# B3221P21C Release Notes

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# B3221P21C Release Notes

Keywords: Version information, usage notes, precautions.

**Abstract:** This document provides information about the **B3221P21C** 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

B3221P21C

## 1.2 Applied Product Models

Table 1  Applied Product Models

| Product Models | Description |
|---|---|
| NVR301-04-P4 | 1 slot, 4-ch, 4 PoE interfaces , H.264/H.265 and 4K ultra HD. |
| NVR301-08-P8 | 1 slot, 8-ch, 8 PoE interfaces , H.264/H.265 and 4K ultra HD. |
| NVR301-16-P8 | 1 slot, 16-ch, 8 PoE interfaces , H.264/H.265 and 4K ultra HD. |
| NVR301-04L-P4 | 1 slot, 4-ch, 4 PoE interfaces plastic shell NVR, H.264/H.265 and 4K ultra HD. |
| NVR301-08L-P8 | 1 slot, 8-ch, 8 PoE interfaces plastic shell NVR , H.264/H.265 and 4K ultra HD. |
| NVR301-16L-P8 | 1 slot, 16-ch, 8 PoE interfaces plastic shell NVR , H.264/H.265 and 4K ultra HD. |

## 1.3 Release History

Table 2  Released Versions

| Version No. | Basic Version No. |
|---|---|
| B3221P21C | B3221P21 |

# 2 Usage Notes

None.

# 3 Software Features

Table 3  Software Features

| Service | Feature |
|---|---|
| Audio and video decoding | H.264/H.265 video compression, 4K ultra HD, 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 B3221P10 Feature Changes

| Item | Feature | Description |
|---|---|---|
| New features | Defocus Detection | Determines whether the camera is defocused, and if so triggers alarm. |
| | Scene Change | Determines whether the scene is changed, and if so triggers alarm. |
| | Auto Tracking | Supports auto tracking of moving objects with IP cameras supporting this function. |
| | People Counting of Multiple Cameras | Displays people counting data of multiple cameras together. |
| | People Counting OSD | Displays people counting data by OSD in real time. |
| | Sort Camera | Supports changing sequence of selected cameras in camera list. |
| | Watermark | Supports custom encryption of video data with compatible IP cameras and EZPlayer, to avoid video info deletion and modification. |
| Improved features | Optimized H.265 compatibility | Supports third-party H.265 IP camera connecting to Uniview NVR through ONVIF. |
| | Log Export Format | The default format of exported logs is changed from TXT to CSV. |
| | Auto-Delete File(s) | Adds auto-delete file(s) configuration on Web client. |
| | Admin Management | Supports admin to force guest offline. |
| | Diagnostic Information | Adds basic information of IP camera to exported diagnostic information. |
| | Network Setting | Supports auto-completion of subnet mask when setting network address. |
| | Quick Match for Camera List | Supports input selection and fuzzy matching for camera list. |
| | Professional Surveillance Keyboard | 1. Supports selecting camera and date for playback. 2. Supports patrol and route. |
| Deleted features | None | None |

Table 5 B3220P28 Feature Changes

| Item | Feature | Description |
|---|---|---|
| New features | Snapshot | More models support snapshot: NVR301-04E, NVR301-08E, NVR301-16E, NVR301-04-P4, NVR301-08-P8, NVR301-16-P8, NVR301-04L-P4, NVR301-08L-P8, NVR301-16L-P8. |
| Improved features | None | None |
| Deleted features | None | None |

Table 6 B3220P11 Feature Changes

| Item | Feature | Description |
|---|---|---|
| New | None | None |

| Item | Feature | Description |
|---|---|---|
| features | | |
| Improved features | Optimized maintenance | The size of Ping packet and captured packet is configurable. |
| | Optimized camera configuration | Supports coping IP camera configurations of OSD, motion detection, video loss and tampering detection. |
| | Optimized PTZ preset | Allows the user to delete preset and only added preset will be displayed in the list. |
| | Optimized password recovery | Supports scanning QR code on mobile client to recover password. |
| Deleted features | None | None |

Table 7 B3219P17 Feature Changes

| Item | Feature | Description |
|---|---|---|
| New features | U-Code | U-Code is a patented technology of Uniview that accomplishes higher compression efficiency than H.264/H.265. |
| | NAS | Supports NAS storage device. |
| | Auto guard | Enables the PTZ camera to operate automatically as configured if no operation is performed during a certain time period. This function can avoid situations where the camera is left to monitor an incorrect scene by user's negligence. |
| | Multicast | Makes live view possible even when the number of connecting Web clients exceeds the limit the NVR can accommodate. |
| | PoE/network port status | Displays port status for network ports, and port status and power information for PoE ports. |
| | USB Device window | Automatically displays the window when a USB storage device is plugged in during device startup or in preview status. The window can also be opened by clicking the USB icon on the screen toolbar. |
| Improved features | Uniview logo | Displays Uniview logo in idle preview windows. This feature is only available to Uniview version. |
| | Auto switch to | Automatically switches to H.265 and U-Code when connected by Uniview IPC and sends default bitrate settings to IPC. |
| | Copy video compression and U-Code settings | Allows user to copy video compression and U-Code settings and quickly apply them to other IPCs. |
| | Draw schedules | Allows users to make recording and snapshot schedules by drawing. |
| | Instant playback | Instant playback time is now configurable. |
| | Mouse operation | Allows user to adjust the moving speed of mouse pointer. |
| | IPC upgrade | Upgrade a batch of IPCs by cloud or USB storage device. |
| | Preview | Live view window's yellow boarders disappear automatically in 20 seconds if no operation is performed. |
| | Snapshot | The window borders flash white when taking a snapshot during live view or playback. |
| | Resolution | Restore default resolution by pressing and holding the scroll wheel for at least 3 seconds. |
| | DHCP | DHCP is enabled by default for international versions. |
| | Playback by tag | Allows playback by tag on Web client. |

| Item | Feature | Description |
|------|---------|-------------|
| Deleted features | None | None |

Table 8 B3218P15 Feature Changes

| Item | Feature | Description |
|------|---------|-------------|
| Newly added features | VCA | Work with smart IPC to achieve VCA functions (smart detection and smart search), enhanced playback by event. |
| | RTSP-based connection to IPC | Adds IPC by RTSP for live view and playback (IPC configuration not supported). |
| | RTSP URL format on screen | Displays RTSP URL format and a description, and users can view live video from a channel of the NVR by visiting the corresponding URL using an RTSP-enabled device. |
| | Ucode | Uniview's private encoding rules which greatly improve the compression rate compared with average encoding modes. |
| | IPv6 | Supports IPv6 and offers three options to set an IPv6 address: Manual, DHCP, Router Advertisement. |
| | Integrated port | Integrates multiple ports (HTTP port, ONVIF port, Media port, and SDK port) into one HTTP port. |
| Improved features | Quick view of serial number | View the device's serial number by double-clicking the lower left corner of the login dialog box as admin. |
| | Improved encoding configuration | Automatically refreshes encoding configurations; automatically changes bit rate as the user changes resolution and frame rate. |
| | One-click cancellation of binding to EZCloud | Allows the user to cancel binding to EZCloud account by clicking the Delete button without visiting the EZCloud website. |
| | Enhanced ease of use | Displays device operation time, camera offline cause, a system message when the USB storage device is unplugged, and added the Camera Name column under Advanced. |
| | Enhanced corridor mode | Added 4/9/10/12/16 corridor modes on the system interface. |
| | Added OSD configurations | Added font color and size options for OSD configuration. |
| | Optimized playback | Supports reverse playback; max. 256x playback speed on the system interface, and 16x playback speed on the web interface; with apparently improved fluency at low playback speed. |
| | Optimized alarm-triggered preview | Changes alarm-triggered preview from "sequence display three times" to "display from alarm is reported till alarm is cleared. |
| Deleted features | None | None |

## 4.2 Operation Change Description

None

## 4.3 Solved Issues

None

# 5  Related Documents and Delivery Method

Table 9  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.

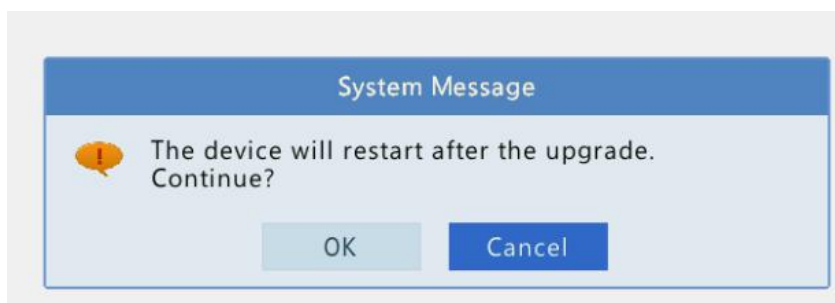## 6.3  Upgrade Through the System Interface

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 2 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.
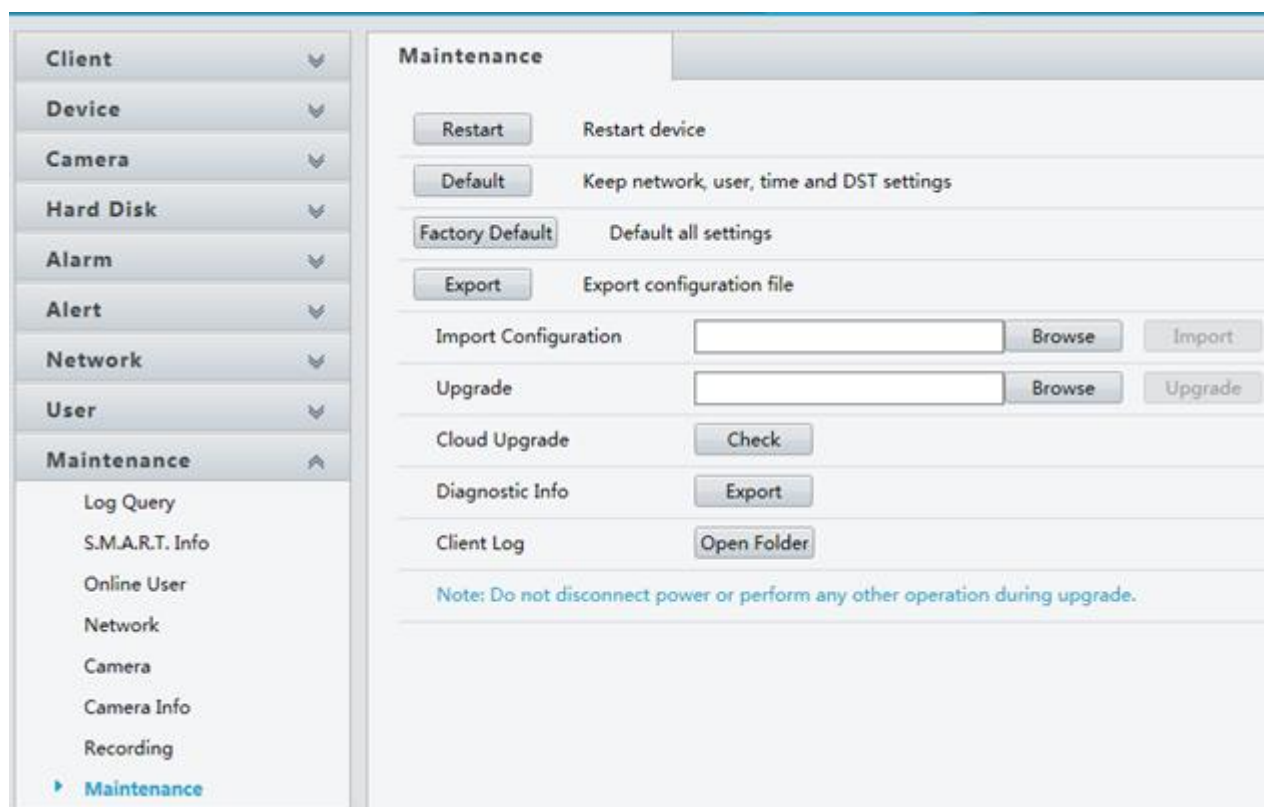
(1)    Click **Maintain** > **Upgrade**, and then click **Check** to check for the latest version.

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


# 6.4  Upgrade Through the Web Interface

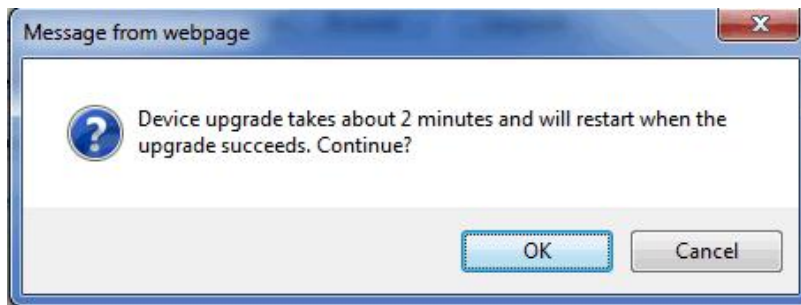Perform the following steps to upgrade through the Web interface:

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

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

Figure 1  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 2 Prompt Message



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