# B3221P20C Release Notes

Zhejiang Uniview Technologies Co., Ltd.

# **B3221P20C** Release Notes

Keywords: Version information, usage notes, precautions.

**Abstract:** This document provides information about the **B3221P20C** board software, including version information, usage notes, precautions, and features.

#### Acronym

Acronym	Full Name
NVR	Network Video Recorder

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### 1 Version Information

### 1.1 Version Number

B3221P20C

### 1.2 Applied Product Models

Table 1 Applied Product Models

Product Models	Description
NVR301-04E	1 slot, 4-ch, 1 U with front panel
NVR301-08E	1 slot, 8-ch, 1 U with front panel
NVR301-16E	1 slot, 16-ch, 1 U with front panel

### 1.3 Release History

Table 2 Released Versions

Version No.	Basic Version No.
B3221P20C	B3221P20

# 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 B3221P10 Feature Changes

Item	Feature	Description
	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.
New features	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.
	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.
Improved features	Diagnostic Information	Adds basic information of IP camera to exported diagnostic information.
reatures	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	Supports selecting camera and date for playback.     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.
	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.
	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.
Improved	Mouse operation	Allows user to adjust the moving speed of mouse pointer.
features	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.
Deleted features	None	None

### Table 8 B3218P15 Feature Changes

Item	Feature	Description
Newly added	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.
features	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.
	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.
Improved	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.
features	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

### Table 9 B3217P16 Feature Changes

Item	Feature	Description
	Cache post recording	Videos are saved to the SD card if connection to the IP camera is lost. When the camera gets back online, videos saved on the SD card will be transmitted and stored on the NVR. No configuration is required.
Newly added	Disk group management	Allows the user to designate disks to different groups and specify different disk groups to store video from different cameras, making storage space calculation for each camera unnecessary.
features	Redundant storage	Extra copy for important recordings.
	Improved colors for the user interface	Uses Uniview standardized style to improve the user interface and enhance the identification of icons and symbols.
	Web-based control of system interface	Allows the user to change image resolution and preview sequence on the system interface through the Web interface.

Item	Feature	Description	
	Alarm-triggered pop-up window	A window pops up on the system interface to alert the user when an alarm occurs.	
	ARP protection	Obtains the MAC of its gateway at first startup and communicates wit the gateway with this MAC ever since. The MAC can be edited as needed.	
Improved features	Snapshot	More models support snapshot:  NVR308-16E, NVR308-32E, NVR308-64E, NVR308-32R, NVR308-64R, NVR304-16E, NVR304-32E, NVR-B200-E8@32, NVR-B200-E8@32, NVR-B200-E8@64, NVR-B200-R8@64, NVR208-32  Current models that support snapshot:  NVR202-08EP, NVR202-08EN, NVR202-16E, NVR202-16EP, NVR202-16EN, NVR204-16E, NVR208-16	
	Optimized system interface for ease of use	Improves window toolbar, shortcut menu, PTZ control, startup wizard, and the menu bar at the bottom of the screen for easier use.	
	Enhanced playback on the Web interface	Allows smart playback and event-based playback on the Web interface.	
	PTZ control	The system interface supports PTZ control using shortcut keys.	
	Enhanced ability to connect to IP cameras	Added the following for Uniview IP cameras:  1. White balance mode  2. Scenes  3. Alarm indicating failed camera access attempts	
	Enhanced downlink ONVIF	Allows the user to disable time synchronization with IP cameras. This feature prevents the problem that some third-party IP cameras cannoget online because they do not support time zone synchronization or time synchronization.	
	Enhanced uplink ONVIF	<ol> <li>Combines uplink ONVIF port with HTTP port to improve network adaptability.</li> <li>Reports more alarm types (disk offline, disk abnormal).</li> <li>Allows the obtainment and modification of the device name.</li> </ol>	
	Log export	Allows the user to export logs as CVS files for easy search and management.	
	One plug-in for NVR and IPC	Allows the user to install the plug-in only once for accessing the NVR and IP cameras using a Web browser.	
	Plug&play	Changes the default IP address to 192.168.1.30 while also supports 192.168.0.30 to adapt to default network environments of most router and network switches and simplify configuration.	
	Network security	Improves protection against network attacks for better user privacy.	
	User management	Increases the number of concurrent remote users from 16 to 128.	
	Web-based upgrade	Filters file types for local upgrade through the Web interface.	
	Maintenance tool	Allows the changing of user password through EZTools.	
Deleted features	None	None	

### 4.2 Operation Change Description

None

#### 4.3 Solved Issues

None

### 5 Related Documents and Delivery Method

Table 10 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

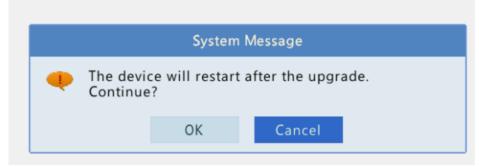
The system interface provides two options for upgrading the system software: local upgrade using a USB drive and cloud upgrade.

#### 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.

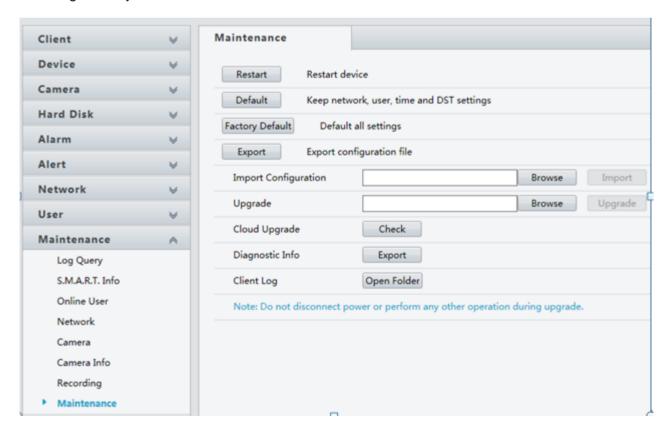
- (1) Click **Maintain** > **Upgrade**, and then click **Check** to check for the latest version.
- (2) Click **Upgrade** after a newer version is detected.

### 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 Settings > Maintenance > Maintenance.

Figure 1 System Maintenance

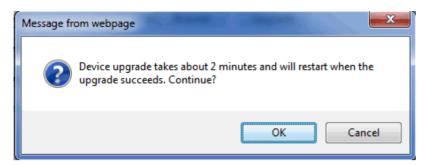


(3) Click Browse right to the Upgrade field, select the Program.bin file to upgrade, and then click

#### 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.

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