NVR-B5170.36.27.230105 Release Notes

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NVR-B5170.36.27.230105 Release Notes

Keywords: Version information, usage notes, precautions.

Abstract: This document provides information about the **NVR-B5170.36.27.230105** board software, including version information, usage notes, precautions, and features.

Acronym

Acronym	Full Name
NVR	Network Video Recorder

Contents

1 Version Information

1.1 Version Number

NVR-B5170.36.27.230105

1.2 Applied Product Models

Table 1 Applied Product Models

Product Models	Description
NVR516-32S	16 HDD, 32 IP channel, H.264 and H.265
NVR516-64S	16 HDD, 64 IP channel H.264 and H.265

1.3 Release History

Table 2 Released Versions

Version No.	Basic Version No.	Released On
NVR-B5170.36.27.230105	NVR-B5170.36.18.221215	2023-01-05
NVR-B5170.36.18.221215	NVR-B5170.35.29.221119	2022-12-15
NVR-B5170.35.29.221119	NVR-B5170.35.27.221010	2022-11-19
NVR-B5170.35.27.221010	NVR-B5170.1.5.220727	2022-10-10
NVR-B5170.1.5.220727	Initial release	2022-07-27

2 Usage Notes

None.

3 Software Features

Table 3 Software Features

Service	Feature
Audio and video decoding	H.264 and H.265, 4K resolution display, up to 16Mbps bit rate.
Data storage	Local storage of recordings in hard disk(s).
Web-based management	Web-based user interface for device configuration and management.

4 Version Change Description

4.1 Feature Change Description

Table 4 NVR-B5170.36.27.230105 Feature Changes

Item	Feature	Description
Newly added features	Supports dual-sensor IPCs	Supports connecting dual-sensor cameras and can display videos in proportional mode or wide mode (32:9 aspect ratio).
Improved features		
Deleted features		

Table 5 NVR-B5170.36.18.221215 Feature Changes

Item	Feature	Description
Newly added features	Supports smart PT cameras	Supports connecting smart PT cameras, and supports functions including live view, patrol, recording storage, playback, configuration, alarm reception (motion detection, human body detection, abnormal audio detection, automatic tracking), alarm storage and searching.
	Supports IPC monostable alarm output	For camera alarm output (D>), user can set alarm duration to Custom or Maximum on the NVR. When the Custom option is enabled on the NVR, the relay mode on the camera is displayed as Monostable.
	Supports continuously track	NVR now allows user to configure continuously track for front-end IPCs. This feature is configurable only if the IPC supports auto tracking. If supported, user can select continuously track or customize tracking duration for the IPC.
	Work with IPC to lift barrier	Added the "let through" action on the **Vehicle Monitoring** page and can trigger the camera to lift the barrier automatically when a plate match alarm occurs. User can also lift the barrier manually on the **Manual** page.
	Adapted to multi-channel cameras	Supports connecting dual-channel cameras, and allows user to configure and receive alarms of motion detection, face detection and perimeter protection for multi-channel cameras, configure privacy mask, and search people counting statistics of multi-channel cameras.
	Optimized people present alarm UI	Supports counting people present for specified camera(s), reporting critical/major/minor alarms according to the number of people present, and triggering the corresponding actions if configured. (Configuration page: 1、4 scenes are available. Allows user to set scene name, alarm thresholds, arming schedule, and alarm-triggered actions for each scene separately, and view the relevant rules while configuring channels. 2、Allows user to choose to reset the number of people present automatically or manually. Both local and web clients support people present alarm configuration.) The people flow counting on **Smart Preview** page now displays real-time people flow statistics including the number of people

		coming in/out/more allowed/present; The normal/slightly/moderately/heavily crowded alarms are displayed with different colors. When user changes the scene on the preview page, the corresponding statistics will also be changed.
Improved features	Supports configuring alarm sound & light for IPCs that support perimeter protection	User can configure front-end alarm sound & light for IPCs that support perimeter protection. The configuration items are displayed only when the IPC supports alarm sound & light, including alarm sound (turn on/off, arming schedule, audio, play count), and alarm light (turn on/off, arming schedule, blink time).
	Configuring arming schedule of motion detection for IPCs	User can configure arming schedule of motion detection for IPCs on the NVR, and then IPCs report alarms according to the arming schedule.
	Optimized the display effects of smart preview and behavior search results	VCA search results: The face search results are not close-up images, but are displayed with surrounding scenes. The faces in the images are not stretched. Behavior search results: The search results for perimeter protection are not close-up images, but are displayed with surrounding scenes; user can double-click an image to maximize it. Smart preview: Face and perimeter images are not stretched; The images on the left are the same as the image details on the right.
	Improved the size limit of face library images	Allows user to upload face library images up to 4M.
	Channel name is displayed when user selects channel on the **VCA Search** page	The **VCA Search** page on the Web client now allows user to view channel ID and channel name to quickly find the desired channel.
	Supports copying storage mode to other channels	The storage mode parameter is added on the **Copy** page of encoding settings, so user can copy storage mode to other channels.
	Relocated custom route configuration	Custom route configuration is moved to the **Network** tab on the web client.
Deleted features	Deleted the relay mode configuration item	Deleted relay mode on the **Alarm Output** page, so monostable and bistable cannot be selected. Custom alarm duration corresponds to monostable mode, and maximum alarm duration corresponds to bistable mode.

Table 6 NVR-B5170.35.27.221010 Feature Changes

Item	Feature	Description
Newly added features	Adapted to IPCs that support box-dome linkage	Adapted to IPCs that support box-dome linkage. Allows user to select a linkage mode to view live videos in multi-sensor mode. ● Drag to zoom: The dome camera can rotate to and zoom in on the area that user specified on the image of the box camera. ● Click linkage: Click an object on the image of the box camera to rotate the dome camera to the specified object. ● Manual tracking: The dome camera can track the object that user specified on the image of the box camera. This function requires user to enable perimeter protection on the NVR side, and configure panoramic linkage on the IPC side.
	Supports thermal imaging cameras	Supports connecting thermal imaging cameras. Supports configuring fire detection, temperature detection, and smoking

		detection. Allows user to view live videos in multi-sensor mode. Supports VCA search, event playback, and storage of alarm information and snapshots.
		NVR can now receive temperature data from thermal imaging cameras and overlay temperatures on live video on the local user interface.
		In thermal camera-NVR-APP networking mode, app can receive thermal imaging and perimeter protection alarms and images from NVR.
		In thermal camera-NVR-VMS networking mode, VMS can receive thermal imaging and perimeter protection alarms and images from NVR.
	Adapted to front-end alarm light and sound linkage of human body detection	Allows user to configure alarm sound and light for human body detection alarms, including turning on/off alarm light and sound and other configurations.
	Supports one-click disarming by switch	Allows user to disarm all linkage actions of the NVR, and alarm sound & light of the IPC by the first alarm input switch on the NVR.
Improved features	Displaying POS information on the local interface	All overseas models support POS function. POS control center can access NVR via network, and the NVR can store data and overlay transaction data on live view and playback images.
	Added detection area for front-end tripwire people counting	Supports drawing a detection area for tripwire people counting.
	Supports downloading SD videos on the web and local interface	The web and local interface allow user to download videos in HD or SD mode.
	Added day/night mode under alarm sound & light configuration in perimeter protection	Day/night mode is added under the alarm sound & light configuration of perimeter protection. The configuration item is displayed if it is supported by the IPC.
Deleted features		

Table 7 NVR-B5170.1.5.220727 Feature Changes

Item	Feature	Description
Newly added features Improved features	AAC audio decoding	Supports decoding AAC bit streams from IPC for live view, playback, and two-way audio on the local and web interfaces to meet demands for higher audio quality.
	Persistent WebSocket connections with upper platform	NVR can initiate WebSocket connections over SSL/TLS with an upper platform (EZCloud or third-party platform) to achieve bi-directional signaling communication based on the WSS.
	WEB plugin 3.0	The new Web plugin supports a variety of new browser versions and provides better performance in supporting multi-channel and high-resolutions.
	Front-end people flow counting and crowd	Supports the connection of IPCs capable of people flow counting and crowd density monitoring, supports the configuration of people flow

		density monitoring	counting and crowd density monitoring, the search and export of people flow counting statistics.
		Perimeter protection camera	Supports connecting deep learning perimeter protection IPCs, which feature intrusion detection, cross line detection, enter area and leave area detection.
		One-key disarm linkage	Allows user to conveniently disarm one or multiple linkage actions of the NVR or its IPCs by a set schedule or period.
		Control wiper via network keyboard	Supports using a network keyboard to control wiper.
		Low battery notification	Prompts users to replace the button battery and reset the time if the system detects incorrect time after the user logs in.
		Optimized audio configuration	Added the **Audio Configuration** tab to configure all audio parameters of IPCs. (The configurable audio input and output parameters include enable/disable audio input, access mode, input volume, audio compression, sampling rate, and audio output. The supported configuration items may vary with IPCs.)
		Optimized alarm sound and light linkage	Allows users to configure alarm sound and light of IPCs on the NVR, including arming schedule and action mechanisms. It meets the needs of users for alarm sound and light linkage in different time periods. (Users can configure alarm sound & light in the **Trigger Actions** page. The configurable parameters include start time, end time, audio, repeat, alarm light, blink time, brightness, etc.)
		Configurable audio storage	Allows users to enable/disable audio storage of each camera separately.
		Optimized network test and packet capture	Separated **Packet Capture** from the **Network Test** tab. Two addresses and multiple cameras can be detected simultaneously. (Allows users to perform network test by entering test address or selecting camera, test duration, and test packet size. Users can view the real-time packet loss rate or network latency in a chart, and export the results when the test ends.) Users can view whether the network is normal intuitively so as to troubleshoot network issues quickly, improving user experience and saving maintenance costs.
		Changed Telnet to SSH	SSH is adopted to access NVR remotely. It is disabled by default, and the secondary logon is required when enabled.
		Reporting people counting results by hours	A new report type (**Hourly**) is added on the local interface to allow users to view people counting results by hours.
		Adapted to the new encryption algorithms of IPCs	Supports SHA-256 to adapt to SHA-256 based RTSP authentication on IPC.
		Optimized perimeter protection configuration on the local interface	The local interface now allows users to draw box(es) when configuring object size for perimeter protection, instead of inputting manually, improving the ease of operation.
		Optimized the layout of **People Counting Report**	The **People Counting Report** is moved to the **VCA Search** tab.
		Changed *Target Type* to *Object Type*	The *Target Type* is changed to *Object Type*.
		Added the perimeter	A new scene (**Perimeter**) is added to allow users to select installation scenes, reducing the tedious adjustment of image parameters. This

	scene	feature is only available for certain IPCs.
	Selecting all channels quickly for vehicle monitoring on the local interface	The local interface now allows users to select all channels with one click when configuring vehicle monitoring.
	Added a progress bar when importing/exporting license plates	A progress bar is added when importing/exporting license plates. Users can view the import/export quantities and progress intuitively.
	Searching face lists by modeling status, and exporting the results in batches	Allows users to search face lists by modeling status, and export the results in batches.
Improved features		
Deleted features		

4.2 Operation Change Description

None

5 Related Documents and Delivery Method

Table 8 Related Document List

Manual Name	Manual Version	Delivery
Network Video Recorders Quick Guide	V1.00	Deliver with device.

6 Version Upgrade Guidance

6.1 Precautions

- This software system includes a software program mirror (Program.bin). Before you start upgrade, please back up configuration data through the system or Web interface in case the upgrade fails.
- Maintain proper network connection and power supply during the upgrade.

6.2 Upgrade Procedure

The version can be upgraded through the system interface and the Web interface, both support cloud upgrade.
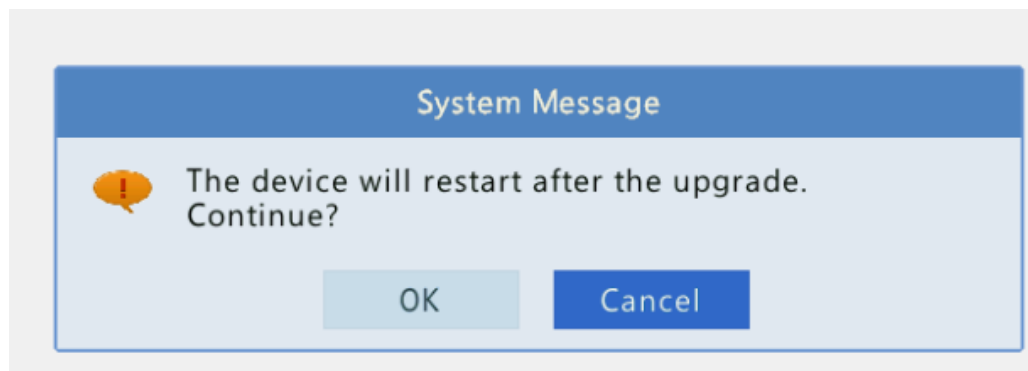
6.3 Upgrade Through the System Interface

The system interface provides two options for upgrading the system software: local upgrade using a USB drive and cloud upgrade.

1. Local upgrade

Before you start, copy the correct upgrade file to the root directory of the USB drive.

(1)　Plug the USB drive into the USB interface on the NVR.

(2)　Log in to the system interface as "admin".

(3)　Click **Maintain** > **Upgrade**.

(4)　Click **Upgrade**, select the upgrade file from the drop-down list, and then click **Upgrade**. A prompt message appears.

(5)　Click **OK**.

Figure 1 Prompt Message

(6)　The NVR will restart automatically when the upgrade is completed.

2. Cloud upgrade

Before you start, check that the NVR is correctly connected to the public network.
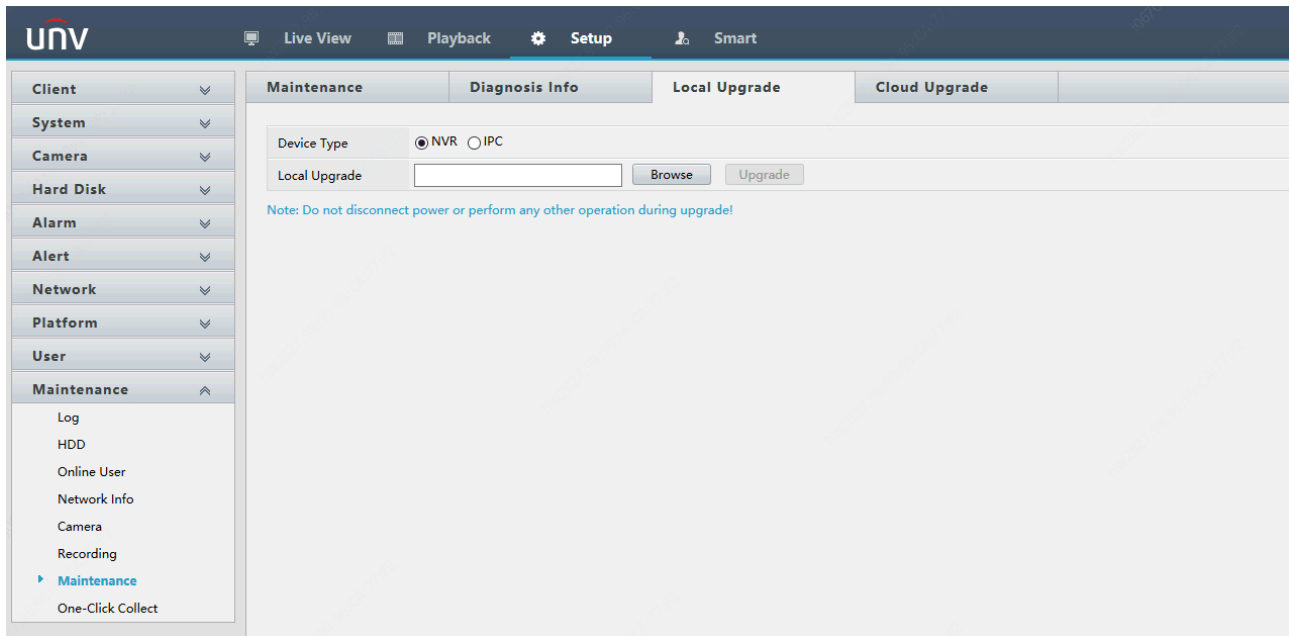
(1)　Click **Maintain** > **Upgrade**, and then click **Check** to check for the latest version.

(2)　Click **Upgrade** after a newer version is detected.

6.4 Upgrade Through the Web Interface

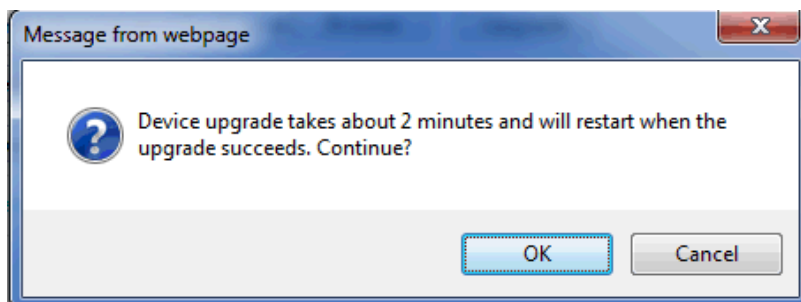Perform the following steps to upgrade through the Web interface:

(1)　Log in to the Web interface as "admin".

(2)　Click **Maintenance** > **Maintenance** > **Upgrade**.

Figure 2 System Maintenance

(3) Click **Browse** right to the **Upgrade** field, select the **Program.bin** file to upgrade, and then click **Upgrade**.

(4) If the NVR is connected to the public network, you may also click **Check** to perform a cloud upgrade. If a newer version is detected, a prompt message will appear. Click **OK** to start upgrade.

Figure 3 Prompt Message

(5) The NVR will restart automatically when the upgrade is completed.

Version Upgrade Disclaimer

1. By setting or installing this program in any way you agree to all of the following terms and conditions. Your downloading or using the program means you acknowledge your full understanding and acceptance of the following terms and conditions. If you do not agree to any of the following terms, you shall not use the program and you must cease installing and delete the program immediately.

2. The upgrade program is only applicable to the intended regions and product models. Before upgrade or update, please read the release notes carefully to make sure the program is applicable to your region and product model. You will be fully liable and responsible for all the consequences of device abnormality and related maintenance costs caused by your improper operations.

3. Uniview owns or is legally authorized to own all rights and IPRs (Intellectual Property Rights) of the program and the supplied release notes.

4. Software upgrades are for the optimization of product functions and do not mean there is defect.

5. You must strictly follow instructions in the release notes during the upgrade process, otherwise you are responsible for the possible consequences and related maintenance costs.

6. You shall not engage in any of the following activities, otherwise you would be liable for infringement and responsible for any adverse consequences arising therefrom.

  6.1   Copy the program (exclude the reasonable and necessary copies for internal backups);

  6.2   Exclude this statement when using the program or transfer the program to any third party;

  6.3   Modify the program or its derivatives;

6.4　　Reverse engineer, decompile or disassemble this program.

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