

Network Video Recorder

FAQ Manual



V1.0.0

Foreword

General

This manual provides the solutions to network camera problems during daily use.

Attention

This manual is for reference only. Not all the camera problems are included.

- You can contact us for any unknown problems, and we will add them into the manual to perfect it.
- You can contact your local retailer or after-sale engineer directly for more help.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
 TIPS	Provides methods to help you solve a problem or save time.
 NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First release.	May 2025

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.

- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

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1 Video Problems

1.1 The playback of local recordings shows grainy screen

Problem

When you log in to the Device's local page, grainy screen appears during video playback.

Possible Causes

- The video quality is set too low.
- The hard disk data cable and hard disk jumper are incorrect.
- Hard disk malfunction.

Solutions

1. Check the jumper connections of the data and power cables on the hard disk.
If the connections are incorrect, reconnect them. Otherwise, continue with the following steps.
2. Check if the hard disk is malfunctioning.
 - a. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
 - b. Log in to the local page, select **Main Menu** > **STORAGE** > **Disk Manager**.
 - c. Check if the hard disk is functioning properly.

If the hard disk is malfunctioning, please repair or replace it; otherwise, contact the relevant technical support.

Figure 1-1 Disk manager

1*	Device Name	Physical Position	Properties	Health Status	Free Sp
All	-	-	-	-	0.00
1*	sda	Host-2	Read/Write ▾	Normal	0.00

1.2 Cannot play downloaded video files

Solution

When you download DAV format video files, a fixed player is required.

1.3 Cannot search videos on third-party platform

Problem

After you add the Device on the third-party platform, searching videos has failed.

Possible Cause

The search method or search time on the platform is incorrect.

Solutions

1. Modify the video search method on the platform (such as file search, time-based search) and the video search time (such as query for 1 hour, 1 day, etc.).
2. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, please contact the relevant technical support.

1.4 The searched videos are intermittent

Identify the cause of the video interruptions based on the duration of the disruptions.

- If the video interruptions last for 1 to 2 minutes, it may be due to a normal device reboot (including automatic maintenance or manual restarts). You can check the device logs to confirm if there are any restarts and the associated restart codes.
- If the video interruptions last between a few seconds and a few minutes, it may be related to time synchronization issues. You can check whether the Device has NTP enabled or if the platform's time is synchronized.
- If the video interruptions last for 10 minutes, 1 hour, or even several days, it may be due to the Device being powered off, or there might be errors or bad sectors on the hard disk.

Based on the possible causes, complete the troubleshooting of the problem. If the problem is not resolved, please contact the relevant technical support.

1.5 Cannot search video recordings in local playback

Problem

When logging in to the local page of the Device, you cannot search the recordings.

Possible Causes

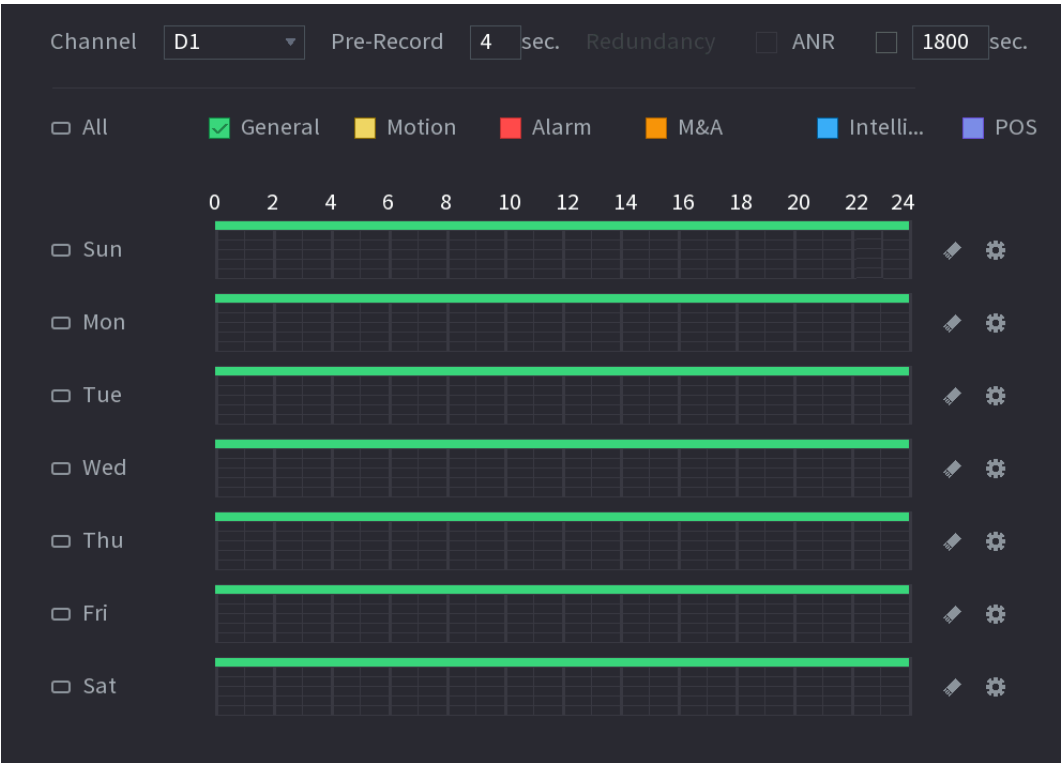
- The recording function is not enabled.
- The hard disk data cable and hard disk jumper are incorrect.
- Hard disk malfunction.
- System version error.

Solutions

1. Check if the recording function has been enabled.
 - a. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
 - b. Log in to the local page, select **Main Menu** > **STORAGE** > **Schedule** > **Record**.

- c. Check if the recording function is enabled and whether the recording time falls within the scheduled period.
- If not, please enable the recording function or adjust the recording time; otherwise, continue with the following steps.

Figure 1-2 Video schedule



- d. Configure the record mode.
- Select **Main Menu > STORAGE > Schedule > Record**. You can configure the recording mode as **Auto** or **Manual**, or stop the recording.

Figure 1-3 Record mode



2. Check the jumper connections of the data and power cables on the hard drive.
- If the connections are incorrect, reconnect them. Otherwise, continue with the following steps.
3. Check if the hard drive is malfunctioning.

- a. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
- b. Log in to the local page, select **Main Menu** > **STORAGE** > **Disk Manager**.
- c. Check if the hard drive is functioning properly.

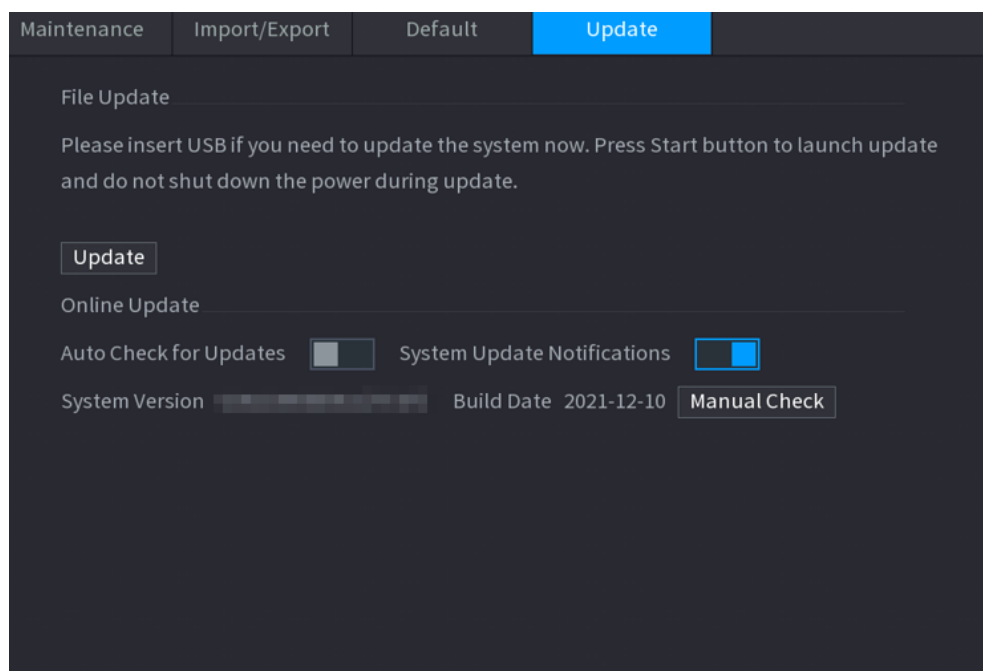
If the hard drive is malfunctioning, please repair or replace it; otherwise, please contact the relevant technical support.

Figure 1-4 Disk manager

1*	Device Name	Physical Position	Properties	Health Status	Free Sp
All	-	-	-	-	0.00
1*	sda	Host-2	Read/Write ▾	Normal	0.00

4. Upgrade the system version.
 - a. Insert the upgrading file into the USB drive, then plug the USB drive into the device's USB port.
 - b. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
 - c. Log in to the local page, select **Main Menu** > **Maintenance Center** > **Manager** > **Update**, and click **Update**.

Figure 1-5 Update



5. Check if the hard drive is functioning properly.

If the hard drive is malfunctioning, please repair or replace it; otherwise, please contact the relevant technical support.

1.6 Mosaic appears during the live view and playback of the video

Problem

When you view the live videos and play back recordings over the network (such as via the web), mosaics appear.

Possible Causes

- Network connection error.
- Resource limitations on the computer.
- The Device is operating in multicast mode.



We recommend you not use the multicast mode as it tends to result in more mosaics.

Solutions

1. Check if the network connection is normal.
 - a. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
 - b. Log in to the local page, select **Main Menu > Maintenance Center > Network > Test**.
 - c. In the **Destination IP** box, enter the IP address and click **Test**.

If there are network connection problems, please troubleshoot them. Otherwise, continue with the following steps.

Figure 1-6 Network test

Online User

Network Load

Test

Network Test

Destination IP

Test

Test Result

Packet Sniffer Backup

Device Name

Refresh

Address

Browse

Name	IP	Packet Sniffer Size	Packet Sniffer Backup
LAN1	192.168.1.1	0KB	▶
LAN2	192.168.1.2	0KB	▶

2. Check for resource limitations on the computer.
- a. On your computer, right-click on the taskbar and select **Task Manager**.
 - b. Select the **Performance** tab to view the memory and CPU usage.
- If the resources of your computer are limited, close any unnecessary applications or switch to a different computer for login. Otherwise, please continue with the following steps.
- c. Check if the Device is logged in using multicast mode.
- If it is, please switch to a different login mode; otherwise, please contact the relevant technical support.

2 Audio Intercom Problems

2.1 No sound when the Device is connected to the audio pickup

Problem

When you use an audio pickup, no sound was captured.

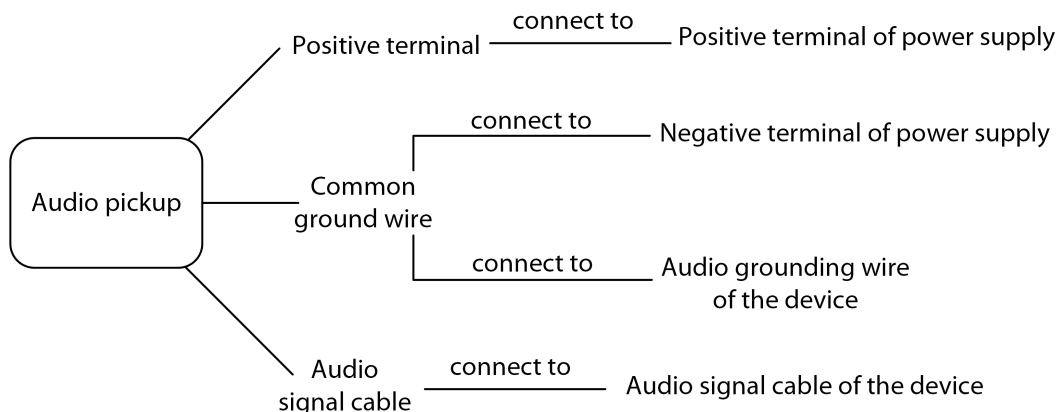
Possible Causes

- Incorrect cable connection or poor contact.
- The pickup is not connected to a power supply.
- The input voltage of the pickup is not the specified voltage.

Solutions

1. Check the audio pickup cables.
 - a. Refer to the corresponding user manual to check whether the audio port connections of the Device are correct.
 - When the pickup has only 3 wires, the definitions of the three wires are positive power, grounding wire, and audio signal wire. The positive pole of the pickup connects to the positive power supply.
 - The common grounding wire needs to be split into two: one connected to the negative terminal of the power supply, and the other connected to the audio ground of the Device or the outer layer of the RCA connector.
 - The audio signal cable from the pickup should be connected to the audio signal cable of the Device or the center pin of the RCA connector.

Figure 2-1 Wiring of the audio pickup



- b. Check if the pickup wiring is loose.

If the wire connections are incorrect or loose, please rewire or replace the cable; otherwise, continue with the following steps.

2. Check if the audio pickup is powered on.

If it is not, please power on the pickup; otherwise, continue with the following steps.

3. Check if the input voltage of the audio pickup meets the requirements.

If it does not, please adjust the input voltage; otherwise, please contact the relevant technical support.

2.2 The audio pickup has a lot of noise or with poor sound quality

Problem

When you use the audio pickup, it has a lot of noise or the sound quality is poor.

Possible Causes

- The pickup is experiencing power supply problems.
- The pickup is positioned too close to the speaker.
- The wiring of the pickup is not properly arranged.
- The gain potentiometer or volume control of the pickup is set inadequately.

Solutions

1. Check the power supply of the pickup.

If there are problems with the power supply, we recommend you use a dedicated power source for the pickup; otherwise, continue with the following steps.

2. Check the positioning of the pickup relative to the speaker.

If the pickup is too close to the speaker, it is advisable to reposition either the pickup or the speaker; otherwise, continue with the following steps.

3. Check the wiring of the pickup.

If the wiring is not properly arranged, please refer to the corresponding documentation for the pickup to rewire it; otherwise, continue with the following steps.



- We recommend you wire the pickup separately, avoiding the use of the same cable ducts as AC power or other high-voltage lines, and maintaining a distance of at least 50 cm to 80 cm from such lines.
- We recommend you check whether the pickup and the device share a common ground (i.e., if the ground connections are linked), because this can effectively mitigate power noise issues.
- If it is unavoidable for the pickup to share the cable duct with high-voltage lines, we recommend you use shielded cables or run them through metal conduits, while keeping them as far away as possible from devices that produce strong electromagnetic interference, such as transformers and lighting rectifiers. Additionally, use a dedicated power supply for the pickup.

4. Adjust the gain potentiometer and volume of the pickup.
5. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, contact the relevant technical support.

2.3 How to choose the audio pickup installation location

Audio pickups can be installed on the ceiling as flush mounts or on the wall as side mounts. The installation location should be as close as possible to the main conversation area. For example, in an interrogation room, the pickup should be installed near the subject; in a classroom, the pickup should be placed near the podium; and in a small conference room, the pickup should be installed in the center of the ceiling.

Installation Principle: Place the pickup as close as possible to the main conversation area for better audio quality.

2.4 Considerations for connecting the audio pickup

- Ensure that the connections between the pickup and other audio amplifiers, sound reinforcement, or recording device are correct. Incorrect connections can affect audio pickup quality and might even damage the pickup and other devices.
- During all connection processes or when you toggle switches, set the volume of the audio amplifier to the minimum to prevent sudden electric shocks.

2.5 The audio pickup is producing muffled or distorted sound

Problem

When you use the audio pickup, it produces muffled or distorted sound.

Possible Causes

- The pickup is installed in a poorly ventilated position.
- The pickup is damaged.
- The audio distributor for the pickup is of low quality.

Solutions

1. Check the installation location of the pickup.

If the pickup is not installed in a proper location, please choose a suitable position and reinstall the pickup; otherwise, continue with the following steps.



Since the pickup may generate heat during operation, it should be installed in a well-ventilated and dry area, maintaining a distance of at least 10 cm from other devices.

2. Check for damage to the pickup.

Inspect the pickup for any damaged power cables, signs of liquid or foreign objects entering the pickup, or exposure to rain or moisture. If any problems are found, repair or replace the pickup as necessary. If everything appears fine, continue with the following steps.

3. Choose a high-quality audio adapter for the pickup.
4. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, contact the relevant technical support.

3 Connection Problems

3.1 The Device is unable to add the network camera

Possible Cause

The parameters for the network camera have been entered incorrectly.

Solutions

Check if the parameters for adding the network camera are filled in correctly.

1. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
2. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
3. Select **CAMERA > Camera List > Camera List**.
4. In the **Added Device** list, double-click the remote devices or click the  beside the devices.
5. Check that the IP address, manufacturer, port, user name, password, and remote channel number for the network camera are correct.

If there are any errors, please make corrections as needed; otherwise, contact the relevant technical support.

3.2 After you connect the IPC to the device, the IPC is still offline

Possible Causes

- The Device and the network camera are unable to communicate over the network.
- IP address conflict of the IPC.
- Incorrect or conflicting port of the IPC.
- Incorrect protocol selection of the IPC.
- Incorrect IPC password, resulting in account lockout.
- IPC has allowlist or blocklist enabled.

Solutions

1. Check if the network connection between the camera and the Device functions properly.
 - a. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
 - b. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 - c. Select **Maintenance Center > Network > Test**.
 - d. In the **Destination IP** input field, enter the IP address of the computer or platform accessing the device, then click **Test**. If there is a problem with the network connection, please troubleshoot the network problems. Otherwise, continue with the following steps.

Figure 3-1 Test

Online User
Network Load
Test

Network Test

Destination IP

Test Result

Packet Sniffer Backup

Device Name

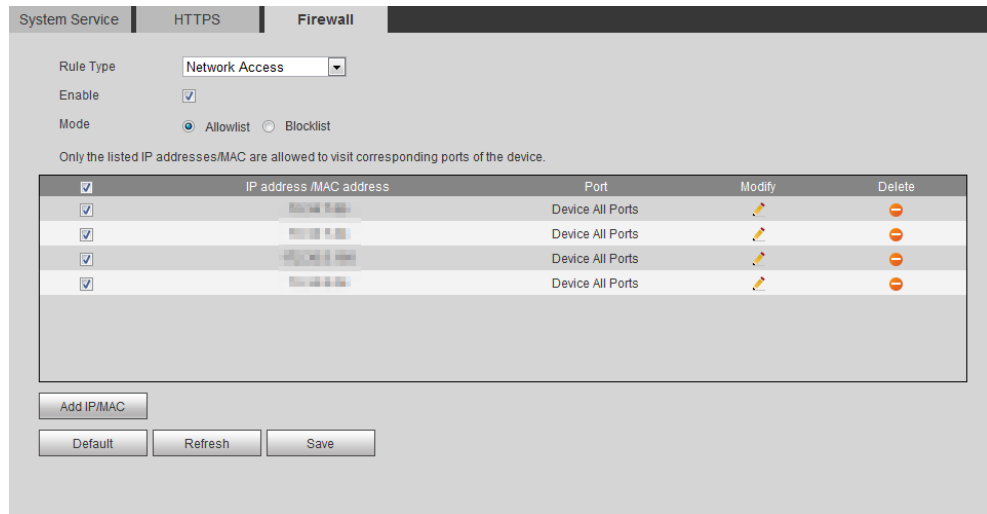
Address

Name	IP	Packet Sniffer Size	Packet Sniffer Backup
LAN1	192.168.1.1	0KB	▶
LAN2	192.168.1.2	0KB	▶

2. Modify the IP address of the IPC.
 - a. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
 - b. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 - c. Select **Main Menu** > **CAMERA** > **Camera List** > **Camera List**.
 - d. In the **Added Device** list, double-click the remote devices or click the  beside the devices.
 - e. Modify the IPC's IP address and click **OK**.
 - f. Check if the problem has been resolved.

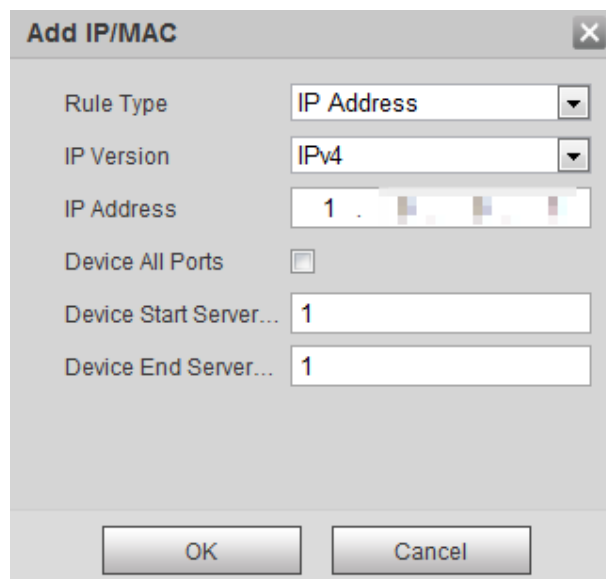
If the problem has been resolved, the problem handling is completed. Otherwise, continue with the following steps.
3. Modify the IPC's port number, protocol, and password, then check if the problem has been resolved.
4. Disable the IPC's blocklist and allowlist, or add the device's IP address to the IPC's allowlist.
 - a. Log in to the IPC's webpage.
 - b. Select **Setting** > **System** > **Safety** > **Firewall**.
 - c. Select **Network Access** from the **Rule Type** list, and then select the **Enable** check box.
 - d. Select the **Allowlist** check box for **Mode** and click **Add IP/MAC**.

Figure 3-2 Network Access



- e. Enter the IP address of the IPC, configure the parameters, and then click **OK**.

Figure 3-3 Add IP/MAC



5. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, please contact the relevant technical support.

3.3 Single-screen display is normal, but there is no image in multi-split mode

Possible Cause

The sub stream of the IPC has not enabled.

Solutions

1. Use a mouse, keyboard, and monitor to directly connect to the device and power it on.
2. Log in to the device's local page, and right-click on the live view to select **Main Menu**.
3. Select **CAMERA > Encode > Audio/Video**.
4. Enable the **Video** function in the **Sub Stream** area and configure the parameters.

Figure 3-4 Audio/video

The screenshot shows the 'Audio/Video' configuration page. The 'Channel' is set to 3. The 'Main Stream' section includes settings for Coding Strategy (AI Coding), Type (General), Compression (H.265), Resolution (2960x1668), Frame Rate (20), Bit Rate Type (ABR), Quality (4), Max Bit Rate (Custom 3-16384), and Average Bit Rate (1024). The 'Sub Stream' section has the 'Video' toggle switch turned on, Stream Type (Sub Stream 1), Compression (H.265), Resolution (352x288), Frame Rate (20), Bit Rate Type (CBR), Quality (4), and Bit Rate (512). There are 'More' buttons for both streams. At the bottom are 'Default', 'Copy to', 'Refresh', 'Apply', and 'Cancel' buttons.

5. Click **Apply**.

3.4 Multi-split display is normal, but there is no image in single-screen mode

Possible Causes

- The IPC primary stream encode mode is not in H.264 format.
- The IPC primary stream encode resolution does not match the resolutions supported by the device.
- The IPC's network transmission capacity has reached its limit.

Solutions

1. Set the encode mode of the IPC main stream to H.264.
 - a. Log in to the IPC's webpage.
 - b. Select **Setting > Camera > Video > Video**.
 - c. Set the **Encode Mode** to **H.264** and click **Save**.

Figure 3-5 Encode mode

The screenshot shows a web interface for video encoding settings. At the top, there are three tabs: 'Video', 'Snapshot', and 'Overlay'. The 'Video' tab is active. Below the tabs, there is a section titled 'Main Stream'. Inside this section, several settings are listed as dropdown menus or text boxes. The 'Encode Mode' dropdown is set to 'H.264' and is highlighted with an orange rectangular box. Other settings include 'Smart Codec' set to 'On', 'Resolution' set to '1920*1080(1080P)', 'Frame Rate(FPS)' set to '25', 'Bit Rate Type' set to 'VBR', 'Quality' set to '4', 'Reference Bit Rate' set to '1792-9216Kb/S', and 'Max Bit Rate' set to '4096 (Kb/S)'. There is a checkbox for 'Watermark Settings' which is checked, and a text box for 'Watermark Character' containing 'DigitalCCTV'. At the bottom of the settings area, there are three buttons: 'Default', 'Refresh', and 'Save'.

- d. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, continue with the following steps.

2. Set the resolution of the IPC's main stream.

- Log in to the IPC's webpage.
- Select **Setting** > **Camera** > **Video** > **Video**.
- Set the **Resolution** of the main stream and click **Save**.

You are required to set the resolution supported by the device, including 1080P, 720P, 960H, D1, etc.

Figure 3-6 Encode mode

The screenshot shows the 'Video' tab in the 'Main Stream' configuration section. The 'Resolution' dropdown menu is highlighted with an orange border and displays '1920*1080(1080P)'. Other visible settings include:

- Encode Mode: H.264
- Smart Codec: On
- Frame Rate(FPS): 25
- Bit Rate Type: VBR
- Quality: 4
- Reference Bit Rate: 1792-9216Kb/S
- Max Bit Rate: 4096 (Kb/S)
- Watermark Settings: ☒ (checked)
- Watermark Character: DigitalCCTV

At the bottom, there are three buttons: 'Default', 'Refresh', and 'Save'.

d. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, continue with the following steps.

3. Check if IPC's online users have exceeded the maximum limit.

- a. Log in to the IPC's webpage.
- b. Select **Setting** > **System** > **Account** > **Account**.
- c. Check if IPC's online users have exceeded the maximum number of connections.

If not, please contact the technical support for help; otherwise continue with the following steps.

Figure 3-7 Online users

The screenshot shows the 'Account' management page. At the top, there's a tab for 'Online User'. Below it, a table lists the online users:

No.	Username	Group Name	Memo	Restricted Login	Modify	Delete
1	admin	admin	admin's account	/		

Below the table, there are navigation links: Authority, User, Peripheral, Live, AV Parameter, Playback, Security, System, Maintenance, System Info, Manual Control, File Backup, Storage, Event, and Network. An 'Add User' button is located at the bottom left.

d. Select **Setting** > **Network** > **Port**

e. Modify the number of **Max Connection** and click **Save**.

Figure 3-8 Port

Port		
Max Connection	20	(1~20)
TCP Port	37777	(1025~65534)
UDP Port	37778	(1025~65534)
HTTP Port	80	
RTSP Port	554	
HTTPS Port	443	

4. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, please contact the relevant technical support.

3.5 How to modify the IP address of IPC through the Device

1. Connect the Device directly to the mouse, keyboard, and monitor, and then turn on the Device.
2. Log in to the local page, select **Main Menu** > **CAMERA** > **Camera List** > **Camera List**.
3. Click **Search Device**.
4. Select a Device from the search list and click .

Figure 3-9 Modify IP

Modify IP

Checked Device No.: 1

☐ DHCP ☒ STATIC

Username Password

IP Address Subnet Mask Default Gateway Incremental Value

1	Serial No.	IP Address
1		192.168.1.254

OK Cancel

5. Enter the username and password of the remote device, and set the IP address.



When you modify multiple remote devices simultaneously, please ensure that the usernames and passwords of all remote devices are consistent.

- When a DHCP server is present on the network, you can select **DHCP** to allow the Device to automatically obtain a dynamic IP address without the need for manual configuration of the IP address and other related information.
- If you select **Static**, you will need to enter IP address, subnet mask, default gateway and incremental value. The system will automatically assign IP addresses to remote devices by incrementing the fourth octet of the specified IP address sequentially based on the provided incremental value.
- The incremental value setting is only required when multiple remote devices are being modified simultaneously. The system will increment the fourth octet of the IP address according to the set incremental value, assigning IP addresses sequentially to the selected remote devices.
- When you modify static IP addresses, if there's a conflict, the system will notify the user of the IP conflict. If you are modifying IP addresses in bulk, the system will automatically skip any conflicting IPs and reassign them based on the increment.

6. Click **OK**.

3.6 Problem with accessing the third-party IPC via ONVIF protocol or private protocol

Currently, third-party IPCs accessed via the ONVIF protocol support functions that include, but are not limited to, the following:

- Modify the name of channels.
- Set up dynamic detection for alarm recording.
- Change the IPC's resolution, bitrate, and frame rate.
- Pan, tilt, and rotate the network camera, and set presets, etc.

If you encounter any problems with these functions during use, please contact the relevant technical support.

4 Intelligence Problems

4.1 How to initialize the reference image for intelligent detection function

After the Device is powered on, the first stable image displayed by the system serves as the reference image, and all subsequent intelligent detections are based on this reference image.

When the Device logs in to the platform, and if the platform supports the reconstruction of the intelligent detection background, you can use this function to initialize the reference image for the intelligent detection function. For detailed configuration, please refer to the accompanying documentation provided with the platform.



The reference image should ensure that there are no humans or abnormal objects present in the image.

4.2 No alarms for face detection

Problem

After you enable the face detection function, you might encounter situations where a face is detected but no alarm is triggered.

Possible Causes

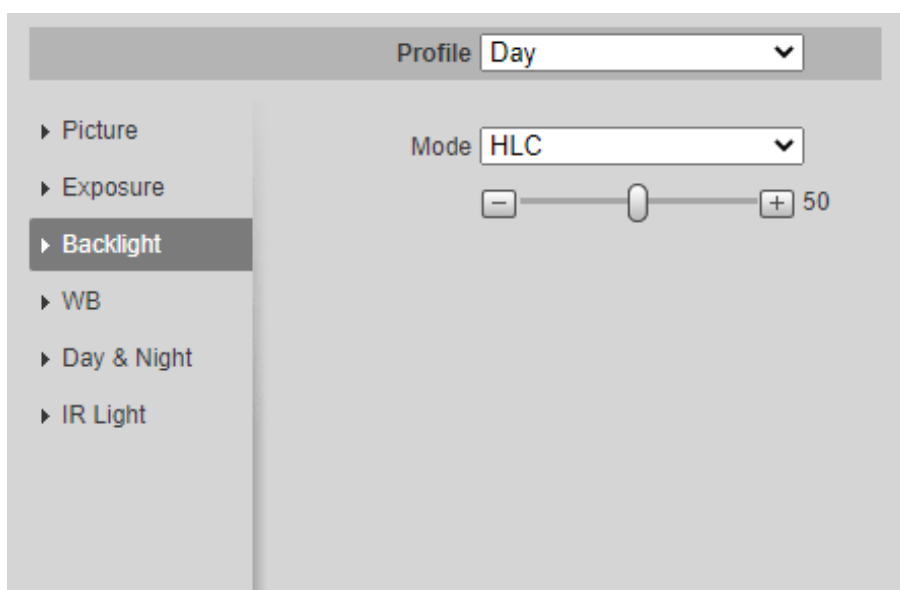
- The camera did not capture a complete face.
- The face is in a backlight environment.
- The face size does not meet the requirements.

Solutions

1. Adjust the installation angle of the camera.
 - a. Refer to the installation manual of the camera and adjust the installation position, angle, etc. of the camera.
 - b. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, continue with the following steps.
2. Adjust the backlight effect of the camera.
 - a. Log in to the webpage of the camera.
 - b. Select **Setting** > **Camera** > **Conditions** > **Backlight**.
 - c. Set the backlight mode and threshold based on the display effect.

Figure 4-1 Backlight



3. Refer to the provided documentation to check if the face size meets the requirements.

If the face size is not compliant, adjust the camera's installation position, angle, etc. accordingly.
Otherwise, please contact the relevant technical support.

4.3 Loitering detection can easily result in false alarms

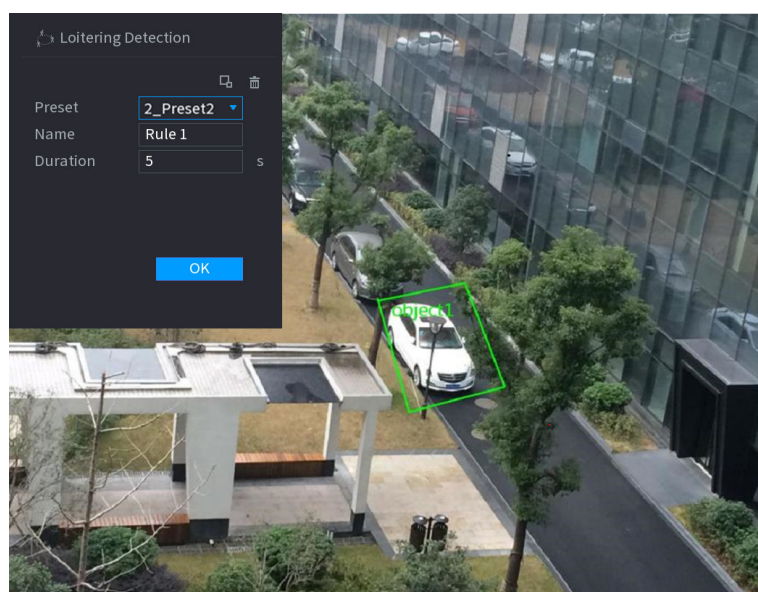
Possible Cause

The minimum duration setting for loitering detection is set too low.

Solutions

1. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
2. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
3. Select **AI** > **Parameters** > **IVS**.
4. Click  for the loitering detection.
5. Set the duration time and click **OK**.

Figure 4-2 Loitering detection



4.4 No alarms for the IVS function

Possible Cause

The video quality is poor (e.g., high image noise, image dithering, or strong glare), and the system did not detect any alarm targets.

Solution

Troubleshoot image anomalies based on actual conditions. If the problem has been resolved, the problem handling is completed. Otherwise, contact the relevant technical support.

4.5 Differences between intrusion detection within an area and loitering detection

The main difference between the two lies in their focus of examination.

- Intrusion detection within an area considers the entire monitored area as the subject of analysis. If the number of targets within the area exceeds a defined alarm threshold for a certain period, and during this time there may be targets entering and exiting the area, an alarm will be triggered as long as the count of targets in the area continues to meet the alarm conditions.
- Loitering detection focuses on specific moving targets. An alarm will be triggered as long as a target remains in the alarm area for longer than a set duration.

4.6 What is the purpose of intelligent background reconstruction

The purpose of background reconstruction is to allow the system to establish a reference background. In subsequent intelligent detection, if a target that differs from the background appears, the system will detect it as a target.

Reconstructing the background simplifies the algorithm's background learning process and helps avoid anomalies in background learning. Therefore, during reconstruction, we advise you use images without any targets as the background whenever possible.

5 Network Problems

5.1 Cannot access the Device through the webpage, and the system prompts login failure

Problem

The network can be pinged, but the Device cannot be accessed through the webpage, and the system prompts login failure.

Possible Causes

- Incorrect Device IP, gateway, subnet mask, or port number settings.
- The number of online users on the Device exceeds the maximum connection limit.
- You access the Device across different network segments.
- The internal certificates of the device are abnormal after the different programs are upgraded.

Solutions

1. Modify the IP, gateway, subnet mask, or port number of the Device.
 - a. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
 - b. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 - c. Select **Network** > **TCP/IP**.
 - d. Modify the Device's IP address, subnet mask, gateway, and port number according to the network plan.

Figure 5-1 TCP/IP

NIC Name	IP Address	Network ...	NIC Member	Modify	Unbind
NIC1	192.168.1.1	Single NIC	1		

IP Address: 192.168.1.1	Default Gateway: 192.168.1.1	MTU: 1500
MAC Address: 00:00:00:00:00:00	Subnet Mask: 255.255.255.0	Mode: Static

IP Version	IPv4	☐ DHCP
Preferred DNS		
Alternate DNS		
Default Card	NIC1	

Virtual Host	☒
--------------	-------------------------------------

TestApplyBack

e. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, continue with the following steps.

2. Check if the number of online users on the Device exceeds the maximum connection limit.
 - a. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
 - b. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 - c. Select **Maintenance Center** > **Network** > **Online User**.
 - d. Check if the number of online users on the Device exceeds the maximum connection limit.

If the limit has not been exceeded, please proceed to the next steps; otherwise, go to 3.

Figure 5-2 Online user

[illegible]

- e. In the main menu, select **NETWORK > Port**.
- f. Modify the number of the max connection and click **Apply**.

Figure 5-3 Port

Max Connection	128	(0 -128)
TCP Port	37777	(1025 - 65535)
UDP Port	37778	(1025 - 65535)
HTTP Port	80	(1 - 65535)
HTTPS Port	443	(1 - 65535)
RTSP Port	554	(1 - 65535)
NTP Server Port	123	(1 - 65535)
POS Port	38800	(1025 - 65535)
Auto Registratio...	7000	(1025 - 65535)

3. Log in to the Device directly using a laptop.
 - a. Connect the laptop to the Device's network port using an Ethernet cable.
 - b. Access the Device through the webpage on the laptop.
4. After all troubleshooting methods have failed, try restoring factory settings and then test again.
5. Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, please contact the relevant technical support.

5.2 Password lockout when changing the password

Before changing the Device password, you need to first remove the Device from the platform where it has been added. After changing the Device password, re-add the Device on the platform using the new password. Otherwise, the platform will continue to access the Device with the old password, and after 5 incorrect attempts, the Device will be locked.

5.3 How to reset the Device login password

Solutions

When the admin user's login password is forgotten, the login password can be reset using one of the following methods: scanning a QR code with a mobile phone, verifying security questions, or performing a hardware reset.

- If the password reset function is enabled, the password can be reset by scanning the QR code with a mobile phone.
- If the password reset function is disabled, the following scenarios apply:
 - ◇ If security questions have been set, the password can be reset by verifying the answers to the security questions.
 - ◇ If security questions have not been set, a hardware reset must be performed to restore the Device to factory settings.



- Only some devices support the hardware reset function.
- The following content primarily discusses resetting the password using a mobile phone.

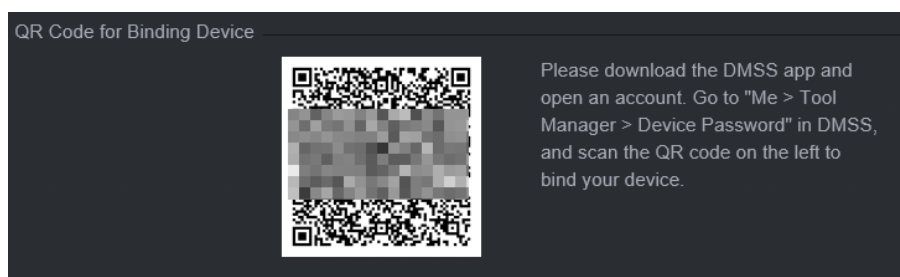
1. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
2. Enable the password reset function.
 - a. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 - b. Select **ACCOUNT** > **Password Reset**.
 - c. Click  to enable the password reset function.



This function is enabled by default.

- d. Enter an email address to receive the security code used to reset the password and configure security questions and answers.
- e. (Optional) Follow the on-screen instructions to bind the Device to DMSS app.

Figure 5-4 Bind device



f. Click **OK**.

6 External Devices Problems

6.1 How to connect alarm devices

The provided voltage for the Device is 12 V. If the startup voltage of the alarm device is 12 V, it can be connected to the CTRL 12 V power supply and ground. If the startup voltage of the alarm device is greater than 12 V, a separate power supply with the required voltage must be used.

- When you use a separate power supply for the alarm device, simply connect to the NO and C alarm output terminals.
- The alarm input type is not restricted; it can be normally open (NO) or normally closed (NC).
- The ground terminal (GND) of the alarm detector should be connected in parallel with the common terminal (COM) (the alarm detector should be powered by an external source).
- The ground terminal of the alarm detector should be connected to the ground terminal of the NVR.
- The NC terminal of the alarm detector should be connected to the alarm input terminal (ALARM) of the Device.
- When you power the alarm device with an external power supply, it is essential to share a common ground with the Device.

Figure 6-1 Alarm interface

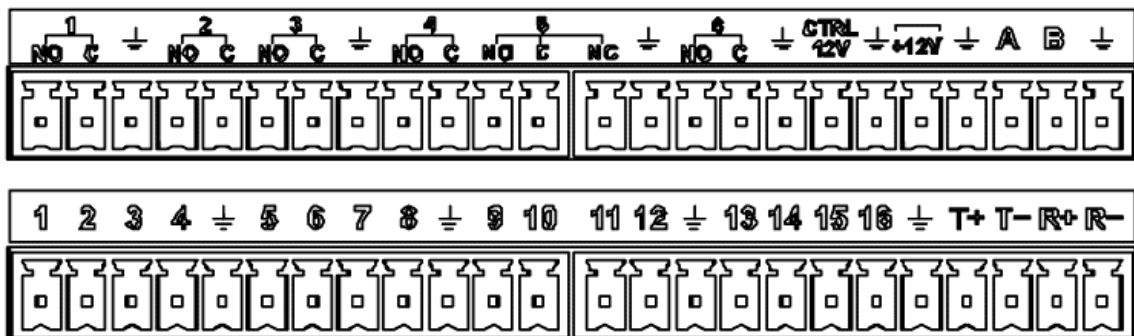
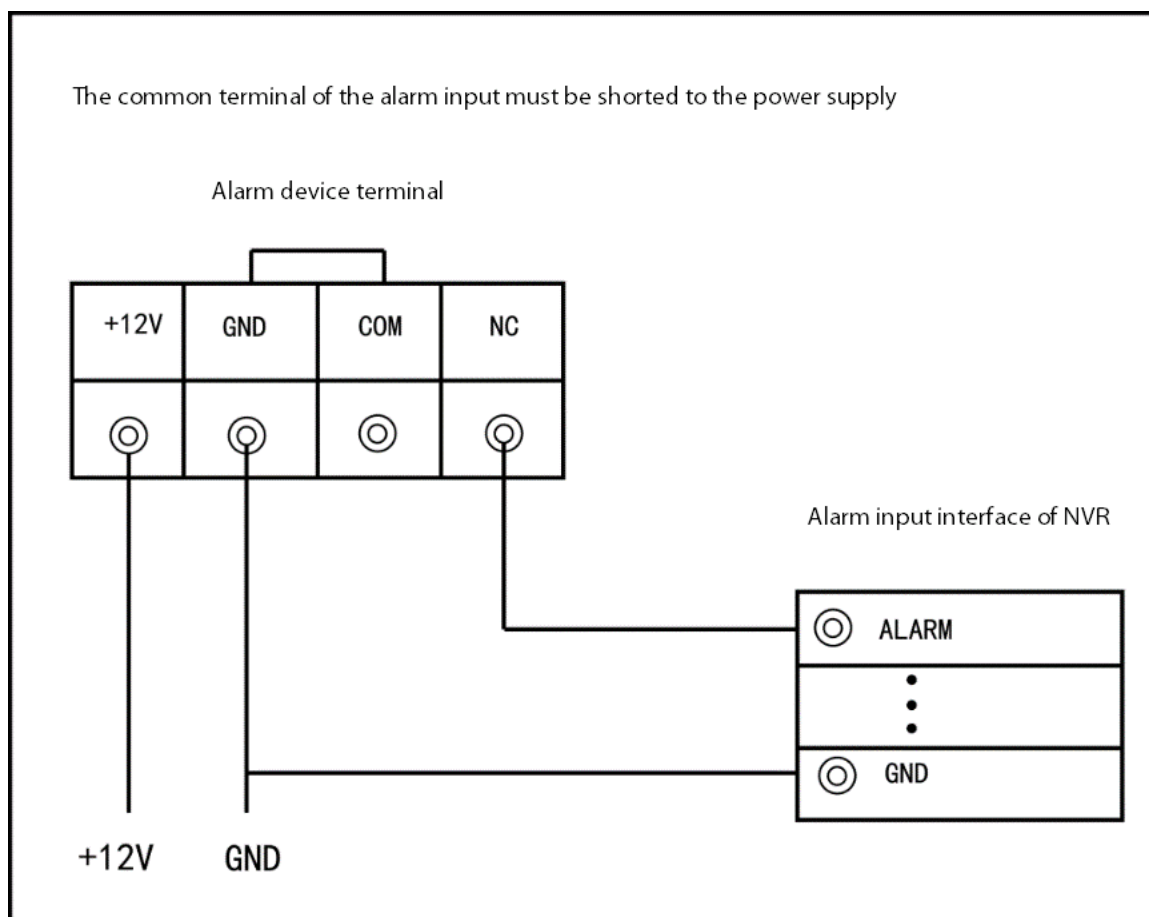


Figure 6-2 Alarm input of NC



6.2 The external alarm sensor can trigger a local alarm when the sensor is reset

Problem

When the Device is equipped with an external alarm sensor, a local alarm will be triggered as the sensor is restarted.

Possible Causes

- Alarm sensor malfunction.
- Incorrect configuration of the alarm device type.

Solutions

1. Check if the alarm sensor functions properly.
If the alarm sensor is faulty or abnormal, please repair or replace the alarm sensor; otherwise, please continue with the following steps.
2. Modify the alarm device type.

- Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
- Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
- Select **Alarm** > **Alarm-in Port** > **Local**.
- Select the channel of the alarm-in port and modify the device type.

Figure 6-3 Alarm-in port

The screenshot shows the 'Local' menu with the 'Alarm-in Port' tab selected. The configuration for 'Alarm-in Port 1' is displayed. The 'Enable' checkbox is checked. The 'Alarm Name' is 'Alarm-in Port1' and the 'Device Type' is 'NC'. The 'Schedule' section has a 'Setting' button. The 'Alarm-out Port' has a 'Setting' button. The 'Show Message' checkbox is unchecked, and the 'Send Email' checkbox is unchecked. The 'Record Channel' checkbox is unchecked, and the 'PTZ Linkage' checkbox is unchecked. The 'Tour' checkbox is unchecked, and the 'Buzzer' checkbox is checked with a 'Log' option. The 'Alarm Tone' is set to 'None'. The 'Camera Audio' has a 'Setting' button. The 'Anti-Dither' is set to 5 sec, 'Post-Alarm' is 10 sec, 'Report AL...' is unchecked, 'Post-Record' is 10 sec, 'Picture Storage' is unchecked, and 'Disarming' is unchecked. The 'Remote Warning Light' has a 'Setting' button. At the bottom, there are 'Default', 'Copy to', 'Apply', and 'Back' buttons.

- Check if the problem has been resolved.

If the problem has been resolved, the problem handling is completed. Otherwise, please contact the relevant technical support.

6.3 The mouse moves slowly during the operation on the local page

Possible Cause

The mouse connection is poor.

Solution

Please replace the mouse.

If the problem persists, please contact the relevant technical support.

6.4 Introduction to VGA and HDMI

- VGA (Video Graphics Array) is a video transmission standard that uses analog signals. It offers advantages such as high resolution, fast display rates, and rich colors. VGA cables typically do not exceed 15 meters in length because the signal quality significantly deteriorates when the

transmission distance exceeds this range. VGA outputs an analog signal, which is then converted; all signals can be converted into a format suitable for the current display, such as 1080p at 60Hz.

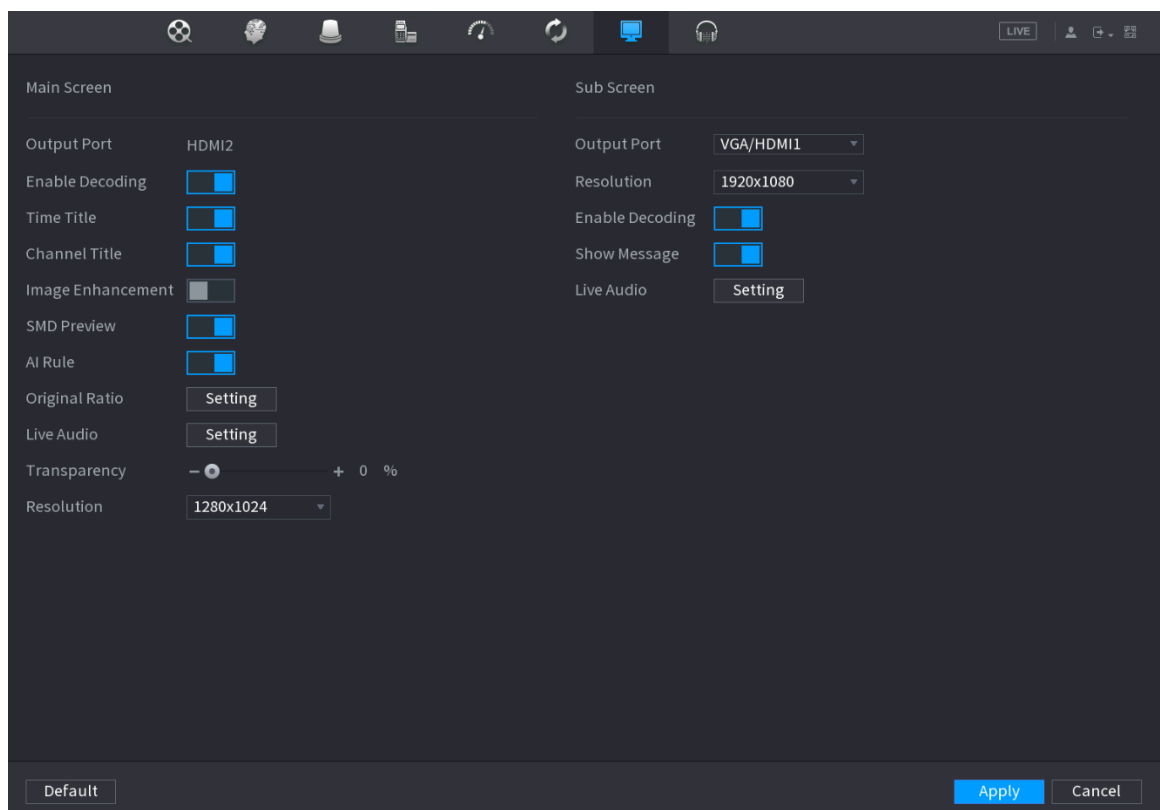
- HDMI (High Definition Multimedia Interface) is a digital video/audio interface technology that transmits uncompressed audio and video signals without requiring D/A or A/D conversion before signal transmission. HDMI outputs digital signals without conversion; for instance, if the original signal is 1080p at 25Hz and the current display does not support this format, it may result in black borders or image overflow.

6.5 Black screen of the monitor or display

Some monitors do not support the Device's default resolution of 1280×1024 and need to have the resolution adjusted based on the actual conditions.

1. Use a mouse, keyboard, and monitor to directly connect to the Device and power it on.
2. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
3. Select **DISPLAY > Display**.
4. Modify the resolution of the screen.

Figure 6-4 Display



5. Click **Apply**.

7 Other Problems

7.1 Introduction to HDMI/VGA asynchronous output

HDMI/VGA asynchronous output refers to the ability to connect two monitors simultaneously and, through configuring a video matrix or dynamically detecting the linked video matrix, output different images on each monitor.

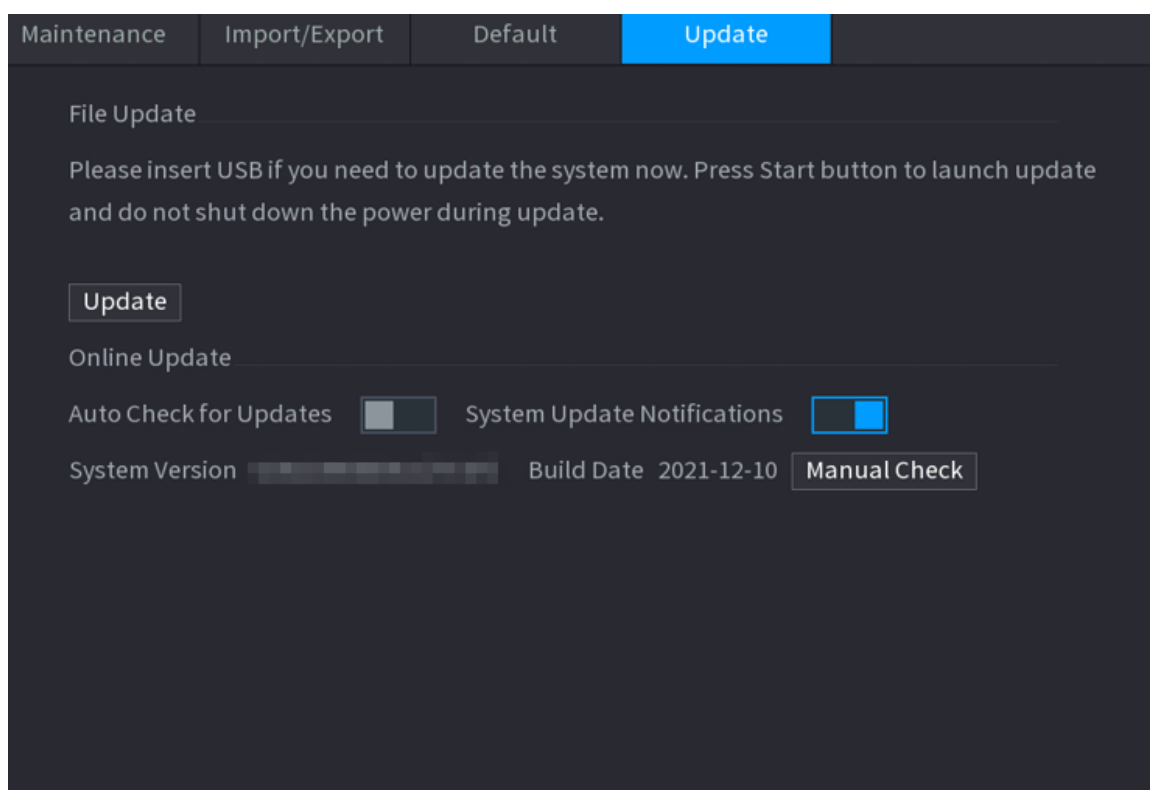
The interfaces used for asynchronous output are similar to the spot ports of traditional NVRs, which only provide analog channel previews and do not support mouse operations. When the monitor currently in use (VGA/HDMI) is configured as a video matrix output port, the mouse will not be operable. If you need to perform operations, you can connect another interface (HDMI/VGA) to a different monitor, or log into the device's webpage and navigate to **Main Menu** > **DISPLAY** > **Display** to modify the video matrix output port.

7.2 If you upgrade the system manually through a USB drive



- Ensure that the Device functions properly before performing a manual upgrade using a USB drive.
 - If the USB drive contains important data, please back it up beforehand to avoid data loss.
1. Format the USB drive to FAT32 and copy the upgrade firmware and main program onto the USB drive.
 2. Insert the USB drive into the USB port of the Device.
 3. Connect the Device directly to a mouse, keyboard, and monitor, and power on the Device.
 4. Log in to the Device's local page, and right-click on the live view to select **Main Menu**.
 5. Select **Maintenance Center** > **Manager** > **Update**.
 6. Click **Update**.

Figure 7-1 System update



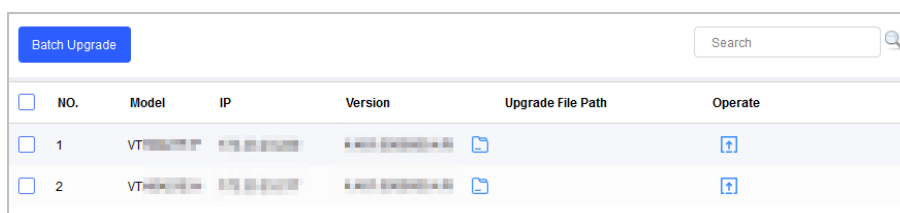
7.3 How to use ConfigTool to upgrade the system



Upgrade through the ConfigTool requires ensuring that the Device can operate normally.

1. Double-click ConfigTool.exe to open the tool and click **Device Upgrade**.
2. Upgrade the Device.
 - Single upgrade:

Figure 7-2 Device upgrade

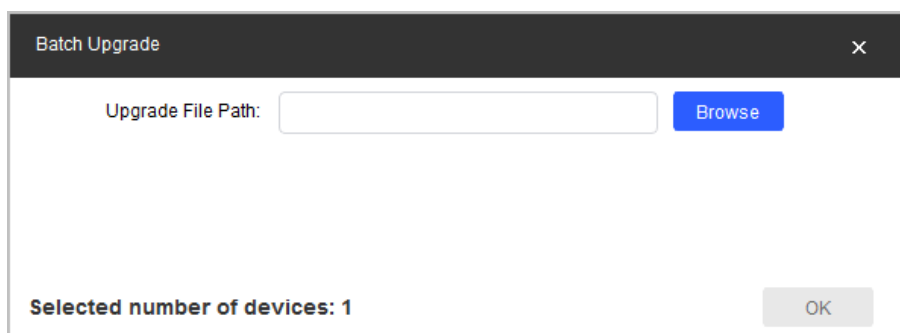


- ◇ Click  next to the device that you want to upgrade. Select the specific file that needs to be upgraded, and then click **Open**.
- ◇ Click  to start upgrading.

After upgrade is complete, a **Prompt** dialog box will be displayed indicating the device will be restarted, and then the device restarts automatically.

- Batch upgrade:

Figure 7-3 Batch upgrade

A screenshot of a 'Batch Upgrade' dialog box. The title bar is dark gray with the text 'Batch Upgrade' and a close button (X). The main area is white. It contains a label 'Upgrade File Path:' followed by a text input field and a blue 'Browse' button. At the bottom left, it says 'Selected number of devices: 1'. At the bottom right, there is a gray 'OK' button.

Batch Upgrade

Upgrade File Path: [Browse](#)

Selected number of devices: 1 [OK](#)

- a. Select the devices that need to be upgraded and click **Batch Upgrade**.
- b. Click **Browse** to select the files that need to be upgraded and click **OK**.