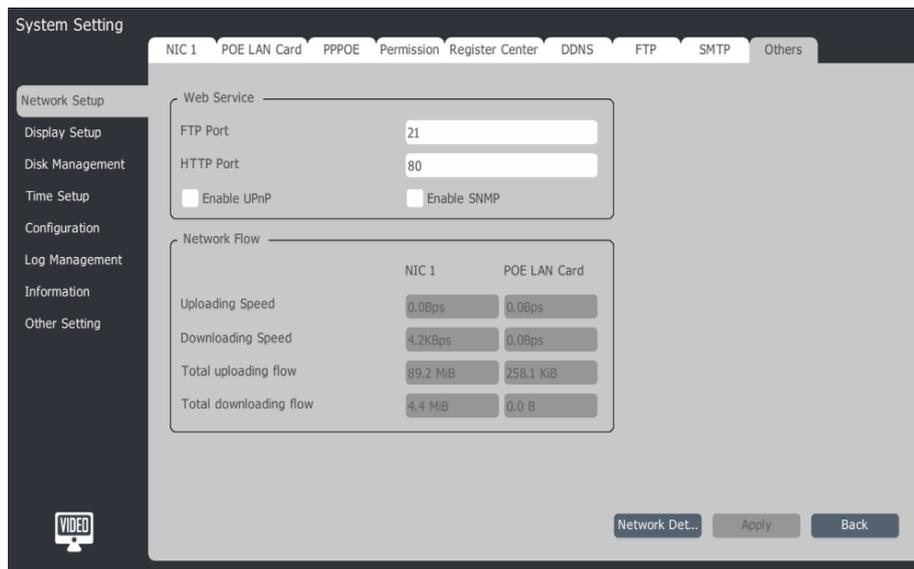
At the bottom right, there are 'Apply' and 'Back' buttons. A 'VIDEO' icon is visible in the bottom left corner.

2. Input SMTP server address, port number, user name, password, log mode, recipient address and subject.

3. Click “Apply”.

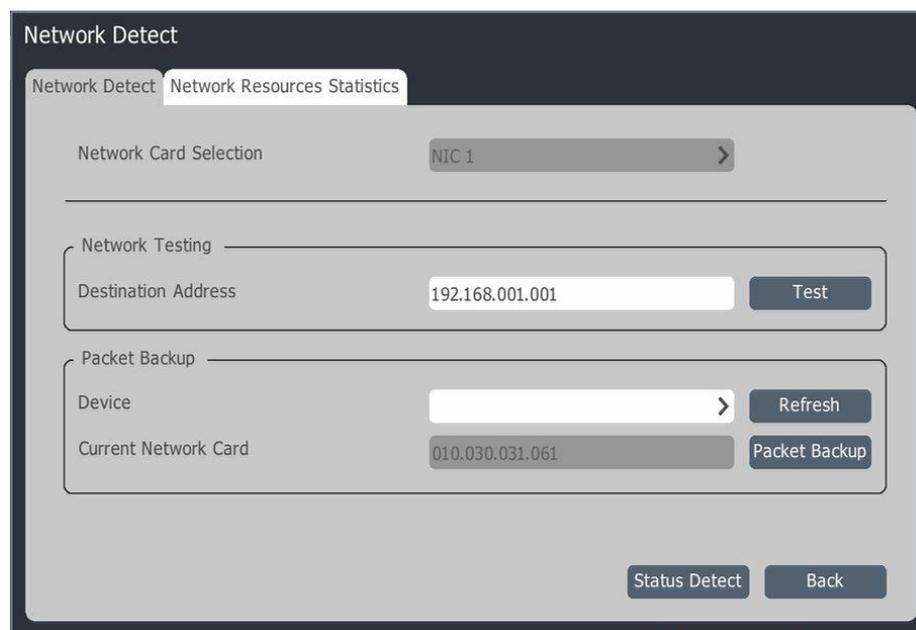
4.9.10 Others

“Main menu”->“System Setting”->“Network setup”->“Others”.



Network Detect

1. “System Setting”->“Network Setup”->“Other Setting”->“Network Detect”:

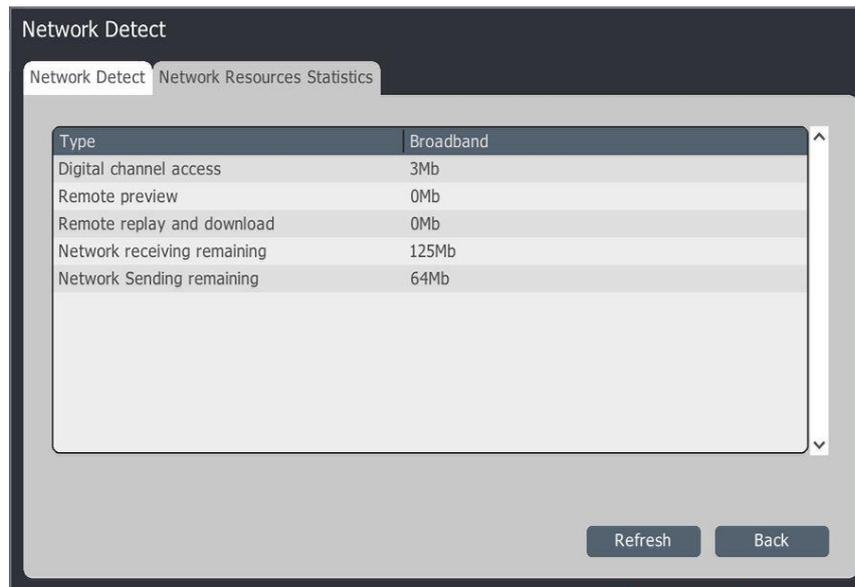


2. Input IP camera's address in "Network testing", then click "Test" to test network environment.

3. Click "Status Detect" to test "Network gateway", DNS.

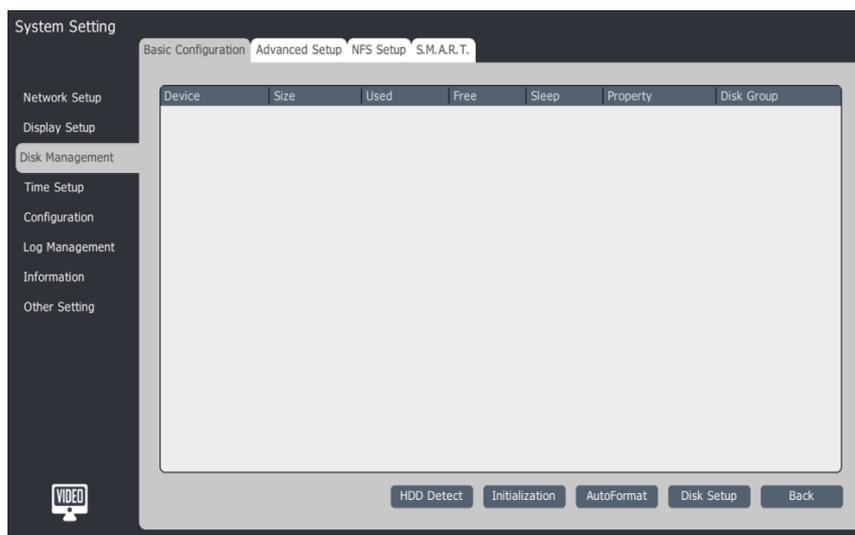
Network Resources Statistics

"System Setting"->"Network setup"->"Other Setting"-> "Network Detect"->"Network Resources Statistics":



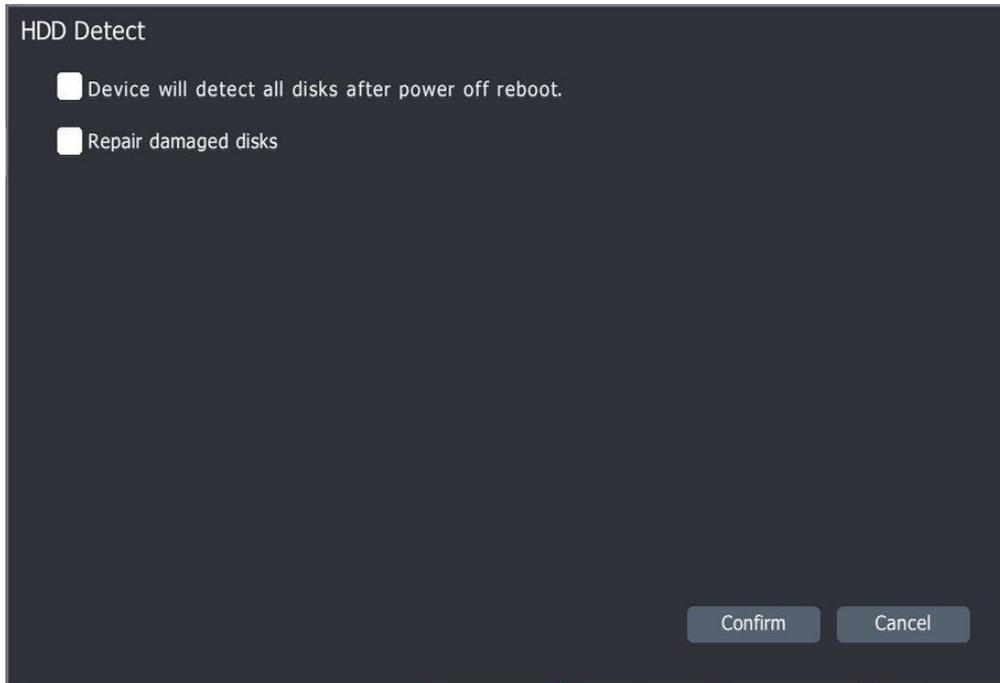
4.10 Disk Management

"Main menu"->"System Setting"->"Disk Management"

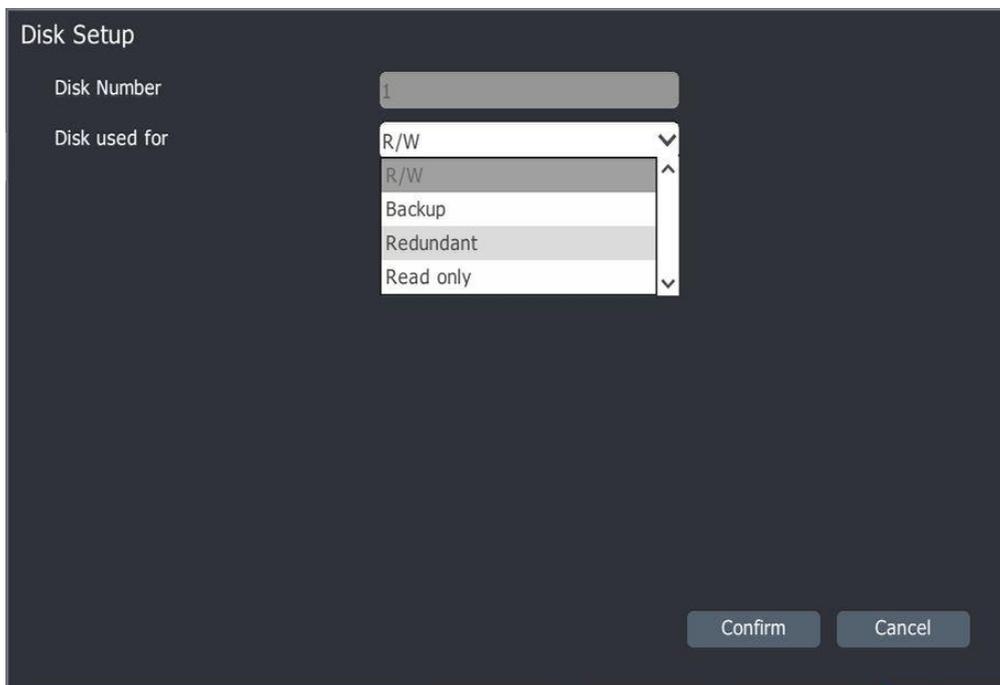


4.10.1 Basic Configuration

HDD Detect.

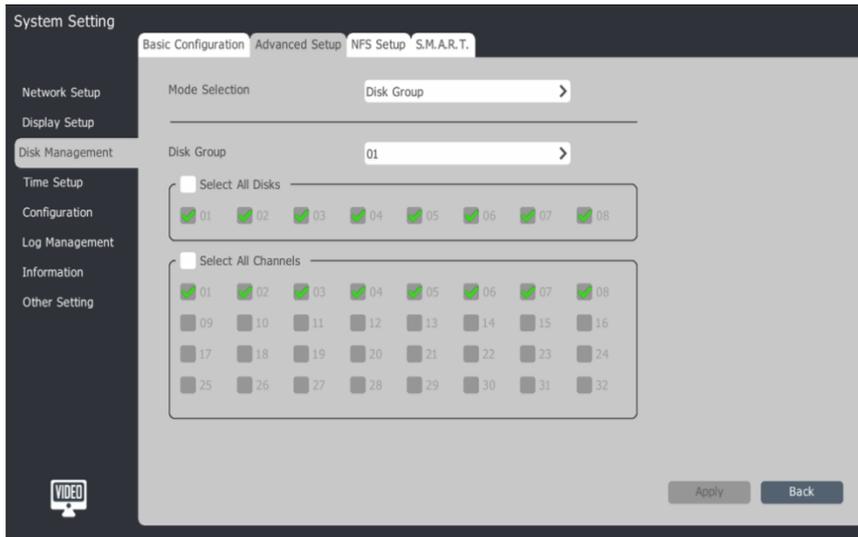


Disk Setup:



4.10.2 Advanced Setup

1. "Disk Management"--"Advanced setup"

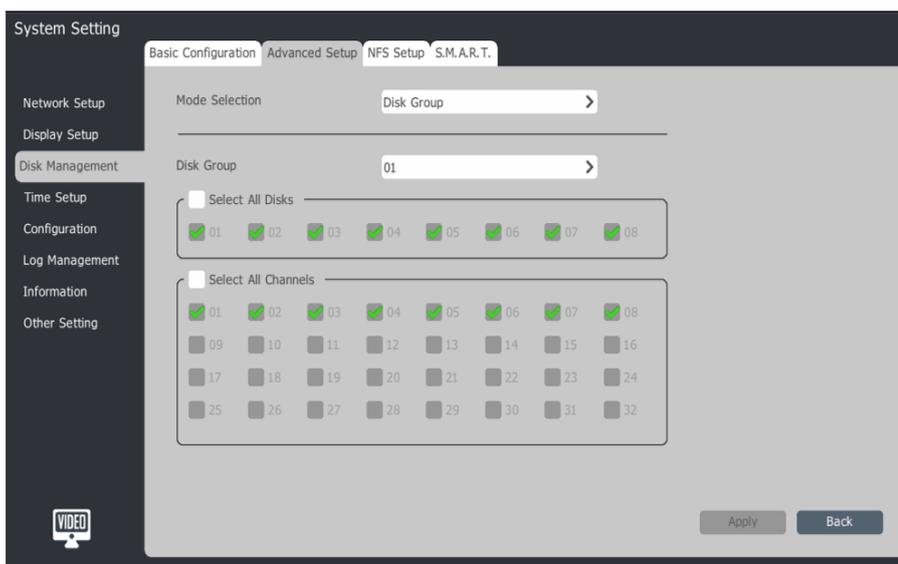


2. Mode selection

Disk Group: you can define what disk records which channel or define which channel records onto the targeted disk.

Quota: Set the max disk space for every channel. For each channel, a different disk space can be set.

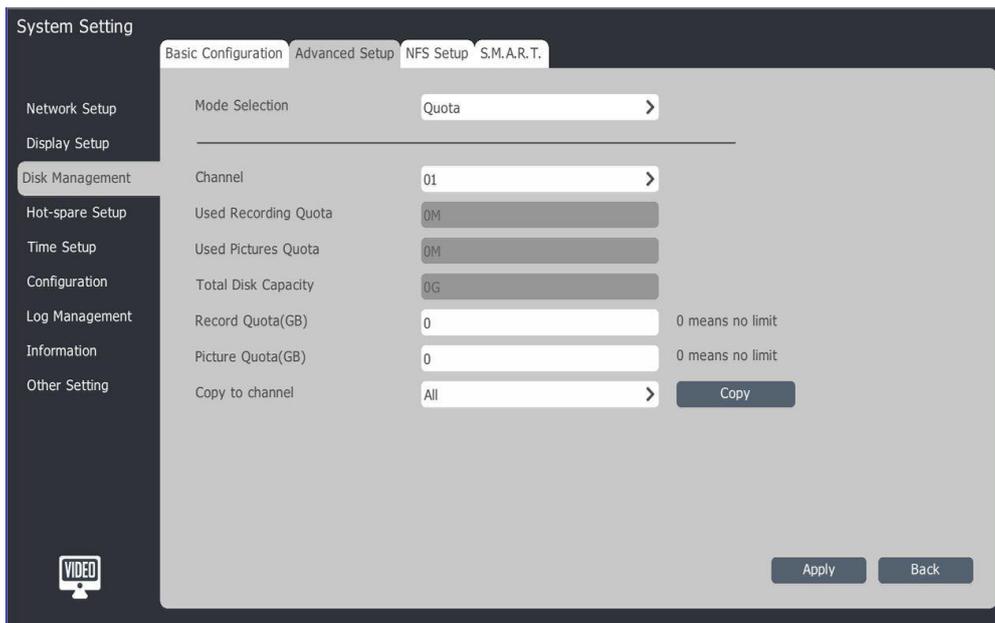
3. Disk Group



- a) Choose group number (01-08).
- b) Select disk number. Only one disk can be selected at once.
- c) Select channel number.
- d) Click “Apply”.

4. Quota

- a) “Disk Management”->“Advanced Setup”→“Mode Selection”→“Quota”.

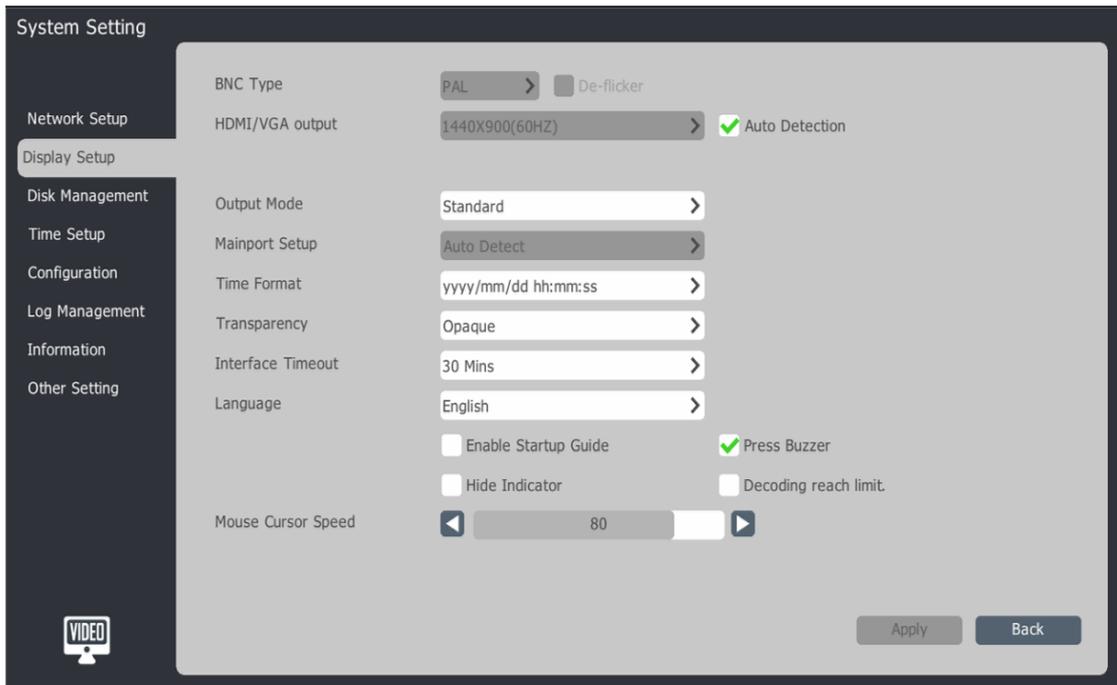


- b) Choose the channel number.
- c) Set disk space of recording file, unit of measure is in GB, 0 means unlimited.
- d) Set disk space of pictures, unit of measure is in GB, 0 means unlimited.
- e) Click “Apply” to save.

4.10.3 Display Setup

Setup device display parameters.

1. Main menu – system setting – display setup.

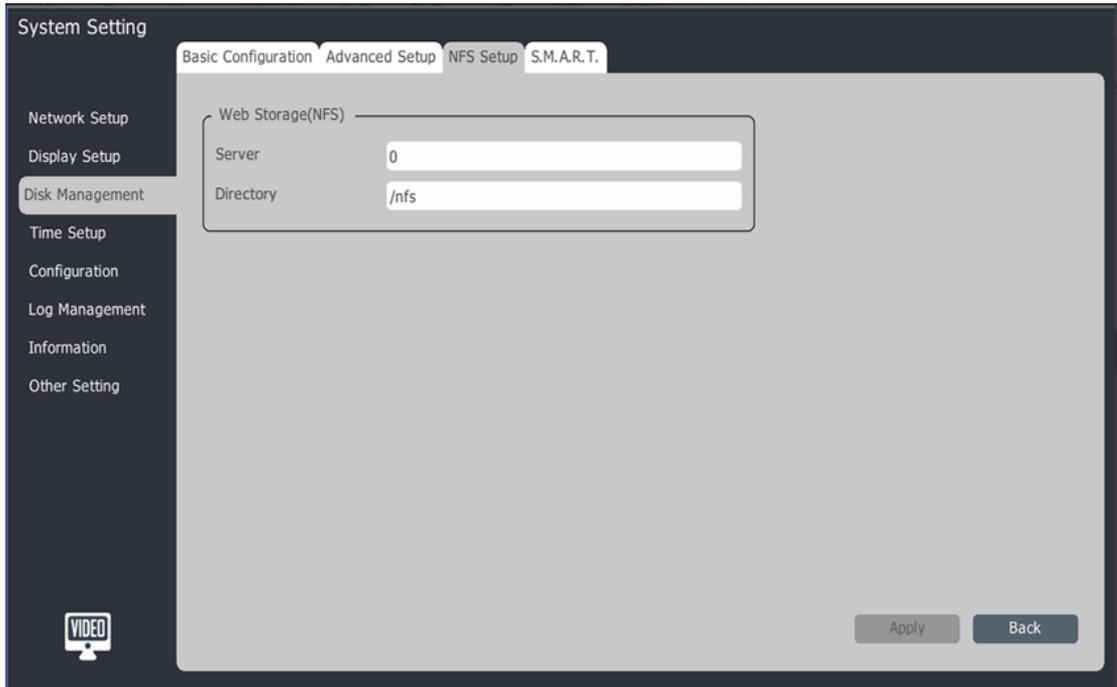


2. Display setup parameters instructions:

- BNC: BNC output mode,.
- HDMI/VGA output: set output device resolution.
- Auto detection: Auto adjusts the monitor for the best resolution.
- Output mode: setup VGA output image mode.
- Time format: choose system time display format.
- Interface timeout: choose time of interface timeout.
- Language: supports English.
- Enable startup guide: Check box to enable startup guide.
- Press buzzer: Toggles audible notification when front power button is pressed.
- Hide indicator: Toggles to show or hide the record indicator and alarm indicator in preview interface.
- Decoding reach limit: Toggles to show or hide the Max Limit Decoding alert .
- Mouse cursor speed: setup mouse speed.

4.10.5 NFS Setup

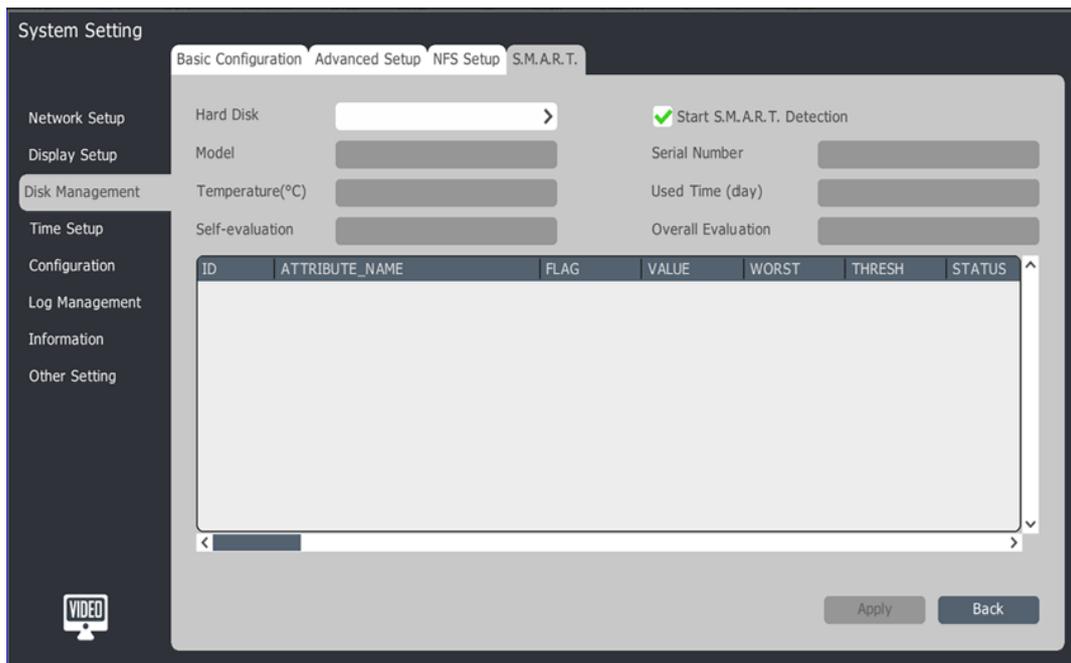
1. Disk Management-->NFS Setup.



2. Setup server IP address and storage path.
3. Click "Apply" to save the setup.

4.10.6 S.M.A.R.T

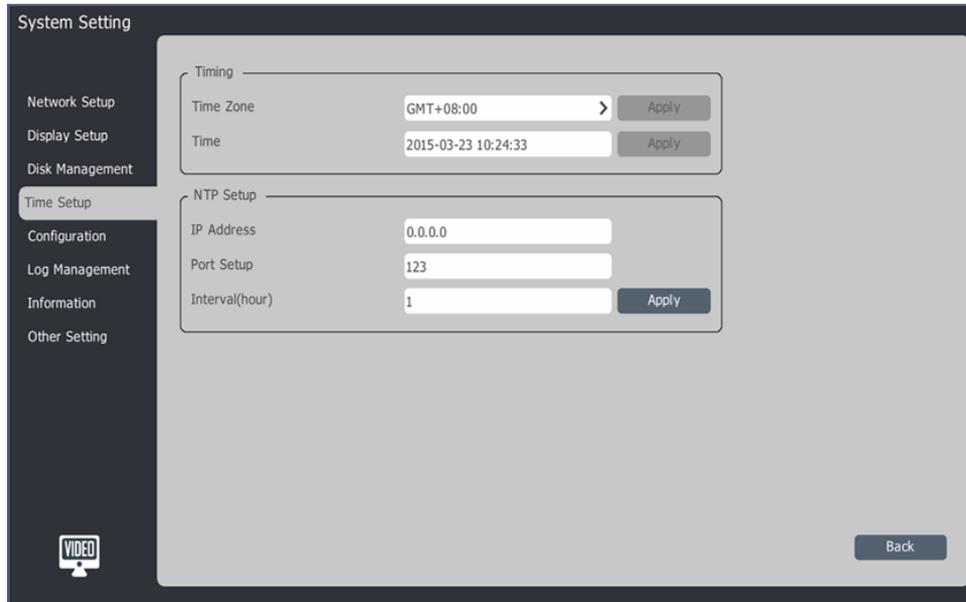
1. Disk Management-->S.M.A.R.T Setup.



2. Select one hard disk.
3. Once Enabled “Start S.M.A.R.T Detection”, the information will be displayed in the list.

4.11 Time Setup

Setup system time, Time Zone and NTP.



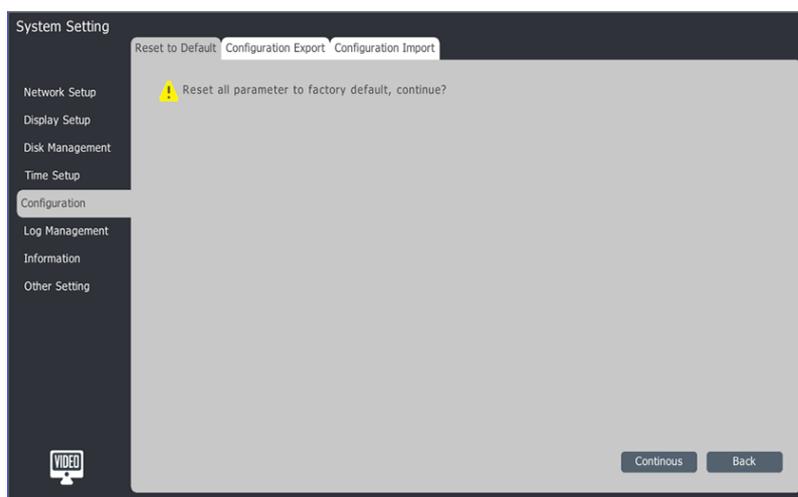
Modify system time zone and time, click “apply” to save the settings.

NTP setup: input NTP server address, port and interval time.

4.12 Configuration

4.12.1 Reset to Default

Click “Continue” to reset all parameter to factory default.



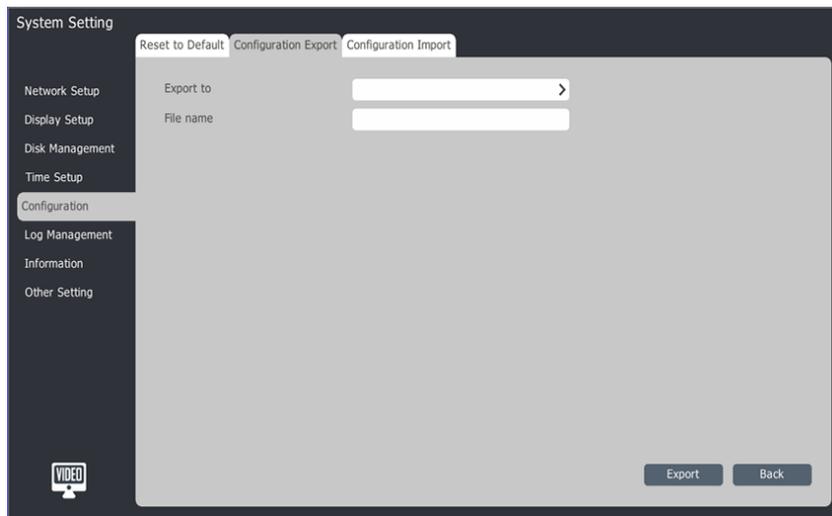


Note: The NVR will auto restart after resetting to defaults.

4.12.2 Configuration Export

【Export to】 select export save path

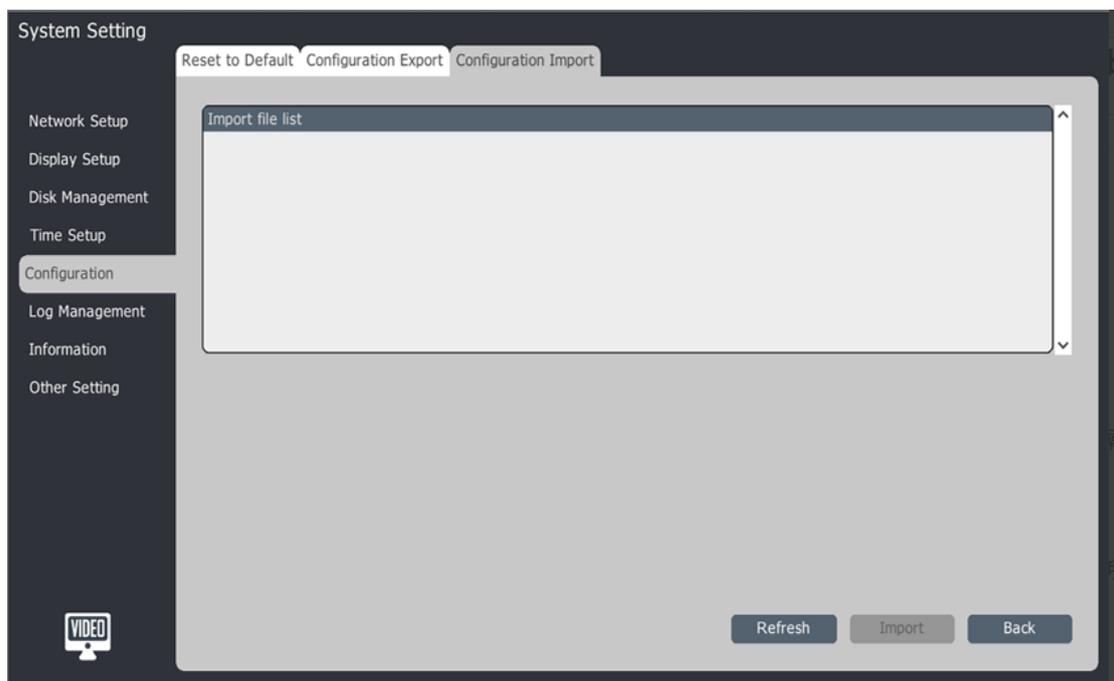
【File name】 name the export file



4.12.3 Configuration Import

【Refresh】 to check the import file list.

【Import】 to import the configuration.

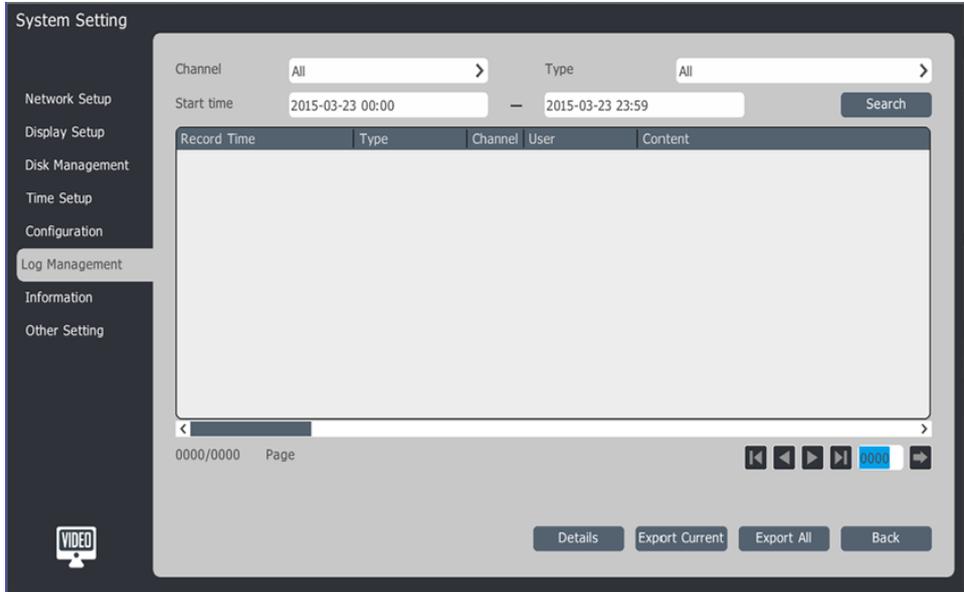




Note: The NVR will auto restart after importing

4.13 Log Management

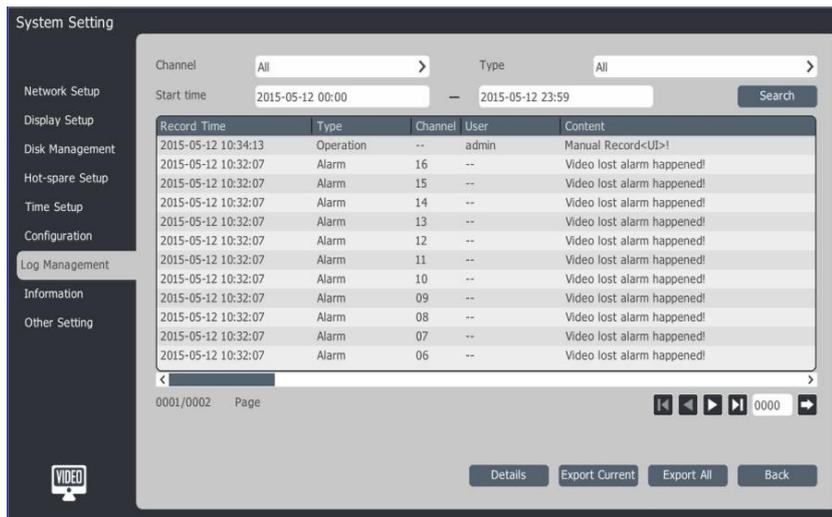
1. Search the log via <Channel>, <Type> and <Start Time>.



2. First page Previous page

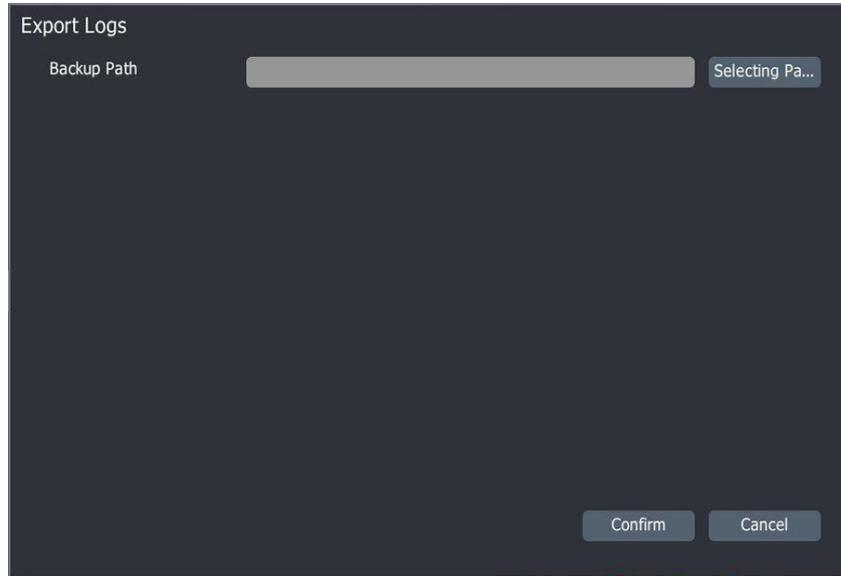
Last page Next page

0000 Enter page No. to jump to that page.



3. Log export

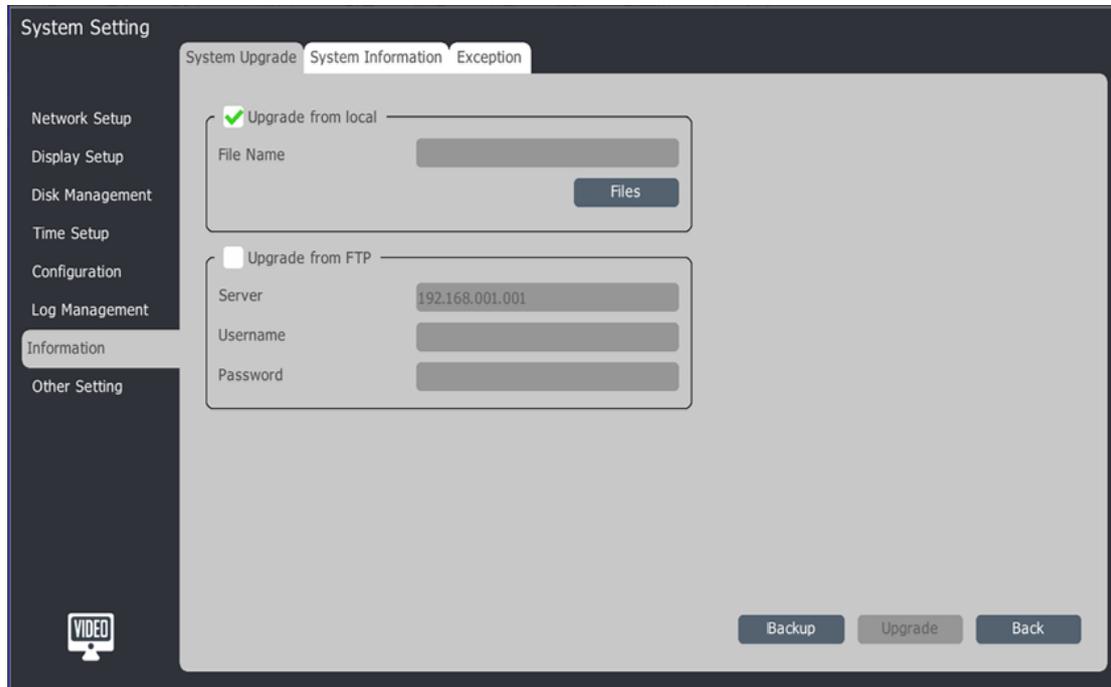
Select “Export Current” or “Select All” to export all the logs, then select backup path and click confirm.



The image shows a dialog box titled "Export Logs". It features a "Backup Path" label followed by a text input field. To the right of the input field is a button labeled "Selecting Pa...". At the bottom right of the dialog, there are two buttons: "Confirm" and "Cancel".

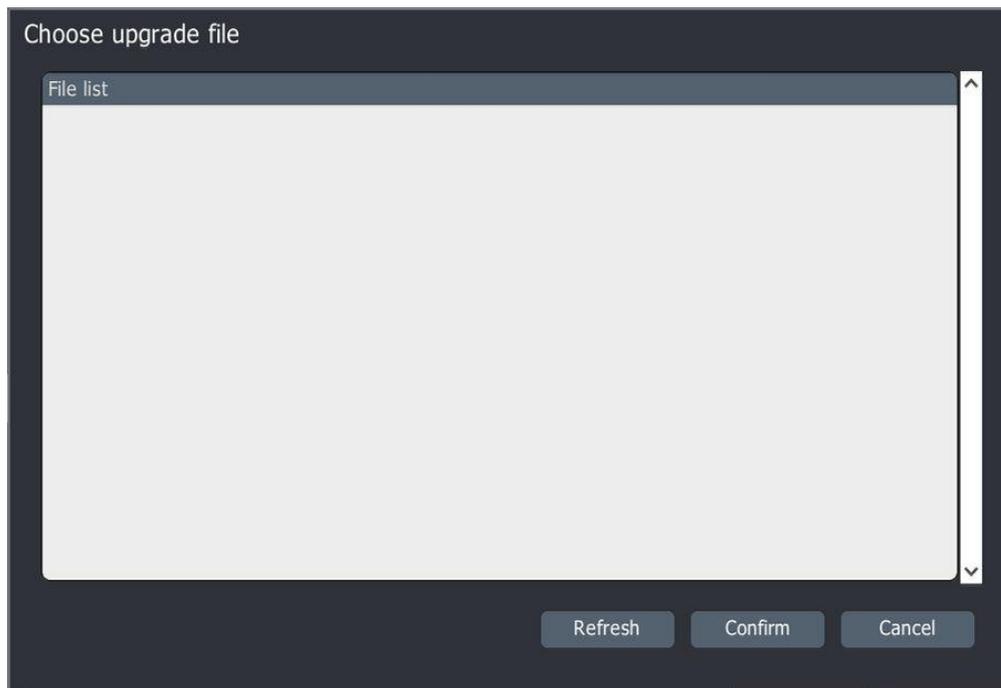
4.14 Information

4.14.1 System Upgrade



The image shows the "System Setting" interface with the "System Upgrade" tab selected. On the left is a sidebar menu with categories: Network Setup, Display Setup, Disk Management, Time Setup, Configuration, Log Management, Information (highlighted), and Other Setting. At the bottom left is a "VIDEO" icon. The main content area has three tabs: "System Upgrade", "System Information", and "Exception". Under "System Upgrade", there are two sections: "Upgrade from local" (checked) with a "File Name" input field and a "Files" button; and "Upgrade from FTP" (unchecked) with "Server" (192.168.001.001), "Username", and "Password" input fields. At the bottom right are "Backup", "Upgrade", and "Back" buttons.

Upgrade from local: Select the local firmware file.



Upgrade from FTP: enter server IP, Username and Password

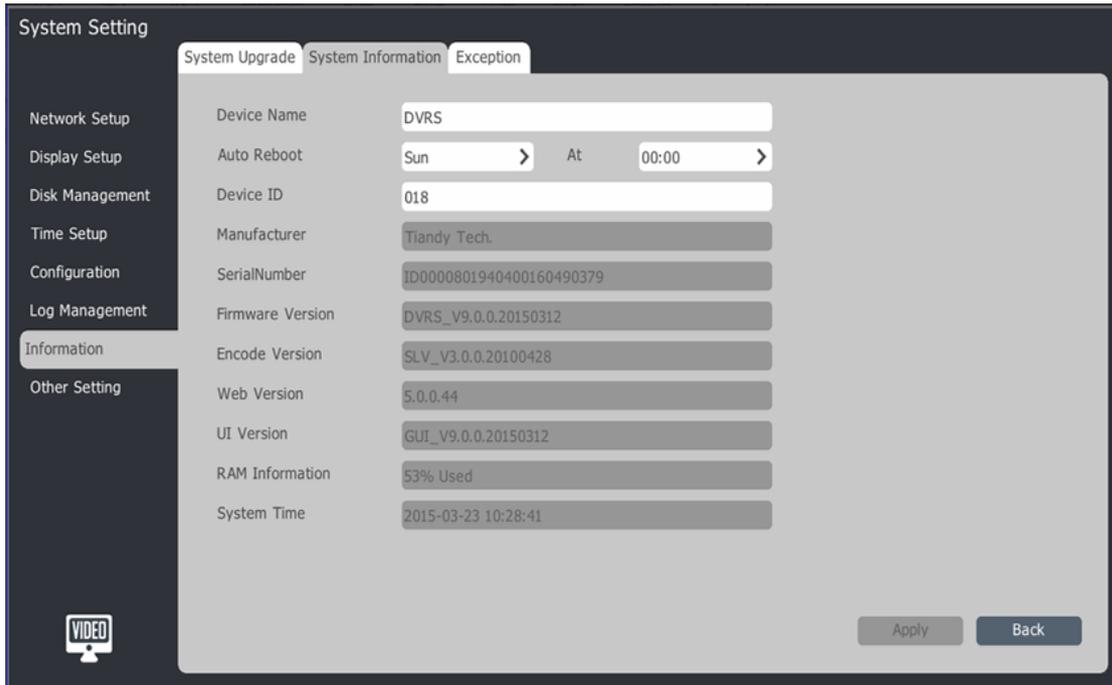


Note:

- The NVR will auto restart after upgrading.
- If upgrade failed or device does not boot after restart, please contact Visualint Support.

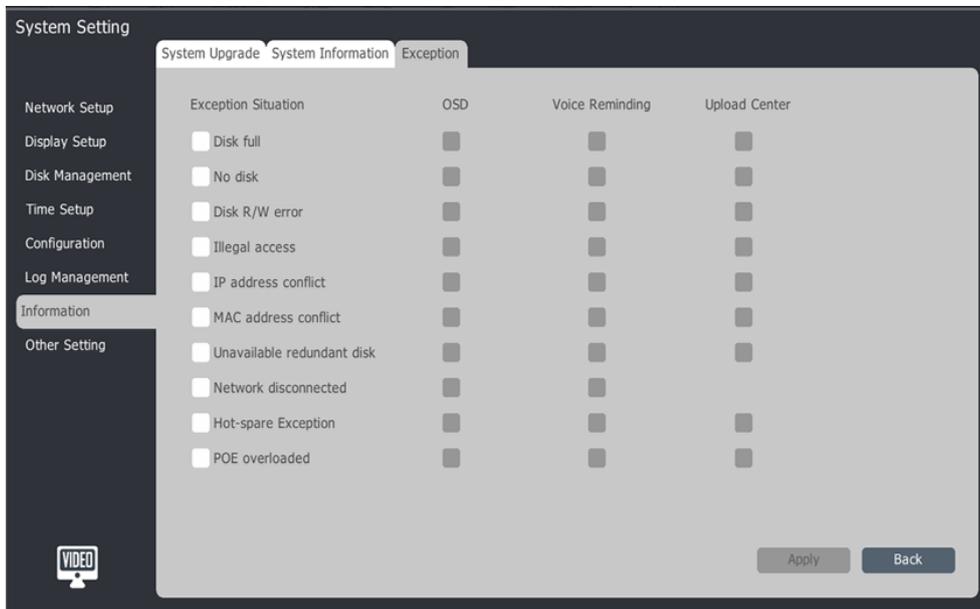
4.14.2 System Information

Check <Device Name>, <Device ID>, <Firmware Version>, <UI version>, etc. Users can also set <Auto Reboot> time to reboot the NVR regularly.



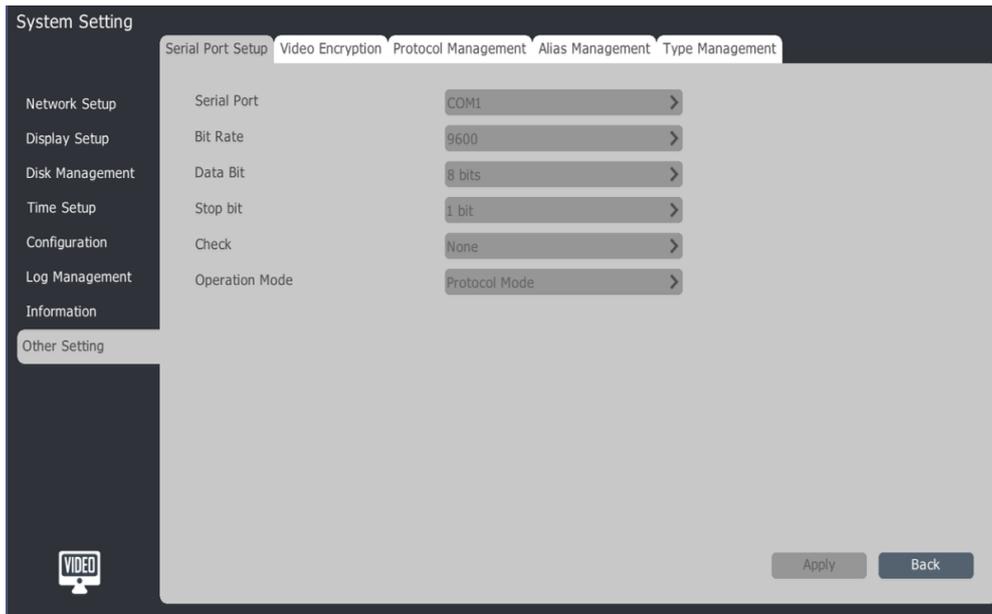
4.14.3 Exception

There are ten exception situations, such as <Disk Full>, <No Disk>, <Disk R/W error>, etc., and you can select to show on screen. <OSD>, provide an audible warning <Voice Reminding> and upload the exception <Upload Center> when it occurs.



4.15 Other Setting

Setup serial port, video encryption, protocol management, alias management and type management.

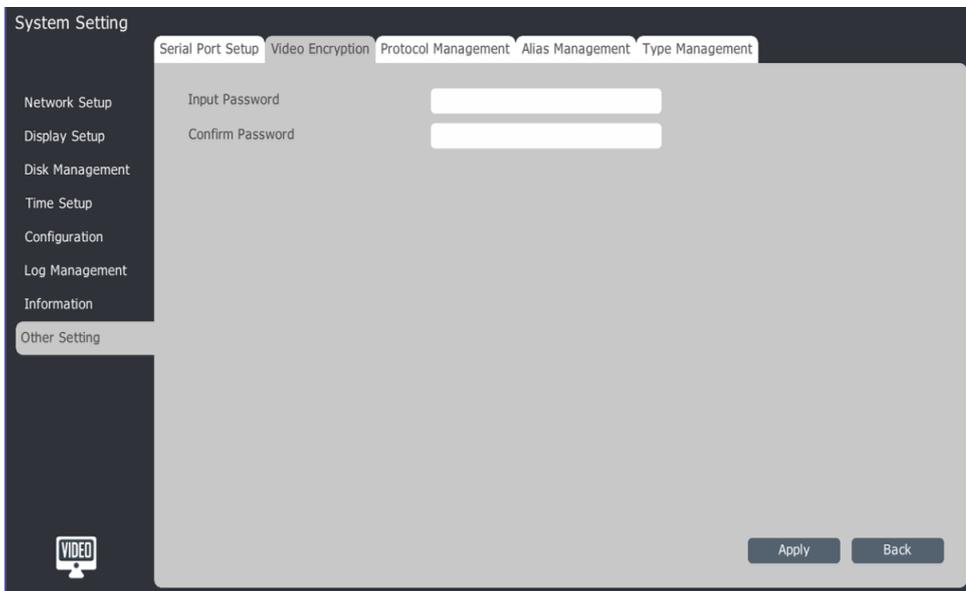


4.15.1 Serial Port

Setup device serial port, bit rate, data bit, stop bit, check and operation mode.

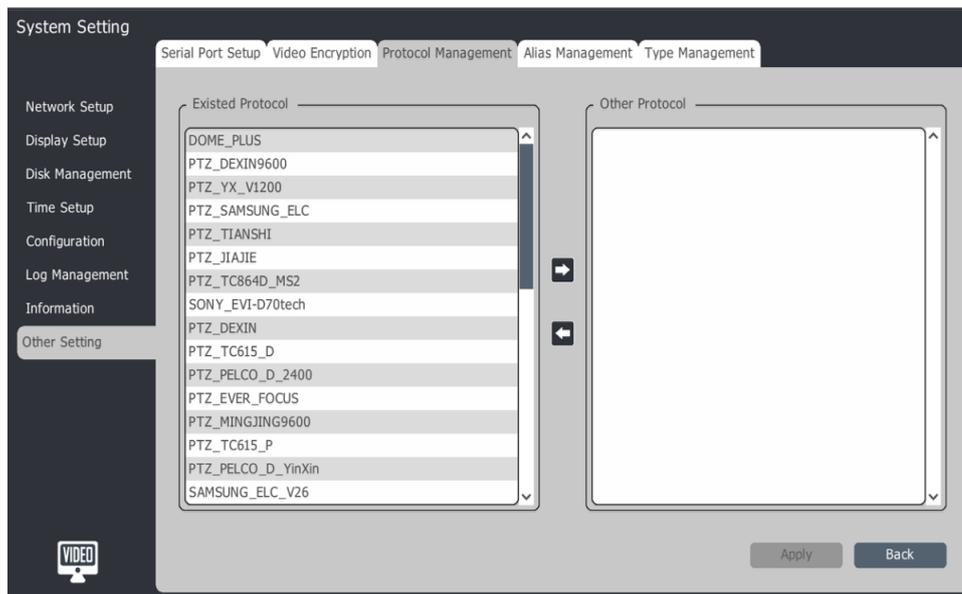
Video encryption

Setup video encryption password



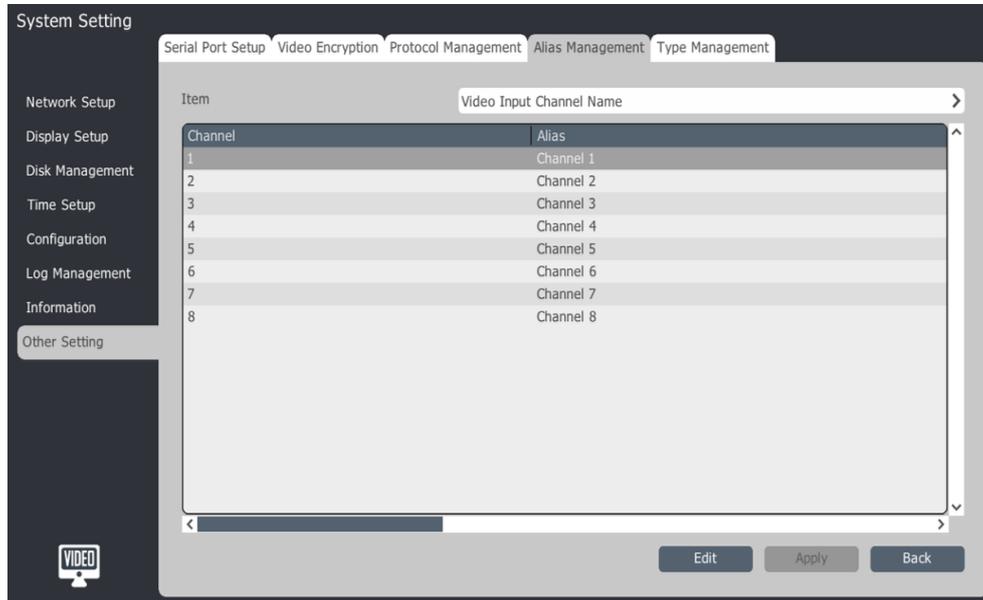
4.15.2 Protocol management

Setup and add device protocol



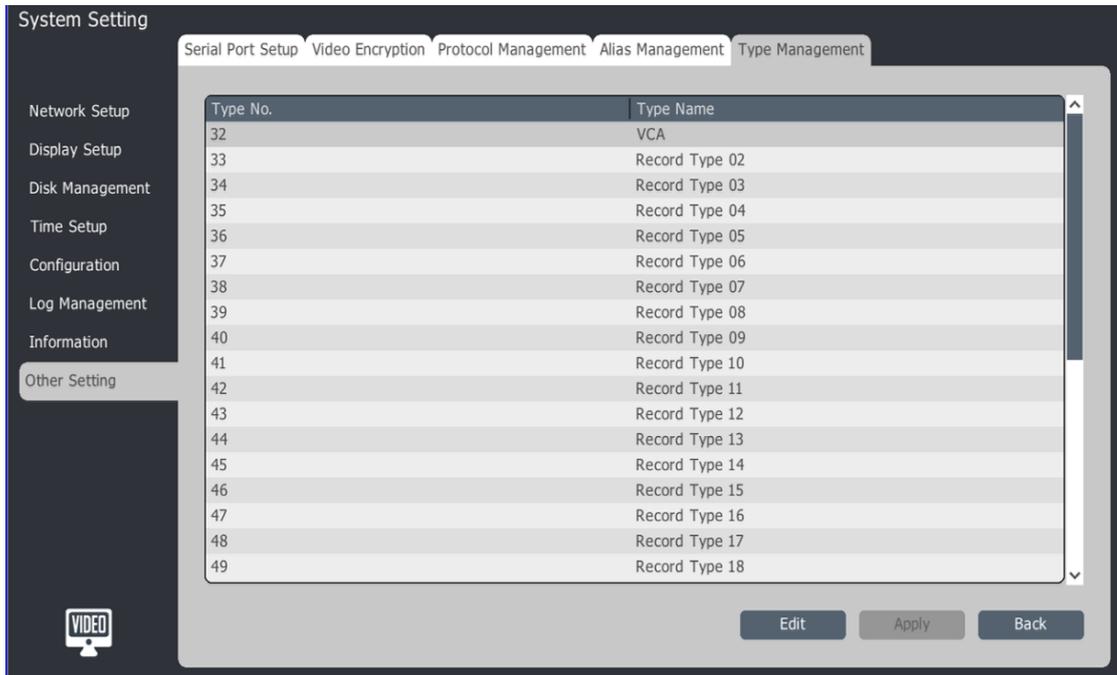
4.15.3 Alias Management

Setup channel's alias



4.15.4 Type Management

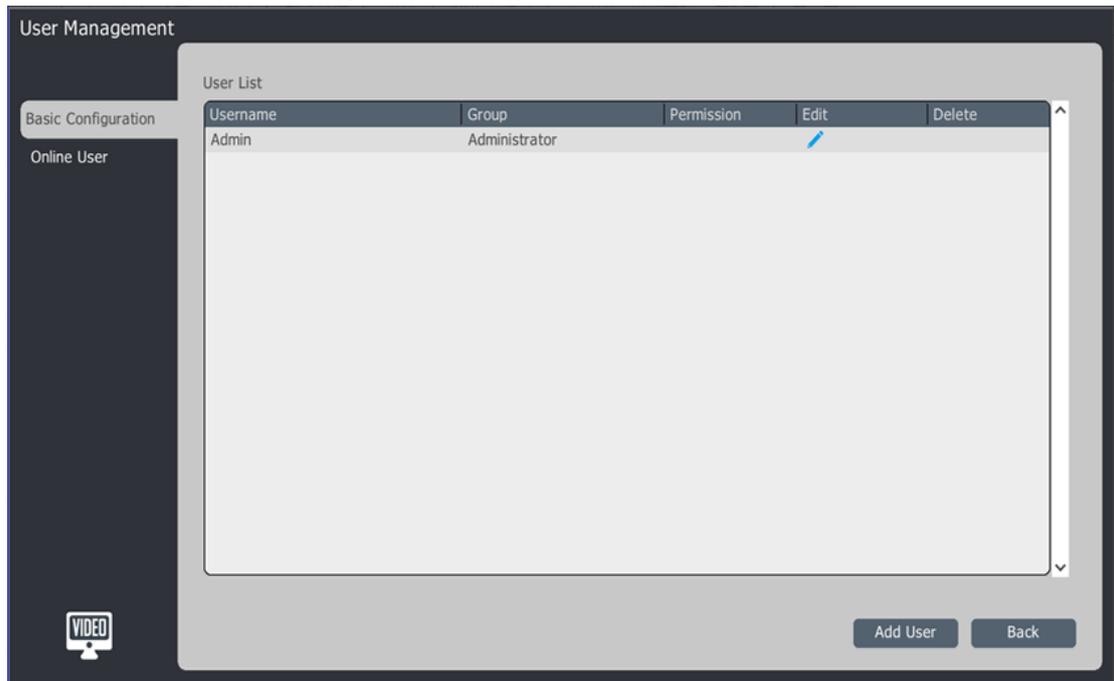
Setup record type name



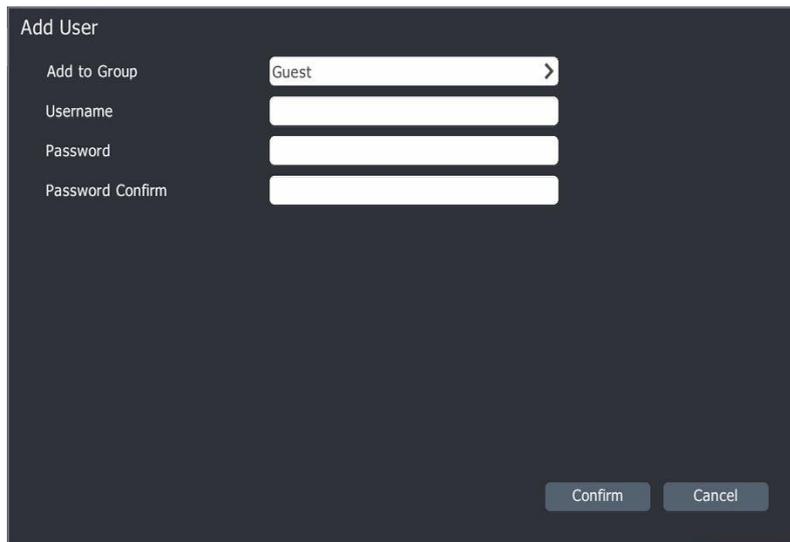
4.16 User Management

4.16.1 Add User

Main Menu-->User Management-->Basic Configuration



Add User: Select the **【Group】** -->Enter User Name **【Account】** and **【Password】**



Note:

- Ability to add up to 31 users.
- There are four groups, “Normal User”, “Special User”, “Super User” and “Administrator”:

Normal User: Preview Access

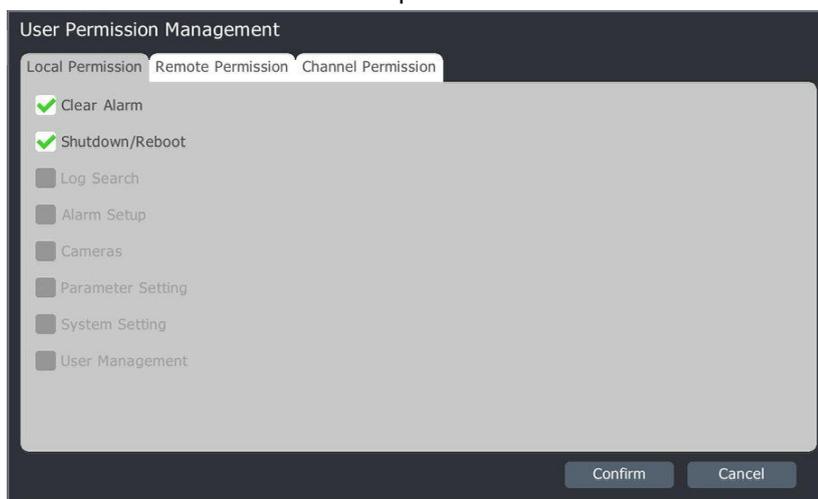
Special User: Preview + Control Access

Super User: Preview + Control + Setup Access

Administrator: Preview + Control + Setup + User Management Access

4.16.2 User Authority Management

1. Select  in the user list to edit user permissions.

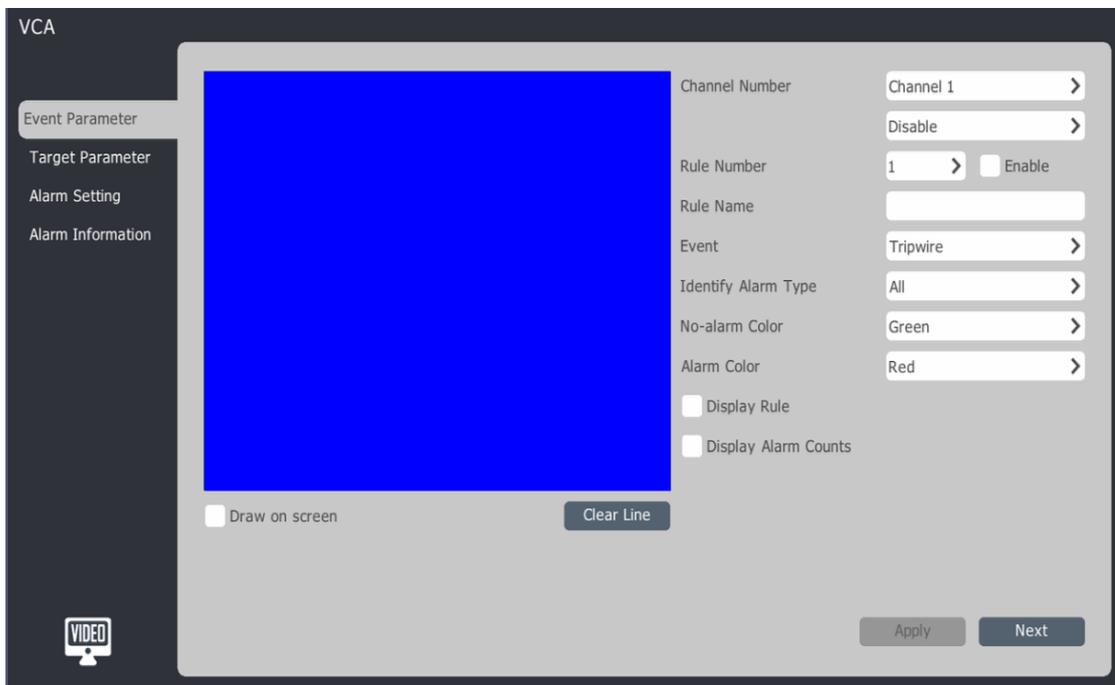


2. Authority Explanation:

- 1) Local: Manual disarm, shutdown/restart, log search, alarm setup, channel management, parameter setup, system setup and user management.
- 2) Remote: Manual disarm, shutdown/restart, log search, alarm setup, channel management, parameter setup, system setup and user management.
- 3) Channel: Remote preview, local playback/ capture preview, remote playback/ capture preview, local/remote PTZ control.

6.17 Video Content Analysis

1. Main menu – VCA – event parameter.



VCA

Event Parameter

Target Parameter

Alarm Setting

Alarm Information

Channel Number: Channel 1

Disable

Rule Number: 1 Enable

Rule Name

Event: Tripwire

Identify Alarm Type: All

No-alarm Color: Green

Alarm Color: Red

Display Rule

Display Alarm Counts

Draw on screen

Clear Line

Apply Next

2. Choose the channel.

3. Enable VCA, user can choose enable VCA.



Instructions:

- PoE NVR (4/8/16 channel with 4HDD) support up to 2 channels with Video Content Analysis.

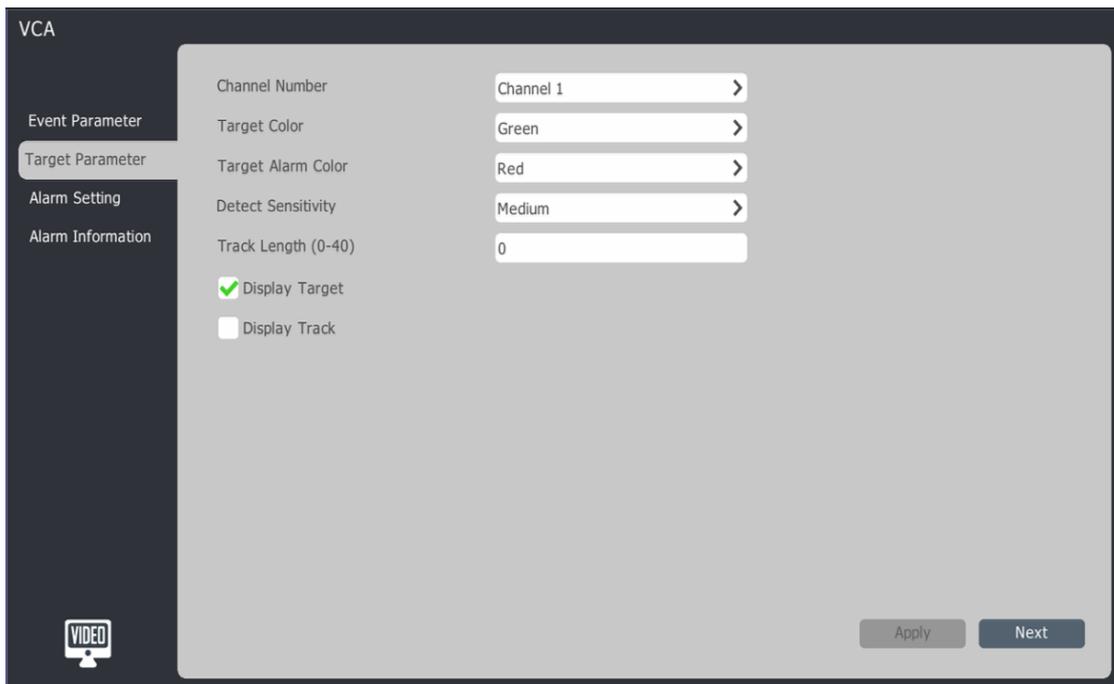
4. VCA parameters setup:

- Rule number: choose VCA rule, each channel supports a max of 8 rules.

- Enable: Check to enable the rule.
- Rule name: Enter the name of the rule.
- Event: choose the VCA mode: tripwire, perimeter, object missing and video diagnosis etc.
- Identify alarm type: Choose to include all objects or people, car, people and car, etc.
- No-alarm color: Setup the border color that appears when and alarm is not triggered.
- Alarm color: Setup the border color that appears when the alarm is triggered.
- Display rule: Select to display the rule information on screen.
- Display alarm counts: Select to display the alarm counts on screen.

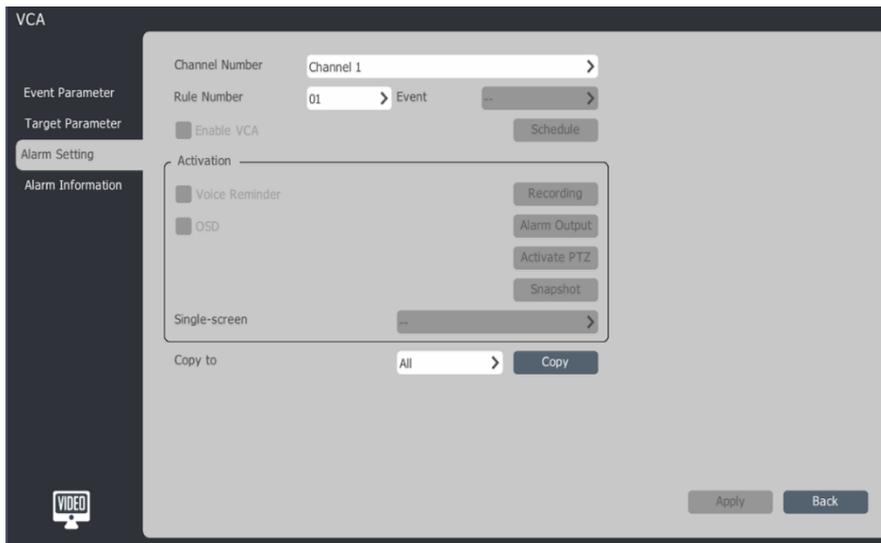
5. Draw on screen: Check the box and draw rule area on the small screen, click “clear line” to clear rules on screen and start over

6. Click next to setup target parameter.

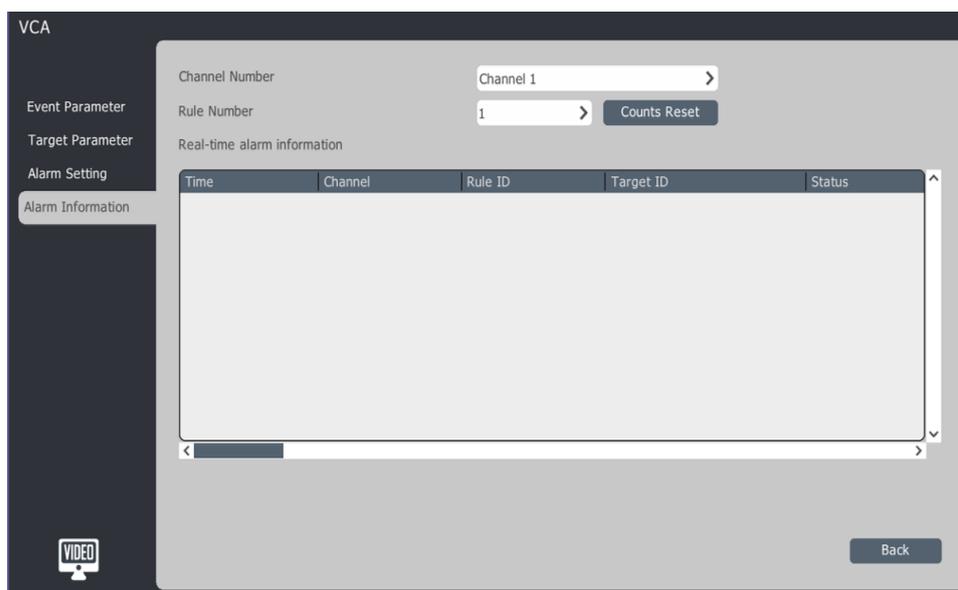


7. User can setup target color, alarm color and detect sensitivity, etc.

8. Click next to setup alarm settings.



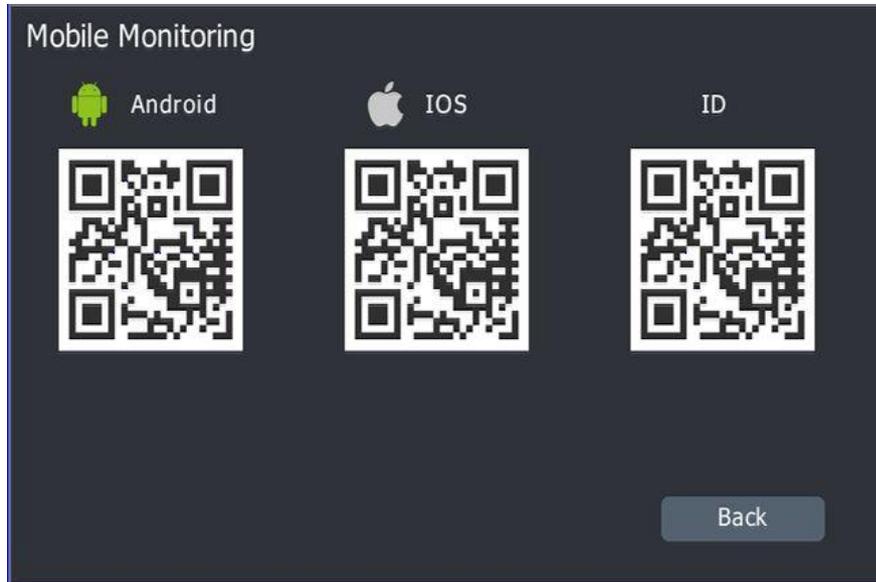
- 1) Choose rule number needed to be setup.
- 2) Check “enable VCA” and click schedule to setup the schedule.
- 3) Activation: setup VCA alarm trigger action; include voice, OSD, recording, alarm output, snapshot and single screen, etc.
- 4) After the setting is complete, copy to all channels.
- 5) Click “apply” to save settings.
- 6) The alarm information interface displays real time alarm information.



4.18 Mobile Monitoring

User can download client app via scan QRcode.

1. Click the mouse right button and select mobile monitoring.



2. Users can use the QRcode to download Android or IOS client.

5. WEB Browser

5.1 Introduction

Users can input device IP address into a supported web browser to remote view the device. Supports IE/Firefox/Chrome browsers.

5.2 Login

Multiple users can login to the Web browser at the same time.

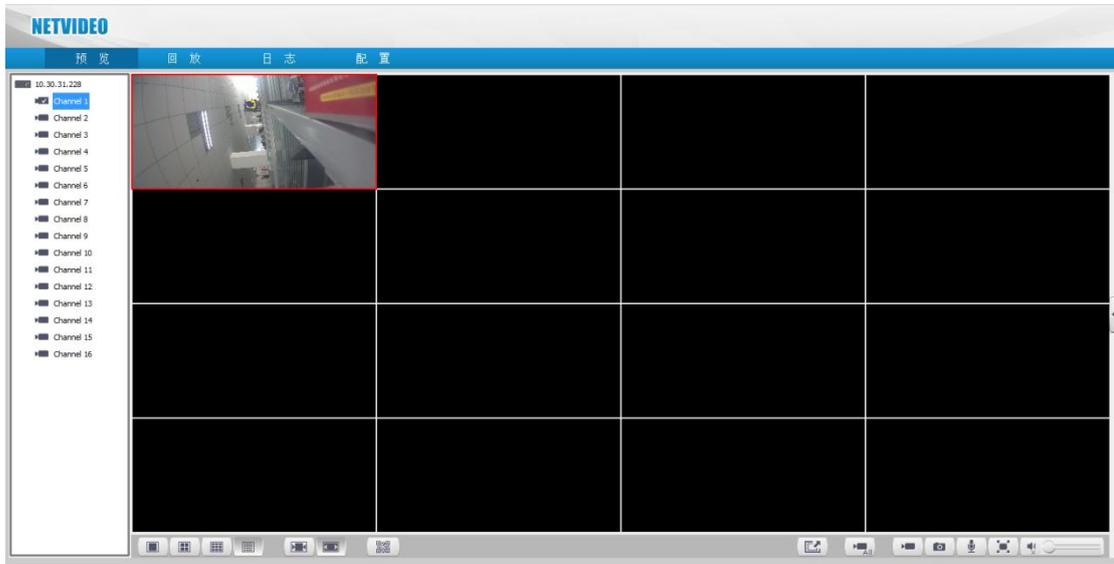
1. Open Web browser, input NVR's IP address.
2. Choose language.
3. Input user name, password, and click login into preview interface.

 **Notice:**

- If using Internet Explorer browser, please make sure the version is higher than V6.0.

5.3 Preview

After login successfully the preview page is displayed.



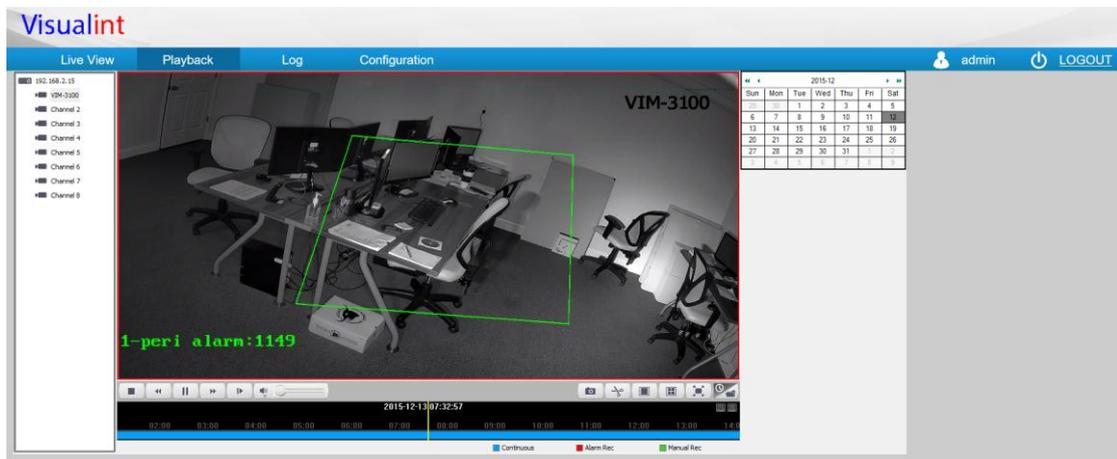
Preview icon description

Icon	Description
	Single screen
	4-split screen
	9-split screen
	16-split screen
	Fixed ratio 

	Ratio self-adaption
	
	Connect all the channel
	Start remote recording
	Start recording
	Snapshot
	Talkback with selected device
	Full screen
	Start all channels recording
	Volume

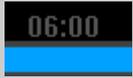
5.4 Playback

Click “Playback” tab page to enter into web playback page.

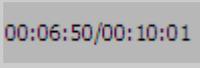


Playback icon description

Icon	Description
	Switch into playback by listed files portfolio
	Play recording file
	Pause
	Stop
	Step-forward by frame
	Fast forward, x2
	Slow forward, x2
	Volume control
	Snapshot
	Cut recording file
	Single screen
	4-split screen play
	Full screen
	Switch mode

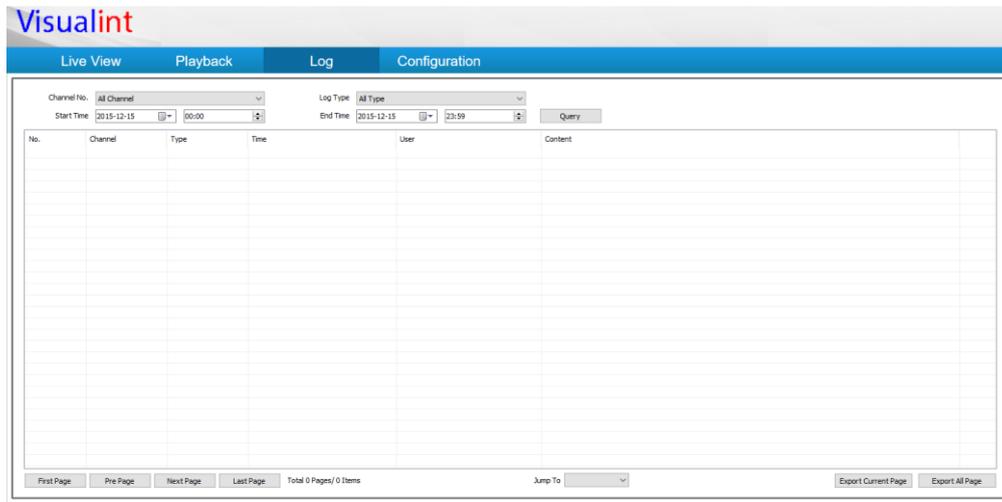
	Visualized play bar
	Draw yellow line to move time shaft
	Zoom in time shaft
	Zoom out time shaft

Control icon description

Icon	Description
	Browse local recording files
	Elapsed time / Remaining time
	Progress bar
	First page
	Last page
	Next page
	End page
	Download
	Download management

5.5 Log

Click “Log” tab page to enter into log query page.



Enter query condition to search log information and back it up.

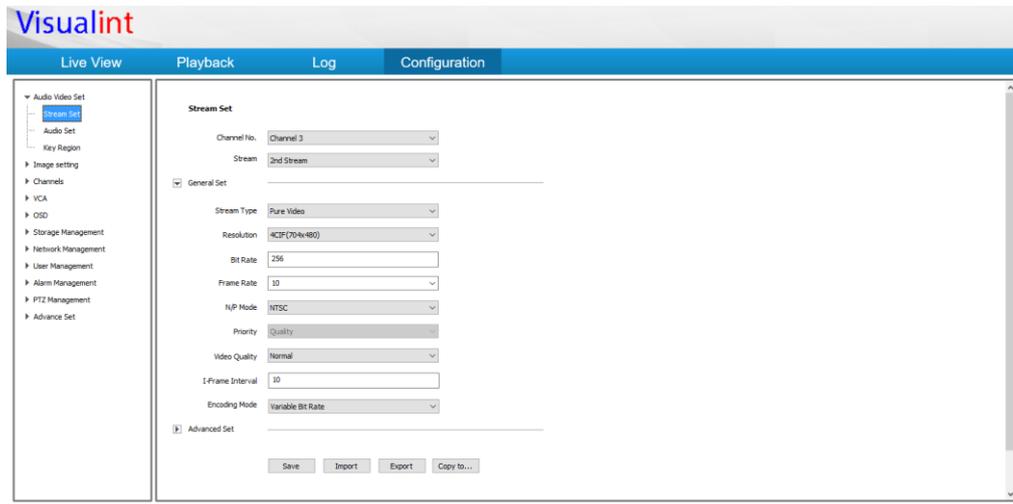


Description

- Default Log file saving path: D:\NetVideoBrowser

5.5 Configuration

Click “configuration” tab page to enter into configuration page.



- If you revise configuration of remote cameras, the local specifications will be updated right away.

Appendix 1 Trouble Shooting

Trouble	Possible reason
Plugging in power and turning on NVR, but “PWR” light on the panel is off, and the fan in the chassis does not work.	<ol style="list-style-type: none"> 1) Power cable is not plugged in. 2) Power supply is defective.
Plugging in power and turning on NVR, and “PWR” light on the panel is on (green), but the fan in the chassis does not work.	<ol style="list-style-type: none"> 1) Fan header panel is defective or cable is not connected. 2) Fan is defective.
Booting the NVR, there is no video on the screen.	<ol style="list-style-type: none"> 1) Video cable is not connected/defective. 2) Interface panel of NVR is defective. 3) Main board of NVR is defective.
Booting the NVR, hard disk cannot be detected.	<ol style="list-style-type: none"> 1) Hard disk cable is not connected/defective. 2) Hard disk is defective.
NVR cannot record.	<ol style="list-style-type: none"> 1) Hard disk is not connected to SATA port. 2) Hard disk is not formatted. 3) Recording template is not activated or not configured in right time period. 4) Hard disk is currently rebuilding the index. 5) SATA disk is not set as a recording drive.
PTZ cannot be control by RS-485 of NVR.	<ol style="list-style-type: none"> 1) RS-485 cable is not connected. 2) PTZ decoder type is incorrect. 3) RS-485 interface on the main board is broken. 4) The location of connected serial port does not match what was set. (Default is A2B2) 5) Configuration of serial port is not correct or does not match the protocol.

<p>Client side cannot transfer video or audio signal.</p>	<ol style="list-style-type: none">1) Entered wrong IP address, port number, user name or password on “local configuration” page in the client.2) Network cable is not connected/ defective.3) Main board interface is defective.
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Appendix 2 Maintenance Instructions

1. The dust on the PCB board can cause a short circuit. We suggest cleaning the internal chassis regularly to prolong device life.
2. Please make sure all the devices are connected to a ground in order to avoid disturbance of video or audio signal.
3. Do not hot-plug audio or video signal cables, RS-285 or alarm interfaces. Or else the interface can be broken easily.
4. Do not shut down the device with the power switch directly. Please use shut down button on the front panel (press and hold for 3 seconds) or use shut down button on the video interface.
5. Keep the device away from high temperature devices.
6. Install the device in a well ventilated area to allow appropriate heat dissipation.
7. Please check and maintain the system regularly.