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Thank you for purchasing Laview Premium Network Video Recorder System. Your LV-N System Represents the state of art in Network video Recording and is designed for reliable and trouble-free performance. This User Guide is designed to illustrate the most common feature. Content of User manual may vary between different model number/device. For complete instruction/user manual please refer to the Utility disk that comes with the kit or go to our website at www.laviewusa.com/support

Front Panel

LV-N9916C6E                LV-N9808C8E

Description of Control Panel Buttons

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Function Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Status Indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POWER</td>
<td>Turns green when NVR is powered up.</td>
</tr>
<tr>
<td></td>
<td>READY</td>
<td>The indicator is green when the device is running normally.</td>
</tr>
<tr>
<td></td>
<td>STATUS</td>
<td>The light is green when the IR remote control is enabled; The light is red when the function of the composite keys (SHIFT); The light is out when none of the above condition is met.</td>
</tr>
<tr>
<td></td>
<td>ALARM</td>
<td>The light is red when there is an alarm occurring.</td>
</tr>
<tr>
<td></td>
<td>HDD</td>
<td>Blinks red when HDD is reading/writing.</td>
</tr>
<tr>
<td></td>
<td>Te/Re</td>
<td>Blinks green when network connection is functioning normally.</td>
</tr>
<tr>
<td>2</td>
<td>DVD/BD/R/W</td>
<td>Slot for DVD/BD/R/W.</td>
</tr>
<tr>
<td></td>
<td>DIRECTION</td>
<td>In menu mode, the direction buttons are used to navigate between different fields and items and select setting parameters. In playback mode, the Up and Down buttons are used to speed up and slow down record playing, and the Left and Right buttons are used to move the recording 30s forwards or backwards. In the image setting interface, the up and down button can adjust the level bar of the image parameters. In free view mode, these buttons can be used to switch channels.</td>
</tr>
<tr>
<td>3</td>
<td>Control Buttons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENTER</td>
<td>The Enter button is used to confirm selection in menu mode, or used to check checkbox fields and ON/OFF switch. In playback mode, it can be used to play or pause the video. In single-frame play mode, pressing the Enter button will play the video by a single frame. In auto sequence view mode, the buttons can be used to pause or resume auto sequence.</td>
</tr>
<tr>
<td></td>
<td>SHIFT</td>
<td>Switch between the numeric or letter input and functions of the composite keys. (Input letter numbers when the light is out. Realize functions when the light is red.)</td>
</tr>
<tr>
<td></td>
<td>Numbers/letters</td>
<td>Key in numbers or letters in NVR user interface.</td>
</tr>
<tr>
<td>4</td>
<td>Composite Keys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JOG SHUTTLE</td>
<td>Move the active selection in a menu. It will move the selection up and down. In Live View mode, it can be used to cycle through different channels. In the Playback mode, it can be used to jump 30s forward/backward in video files. In PTZ control mode, it can control the movement of the PTZ camera.</td>
</tr>
<tr>
<td></td>
<td>POWER ON/OFF</td>
<td>Power on/off switch.</td>
</tr>
<tr>
<td>5</td>
<td>USB Interfaces</td>
<td>Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).</td>
</tr>
</tbody>
</table>

Rear Panel

LV-N9916G6E                LV-N9808C8E

Description of Rear Panel Interfaces

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VIDEO OUT</td>
<td>BNC connector for video output.</td>
</tr>
<tr>
<td>2</td>
<td>CVBS AUDIO OUT</td>
<td>BNC connector for audio output. This connector is synchronized with CVBS video output.</td>
</tr>
<tr>
<td></td>
<td>VGA AUDIO OUT</td>
<td>BNC connector for audio output. This connector is synchronized with VGA video output.</td>
</tr>
<tr>
<td>3</td>
<td>LINE IN</td>
<td>BNC connector for audio input.</td>
</tr>
<tr>
<td>5</td>
<td>VGA</td>
<td>DB9 connector for VGA output. Display local video output and menu.</td>
</tr>
<tr>
<td>6</td>
<td>HDMI</td>
<td>HDMI video output connector.</td>
</tr>
<tr>
<td>7</td>
<td>eSATA (Optional)</td>
<td>Connects external SATA HDD, CD/DVD-ROM.</td>
</tr>
<tr>
<td>8</td>
<td>LAN Interface</td>
<td>Connector for LAN (Local Area Network).</td>
</tr>
<tr>
<td>9</td>
<td>Termination Switch</td>
<td>RS-485 termination switch. Up position shows the RS-485 is terminated. Down position shows the RS-485 is terminated with 120Ω resistance.</td>
</tr>
<tr>
<td>10</td>
<td>RS-485 Interface</td>
<td>Connector for RS-485 devices. T+ and T- pins connect to R+ and R- pins of PTZ receiver respectively.</td>
</tr>
<tr>
<td></td>
<td>Controller Port</td>
<td>D+ D- pin connects to Ta, Tb pin of controller. For cascading devices, the first NVR’s D+, D- pin should be connected with the D+, D- pin of the next NVR.</td>
</tr>
<tr>
<td></td>
<td>ALARM IN</td>
<td>Connector for alarm input.</td>
</tr>
<tr>
<td></td>
<td>ALARM OUT</td>
<td>Connector for alarm output.</td>
</tr>
<tr>
<td>11</td>
<td>GROUND</td>
<td>Ground (needs to be connected when NVR starts up).</td>
</tr>
<tr>
<td>12</td>
<td>AC 100V ÷ 240V</td>
<td>AC 100V ÷ 240V power supply.</td>
</tr>
<tr>
<td>13</td>
<td>POWER</td>
<td>Switch for turning on/off the device.</td>
</tr>
<tr>
<td>14</td>
<td>USB Interface</td>
<td>Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).</td>
</tr>
<tr>
<td>15</td>
<td>Network Interfaces with PoE function</td>
<td>Network interface for the cameras and to provide power over Ethernet.</td>
</tr>
</tbody>
</table>

IR Remote Control Operations

The NVR may also be controlled with the included IR remote. Complete instruction on remote control can be found in the online user manual at our download center at www.laviewusa.com/support/download.

Note: Batteries (2×AAA) must be installed before operation.

USB Mouse Operation

A regular 3-button (Left/Right/Scroll-wheel) USB mouse can also be used with this NVR. To use a USB mouse:

1. Plug USB mouse into one of the USB interfaces on the front panel of the NVR.
2. The mouse should automatically be detected. In the rare case that the mouse is not detected, the possible reason may be that the two devices are not compatible, please refer to the recommended device list from your provider.
Starting Up and Shutting Down the NVR

Before you start:
Check that the voltage of the extra power supply is the same as the NVR’s requirement, and the ground connection is working properly.

Steps:
1. Check that the power supply is plugged into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device.
2. Turn on the power switch on the rear panel.
3. After startup, the Power LED indicator turns on. A splash screen with the status of the HDD appears on the monitor. The row of icons at the bottom of the screen shows the HDD status. ‘X’ means that the HDD is not installed or cannot be detected.

Shutting down the NVR
Steps:
1. Enter the Shutdown menu. Menu > Shutdown
2. Click the Shutdown button.
3. Click the Yes button.
4. Turn off the power switch on the rear panel when the Prompt pops up.

Adding and Connecting IP Cameras

Note: ONVIF compatibility means the camera can be supported both when it uses the ONVIF protocol and its private protocols. **Only ONVIF is supported** means the camera can only supported when it uses the ONVIF protocol.

Adding the Online IP Cameras

Purpose:
The main function of the NVR is to connect the network cameras and record the video captured. So before you can get live view or recorded video, you should add the network cameras to the connection list of the device.

Before you start:
Ensure that the network connection is valid and correct. For detailed checking and configuring of the network, please see Chapter Checking Network Traffic and Chapter Configuring Network Detection.

Option 1:
Steps:
1. Right-click the mouse when you are in live view mode to show the menu bar.
2. Select (Auto) or (Manual).

- **Auto** The device will add the detected IP cameras or encoders automatically by using the admin user name and password.

Option 2:
Steps:
1. Enter the Camera Management interface. Menu > Camera > Camera
2. To add online cameras with same network segment:
   1) Click **Search** to search for online cameras.
   2) You can edit the IP address, protocol, management port, and other information for the IP camera.
   3) Click **Add** to add the camera.
Camera Settings Interface

2) Check the box next to cameras to be added.
3) Click Quick Add to add the camera.
4) To add other IP cameras:
   1) On the left side of the interface, you can enter the IP address, protocol, management port, user name, password and other information for the IP camera.
   2) Click Add to add the camera.
   Note: If you check the Synchronize IP Camera checkbox, the default settings of the NVR for IP cameras is applied to the added camera.

Editing the Connected IP cameras and Configuring Customized Protocols

After the IP cameras are added, the basic information of the camera will show in the page, you can configure the basic settings of the IP cameras.

Steps:
1. Click the icon to edit the parameters; you can edit the IP address, protocol and other settings.

   Editing IP Cameras Interface

   2. Click apply to save the settings and click OK to exit the editing interface.

   Configuring customized protocols

   Purpose:
   To connect the network cameras which are not configured with standard protocols, you can configure customized protocols for them.

   Steps:
   1. Choose the protocol type and choose the transfer protocols.
   Note: The protocol type and the transfer protocols must be supported by the connected network camera.
   After adding customized protocols, you can see the protocol name listed in the dropdown list.

   Protocol Setting

   2. Choose the protocols you just added to validate the connection of the network camera.

   List of Connected Cameras

   Editing IP Cameras connected to the PoE interfaces

   The PoE interface enables the NVR system to pass electrical power and data, through Ethernet cabling to the connected network cameras.
   LaView NVRs provides PoE interfaces which can connect to network cameras directly; and if you don't use the PoE interface, you can also connect to the online network cameras. The PoE interface supports the Plug-and-Play function.

   Example:
   For LaView NVRs, when you want to connect 1 online camera and connect 3 network cameras via PoE interfaces, you must disable 1 PoE interface in the Edit IP camera panel.
   To add Cameras for NVR supporting PoE function:
   Before you start:
   Connect the network cameras using the PoE interfaces.
   Steps:
   1. Enter the Camera Management interface.

   Main menu> Camera> Camera
   The connected cameras are listed.

   Notes:
   Plug-and-Play means that the camera is connected to the PoE interface. The parameters of the camera can’t be edited here. The IP address of the camera can only be edited in the Network Configuration interface, see Chapter Configuring General Settings for detailed information.

   Editing IP cameras connected to the built-in switch network interfaces

   In LaView NVRs, the extra network interfaces provide a built-in switch with plug-and-play function.
   Example:
   When you want to connect 2 online cameras and 6 network cameras via built-in switch interfaces, you must disable 2 built-in switch interfaces in the Edit IP camera panel.
   To add Cameras for NVR via built-in switch interfaces:
   Before you start:
   Connect the network cameras via the built-in switch interfaces.
   Steps:
   1. Enter the Camera Management interface.

   Main menu> Camera> Camera
   The connected cameras should be listed.
List of Connected Cameras

Note: The cameras connected to the built-in switch interface cannot be deleted in this menu.

2. Click the Edit button.

Edit IP Camera Interface

Note: Plug-and-Play means that the camera is connected to the switch interface. The parameters of the camera can’t be edited here. The IP address of the camera can only be edited in the Network Configuration interface.

Chapter 3 Live View

Introduction of Live View

Live view shows you the video captured by each camera in real time. The NVR automatically enters Live View mode when powered on.

Live View Icons

In the live view mode, there are icons at the top right of the screen, showing the status of each channel, so that you can see whether the channel is recording, or whether there are alarms being triggered.

Operations in Live View Mode

In live view mode, there are many functions provided. The functions are listed below.

- Single Screen: Showing only one screen on the monitor.
- Multi-screen: Showing multiple screens on the monitor simultaneously.
- Auto-switch: The screen is auto switched to the next one. You must set the dwell time for each screen on the configuration menu before enabling auto-switch.

Menu>Configuration>Live View>General.
- Start Recording: Normal record and motion detection record are supported.
- Output Mode: Select the output mode to Standard, Bright, Gentle or Vivid.
- All-day Playback: Playback the recorded videos for the selected day.

Using the Mouse in Live View

Mouse Operation in Live View

Note: The dwell time of the live view configuration must be set before using Start Auto-switch.

Note: Reboot Intelligence is enabled when right-clicking on a camera as long as the corresponding camera supports intelligent function.
Adjusting Live View Settings

Purpose:
Live View settings can be customized according to your needs. You can configure the output interface, dwell time for each channel, mute/volume for audio, the screen number for each channel, etc.

Steps:
1. Enter the Live View Settings interface.
   Menu> Configuration> Live View

2) Select the small box, and double-click on the camera number to display that channel on the window.

You can click [ ] button to enable live view for all the channels and click [ ] to stop live view.

3) Click the Apply button to save the settings.

Configuring PTZ Settings

Purpose:
Follow the procedure to set the parameters for PTZ. The configuring of the PTZ parameters must be done before you can control the PTZ camera.

Steps:
1. Enter the PTZ Settings interface.
   Menu > Camera > PTZ

2. Choose the camera in the Camera dropdown list.

3. Enter the parameters of the PTZ camera.
   Note: All the parameters should be in the PTZ camera parameters section of the camera manual.
   Example: If the PTZ camera uses the protocol of DRAGON, you should select DRAGON in the PTZ Protocol field.

4. Click Apply button to save the settings.

Setting PTZ Presets, Patrols & Patterns

Before you start:
Please make sure that the presets, patrols and patterns are supported by PTZ protocols.

Steps:
1. Enter the PTZ Control interface.
   Menu > Camera > PTZ > More Settings

2. Use the directional button to wheel the camera to the location that you want to as preset.

3. Click the round icon next to Save Preset.

4. Click the preset number to save the preset.
Repeat the steps2-4 to save more presets. If the number of the presets you want to save is more than 17, you can click […] and choose the available numbers.

Calling Presets

Purpose:
This feature enables the camera to point to a specified position such as a window when a preset is needed.

Call preset in the PTZ setting interface:
Steps:
1. Enter the PTZ Control interface.
   Menu > Camera > PTZ > More Settings

2. Check the round icon of Call Preset.
Choose the preset number.

**Call preset in live view mode:**

**Steps:**

1. Press the PTZ button on the front panel or click the PTZ Control icon in the quick setting bar to enter the PTZ setting menu in live view mode.

2. Choose Camera in the list on the menu.

3. Double click the preset in the Preset list to call it.
   The camera will move to the saved location from the preset selected.

---

### Configuring Encoding Parameters

**Purpose:**

By configuring the encoding parameters you can adjust image quality, through changing transmission stream type, resolution, etc.

**Before you start:**

Make sure that the HDD has already been installed.

If not, please install a HDD and initialize it.

(Menu>HDD>General)

---

**Check the storage mode of the HDD:**

Click Advanced to check the storage mode of the HDD.

If the HDD mode is Quota, please set the maximum record capacity and maximum picture capacity.

For detailed information, see Chapter Configuring Quota Mode.

If the HDD mode is Group, you should set the HDD group. For detailed information, see Chapter Configuring HDD Group for Recording.

---

**Steps:**

Enter the Record settings interface to configure the encoding parameters:

Menu>Record-Encoding

Encoding Parameters for Recording

Select Record tab page to configure stream type, resolution, and other parameters as needed.

**Pre-record:** The amount of time to be recorded prior to an alarm-triggered event. For example, if you set the pre-record time as 5 seconds, when an alarm triggers recording at 10:00, the camera saves video starting at 9:59:55.

**Post-record:** The time you set to be recorded after the event. For example, if you set the post-record time as 5 seconds, when an alarm triggered the recording ends at 11:00, it continues recording till 11:00:05.

**Expiration Time:** Expired time, is the amount of time for a record file to be kept in the HDD. If the deadline is reached, the file will be deleted. You can set the expired time to 0, and then files will never be deleted. Storage time for files should be determined by the capacity of the HDD.

**Redundant Record:** Enabling redundant record means the recording is saved in the redundant HDD. See Chapter Configuring Redundant Recording.

**Record Audio:** Check the checkbox to enable or disable audio recording.

Click Apply to save the settings.

Encoding Parameters Settings for Sub-stream

Enter the Sub-stream tab page.

---

**Configure the parameters of the camera.**

Click Apply to save the settings.

### Configuring Record Schedule

**Purpose:**

Set the recording schedule for the camera to automatically start/stop recording according to the configured schedule.

**Steps:**

Enter the Record Schedule interface.
Menu>Record>Schedule
Configure Record Schedule
Select Record Schedule.

To arrange any other schedule, leave the All Day checkbox blank and set the Start/End time.

**Note:** Up to 8 periods can be configured for each day. The time periods cannot be overlapped.

Repeat these steps to schedule recording for other days of the week. If the schedule can also be applied to other days, click Copy.

Choose the camera you want to configure, check the checkbox next to Enable Schedule item. Click Edit button or click the icon under the edit button and click and drag the schedule desired on the panel.

**Edit the schedule:**
In the message box, you can choose the day to which you want to set schedule.

Click OK to go back to upper level menu.
Click Apply in the Record Schedule interface to save the settings.

**Draw the schedule:**
Click on the color icons, you can choose the scheduled recording type as normal or event triggered.

Descriptions of the scheduled recording icons are shown in the figure below.

Click the Apply button to validate the settings.
If you wish to use these settings for other channels, click Copy, then choose the channel to which you want to copy the settings.

Configure Motion Detection:
Choose camera you want to configure. Check the checkbox next to Enable Motion Detection. Crop the area for motion detection by mouse. If you want to set motion detection for the area shot by the camera, click Full Screen. To start over, click Clear.

Click Setting to select channels that will link to the motion detection trigger.

**Configuring Motion Detection Record**

**Purpose:**
Follow these steps to set the motion detection parameters. In live view mode, when a motion detection event takes place, the NVR can analyze it and carry out a variety of actions to handle it. Enabling motion detection function can trigger certain channels to start recording, full screen monitoring, audio warning, notify the surveillance center etc.

**Steps:**
Enter the Motion Detection interface. Menu>Camera>Motion
Manual Record

**Purpose:**
Follow the steps to set parameters for manual recording.

**Steps:**
Enter the Manual settings interface.
Menu> Manual
Or press the REC button on the remote control.

Enabling Manual Record:
Select **Record** on the left bar.
Next to the camera number, change **off** to **on**.

Disabling manual record:
Next to the camera number, change **on** to **off**.

**Note:** After rebooting, all manual records enabled are canceled.

Start all-day continuous recording or all-day motion detection recording on all channels:
Click **Yes** for **Continuous**, **Motion Detection**.

Continuous Recording

Playing Back Record Files

**Playing Back by Channel**

**Purpose:**
Play back the recorded video files of a specific channel in live view mode. Channel switch is supported.

**OPTION 1:**
Choose a channel in live view mode using the mouse and click the **button in the quick setting toolbar.

**Note:** In instant playback mode, only files recorded during the last five minutes on this channel will be played back.

Instant Playback Interface

**OPTION 2:**
Enter the Playback interface.
Mouse: right click a channel in live view mode and select **Playback** from the menu.

**Playback Interface**
Click on multiple channel(s) to execute simultaneous playback.

**Toolbar of Playback**

**Note:**
Indicates the start/end time of recording.
Detailed Explanation of Playback Toolbar

**Playing Back by Time**

**Purpose:**
Play back video files recorded in specified time duration. Multi-channel simultaneous playback and channel switch are supported.

**Steps:**
Enter playback interface.
Menu>Playback
Check off channel(s) in the channel list and then double-click to select a date on the calendar.

Front Panel: press **PLAY** button to play back recorded files from the channel under single-screen live view mode.
When on multi-screen live view mode, the recorded files from the top-left channel will be played back.

**Note:** During playback process, pressing the numerical buttons will switch playback to the corresponding channels.
Playback management:
The toolbar on the bottom of the Playback interface can be used to control playing progress.
Note: The 2013-09-10 16:18:14 -- 2013-09-10 18:44 indicates the start/end time of the recording.

Playback Calendar

Note:
If a camera has recordings from that day, the icon in the calendar is displayed as . Otherwise it is displayed as . The selected date is surrounded by a white rectangle, as in .

In the Playback interface:
The toolbar at the bottom of the Playback interface can be used to control playing progress.

Playing Back by Event Search

Purpose:
Play back specific files on one or several channels by restricting event type (e.g. alarm input and motion detection).

Steps:
Enter the Playback interface.
Menu>Playback
Select Event in the drop-down list on the top-left.
Select Alarm Input or Motion as the event type and set the Start time and End time.

Click the Search button to get search results from the information provided. Refer to right-side bar for results.

Click the button to play back the file.

Note:
Pre-play and post-play can be configured.
If the event is set to trigger recording on multiple channels, clicking the will activate the Synch Playback interface. You can select which channels to play back synchronously.
Click the Back button to go back to the search interface.
Playback interface:
The toolbar at the bottom of the Playback interface can be used to control playing progress.

Smart Search

Purpose:
In order to locate motion detection events easily in the playback progress bar, you can analyze a certain area/scene to get all of the related motion detection events that occurred in the area.

Note: The smart search function may vary according to the camera connected to the NVR.

Before you start:
Log in the network camera using your web browser, and enable the Dynamic Analysis for Motion by checking the checkbox next to it. Enter the motion detection configuration interface: Configuration> Advanced Configuration> Events> Motion Detection.
Motion Detection Settings

Enable the motion detection function and set the arming area to full screen using the NVR's local menu.

Steps:
Enter the Playback interface and play a record file.

Click on the playback toolbar to enter Smart Search mode.
Click and drag the mouse to crop an area. You can click the button to set the whole screen as a search area. After cropping an area, click the button to execute smart search in this area.

Note: Multi-area searching modes are supported.

Smart search findings will be marked as in the progress bar.
The hidden list of recorded files appear when mouse is moved to the right of the playback interface.

Digital Zoom

Steps:
Click the button on the playback toolbar to enter Digital Zoom interface.
Use the mouse to crop an area and the cropped image will be enlarged up to 16 times.

Right-click the image to exit the digital zoom interface.

Reverse Playback of Multi-channel

Purpose:
You can play back multi-channel recordings in reverse. 16-ch (with up to 1280*720 resolution), 4-ch (with up to 1920*1080P resolution) and 1-ch (with up to 2560*1920 resolution) reverse playback are all supported.

Steps:
Enter Playback interface.
Menu>Playback
Check multiple checkboxes to select multiple channels, and select a date on the calendar.

Note:
Playback progress bar: Use the mouse to click on any point in the progress bar or drag the progress bar to locate specific frames.
**Backing Up Footage Files**

**Quick Export**

**Purpose:**
Export record files to backup device(s) quickly.

**Steps:**
1. Enter Video Export interface.
   Menu>Export>Normal
   Choose the channel(s) you want to back up and click
   **Export.**

   *Note:* The time duration of recordings on a specified channel cannot exceed one day. Otherwise, the message box “Max. 24 hours are allowed for quick export.” will pop up.

2. Export.
   Go to Export interface, choose backup device and click **Export** to start exporting.

   *Note:* Here we show a USB Flash Drive.

---

**Checkup of Quick Export Result Using USB1-1**

3. Check backup result.
   Choose the file in the Export interface and click **Play** to check it.

   *Note:* The Player (player.exe) will be exported automatically.

---

**Backing up by Video Search**

**Purpose:**
Files can be stored to various devices, such as USB devices (USB flash drives, USB HDDs, USB writer) and DVD-R/W.

**Backup using USB flash drives, USB HDDs, USB writer and DVD-R/W**

**Steps:**
1. Enter Export interface.
   Menu>Export>Normal

2. Set search condition and click **Search**.

   *Notes:*
   1) Six different Record types are selectable: Continuous, Motion, Alarm, Motion & Alarm, Command Triggered and Manual.
   2) Two different file types are selectable: Unlocked and Locked.

---

**Result of Normal Video Search for Backup**

4. Export.
   Click **Export** and start backup.

   *Note:* If the inserted device is not recognized:
   - Click **Refresh**
   - Reconnect device.
   - Check for compatibility from vendor.
   You can also format USB flash drives or USB HDDs via the device. USB writer and DVD-R/W cannot be formatted.

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**Export Finished**

5. Check backup result.
   Choose the file in Export interface and click **Play** to check it.

   *Note:* The Player (player.exe) will be exported automatically.
Chapter 8 Network Settings

Configuring General Network Settings

Purpose:
Network settings must be properly configured before you operate NVR over network.

Steps:
1. Enter the Network Settings interface. Menu >Configuration>Network
2. Select the General tab.
3. In the General Settings interface, you can configure the following settings: NIC Type, IPv4 Address, IPv4 Gateway, MTU and DNS Server. If the DHCP server is available, you can check the checkbox next to DHCP to automatically obtain an IP address and other network settings from that server.

Note: For the LV-N9808C8E series NVR, you need to configure the internal NIC address, so that IP addresses are assigned to the cameras connected to the PoE or built-in switch interfaces.

Note: The valid value range of MTU is 500 ~ 9676.
4. After configuring the general settings, click Apply to save the settings.

Configuring advanced Settings

Configuring DDNS

Purpose:
If your NVR is set to use PPPoE as its default network connection, you may set Dynamic DNS (DDNS) to be used for network access. Prior registration with your ISP is required before configuring the system to use DDNS.

Steps:
1. Enter the Network Settings interface. Menu >Configuration>Network
2. Select the DDNS tab to enter the DDNS Settings interface.
3. Check the DDNS checkbox to enable this feature.
4. Select DDNS Type. Five different DDNS types are selectable: IPServer, DynDNS, PeanutHull, NO-IP and HiDDNS.

Configuring NTP Server

Purpose:
A Network Time Protocol (NTP) Server can be configured on your NVR to ensure the accuracy of system date/time.

Steps:
1. Enter the Network Settings interface. Menu >Configuration>Network
2. Select the NTP tab to enter the NTP Settings interface.
3. Check the Enable NTP checkbox to enable this feature.
4. Configure the following NTP settings:
   • Interval: Time between the two synchronizing actions with NTP server. The unit of time is in minutes.
   • NTP Server: IP address of NTP server.
   • NTP Port: Port of NTP server.
5. Click the Apply button to save settings and exit the interface.

Note: The time synchronization interval can be set from 1 to 10,080 min, and the default
value is 60min. If the NVR is connected to a public network, you should use a NTP server that has a time synchronization function, such as the server at the National Time Center (IP Address: 210.72.145.44). If the NVR is set up in a customized network, NTP software can be used to establish a NTP server used for time synchronization.

### Configuring RTSP

**Purpose:**
The RTSP (Real Time Streaming Protocol) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers.

**Steps:**
1. Enter the Network Settings menu Menu > Configuration > Network
2. Select the **More Settings** tab to enter the More Settings menu

#### RTSP Settings Interface

3. Enter the RTSP port in the text field next to **RTSP Service Port**. The default RTSP port is 554, and you can change it accordingly.
4. Click **Apply** button to save settings and exit the menu.

### Configuring Email

**Purpose:**
The system can be configured to send an email notification to designated users if an alarm motion event is detected or if the administrator password is changed.

Before configuring the email Settings, the NVR must be connected to a local area network (LAN) that maintains an SMTP mail server. The network must also be connected to either an intranet or the Internet depending on the location of the e-mail accounts to which you want to send notifications.

**Steps:**
1. Enter the Network Settings interface. Menu > Configuration > Network
2. Set the IPv4 Address, IPv4 Subnet Mask, IPv4 Gateway and the Preferred DNS Server in the Network Settings menu.
3. Click the **Apply** button to save the settings.
4. Enter the Server Port and HTTP Port in the text fields. The default Server Port is 8000 and the HTTP Port is 80, and you can change them according to different requirements.
5. Click **Apply** button to save settings and exit the interface.

Note: The Server Port should be set to the range of 2000-65535 and is used for remote client software access. The HTTP port is used for remote IE access.

### Configuring Server and HTTP Ports

**Purpose:**
You can change the server and HTTP ports in the Network Settings menu. The default server port is 8000 and the default HTTP port is 80.

**Steps:**
1. Enter the Network Settings interface. Menu > Configuration > Network
2. Select the **More Settings** tab to enter the More Settings interface.

#### Email Settings Interface

3. Configure the following settings:

   **Server Authentication (optional):**
   - Check the checkbox to enable the server authentication feature.
   - **User Name:** The user account of sender’s email for SMTP server authentication.
   - **Password:** The password of sender’s email for SMTP server authentication.
   - **SMTP Server:** The SMTP Server IP address or host name (e.g., smtp.263xmail.com).
   - **SMTP Port No.:** The SMTP port. The default TCP/IP port used for SMTP is 25.
   - **Enable SSL (optional):** Click the checkbox to enable SSL if required by the SMTP server.
   - **Sender:** The name of sender.
   - **Sender’s Address:** The email address of sender.
   - **Receivers:** Select the receiver. Up to 3 receivers can be configured.
   - **Receiver’s Address:** The email address of user to be notified.
   - **Receiver’s Address:** The email address of user to be notified.
   - **Attached Pictures:** Check the checkbox if you want to send emails with attached alarm scene images. The interval is the time before another alarm event image is sent. You can also set SMTP port and enable SSL here.
   - **Interval:** The interval refers to the time between two alarm scene pictures.

4. You can click **Test** button to test whether your settings work. An Attention message box will pop up. Refer to 0.

### Remote Viewing

**Purpose:**
You can view both the live and recorded footage from your mobile devices like smart phones, tablets or laptops.

**Steps:**
1. Connect the NVR to your router.
2. Find out the Local IP address of the NVR in your Local Area Network (i.e.: 192.168.x.x, 10.0.0.x)
3. In your network router setting interface, complete the Port Forwarding of the HTTP Port (Default: 80), SERVER Port (Default: 8000) and RTSP Port (Default: 8554) for the IP address of the NVR.

#### More Settings Interface

4. Download LaView Net / LaView Net HD from the IOS App Store or Google Play Store
5. Set up the device in the app by going to Menu > Devices > Add > Manual Adding. See figure below for more details
6. Save the settings and click on ‘Start Live View’ to view the footage.
Chapter 9 HDD Management

Initializing HDDs

**Purpose:**
A newly installed hard disk drive (HDD) must be initialized before it can be used with your NVR.

**Steps:**
1. Enter the HDD Information interface. **Menu > HDD > General**
2. Select HDD to be initialized.
3. Click the **Init** button.
4. **OK** button to start initialization.

5. After the HDD has been initialized, the status of the HDD will change from *Uninitialized* to *Normal*.

**Note:** Initializing the HDD will erase all data on it.

Managing Network HDD

**Purpose:**
You can add the allocated NAS or disk of IP SAN to your NVR, and use it as a network HDD.

**Steps:**
1. Enter the HDD Information interface. **Menu > HDD > General**
2. Click the **Add** button to enter the Add NetHDD interface.
3. Add the allocated NetHDD.
4. Select the type as either NAS or IP SAN.
5. Configure the NAS or IP SAN settings.
   - **Add NAS disk:**
     1) Enter the NetHDD IP address in the text field.
     2) Enter the NetHDD Directory in the text field.
     3) Click the **OK** button to add the configured NAS disk.
   - **Add IP SAN:**
     1) Enter the NetHDD IP address in the text field.
     2) Click the **Search** button to view available IP SAN disks.
     3) Select the IP SAN disk from the list shown.
     4) Click the **OK** button to add the selected IP SAN disk.

   **Note:** Only 1 IP SAN disk can be added.

6. After successfully adding the NAS or IP SAN disk, return to the HDD Information menu. The added NetHDD will now be displayed in the list.

   **Note:** If the added NetHDD is uninitialized, please select it and click the **Init** button for initialization.

Managing HDD Group

Setting HDD Groups

**Purpose:**
Multiple HDDs can be managed in groups. Video from specified channels can be recorded onto a particular HDD group through HDD settings.

**Steps:**
1. Enter the Storage Mode interface. **Menu > HDD > Advanced**
2. Set the **Mode** to Group.
3. Click the **Apply** button and the following message box will pop up;

   **Attention for Reboot**

4. Click the **Yes** button to reboot the device and activate the changes.
5. After reboot of device, enter the HDD Information interface.  
Menu > HDD > General
6. Select HDD from the list and click the icon to enter the Local HDD Settings interface.

HDD and the R/W HDD simultaneously so as to ensure that reliability of video data is highly secured and realiable.

**Steps:**
1. Enter the HDD Information interface.  
   Menu > HDD > General
2. Select HDD from the list and click the icon to enter the Local HDD Settings interface.

3. Set the HDD property to R/W, Read-only or Redundancy.
4. Click the OK button to save settings and exit the interface.
5. In the HDD Information menu, the HDD property will be displayed in the list.

**Note:** The default group No. for each HDD is 1.

8. Click the OK button to confirm settings.

7. Select the Group number for the current HDD.

**Note:** The default group No. for each HDD is 1.

8. Click the OK button to confirm settings.

9. In the pop-up message box, click the Yes button to confirm the settings.

**Setting HDD Property**

**Purpose:**
The HDD property can be set to redundancy, read-only or read/write (R/W). Before setting the HDD property, please set the storage mode to Group (refer to steps 1-4 of Chapter Setting HDD Groups).

A HDD can be set to read-only to prevent important recorded files from being overwritten when the HDD becomes full in overwrite recording mode.

When the HDD property is set to redundancy, the video can be recorded both onto the redundancy HDD and the R/W HDD simultaneously so as to ensure that reliability of video data is highly secured and realiable.

**Steps:**
1. Enter the HDD Information interface.  
   Menu > HDD > General
2. Select HDD from the list and click the icon to enter the Local HDD Settings interface.

3. Set the HDD property to R/W, Read-only or Redundancy.
4. Click the OK button to save settings and exit the interface.
5. In the HDD Information menu, the HDD property will be displayed in the list.

**Note:** The default group No. for each HDD is 1.

8. Click the OK button to confirm settings.

7. Select the Group number for the current HDD.

**Note:** The default group No. for each HDD is 1.

8. Click the OK button to confirm settings.

9. In the pop-up message box, click the Yes button to confirm the settings.

**Configuring OSD Settings**

**Purpose:**
You can configure the OSD (On-Screen Display) settings for the camera, including date/time, camera name, etc.

**Steps:**
1. Enter the OSD Configuration interface.  
   Menu > Camera > OSD
2. Select the camera to configure OSD settings.
3. Edit the Camera Name in the text field.
4. Configure the Display Name, Display Date and Display Week by clicking the checkbox.
5. Select the Date Format, Time Format and Display Mode.
6. You can use the mouse to click and drag the text frame on the preview window to adjust the OSD position.
7. Click the Apply button to apply settings.

5. The designated privacy mask zones on the window can be deleted by clicking the corresponding Clear Zone 1-4 buttons on the right side of the window, or you can click Clear All to clear all zones.

**Configuring Privacy Mask**

**Purpose:**
You can configure up to four privacy mask zones which will prevent certain areas from being viewed or recorded.

**Steps:**
1. Enter the Privacy Mask Settings interface.  
   Menu > Camera > Privacy Mask
2. Select the camera to set a privacy mask on.
3. Check the checkbox next to Enable Privacy Mask to enable this feature.
4. Use the mouse to crop a zone on the window. Different zones will be marked with different frame colors.

**Note:** Up to 4 privacy masks zones can be configured and the size of each area can be adjusted.

5. The designated privacy mask zones on the window can be deleted by clicking the corresponding Clear Zone 1-4 buttons on the right side of the window, or you can click Clear All to clear all zones.

6. Click the Apply button to save settings.

**Configuring Video Parameters**

**Steps:**
1. Enter the Image Settings interface.  
   Menu > Camera > Image
2. Select the camera to set image parameters for.
3. Click the arrows to adjust each parameter. Click the Apply button to save settings.
Viewing Device Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the Device Info tab to see the Device Information menu where you can access the device name, model, serial No., firmware version and encoding version.

Viewing Camera Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the Camera tab to see the Camera Information menu where you can view the status of each camera.

Viewing Record Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the Record tab to see the Record Information menu where you can access the recording status encoding parameters of each camera.

Viewing Alarm Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the Alarm tab to see the Alarm Information menu where you can access the alarm information.

Viewing Network Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the Network tab to see the Network Information menu where you can view the network information.

Viewing HDD Information

Steps:
1. Enter the System Information interface.
   Menu > Maintenance > System Info
2. Click the HDD tab to see the HDD Information menu where you can view the HDD status, free space, property, etc.,

Searching & Export Log Files

Purpose:
The operation, alarm, exception and other information about the NVR can be stored in log files, which can be viewed and exported at any time.

Steps:
1. Enter the Log Search interface.
   Menu > Maintenance > Log Search
2. Set the log search conditions to refine your search: Start Time, End Time, Major Type and Minor Type.
3. Click the Search button to find matching log files.
4. The matching log files will be displayed on the list shown below.
5. You can click the button of each log or double click it to view its detailed information, you can also click the button to view the related video files if available.
6. If you wish to export the log files, click the Export button to enter the Export menu.

Note: Up to 2000 log files can be displayed at once.
Upgrading by Local Backup Device

Steps:
1. Connect your NVR with a local backup device where the update firmware file is located.
2. Enter the Upgrade interface. Menu > Maintenance > Upgrade
3. Click the Local Upgrade tab to enter the local upgrade menu.
4. Select the update firmware file from the backup device.
5. Click the Upgrade button to start upgrade.
6. After the upgrading is complete, reboot the NVR to activate the new firmware.

Notes:
1) Please connect the backup device to NVR before initiating log export.
2) The log files exported to the backup device are named according to exporting time, e.g., 20110514124841logBack.txt.

To export all the log files:
You can enter the Log Export interface. Menu > Maintenance > Log Information > Log Export
7. Select the backup device from the dropdown list under Device Name.
8. Click Export to export the log files to the selected backup device.
You can click the New Folder button to create a new folder in the backup device, or click the Format button to format the backup device before log export.

Restoring Default Settings

Steps:
1. Enter the Default interface. Menu > Maintenance > Default
2. Click the OK button to restore the default settings.
3. Click the Apply button to save the settings.

Configuring DST Settings

Steps:
1. Enter the General Settings interface. Menu > Configuration > General
2. Select the DST Settings tab.
3. Configure the following settings:
   - Language: The default language used is English.
   - Resolution: Select the output resolution, which must be the same as the resolution of the monitor screen.
   - Time Zone: Select the time zone.
   - Date Format: Select the date format.
   - System Date: Select the system date.
   - System Time: Select the system time.
   - Mouse Pointer Speed: Set the speed of the pointer; 4 levels are configurable.
   - Enable Wizard: Enable/disable the Wizard to appear when the device starts up.
   - Enable ID Authentication: Enable/disable the use of the login password.
4. Click the Apply button to save settings.

Configuring General Settings

Steps:
1. Enter the General Settings interface. Menu > Configuration > General
2. Select the General tab.
3. You can click the New Folder button to create a new folder in the backup device, or click the Format button to format the backup device before log export.

Managing User Accounts

Purpose:
The default account in the NVR is Administrator. The user name is admin and the password is 12345.
The Administrator has the permission to add/delete users and configure user parameters.

Steps:
1. Enter the User Management interface. Menu > Configuration > User
2. Click the Add button to enter the Add User menu.

Upgrading System

Purpose:
The firmware on your NVR can be upgraded by local backup device or remote FTP server.

Notes:
Besides network parameters (IP address, subnet mask, gateway, MTU, default route and server port), all other parameters of the device will be restored to factory default settings.
3. Enter the information for a new user: User Name, Password, Level and User’s MAC Address. **Level**: Set the user level to Operator or Guest. Different user levels have different operating permission.
   - **Operator**: The Operator user level has permission for Two-way Audio in Remote Configuration and all operating permission in Camera Configuration.
   - **Guest**: The Guest user does not have permission for Two-way Audio in Remote Configuration and has local/remote playback in Camera Configuration.
   - **User’s MAC Address**: The MAC address of the remote PC which logs onto the NVR. If it is configured and enabled, it only allows the remote user with this MAC address to access the NVR.
4. Click the **OK** button to save settings and go back to the User Management interface. The added new user will be displayed on the list.
5. Select the user from the list and then click the **button** to enter the Permission Settings interface.

6. Set the operating permissions (Local Configuration, Remote Configuration and Camera Configuration) for the user. **Local Configuration**
   - **Local Log Search**: Searching/viewing logs and system information of NVR.
   - **Local Parameters Settings**: Configuring parameters, restoring factory default parameters and importing/exporting configuration files.
   - **Local Camera Management**: Adding, deleting and editing of IP cameras.
   - **Local Advanced Operation**: Operating HDD management (initializing HDD, setting HDD property), upgrading system firmware, clearing I/O alarm output.
   - **Local Shutdown/Reboot**: Shutting down or rebooting the NVR.
   - **Remote Configuration**
   - **Remote Log Search**: Remotely viewing logs that are saved on the NVR.
   - **Remote Parameters Settings**: Remotely configuring parameters, restoring factory default parameters and importing/exporting configuration files.
   - **Remote Camera Management**: Remote adding, deleting and editing of the IP cameras.
   - **Remote Video Output Control**: Remotely sending button control signals.
   - **Two-Way Audio**: Realizing two-way audio between the remote client and the NVR.
   - **Remote Alarm Control**: Remotely arming (notify alarm and exception message to the remote client) and controlling the alarm output.
   - **Remote Advanced Operation**: Remotely operating HDD (initializing HDD, setting HDD property), upgrading system firmware, clearing I/O alarm output.
   - **Remote Shutdown/Reboot**: Remotely shutting down or rebooting the NVR.

7. Click the **OK** button to save settings and exit interface.

**Editing a User**

Steps:
1. Enter the User Management interface. **Menu > Configuration > User**
2. Select the user to be edited from the list.
3. Click the **** icon to enter the Edit User interface.
   - **Note**: The admin user can also be edited.

**Deleting a User**

Steps:
1. Enter the User Management interface. **Menu > Configuration > User**
2. Select the user to be deleted from the list.
3. Click the ** icon to delete the selected user.
FAQ

• No image displayed on the monitor after starting up normally.

  Possible Reasons
  a) No VGA or HDMI connections.
  b) Connection cable is damaged.
  c) Input mode of the monitor is incorrect.

  Steps
  1. Verify the device is connected to the monitor via HDMI or VGA cable.
      If not, please connect the device with the monitor and reboot.
  2. Verify the connection cable is good.
      If there is still no image display on the monitor after rebooting, please check if the connection cable is good, and change a cable to connect again.
  3. Verify Input mode of the monitor is correct.
      Please check the input mode of the monitor matches with the output mode of the device (e.g. if the output mode of NVR is HDMI output, then the input mode of monitor must be the HDMI input). And if not, please modify the input mode of monitor.
  4. Check if the fault is solved by the step 1 to step 3.
      If it is solved, finish the process.
      If not, please contact the engineer to do the further process.

• There is an audible warning sound “Di-Di Di-Di-Di” after a new bought NVR starts up.

  Possible Reasons
  a) No HDD is installed in the device.
  b) The installed HDD has not been initialized.
  c) The installed HDD is not compatible with the NVR or is broken-down.

  Steps
  1. Verify at least one HDD is installed in the NVR.

     1) If not, please install the compatible HDD.
        Note: Please refer to the “Quick Operation Guide” for the HDD installation steps.
     2) If you don’t want to install a HDD, select “Menu>Configuration > Exceptions”, and uncheck the Audible Warning checkbox of “HDD Error”.
  2. Verify the HDD is initialized.

     1) Select “Menu>HDD>General”.
     2) If the status of the HDD is “Uninitialized”, please check the checkbox of corresponding HDD and click the “Init” button.
  3. Verify the HDD is detected or is in good condition.

     1) Select “Menu>HDD>General”.
     2) If the HDD is not detected or the status is “Abnormal”, please replace the dedicated HDD according to the requirement.
  4. Check if the fault is solved by the step 1 to step 3.

     1) If it is solved, finish the process.
     2) If not, please contact the engineer to do the further process.

• The status of the added IPC displays as “Disconnected” when it is connected through Private Protocol. Select “Menu>Camera>Camera>IP Camera” to get the camera status.

  Possible Reasons
  a) Network failure, and the NVR and IPC lost connections.
  b) The configured parameters are incorrect when adding the IPC.
  c) Insufficient bandwidth.

  Steps
  1. Verify the network is connected.

     1) Connect the NVR and PC with the RS-232 cable.
     2) Open the Super Terminal software, and execute the ping command. Input “ping IP” (e.g. ping 172.6.22.131).
        Note: Simultaneously press Ctrl and C to exit the ping command.
        If there exists return information and the time value is little, the network is normal.
     2. Verify the configuration parameters are correct.

        1) Select “Menu>Camera>Camera>IP Camera”.
        2) Verify the following parameters are the same with those of the connected IP devices, including IP address, protocol, management port, user name and password.
  3. Verify the whether the bandwidth is enough.

        1) Select “Menu>Maintenance > Net Detect > Network Stat.”.
        2) Check the usage of the access bandwidth, and see if the total bandwidth has reached its limit.
  4. Check if the fault is solved by the step 1 to step 3.

     1) If it is solved, finish the process.
     2) If not, please contact the engineer to do the further process.

• The IPC frequently goes online and offline and the status of it displays as “Disconnected”.

  Possible Reasons
  a) The IPC and the NVR versions are not compatible.
  b) Unstable power supply of IPC.
  c) Unstable network between IPC and NVR.
  d) Limited flow by the switch connected with IPC and NVR.

  Steps
  1. Verify the IPC and the NVR versions are compatible.

     1) Enter the IPC Management interface “Menu > Camera > Camera>IP Camera”, and view the firmware version of connected IPC.
     2) Enter the System Info interface “Menu>Maintenance>System Info>Device Info”, and view the firmware version of NVR.
  2. Verify power supply of IPC is stable.

     1) Verify the power indicator is normal.
     2) When the IPC is offline, please try the ping command on PC to check if the PC connects with the IPC.
  3. Verify the network between IPC and NVR is stable.

     1) When the IPC is offline, connect PC and NVR with the RS-232 cable.
     2) Open the Super Terminal, use the ping command and keep sending large data packages to the connected IPC, and check if there exists packet loss.
        Note: Simultaneously press Ctrl and C to exit the ping command.

     Example: Input ping 172.6.22.131 –I 1472 –f.
  4. Verify the switch is not flow control.

     Check the brand, model of the switch connecting IPC and NVR, and contact with the manufacturer of the switch to check if it has the function of flow control. If so, please turn it down.
  5. Check if the fault is solved by the step 1 to step 4.

     If it is solved, finish the process.
     If not, please contact the engineer to do the further process.

• No monitor connected with the NVR locally and when you manage the IPC to connect with the device by web browser remotely, of which the status displays as Connected.
And then you connect the device with the monitor via VGA or HDMI interface and reboot the device, there is black screen with the mouse cursor.

Connect the NVR with the monitor before startup via VGA or HDMI interface, and manage the IPC to connect with the device locally or remotely, the status of IPC displays as Connect. And then connect the device with the CVBS, and there is black screen either.

Possible Reasons:
After connecting the IPC to the NVR, the image is output via the main spot interface by default. Steps:

1. Enable the output channel.
2. Select “Menu > Configuration > Live View > View”, and select video output interface in the drop-down list and configure the window you want to view.

Notes:
1) The view settings can only be configured by the local operation of NVR.
2) Different camera orders and window-division modes can be set for different output interfaces separately, and digits like “D1” and “D2” stands for the channel number, and “X” means the selected window has no image output.
3. Check if the fault is solved by the above steps.

If it is solved, finish the process.
If not, please contact the engineer to do the further process.

Live view stuck when video output locally.

Possible Reasons:

a) Poor network between NVR and IPC, and there exists packet loss during the transmission.

b) The motion detection and alarm functions are enabled, and the parameters of Main Stream (Normal) and Main Stream (Event) are different. So the image looks stuck due to the image changes between different resolutions.

c) The frame rate has not reached the real-time frame rate.

Steps:

1. Verify the network between NVR and IPC is connected.
2. Check the parameters of Main Stream (Normal) and Main Stream (Event).
3. Verify the frame rate is real-time frame rate.

Note: Simultaneously press Ctrl and C to exit the ping command.

4. Check if the fault is solved by the above steps.

If not, please contact the engineer to do the further process.

Live view stuck when video output remotely via the Internet Explorer or platform software.

Possible Reasons:

a) Poor network between NVR and IPC, and there exists packet loss during the transmission.

b) Poor network between NVR and PC, and there exists packet loss during the transmission.

c) The performances of hardware are not good enough, including CPU, memory, etc..

Steps:

1. Verify the network between NVR and IPC is connected.
2. Open the Super Terminal, and execute the command of “ping 192.168.0.0 –1 1472 –f” (the IP address may change according to the real condition), and check if there exists packet loss.

Note: Simultaneously press Ctrl and C to exit the ping command.

3. Use the ping command to send large packet to the NVR, execute the command of “ping 192.168.0.0 –1 1472 –f” (the IP address may change according to the real condition), and check if there exists packet loss.

Note: Simultaneously press Ctrl and C to exit the ping command.

4. Check if the fault is solved by the above steps.

If it is solved, finish the process.
If not, please contact the engineer to do the further process.

The image gets stuck when NVR is playing back by single or multi-channel.

Possible Reasons:

a) Poor network between NVR and IPC, and there exists packet loss during the transmission.

b) The stream type is not set as “Video & Audio”.

c) The encoding standard is not supported with NVR.

Steps:

1. Verify the cable between the pickup and IPC is connected well; impedance matches and compatible.

2. Verify the setting parameters are correct.

3. Verify the audio encoding standard of the IPC is supported by the NVR.

4. Check if the fault is solved by the above steps.

If it is solved, finish the process.
If not, please contact the engineer to do the further process.

When using the NVR to get the live view audio, there is no sound or there is too much noise, or the volume is too low.

Possible Reasons:

a) Cable between the pickup and IPC is not connected well; impedance mismatches or incompatible.

b) The stream type is not set as “Video & Audio”.

c) The encoding type is not set as “Audio & Video”.

Steps:

1. Verify the cable between the pickup and IPC is connected well; impedance matches and compatible.

2. Log in the IPC directly, and turn the audio on, check if the sound is normal. If not, please contact the manufacturer of the IPC.

3. Verify the audio encoding standard of the IPC is supported by the NVR.

4. Check if the fault is solved by the above steps.

If it is solved, finish the process.
If not, please contact the engineer to do the further process.
transmission.

b) The motion detection and alarm functions are enabled, and the parameters of Main Stream (Normal) and Main Stream (Event) are different. So the image looks stuck due to the image changes between different resolutions.

c) The frame rate is not the real-time frame rate.

d) The NVR supports up to 16-channel synchronize playback at the resolution of 4CIF, if you want a 16-channel synchronize playback at the resolution of 720p, the frame extracting may occur, which leads to a slight stuck.

**Steps:**

1. Verify the network between NVR and IPC is connected.
   1) When image is stuck, connect the RS-232 ports on PC and the rear panel of NVR with the RS-232 cable.
   2) Open the Super Terminal, and execute the command of "**ping 192.168.0.0 –l 1472 –f**" (the IP address may change according to the real condition), and check if there exists packet loss.

   **Note:** Simultaneously press the Ctrl and C to exit the ping command.

2. Check the parameters of Main Stream (Normal) and Main Stream (Event).
   Select “Menu > Record > Parameters > Record”, and set the resolution of Main Stream (Event) the same as the one of Main Stream (Normal).

3. Verify the frame rate is real-time frame rate.
   Select “Menu > Record > Parameters > Record”, and set the Frame Rate to “Full Frame”.

4. Verify the hardware can afford the playback.
   Reduce the channel number of playback.
   Select “Menu > Record > Encoding > Record”, and set the resolution and bitrate to a lower level.

5. Reduce the number of local playback channel.
   Select “Menu > Playback”, and uncheck the checkbox of unnecessary channels.

6. Check if the fault is solved by the above steps.
   If it is solved, finish the process.
   If not, please contact the engineer to do the further process.

- **No record file found in the NVR local HDD, and prompt “No record file found”.

**Possible Reasons:**

a) The time setting of system is incorrect.

b) The search condition is incorrect.

c) The HDD is error or not detected.

**Steps:**

1. Verify the system time setting is correct.
   Select “Menu > Configuration > General > General”, and verify the “Device Time” is correct.

2. Verify the search condition is correct.
   Select “Playback”, and verify the channel and time are correct.

3. Verify the HDD status is normal.
   Select “Menu > HDD > General” to view the HDD status, and verify the HDD is detected and can be read and written normally.

4. Check if the fault is solved by the above steps.
   If it is solved, finish the process.
   If not, please contact the engineer to do the further process.