

Video Matrix Platform

FAQ



V1.0.0

Foreword

This manual provides solutions and operational guidance for common device malfunctions, parameter setting inquiries, and usage misconceptions encountered in actual use. Read carefully before using the device, and keep the manual safe for future reference.

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 Number	Revised Content	Publication Date
V1.0.0	First release.	July 2025

Important Safeguards and Warnings

This section introduces content covering the proper handling of the device, hazard prevention, and prevention of property damage. Read carefully before using the device, and comply with the guidelines when using it.

Transportation Requirements



- Transport the device within the allowed range of humidity and temperature.
- Do not transport the device panel upside down.

Storage Requirements



Store the device within the allowed range of humidity and temperature.

Installation Requirements



WARNING

- The device is a Class A device. In domestic environment, it might cause radio interference, in which case the user might be required to take practical measures.
- After all the device cables are properly connected, use cable zip ties to bundle the wires to prevent hazards such as short circuits, overheating, and electric shock caused by disorganized wires.



- Install an overcurrent protection device rated at 5 A in the device's external power circuit as a safety disconnecting device. Install it close to the device, to safely disconnect the device from the mains during maintenance.
- Install the device near a readily accessible power outlet to allow safe power disconnection by unplugging.
- A safety disconnecting switch is designed at the device bottom for safe power cutoff. Make sure that the switch remains easily operable during installation.
- The device shall be installed by professionals and located in areas accessible only to such personnel.
- Maintain sufficient clearance around the device for heat dissipation: at least 5 cm on sides and 1 cm on top.
- Do not obstruct vents with items such as newspapers, tablecloths, or curtains.
- Do not place open flame sources (such as lit candles) on the device.
- Install the device away from water splashes. Do not place liquid-filled containers (such as vases) on its surface.
- Keep the device away from high-temperature sources, and avoid direct sunlight or heat-emitting device.
- Install the device at a fixed horizontal position to ensure proper function of internal anti-vibration components.
- Connect Class I device to mains sockets with protective earthing connections.
- A dedicated protective earthing terminal is located at the lower-right corner of the device. Permanently and reliably connect this terminal to the installation site's earth ground.
- Strictly follow connection sequence by connecting other lines before the power cable to prevent device damage.
- Disconnect the battery's negative terminal before wiring operations.

- Use a power supply meeting SELV (Safety Extra-Low Voltage) requirements. Operate at rated voltages according to GB8898 (IEC60065) or GB4943.1 (IEC60950-1 compliant with Limited Power Source), as specified on the device nameplate.

Operational Requirements



- Use the device within the allowed range of humidity and temperature.
- Use the device only within the rated input and output range.
- Operating temperature range: -10 °C to +50 °C.
- Do not disassemble the device without guidance.
- Do not hot-plug or unplug audio and video signal cables, RS-232 or RS-485 cables while the device is powered on. This might cause interface damage.

Maintenance and Repair Requirements



WARNING

- The fuse is designed to be installed on the neutral line, and care should be taken during maintenance and replacement. A blown fuse does not guarantee that the downstream circuit is powered off.
- Always unplug the power cord before removing the cover for maintenance to ensure complete disconnection from mains power.
- The device must only be used with batteries containing internal protection circuits. Always dispose of exhausted batteries according to instructions.
- Only batteries of the same model might be used for replacement. Using incorrect battery models might cause explosion or fire hazards.



- The device casing is used for the protecting internal components of the device, and needs to be opened by loosening the bolts with a screwdriver. Before the device is powered on again, make sure that the casing is reinstalled at its original position.
- Dust on the circuit board can cause a short circuit when it becomes damp, affecting the normal operation of the device and even damaging it. To ensure the device operates stably over the long term, regularly use a brush to clean the electrical circuit, plug-in, case, and other components.

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1 Device

1.1 Device Decoding Specifications

Three output ports of the HDMI enhanced decoding card correspond to one chip, which can decode 16-channel 1080p @ 30 and 64-channel D1 code streams.

- The M70-E model features a 6-channel HDMI decoding card, corresponding to 2 chips.
- The M60 model has versions with 8, 9, 12, 15, 16, and 18 channels, each corresponding to a different number of chips.
- When opening the window across chips, all chips have the capability to calculate the current window once.

1.2 Maximum Number of Users Supported by the Device

A maximum of 20 user groups and 64 users are supported.

1.3 Maximum Number of Channels Supported by Webpage

1024 channels.

1.4 Does the Device Support Audio Collection?

Only the HDMI port supports audio collection. The 4K collection card of M70-E does not support audio collection.

1.5 How to Distinguish between M70-4U and M70-4U-E?

Check the number of network ports on the control board in slot C of the device. 3 for the M70-4U model, 8 for the M70-4U-E model.

Figure 1-1 M70-4U control board

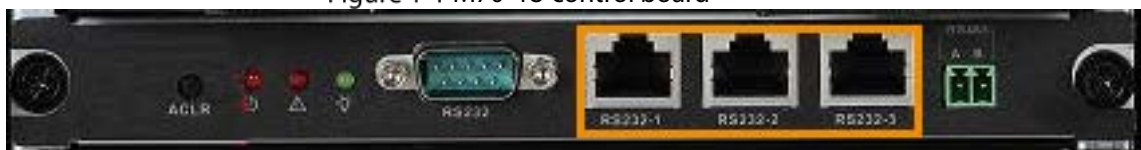


Figure 1-2 M70-4U-E control board



1.6 How to Ground the Device and Screen

Problem Description

If the device is not properly grounded, or if the grounding impedance of the device is not equivalent to that of the screen, a voltage difference might exist between the device and the screen, which can cause the video interface and chip to be damaged due to current backflow. To prevent such damage, perform common grounding for both the screen and the device to eliminate voltage differences.

Solution

Locate the grounding point near the power supply on the rear of the device. Connect it to the screen stand with high-quality wires, and ground both to earth.

1.7 Unable to Power on after Plugging in

Possible Reasons

- The power button on the front panel is not pressed.
- Loose connection of the power cable.
- Physical damage to the power cable.

Solution

Step 1 Locate and press the power button on the front panel.
If the device powers on, troubleshooting is complete.
If not, proceed to Step 2.

Step 2 Plug the power cord again to ensure a tight fit.
If the device powers on, troubleshooting is complete.
If not, proceed to Step 3.

Step 3 Replace the same model power cord and restart the device.
If the device powers on, troubleshooting is complete.
If not, contact the manufacturer or service provider for technical support.

1.8 Device Buzzes When Powered on through the Power Button

Possible Reasons

The device supports dual power supply. If only one power cord is plugged in, the device will trigger an alarm.

Solution

- Plug in the power cord that is not connected.
- Press the red button next to the power module socket to mute the buzzer alarm.

1.9 Forgot the Password for Device Login

Insert a pointed tool into the RESET pinhole on the main control board for 3–5 seconds to restart the device. The login password will be restored to the default **admin**.

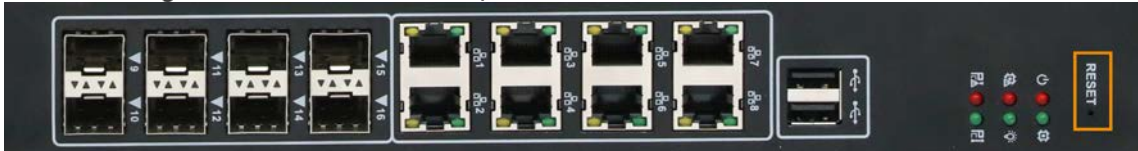


This operation will clear all configurations. Please be advised.

Figure 1-3 Location of RESET pinhole on M70 main control board



Figure 1-4 Location of RESET pinhole on M60 main control board



1.10 No Display on Local Interface

Problem Description

After starting the device, only local interface is displayed on the monitor connected to the device.

Possible Reasons

- The device startup requires approximately 180 seconds, during which the screen is black. After waiting for a period, a startup progress bar appears.
- Monitor abnormality prevents determining whether the device is functioning normally.
- The interface board of the mainboard has poor contact with the mainboard, resulting in the output signal from the local operation interface not being transmitted to the interface board.
- Inconsistent program configurations before and after upgrade cause failure to start the program.
- The program has not been upgraded or the upgrade was unsuccessful.

Solution

- Step 1** After powering on, wait 180 seconds for the device to startup.
If the local interface appears, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 2** Replace the monitor, and reconnect it to the VGA port on the mainboard's interface board.
If the local interface appears, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 3** Plug the interface board out and in the mainboard again, to ensure sufficient contact between the interface board and mainboard.
If the local interface appears, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 4** Insert a pointed tool into the RESET pinhole on the main control board for 3–5 seconds to restart the device (the configurations will be cleared).
If the local interface appears, troubleshooting is complete. Otherwise, proceed to the next step.



This operation will clear all configurations. Please be advised.

- Step 5** Upgrade the device program again.
If the local interface appears, troubleshooting is complete. Otherwise, contact relevant technical support.

1.11 Unable to Log in to the Device Webpage

Possible Reasons

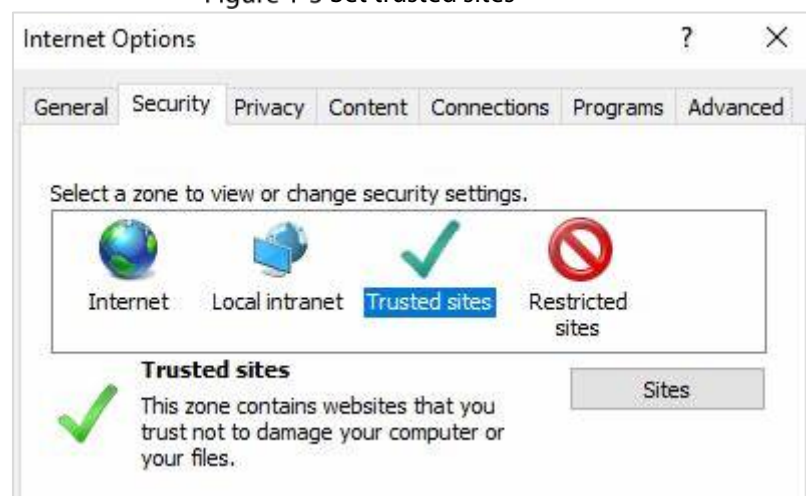
- The username or password is incorrect.

- The network settings are incorrect.
- Network connection error.
- ActiveX Control is blocked.

Solution

- Step 1** Log in to the device again. Make sure that the username and password are correct.
If you can log in, troubleshooting is complete; otherwise, proceed to the next step.
- Step 2** Log in to the device local interface and reconfigure the its network parameters, including network address, video data transmission protocol, and more. Make sure that the device parameters are correct.
If you can log in, troubleshooting is complete; otherwise, proceed to the next step.
- Step 3** Plug the network cable out and in again, to ensure the device network is smooth.
If you can log in, troubleshooting is complete; otherwise, proceed to the next step.
- Step 4** Switch to another browser or set the device webpage as a trusted site. Here uses Internet Explorer as an example.
- 1) Open the settings in Internet Explorer, and then click **Internet Options**.
 - 2) Click the **Security** tab.
 - 3) Click **Trusted Sites**, then click **Sites**.

Figure 1-5 Set trusted sites



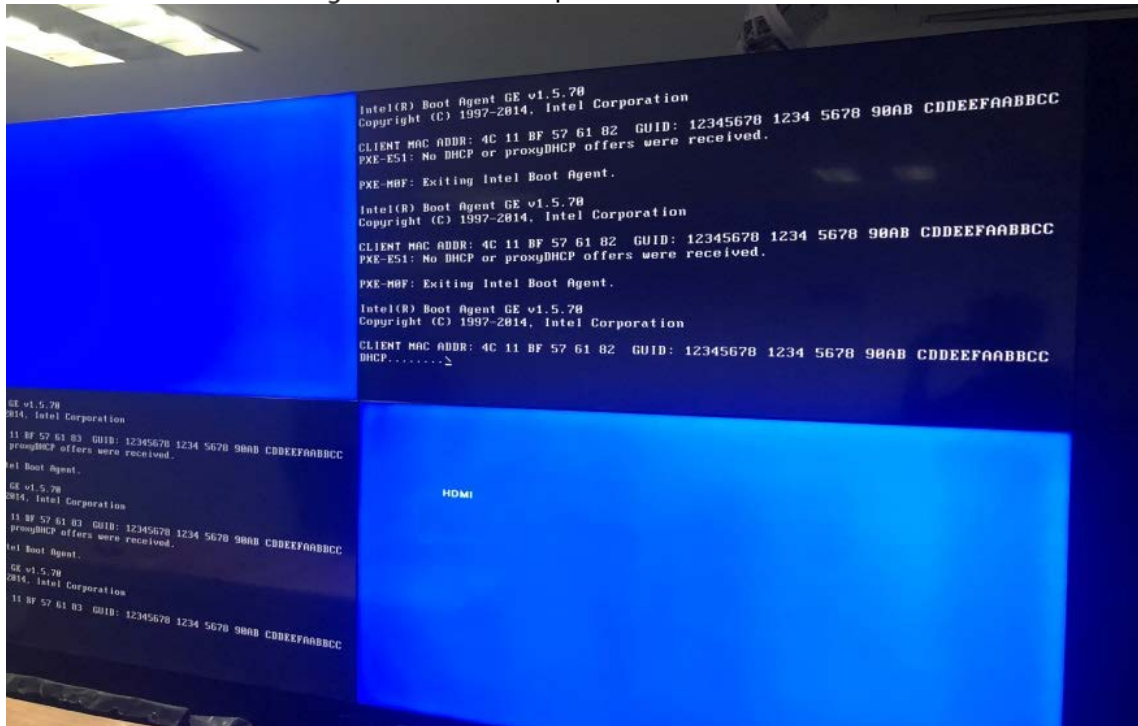
- 4) Fill in the website, click **Add**.
- 5) Check whether the issue has been resolved.
If you can log in, troubleshooting is complete; otherwise, contact relevant technical support.

1.12 No Recognition with the Board

Problem Description

- The screen continuously requests DHCP.

Figure 1-6 Abnormal phenomenon



- Status of some or all boards shows no response, or board information is not displayed.

Possible Reasons

- The board model does not match the device.
- The board is not securely inserted.
- The board malfunctioned.
- The board is outdated and configurations need to be cleared.
- Incorrect jumper settings on the M70-4U-E device board.
- Incorrect network card parameter configuration.
- Some devices are not grounded. The grounding issue manifests as random board recognition failures upon each restart.

Solution

- Step 1** Check whether the board label matches the device. If not, replace it with a matching board. If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 2** Plug the board out and in again, and then restart the device.
If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 3** Relocate the board to another slot, and check whether the breathing light flashes. If not, the board has malfunctioned and should be replaced.
If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.
- Step 4** Insert a pointed tool into the RESET pinhole on the main control board for 3–5 seconds to restart the device (the configurations will be cleared).
If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.



This operation will clear all configurations. Please be advised.

- Step 5** The M70-4U-E board is connected to the main control through jumpers. Connect network port 2 on the main control board to any one of the 4 network ports on the left side of the control board. If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.

Figure 1-7 Jumper connection



Step 6 Log in to the device's local interface, and then check whether the net mode (**Fault Tolerance** by default), network card IP address, subnet mask, default gateway, and more, are correct. If any of these are incorrect, modify them according to the actual situation. If the problem is resolved, troubleshooting is complete. Otherwise, proceed to the next step.

Figure 1-8 Network

A screenshot of a network configuration window titled "Network". The window contains the following fields and controls:

- Net Mode: Fault Toleranc (dropdown menu)
- Network Device Name: Bond1 (dropdown menu)
- IP Version: IPv4 (dropdown menu)
- IP Address: [blurred text]
- Subnet Mask: [blurred text]
- Gateway: [blurred text]
- TCP Port: 37777
- UDP Port: 37778
- Max Connection: 128
- HTTP Port: 80
- RTSP Port: 554
- DHCP: ☐
- Buttons: Default, Save, Cancel

Step 7 Locate the grounding point near the power supply on the rear of the device. Connect it to the screen stand with high-quality wires, and ground both to earth. If the problem is resolved, troubleshooting is complete. Otherwise, contact the technical support.

1.13 Device Time Display Error

Possible Reasons

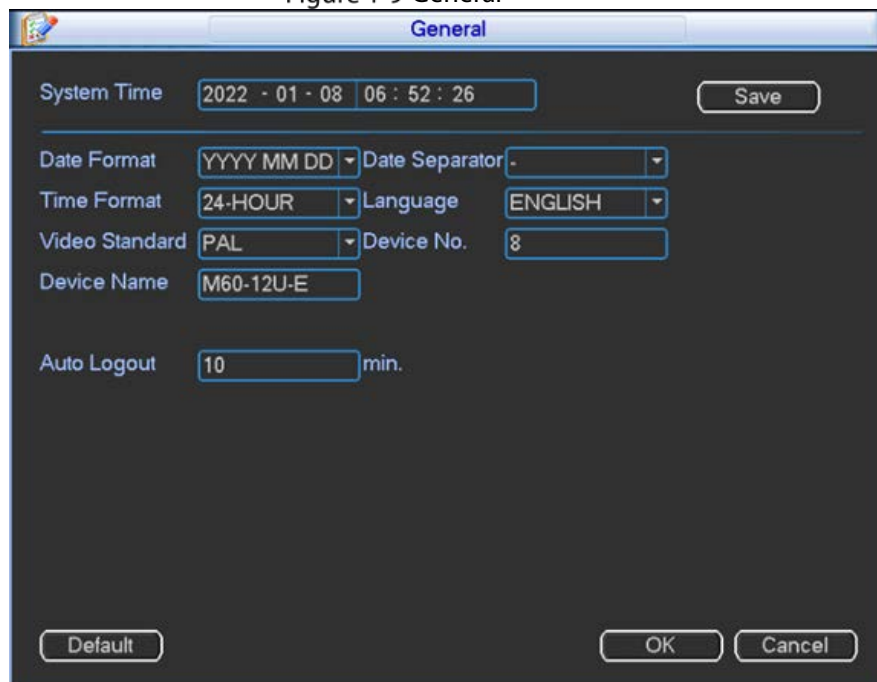
- Time setting error.
- Poor contact connection or low voltage in the Button battery.

Solution

Step 1 Reset the device time.

- Local interface settings
 - 1) Log into the device local interface.
 - 2) Select Main Menu > System Settings > General.
 - 3) Modify the current system date and time of the device.
 - 4) Click **Save**.

Figure 1-9 General



The screenshot shows a 'General' settings window with a dark background and blue accents. At the top, there's a title bar with a small icon and the word 'General'. Below this, the 'System Time' is displayed as '2022 - 01 - 08 06 : 52 : 26' in a light blue box, with a 'Save' button to its right. The settings are organized into several rows: 'Date Format' is 'YYYY MM DD' with a dropdown arrow, 'Date Separator' is '-' with a dropdown arrow, 'Time Format' is '24-HOUR' with a dropdown arrow, 'Language' is 'ENGLISH' with a dropdown arrow, 'Video Standard' is 'PAL' with a dropdown arrow, 'Device No.' is '8' in a text box, and 'Device Name' is 'M60-12U-E' in a text box. At the bottom, 'Auto Logout' is set to '10 min.' in a text box. At the very bottom of the window, there are three buttons: 'Default', 'OK', and 'Cancel'.

- Webpage settings
 - 1) Log in to the device webpage.
 - 2) Select **Setup > System Config > General > Date**.
 - 3) Set the device system time, or click **Sync PC** to synchronize with the current computer time.
 - 4) Click **OK**.

Figure 1-10 Web time setup

Step 2 After one week, check whether the time is correct.
If the time is still correct, the issue is resolved; otherwise, proceed with the following steps.

Step 3 Plug the button battery out and in again, or replace it.

- If the button battery has been replaced for less than one year, we recommend removing and then inserting the battery again, to ensure it is inserted correctly and in full contact with the device.
- If the button battery has been in use for more than one year, we recommend replacing it with a new one.



- Export and save configurations before replacement; otherwise, all configurations will be lost.
- Use the same model battery for replacement.

Step 4 After one week, check whether the time is correct.
If the time is still correct, the issue is resolved; otherwise, contact the technical support.

1.14 Device Unable to Control PTZ

Possible Reasons

- Incorrect PTZ parameter configuration in the device.
- Incorrect PTZ wiring (such as Ethernet cable, RS-485 A/B cables).
- Improper PTZ installation.

Solution

Step 1 Check whether the PTZ parameter settings are correct.

- 1) Log in to the device webpage.
- 2) Select Setup > System Config > PTZ Setup.
- 3) Confirm correct parameter configuration. Make sure that protocol, baud rate, address, and parity settings match those of the camera and PTZ.
- 4) If the device can control PTZ, troubleshooting is complete; otherwise, proceed to the next step.

- Step 2** Reconnect all PTZ cables (including Ethernet and RS-485 A/B cables).
If the device can control PTZ, troubleshooting is complete; otherwise, proceed to the next step.
- Step 3** Reinstall the PTZ device according to its installation manual.
If the device can control PTZ, troubleshooting is complete; otherwise, contact relevant technical support.

2 Video on Wall

2.1 High Latency in Video on Wall

Step 1 Log in to the device webpage.

Step 2 Click the **Video Wall** tab.

Step 3 In the **Device Tree** or **Signal Grouping** panel on the right, select **Preview Stream** when projecting signals to the wall.
Preview stream uses not encoded data with low latency (≈ 100 ms).

2.2 No Video Output in Video Wall

Possible Reasons

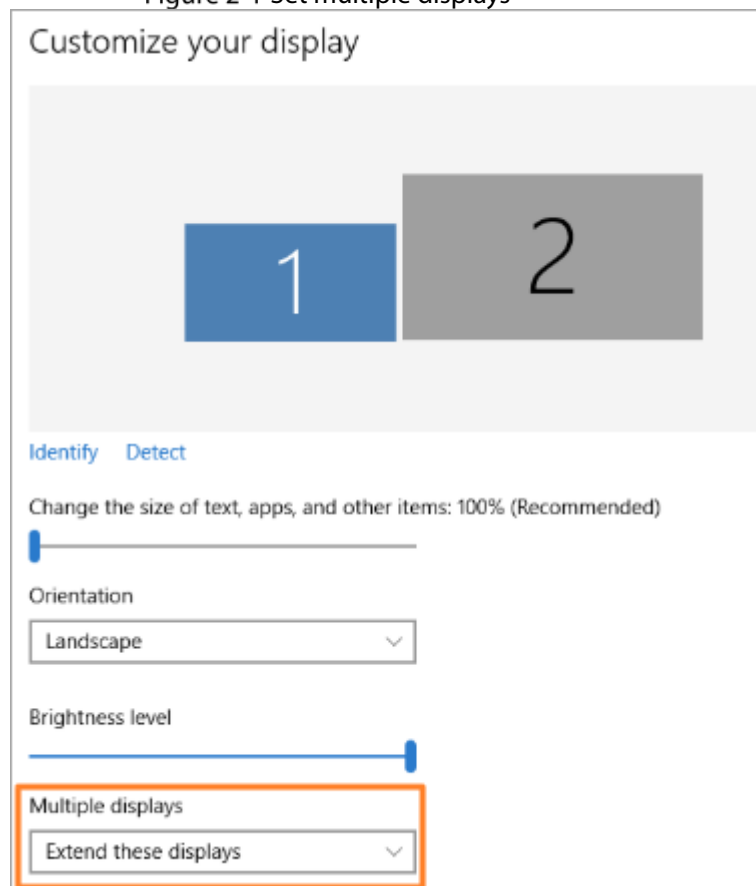
- Multi-GPU simultaneous output not configured when using computer as the signal source.
- Resolution mismatch between computer output and encoding card.
- Incorrect signal source type configured for input channel.
- Output channel is not configured.
- Screen incompatible with decoding channel output resolution.
- Signal transmission cable issues (such as length, quality, adapters).
- Poor contact between front panel and interface board, preventing signal transmission.

Solution

Step 1 Configure computer signal source for multi-display mode.

- 1) Right-click desktop on the computer as the signal source, and then select **Screen Resolution**.
- 2) Set Multiple displays to Extend these displays.
- 3) Click **OK**.

Figure 2-1 Set multiple displays



- 4) Check whether the issue is resolved.
If video output appears, troubleshooting is complete; otherwise, proceed to the next step.

Step 2 Adjust the computer output resolution to detect video output.

If video output appears, troubleshooting is complete; otherwise, proceed to the next step.

Step 3 Configure the device input channel.

- 1) Log in to the device webpage.
- 2) Select Setup > Signal Management > Local Signal > Input Channel Setup.
- 3) Select the appropriate signal source type, and then click **Save**.
Signal source type must match the acquisition source, and the optional types include VGA, DVI, and HDMI.



VGA: Displays blue screen when no source is connected.

DVI/HDMI: Displays green screen when no source is connected.

Figure 2-2 Input channel setup

- 4) If video output appears, troubleshooting is complete; otherwise, proceed to the next step.

Step 4 Configure device output channels.

- 1) Log in to the device webpage.
- 2) Select Setup > Display Management > Display Setup > Display Setup.
- 3) Set parameters according to actual output channel requirements.

Figure 2-3 Display setup

Table 2-1 Display setup parameter description

Parameter	Description
Slot	Select the slot for the output screen.
Channel	Select the channel of the output screen.
Resolution	Set the resolution of the output screen. You can select Custom to define a custom resolution.
Output mode	Sets the output mode for the screen. ● Hot Plug: Outputs video only when the device output port is connected to a display. ● Forced Output: Outputs video regardless of whether the device output port is connected to a display.
Audio Output Mode	Set the audio output mode. ● Sub-card Output: Decoded audio is output from the audio output port of the sub card. ● Main Control Output: Decoded audio is output from the audio output port of the main control. ● Sub-card & Main Control Output: Decoded audio is output simultaneously from both the sub card and main control audio output ports.
Video Output Mode	Sets the video output mode. You can select from DVI and HDMI .
Chroma	Adjust the hue and saturation of the video.
Brightness	Adjust the overall brightness of the video linearly. A larger value makes the video brighter, and vice versa. Setting this value too high can cause the video to appear hazy.
Contrast	Adjust the contrast of the video. A larger value increases the difference between light and dark areas; a smaller value decreases it. Setting this value too high can cause dark areas to be overly dark and bright areas to become overexposed. Setting it too low can cause the video to appear hazy.
Saturation	Adjust the intensity of the colors in the video. A larger value makes the colors richer (more intense), and vice versa. This adjustment does not affect the overall brightness of the video.
Screen Color/Window Color	Set the background color for the screen and windows on the output screen.

4) Click **OK**.

5) Check whether the issue is resolved.

If video appears, the troubleshooting is complete. Otherwise, proceed to the next steps.

Step 5 In **Setup > Display Management > Display Setup > Display Setup**, and then set the resolution.

If video appears, the troubleshooting is complete. Otherwise, proceed to the next steps.

Step 6 Reduce the source resolution, or replace the cable with a shorter one. Do not use adapters, so that you can minimize signal reduction.

If video appears, the troubleshooting is complete. Otherwise, proceed to the next steps.

Step 7 Plug the front panel connector out and in again, to make sure that it is securely plugged in. If video appears, the troubleshooting is complete. Otherwise, contact the technical support for assistance.

2.3 Vertical Screen Misalignment at Splits

Problem Description

When multiple screens are used in a split way, the video at the screen split is not synchronized in real time.

Possible Reasons

Incorrect line spacing delay setting configured for the video wall.

Solution

Step 1 Log in to the device webpage.

Step 2 Select **Setup > Display Management > Video Wall Setup**.

Step 3 In the **Video Wall Setup**, double-click the corresponding video wall, set the line spacing delay parameter to 0, and then Click **Save**.



This parameter does not require configuration for fine-pitch LED displays.

Step 4 Check whether the issue is resolved.

If resolved, the troubleshooting is complete. Otherwise, contact relevant technical support.

2.4 Partial Green Screen on Video Wall

Step 1 Log in to the device webpage.

Step 2 Select **Setup > Display Management > Display Setup > Global Setup**.

Step 3 Select **Abnormal Stream Filtering**, and then click **Save**.



Selecting this option halves decoding performance and might cause lag.

Figure 2-4 Global setup

Step 4 Check whether the issue is resolved.

If resolved, the troubleshooting is complete. Otherwise, contact relevant technical support.

2.5 Random Black Screen or Stuttering on Video Wall

Possible Reasons

- Insufficient decoding capability of the decoding channel.
- Excessive concurrent wall display streams, and inadequate main controller stream-pulling performance.
- Insufficient network bandwidth.
- Abnormal signal from the front-end source.

Solution

Step 1 If the webpage prompts **Exceeds Decoding Capability**, select lower-resolution streams for wall display.

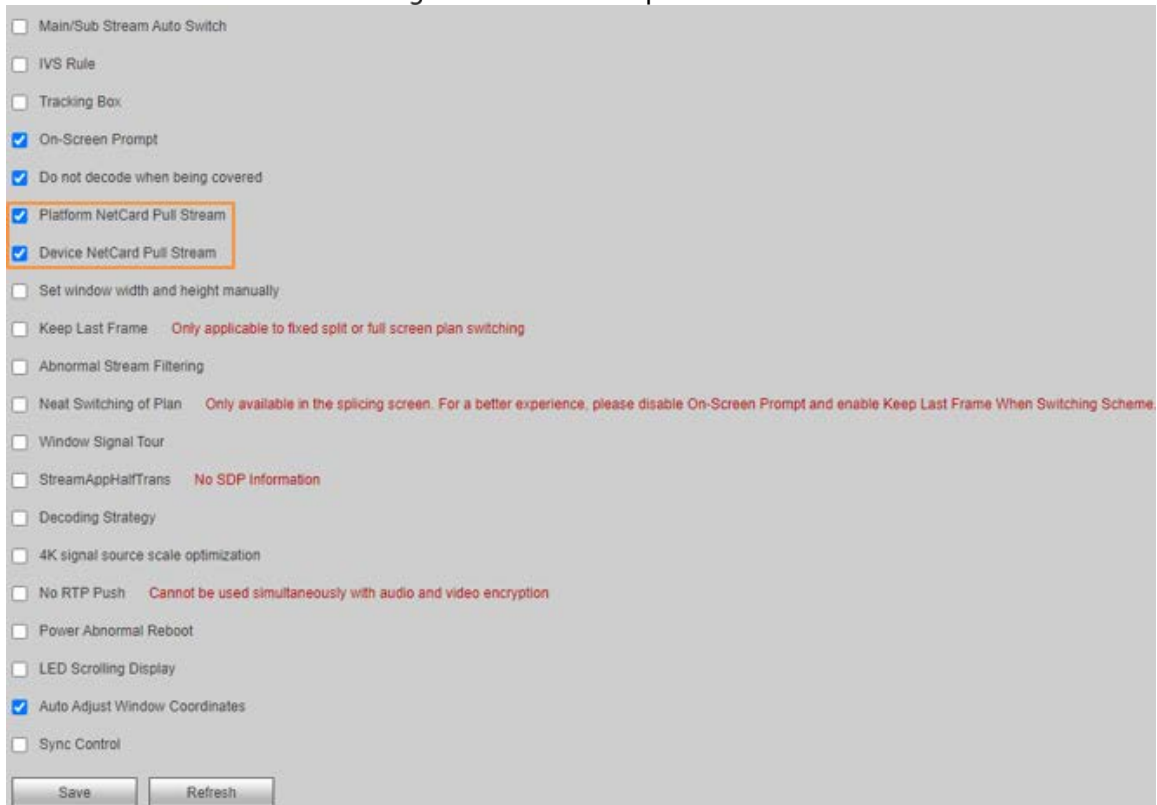
Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 2 Set the streaming mode to **NetCard Pull Stream**.

- 1) Log in to the device webpage.
- 2) Select **Setup > Display Management > Display Setup > Global Setup**.
- 3) Select all netcard pull stream and click **Save**.

Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Figure 2-5 Global setup



Step 3 Check network bandwidth.

- 1) Select **Information > System Status**.
- 2) Verify that all network interfaces in the device system status operate at Gigabit speed. If not, upgrade the network to Gigabit Ethernet.
- 3) Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 4 Log in to the front-end device webpage, and then check whether live view function is normal.

- If the live video on the front-end device is abnormal, this indicates a front-end signal issue. Contact technical support for the front-end device.
- If the live video on the front-end device is normal, contact technical support for the video matrix device.

2.6 Flickering or Line Interference on Video Wall

Possible Reasons

- Lack of common grounding between device and display power supplies.
- Substandard video cable quality or excessive cable length.

Solution

Step 1 Locate the grounding point near the power supply on the rear of the device. Connect it to the screen stand with high-quality wires, and ground both to earth.
Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 2 Replace with a higher-quality or shorter video cable. Avoid using signal converters to reduce signal reduction.
Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, contact the technical support.

2.7 No Audio Output After Video on Wall

Possible Reasons

- Audio is disabled in encoding settings.
- Incorrect audio output mode is selected in output settings.
- The audio function is disabled on the video wall page.
- Source video contains no audio track.
- Display device lacks speakers.
- Damaged audio cable.

Solution

Step 1 Enable audio in encoding settings.

- 1) Log in to the device webpage.
 - 2) Select **Setup > Signal Management > Local Signal > Encoding Setup**.
 - 3) In the **A/V Enable** row, select **Audio**, and then click **Save**.
 - 4) Check whether the issue is resolved.
- If resolved, the troubleshooting is complete. Otherwise, proceed to the following steps.

Figure 2-6 Encoding setup

Slot: [Dropdown] Channel: [Dropdown]
Audio Type: [Dropdown]

Main Stream

Encode Mode: [Dropdown]
Stream Type: [General Stream]
A/V Enable: ☐ Video ☒ Audio
Resolution: [Dropdown] ☐ Custom
Frame: [Dropdown]
Stream Control: [Limit Stream]
Stream Value: [Dropdown] ☐ Custom
Recommended: (768 - 4096Kbps)
Level: [Baseline]
Audio Format: [Dropdown]

Sub Stream

Encode Mode: [Dropdown]
Stream Type: [Sub Stream]
A/V Enable: ☒ Video ☒ Audio
Resolution: [Dropdown] ☐ Custom
Frame: [Dropdown]
Stream Control: [Limit Stream]
Stream Value: [Dropdown] ☐ Custom
Recommended: (768 - 4096Kbps)

[Save] [Refresh]

Configure the correct audio output mode.

- 1) Log in to the device webpage.
- 2) Select **Setup > Display Management > Display Setup**.
- 3) Select the correct audio output mode, click **OK**.
 - ◇ **Sub Card Output:** Decoded audio signals are output from the sub-card's audio output port.
 - ◇ **Main Control Output:** Decoded audio signals are output from the main control's audio output port.
 - ◇ **Sub Card & Main Control Output:** Decoded audio signals are simultaneously output from both the sub card's and main control's audio output ports.

Figure 2-7 Display setup

Slot: [3] Channel: [1]
Resolution: [1920*1080P@60] ☐ Customized
Display: [Force]
Audio Mode: [Out To SubCard]
Video Mode: [HDMI]

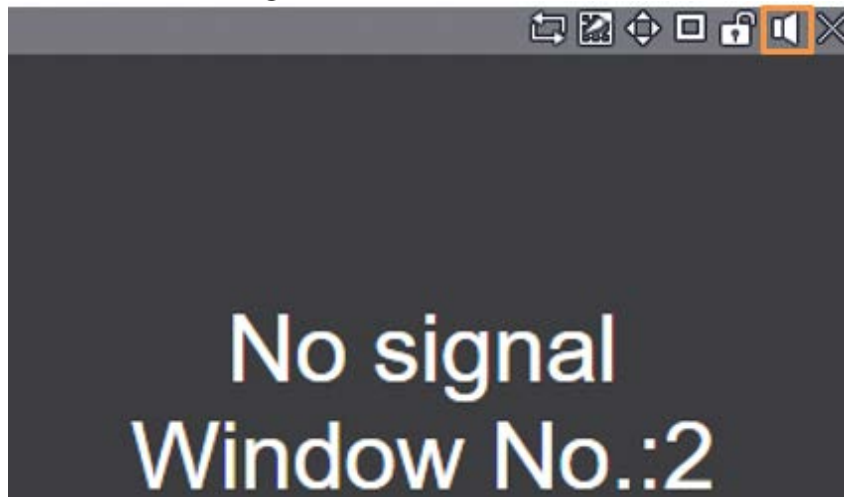
- 4) Check whether the issue is resolved.
- If audio is present, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 2 Enable the audio function of the video wall.

- 1) Log in to the device webpage.
- 2) Click the **Video Wall** tab.

- 3) At the upper-right corner of the preview page, click  to enable audio.

Figure 2-8 Video wall



- 4) Check whether the issue is resolved.
If audio is present, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 3 Upload other videos with audio to the wall.
If audio is present, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 4 Confirm whether the display has built-in speakers. If not, connect external speakers.
If audio is present, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 5 Replace the audio cable between the device and the screen.
If audio is present, the troubleshooting is complete. Otherwise, contact the technical support.

2.8 Distorted Color or Brightness on Output Display

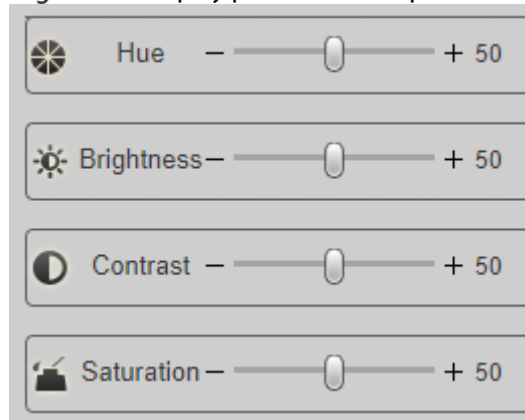
Possible Reasons

- Device and screen have impedance mismatch or inconsistent grounding.
- Excessive video transmission distance or significant signal reduction in video cables.
- Incorrect device settings for color, brightness, and more.

Solution

- Step 1 Check whether the grounding impedance of the device and screen is equivalent. If not, replace with equivalent impedance to ensure no voltage difference between them.
If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 2 Use shorter video cables. Avoid adapters to minimize signal reduction.
If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 3 Reconfigure device color and brightness parameters.
- 1) Log in to the device webpage.
 - 2) Select **Setup > Display Management > Display Setup > Display Setup**.
 - 3) Configure chroma, brightness, contrast, and saturation for the output screen.
If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, contact the technical support.

Figure 2-9 Display parameter setup



2.9 Mosaic Artifacts or No Image in the Live Image

Problem Description

In the live view window of the device webpage, the real-time display shows mosaic artifacts or fails to display the live video.

Possible Reasons

- Unstable network connection.
- The logged-in account has no permissions of the live view page.
- Privacy masking is enabled on the front-end device.
- Poor source image quality or resource limitations for stream pulling on front-end devices.



Resource limitation for stream pulling: The maximum number of concurrent stream connections supported by the front-end device has been reached.

Solution

- Step 1** Plug network cables out and in again, to ensure stable network conditions for the device. If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.
- Step 2** Switch accounts or grant preview permissions to the current account.
- 1) Log in to the device webpage with the administrator account.
 - 2) Select **Setup > System Config > User Management > User Management > User**.
 - 3) Select the target user and click .
 - 4) Select **Live view** in the **Authority** area.
If the **Live view** cannot be selected, the user's group lacks this authority. Change the user's group affiliation.

Figure 2-10 Change authority

Modify User

Username:

Share: ☒

Remark:

Group:

☐ Modify Password

Authority

- ☒ All
- ☒ User management
- ☒ System management*
- ☒ View System Info*
- ☒ Manual control
- ☒ Event setting
- ☒ Network management
- ☒ Sub network management
- ☒ Peripheral management
- ☒ Security Management
- ☒ Audio and video parameters
- ☒ Decode and display on vi...
- ☒ PTZ setting
- ☒ Device maintenance
- ☒ Live view
- ☒ Video wall management
- ☒ Video Wall[1]
- ☒ Video Wall[2]
- ☒ Video Wall[3]
- ☒ Video Wall[4]
- ☒ Video Wall[5]

Note: item with '*' is parent directory.

OK Cancel

5) Check whether the issue is resolved.

If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 3 Check whether privacy masking is enabled on the source device. If enabled, disable privacy masking on the front-end device.

If the display returns to normal. If yes, the troubleshooting is complete. Otherwise, proceed to the following steps.

Step 4 Switch between signal sources from different devices.

Check whether the display returns to normal. If yes, the troubleshooting is complete. Otherwise, contact the technical support.

3 Others

3.1 How Third-Party Devices Acquire our Device Streams

Step 1 Log in to the device webpage.

Step 2 Select **Setup > Network > Port**.

Step 3 Select **Enable RTSP**.

The RTSP stream access format will be displayed.

Figure 3-1 Connection setup

The screenshot shows a 'Connection Setup' window with the following fields and values:

Field	Value	Range
Max Connection	128	(1~128)
TCP Port	37777	(1025~65535)
UDP Port	37778	(1025~65535)
HTTP Port	80	(1~65535)
Enable RTSP	☒	
RTSP Port	554	(128~65535)
RTSP format	rtsp://<Username>:<Password>@<IP Address>:<Port>/cam/realmonitor?channel=1&subtype=0 channel: Channel, 1-8; subtype: Stream Type, Main Stream 0, Sub Stream 1.	

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

Step 4 Click **OK**.

Step 5 Check whether the issue is resolved.

If resolved, the troubleshooting is complete. Otherwise, contact relevant technical support.

3.2 What Do the Identifiers in System Logs Mean?

Step 1 Log in to the device webpage.

Step 2 Select **Info > System Log**.

Step 3 Select log type, set start time and end time, and then click **Search**.

Figure 3-2 Search results

System Log

Start Time: 2025 - 06 - 27 00 : 00 : 00 End Time: 2025 - 06 - 28 00 : 00 : 00

Type: All Search Found 7 logs Record Time: 2025-06-27 11:48:36 -- 2025-06-27 02:59:56

No.	Time
1	2025-06-27 11:48:36
2	2025-06-27 02:59:56
3	2025-06-27 02:59:56
4	2025-06-27 02:59:56
5	2025-06-27 02:59:56
6	2025-06-27 02:59:56
7	2025-06-27 02:59:56

System Log Info

Time: 2025-06-27 02:59:56

Type: Event Begin

Content: Event Type:info_log.powerPmbusAlarm

Backup ☐ File backup encryption

Common restart identifiers are as follows.

- **0x00:** Normal restart.
- **0x01:** Abnormal power failure (such as manual power cable removal. If unintended, typically indicates power supply or module failure).
- **0x02:** Log exception.
- **0x05:** Sub card exception.
- **0x6 (a, c, f, or 6):** Software crash (requires stack trace from the faulty device).
- **0x0a:** Watchdog restart.
- **0x0c:** Power off, and then restart.

3.3 Unstable Network Connection

Problem Description

The device frequently disconnects, or stream-pulling during live view is unstable with mosaic artifacts.

Possible Reasons

- Unstable network conditions.
- IP address conflicts.
- Switch failure or configuration error in local area network (LAN).

Solution

- Step 1** Plug network cables out and in again for stable network.
If the network recovers, the troubleshooting is complete. Otherwise, proceed to the next step.
- Step 2** Log in to the device local interface, and configure its IP address again.
If the network recovers, the troubleshooting is complete. Otherwise, proceed to the next step.
- Step 3** Check whether the configuration of the switch is correct. If there are any errors, correct them promptly.
If the network recovers, the troubleshooting is complete. Otherwise, contact the technical support.

3.4 Alarm Signal Cannot be Disarmed

Problem Description

The alarm signal lasts even after the triggering event has been resolved.

Possible Reasons

Software version issue.

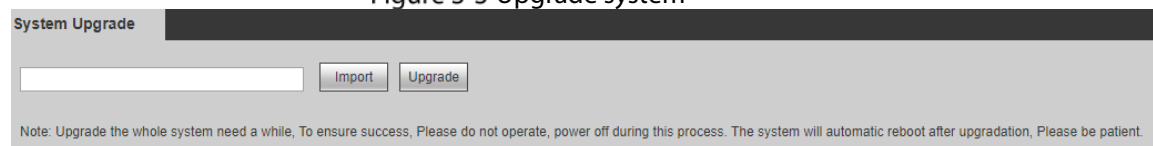
Solution

Step 1 Log in to the device webpage.

Step 2 Select **Setup > System Config > System Upgrade**.

Step 3 Click **Import**, and then select the correct upgrade file.

Figure 3-3 Upgrade system



Step 4 Click **Upgrade**.

A progress bar will be displayed during the upgrade. The device will automatically restart upon successful upgrade.

3.5 Downloaded Video Files Cannot be Played

Problem Description

Select **Info > Device Info > Decoding Info**, and then click  to download the video of the selected channel, but the video cannot be played.

Possible Reasons

The downloaded .dav file format requires a compatible player, which might not be installed on the local computer.

Solution

- Download our Player or VLC Media Player to play .dav files.
- Convert the downloaded video to the .avi format before playing.

Appendix 1 Security Recommendation

1. Account Management

1.1 Use complex passwords

Please refer to the following suggestions to set passwords:

- The length should not be less than 8 characters;
- Include at least two types of characters: upper and lower case letters, numbers and symbols;
- Do not contain the account name or the account name in reverse order;
- Do not use continuous characters, such as 123, abc, etc.;
- Do not use repeating characters, such as 111, aaa, etc.

1.2 Change passwords periodically

It is recommended to periodically change the device password to reduce the risk of being guessed or cracked.

1.3 Allocate accounts and permissions appropriately

Appropriately add users based on service and management requirements and assign minimum permission sets to users.

1.4 Enable account lockout function

The account lockout function is enabled by default. You are advised to keep it enabled to protect account security. After multiple failed password attempts, the corresponding account and source IP address will be locked.

1.5 Set and update password reset information in a timely manner

Our device supports password reset function. To reduce the risk of this function being used by threat actors, if there is any change in the information, please modify it in time. When setting security questions, it is recommended not to use easily guessed answers.

2. Service Configuration

2.1. Enable HTTPS

It is recommended that you enable HTTPS to access Web services through secure channels.

2.2 Encrypted transmission of audio and video

If your audio and video data contents are very important or sensitive, we recommend you to use encrypted transmission function in order to reduce the risk of your audio and video data being eavesdropped during transmission.

2.3 Turn off non-essential services and use safe mode

If not needed, it is recommended to turn off some services such as SSH, SNMP, SMTP, UPnP, AP hotspot etc., to reduce the attack surfaces.

If necessary, it is highly recommended to choose safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up complex passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up complex passwords.

2.4 Change HTTP and other default service ports

It is recommended that you change the default port of HTTP and other services to any port between 1024 and 65535 to reduce the risk of being guessed by threat actors.

3. Network Configuration

3.1 Enable Allow list

It is recommended that you turn on the allow list function, and only allow IP in the allow list to access the device. Therefore, please be sure to add your computer IP address and supporting device IP address to the allow list.

3.2 MAC address binding

It is recommended that you bind the IP address of the gateway to the MAC address on the device to reduce the risk of ARP spoofing.

3.3. Build a secure network environment

In order to better ensure the security of devices and reduce potential cyber risks, the following are recommended:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- According to the actual network needs, partition the network: if there is no communication demand between the two subnets, it is recommended to use VLAN, gateway and other methods to partition the network to achieve network isolation.
- Establish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

4. Security Auditing

4.1 Check online users

It is recommended to check online users regularly to identify illegal users.

4.2 Check device log

By viewing logs, you can learn about the IP addresses that attempt to log in to the device and key operations of the logged users.

4.3 Configure network log

Due to the limited storage capacity of devices, the stored log is limited. If you need to save the log for a long time, it is recommended to enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

5. Software Security

5.1 Update firmware in time

According to the industry standard operating specifications, the firmware of devices needs to be updated to the latest version in time in order to ensure that the device has the latest functions and security. If the device is connected to the public network, it is recommended to enable the online upgrade automatic detection function, so as to obtain the firmware update information released by the manufacturer in a timely manner.

5.2 Update client software in time

It is recommended to download and use the latest client software.

6. Physical Protection

It is recommended that you carry out physical protection for devices (especially storage devices), such as placing the device in a dedicated machine room and cabinet, and having access control and key management in place to prevent unauthorized personnel from damaging hardware and other peripheral equipment (e.g. USB flash disk, serial port).