

NVR4x-EI_MultiLang
V4.003.0000000.0.R.240328
Release Notes

Table of Contents

1 Release Notes	1
1.1 Overview	1
1.2 New Features	1
1.3 New Feature Details	3
1.3.1 Optimized Channel Selection during Video Playback	3
1.3.2 Selectively Adding Multiple Channels	3
1.3.3 Optimized HTTP Push	5
1.3.4 Customizing URL in Event Linkage Items (Webpage)	6
1.3.5 Camera Login Password	6
1.3.6 Optimized Plug and Play	7
1.3.7 Optimized Channel Sorting	7
1.4 Fixed Bugs	9
1.5 Compatibility	9
1.5.1 Program	9
1.5.2 Browser	9
1.5.3 Third-party Access	9
1.6 Software Environment	9
1.7 Pending Issues	14
2 Update Guide	15
2.1 Introduction	15
2.2 Preparation	15
2.3 Instructions	15
2.3.1 Local Update on the Device	15
2.3.2 Updating by USB Flash Drive	16
2.3.3 Updating by Uboot	16
2.4 Checking for Update Success	16

1 Release Notes

1.1 Overview

Product name	Network Video Recorder (NVR)
Version	4.003.0000000.0.R.240328
Software package information	DH_NVR4x-EI_MultiLang_V4.003.0000000.0.R.240328
OS requirement	None
Release date	March 28, 2024

1.2 New Features

No.	Feature Description
1	CGI protocol project
2	Optimized channel selection during video playback.
3	Manually enter the time when using playback backup on the device.
4	Supports the Connect option when cameras are added on the webpage.
5	Supports default values for DNS server.
6	Selectively add multiple channels of multi-lens cameras.
7	SMD linkage emails distinguish SMD (Vehicle) and SMD (Human).
8	Optimized HTTP push.
9	Optimized the prompt when the host whose IP is not in the allowlist is used to synchronize the device time.
10	Customize URL in event linkage items on the webpage.
11	The default NTP server configuration of the device is the same.
12	Supports security baseline 2.4.
13	Optimized camera login password and plug and play.
14	Optimized PoE unbinding mode.
15	Added the text prompt when camera password input box appears on the LIVE page.
16	Supports smart tracking when the connected PTZ cameras have smart tracking function.
17	When plug and play is enabled, cameras that have been added to other NVRs will not be automatically added.
18	Supports optimized UTC scheme 2.0.
19	Supports LLDP for overseas NVRs and XVRs.
20	Double-click the image to enter full screen.

No.	Feature Description
21	Optimized preset functions.
22	Added Ping functions on the webpage.
23	Optimized channel display order.
24	Updated Greenland time zone.
25	Supports webpage redirection in private tunnels of router environment.
26	Added logs when IPC update through NVR cloud update failed.
27	Passwords of remote devices can be displayed.
28	Compatible with the Wi-Fi modules of multiple channels.
29	Search for recorded videos by UTC time when the device is used with Dolyink Care.
30	Synchronize device time by UTC on the client.
31	Changed the string Turkey to Türkiye.
32	Optimized the split image effect on the live page.
33	Supports adding cameras through auto registration.
34	Adjust the IPC volume.
35	The target videos can be accurately played back according to the rules of area.
36	Smart events support linking the audio and light alarm in multiple TiOC channels.
37	Connect Imou cameras through ONVIF
38	Scan QR code to acquire the product documents.
39	EPTZ V2.0.
40	Disarm by period supports holiday configuration.
41	IPC supports ABR encoding.
42	Supports web 5.0.
43	Generates logs when you delete old files.
44	Supports automatic network replenishment.
45	All live view supports no target filtering rule.
46	Supports sound classification detection.
47	Supports PoE error detection.
48	Unified smart rule names of IVS.
49	Copy device channel name.
50	Supports smart dual light.
51	Enable and disable live audio of channels.
52	Optimized time range prompt of search results.
53	Supports smart object detection.
54	Optimized stream acquiring of DMSS.
55	Displays channel name in the DMSS notifications.

No.	Feature Description
56	Supports passing the tour information of PTZ camera to DSS Pro.

1.3 New Feature Details

1.3.1 Optimized Channel Selection during Video Playback

When you enter the video playback page through the main menu, playback channels 1 to 4 are selected by default.

When you enter the video playback page by right-clicking on the live video channel, the current channel is selected by default.

After you exit the video playback page and enter it again, the previous selected channels are kept.

1.3.2 Selectively Adding Multiple Channels

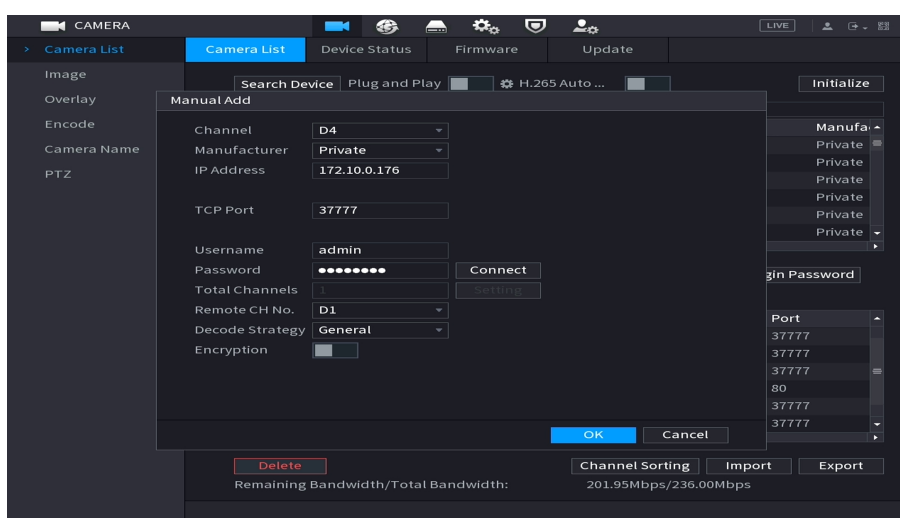
1.3.2.1 Adding Multi-lens Camera

The system supports plug and play (including PoE). When the multi-lens camera is added, all channels are added.

Manually Adding Multi-lens Camera

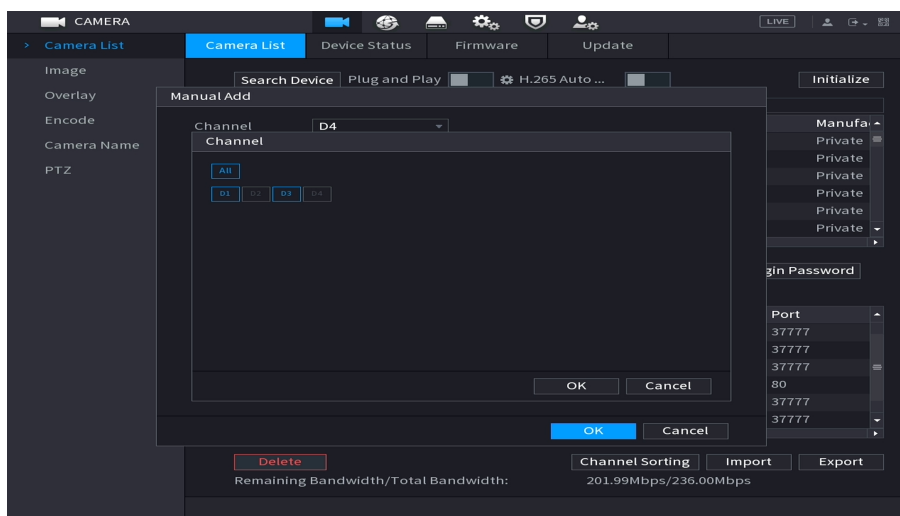
- Scenario 1: Select the manufacturer, IP address, port, username, password, and other information. If you do not want to specify any channel, click **OK**. All channels of the multi-lens camera are added by default.

Figure 1-1 Add all channels by default by clicking OK instead of Connect



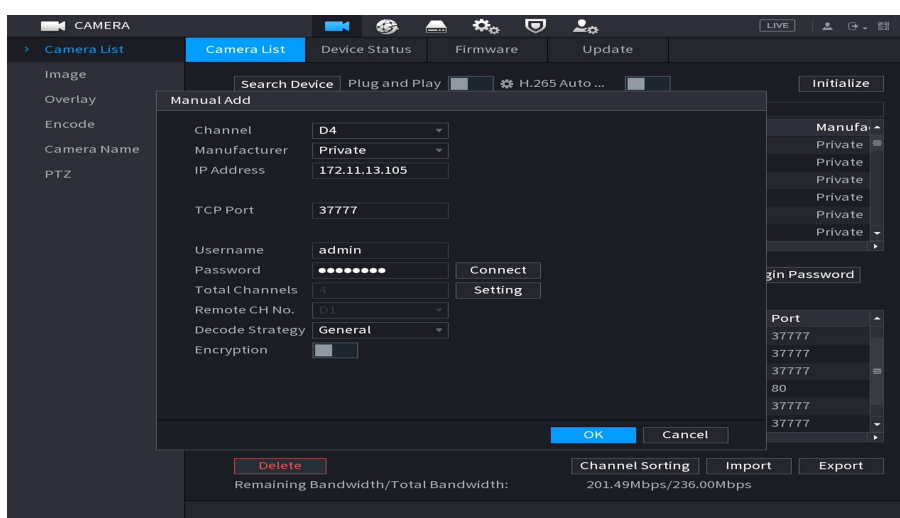
- Scenario 2: Select the manufacturer, IP address, port, username, password, and other information, click **Connect** to obtain the total number of channels, click **Setting** to select a specified channel, and then click **OK** to add the selected channel to the device.

Figure 1-2 Add a specified channel by clicking Connect to obtain the number of channels



If you click **OK** and do not click **Setting** after clicking **Connect**, the channels of the multi-lens cameras are added in sequence by default according to the remaining number of channels that can be added.

Figure 1-3 Add channels by clicking Connect without clicking Setting



1.3.2.2 Importing and Exporting Remote Device List

When you are importing the remote device list, the number of channels must be the same as the exported remote device list. For example, the remote device list contains channel 1 and channel 3 of a 4-lens camera. After you export the remote device list and import it again, include channel 1 and channel 3 of the 4-lens camera.

1.3.2.3 Removing Multi-lens Cameras

You can remove a specific channel of the multi-lens camera.

The selected channels can be removed in PoE unbinding mode.

1.3.2.4 Playing Recorded Videos of Multi-lens Cameras

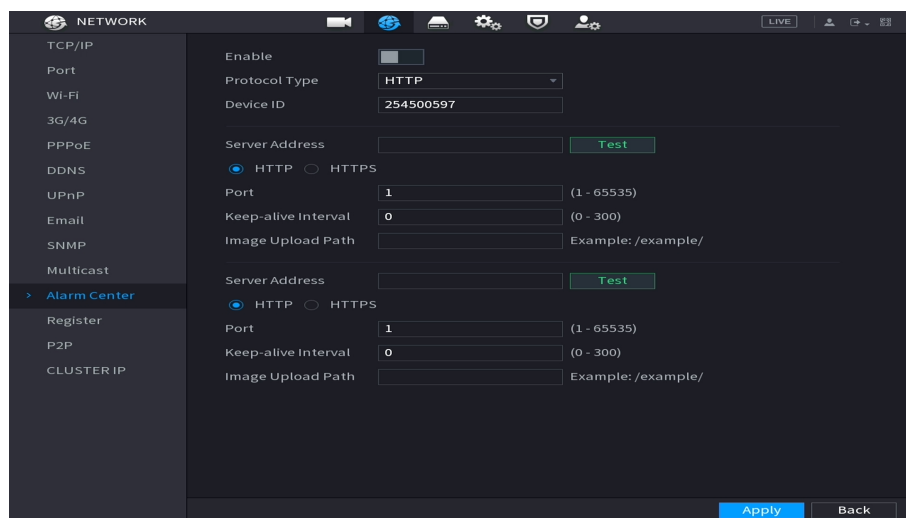
When all channels of the multi-lens camera are added, linkage playback of the linked channels is performed during video playback.

When some channels of the multi-lens camera are added, normal playback of the linked channels is performed during video playback.

1.3.3 Optimized HTTP Push

Configuring HTTP Push

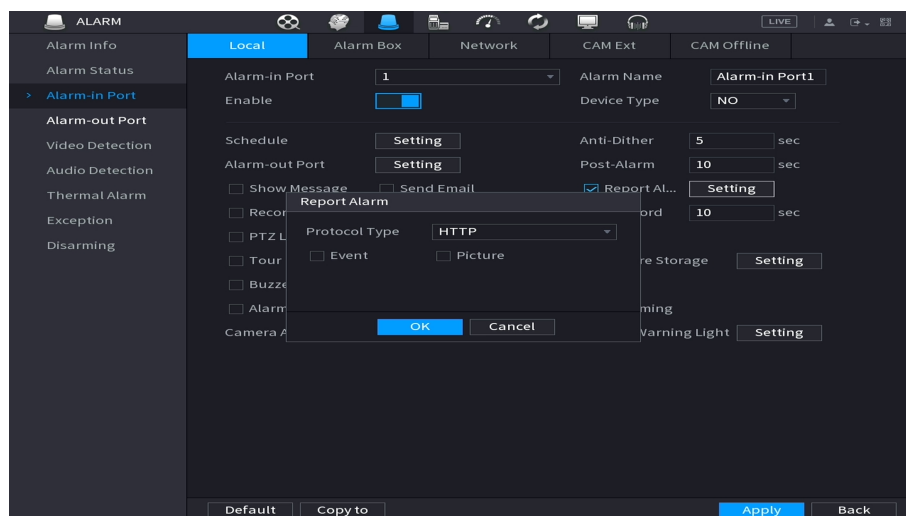
Figure 1-4 Settings page



Add device ID to the Alarm Center to identify devices in the alarm information. HTTPS is also available for you to select.

HTTP push is also linked by alarm upload.

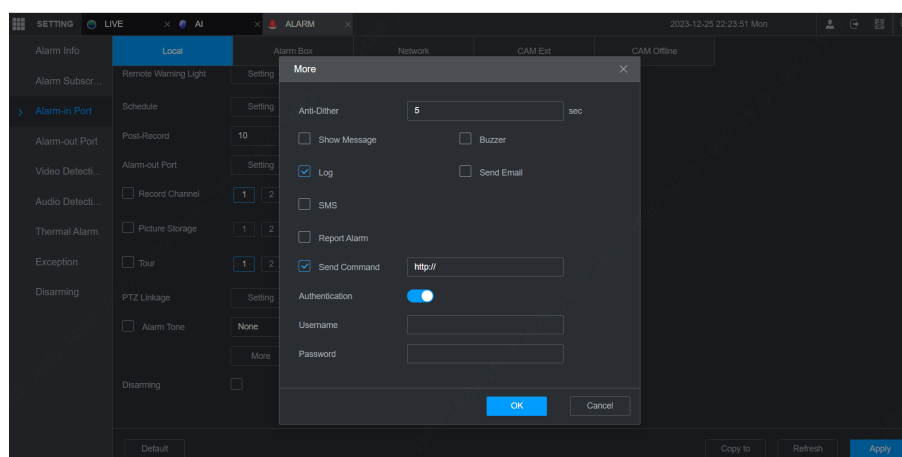
Figure 1-5 Report alarm



The disarming linkage items of Report Alarm include HTTP push.

1.3.4 Customizing URL in Event Linkage Items (Webpage)

Figure 1-6 Configure URL



Select **Send Command** to enable the linkage when alarms are triggered.

Enter the linked server URL and operation in the text box after Send Command. After entering the content, you can configure the authentication.

The username is the server username, and the password is the server password. If the username and password are not entered, the authentication cannot be configured successfully.

The following is the example of the linked command: `http://172.10.4.187/cgi-bin/split.cgi?action=setMode&channel=1&mode=split4&group=0`. It means performing splitting.

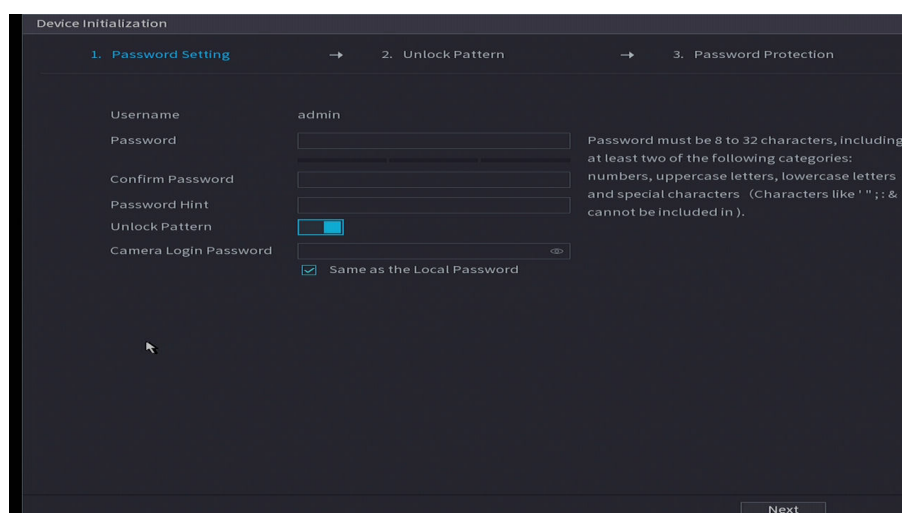
1.3.5 Camera Login Password

Add Camera Login Password on the device initialization page.

The camera login password is the same as the device password by default.

If you want to use different passwords and manually configure the camera login password, do not select the check box before **Same as the Local Password**.

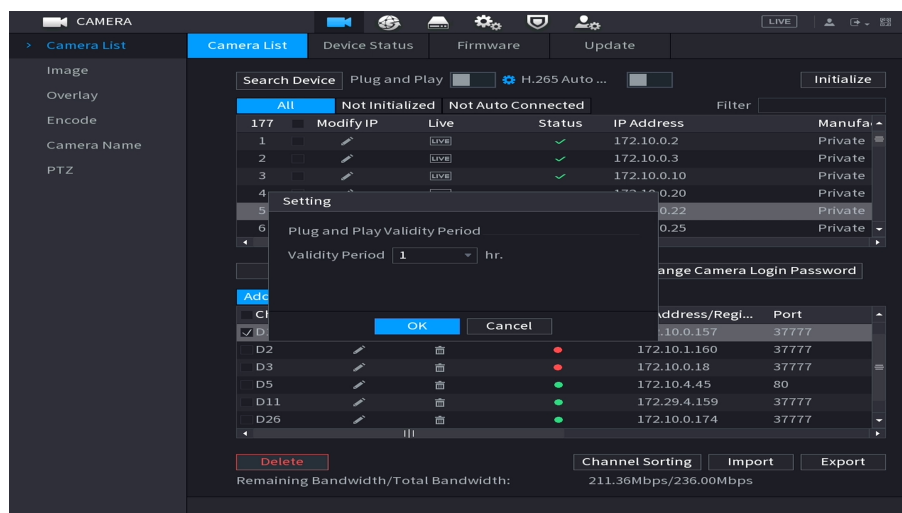
Figure 1-7 Configure camera login password during initialization



1.3.6 Optimized Plug and Play

You can configure the validity period for plug and play.

Figure 1-8 Configure validity period



Click the settings button next to the switch used to enable plug and play. The validity period setting window is displayed. Select the validity period from 1 hour to 12 hours in the drop-down list. It is 1 hour by default.

When the time during which plug and play is enabled exceeds the configured period, plug and play is automatically turned off.

When the time during which plug and play is enabled does not exceed the configured period, if no more channels can be added to the device for 10 minutes, plug and play is automatically turned off.

Modifying the system time or synchronizing device time does not affect the plug and play validity period.

After you restart the device or modify the validity period parameters, the validity period configuration takes effect again.

1.3.7 Optimized Channel Sorting

Live Video Channel Sorting

Figure 1-9 Live video channel sorting



Drag the channels to adjust the display order of the live video channels.

Sorting Added Remote Channels

Figure 1-10 Sorting added remote channels



Select **CAMERA > Camera List**, and then click **Camera Sorting** under the added device list to enter the camera sorting page to adjust the display order of the added channels.

Drag the channels to adjust the display order. When you click Cancel, the system prompts **“The channel sequence was not saved. Are you sure you want to exit?”** If you click **OK**, the modified channel sequence will not take effect. When you click **OK** after adjusting the display order of the channels, the system prompts **“After the channels are sorted, the device will reconnect to the cameras and the configuration of the channels will not change. Are you sure you want to continue?”** If you click **OK**, the IP address of the camera added to the channel will change.

After you adjust the display order of the added remote channels, the channels added to the camera will change.



For PoE bound channels and channels that you have no permission to watch the live video, you cannot drag them to adjust the display order.

1.4 Fixed Bugs

No.	Fixed Bug
1	Fixed the issue of redirection and stream pulling failure on Dolynk Care in private tunnel.
2	Fixed the issue that the device failed to be initialized through DMSS after it was restored to the factory settings.

1.5 Compatibility

1.5.1 Program

This version is V4.003.0000000.0.R.240328, which is compatible with the earlier versions.

1.5.2 Browser

IE 11 and later, Safari 10 and later, Edge, Firefox V70 and later, and Chrome 41 and later.

1.5.3 Third-party Access

1. ONVIF testing tool version: V23.06.
2. ONVIF: Supports Profile T, Profile S and Profile G.

1.6 Software Environment

Category	Model	Version
IPC	DH-IPC-HFW1230S P-A-0280B-S5	DH_IPC-HX2(1)XXX-Euler_EngSpnRus_PN_V2.840.0000000.5.R.221222.zip
IPC	DH-IPC-HFW1230S P-0360B-S5	DH_IPC-HX2(1)XXX-Euler_EngSpnRus_PN_V2.800.0000000.18.R.220902.zip
IPC	DH-IPC-HFW1431S N-0280B-S4	DH_IPC-HX1XXX-Molec_MultiLang_NP_V2.820.0000000.49.R.220815.zip
IPC	DH-IPC-HFW1430S P-A-0280B-S5	DH_IPC-HX14XX-Hertz2_EngSpnRus_PN_V2.800.0000000.12.R.221214.zip

Category	Model	Version
IPC	DH-IPC- HDW1530T P-0280B-S6	DH_IPC-HX1XXX-Hertz_EngSpnRus_PN_V2.800.0000000.18.R.220902.zip
IPC	DH-IPC- HDW1830T P-0280B-S6	DH_IPC-HX18XX-Molec_EngSpnRus_PN_V2.800.0000000.18.R. 220902.zip
IPC	DH-IPC- HDW2441T P-S-0280B	DH_IPC-HX2X4X-Taylor_MultiLang_PN_V2.840.0000000.8.R.221213.zip
IPC	DH-IPC- HDW2449T P-S- IL-0280B	DH_IPC-HX2X4X-Taylor_MultiLang_PN_V2.840.0000000.8.R.221213.zip
IPC	DH-IPC- HDW2531T P- AS-0280B- S2	DH_IPC-HX25(8)XX-Molec_MultiLang_PN_V2.820.0000000.49.R. 220815.zip
IPC	DH-IPC- HDW2849T P-S- IL-0280B	DH_IPC-HX2XXX-Kant_MultiLang_PN_V2.860.0000000.4.R.230109.zip
IPC	DH-IPC- HDW2831T P- AS-0280B- S2	DH_IPC-HX25(8)XX-Molec_MultiLang_PN_V2.820.0000000.49.R. 220815.zip
IPC	DH-IPC- HFW3241T P- ZS-27135- S2	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.120.0000000.9.R. 221118.zip
IPC	DH-IPC- HDW3441T P- ZS-27135- S2	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.120.0000000.9.R. 221118.zip
IPC	DH-IPC- HDW3449H P-AS- PV-0280B- S4	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.000.0000000.22.R. 221119.zip

Category	Model	Version
IPC	DH-IPC- HDW3549H P-AS- PV-0280B- S4	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.000.0000000.22.R. 221119.zip
IPC	DH-IPC- HDW3849H P-AS- PV-0280B- S4	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.000.0000000.22.R. 221119.zip
IPC	DH-IPC- HDBW3241 FP- AS-0210B- S2	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.120.0000000.9.R. 221118.zip
IPC	DH-IPC- HDBW3441 FP- AS-0210B- S2	DH_IPC-HX3XXX-Taurus_MultiLang_PN_Stream3_V3.120.0000000.9.R. 221118.zip
IPC	DH-IPC- HDW5241T MP- ASE-0280B- S3(AcuPick)	DH_IPC-HX5XXX-single- Riemann_MultiLang_PN_Stream4_V3.100.0000000.5.R.230509.zip
IPC	DH-IPC- HDW5442T MP- ASE-0280B- S3(AcuPick)	DH_IPC-HX5XXX-single- Riemann_MultiLang_PN_Stream4_V3.100.0000000.5.R.230509.zipp
IPC	DH-IPC- HFW5541T P- ASE-0280B- S3(AcuPick)	DH_IPC-HX5XXX-single- Riemann_MultiLang_PN_Stream4_V3.100.0000000.5.R.230509.zip
IPC	DH-IPC- HFW5842E P-ZE-2712- S3(AcuPick)	DH_IPC-HX5XXX-single- Riemann_MultiLang_PN_Stream4_V3.100.0000000.5.R.230509.zip
IPC	DH-IPC- HFW7442H P-Z-0832- DC12AC24 V-X	DH_IPC-HX7XXX-HW-Faraday_MultiLang_PN_V3.100.0000000.12.R. 230111.zip

Category	Model	Version
IPC	DH-IPC-HFW7842H P-Z-2712F- DC12AC24 V-X	DH_IPC-HX7XXX-HW-Faraday_MultiLang_PN_V3.100.0000000.12.R. 230111.zip
IPC	DH-IPC-HFW71242 HP-Z-2712- DC12AC24 V-X	DH_IPC-HX7XXX-HW-Faraday_MultiLang_PN_V3.100.0000000.12.R. 230111.zip
IPC	DH-IPC-MFW7849Y P-Z-2080- T44-0832	DH_IPC-MFW8XXX- Faraday_MultiLang_NP_Stream3_V3.100.0000000.5.R.221102.zip
IPC	DH-IPC-HDW8441X P-3D-0200B	DH_IPC-HX7(8)XXX-EMMC- Taurus_MultiLang_PN_Stream3_V3.000.0000000.14.R.220718.zip
IPC	DH-IPC-EB5541	DH_IPC-EX5XXX-Leo_MultiLang_NP_Stream3_V2.800.0000000.40.R. 220815.zip
IPC	DH-IPC-EBW81242 P-AS-S2	DH_IPC-HX8(7)XXX-FE-Darwin_MultiLang_PN_V3.000.0000000.1.R. 210705.zip
IPC	DH-IPC-PFW81642 P-A180- DC12AC24 V	DH_IPC-PFW8XXX-Four- Faraday_MultiLang_PN_Stream3_V3.100.0000000.4.R.220813.zip
IPC	DH-PSDW8244 2M-A270- D440-S3	DH_IPC-PSDW8XXX-Plato- Darwin_MultiLang_PN_Stream3_V3.000.0000000.7.R.221217.zip
IPC	DH-IPC-PDBW8204 1P-B360- E4-2812- ATC-S2	DH_IPC-PDBW820XX- Faraday_MultiLang_PN_Stream3_V3.100.0000000.6.R.220908.zip
IPC	DH-IPC-MFW7442K 1P-Z-0832- T40-0360B	DH_IPC-HX5XXX-EMMC2- Volt_MultiLang_PN_Stream3_V2.840.0000000.18.R.220629.zip

Category	Model	Version
IPC	DH-IPC-HFW7442H N-Z-2712F-DC12AC24 V	DH_IPC-HX8XXX-Nobel_MultiLang_NP_V3.000.0000000.2.R.210712.zip
IPC	DH-IPC-HFW7442H P-Z-2712F-DC12AC24 V-S2	DH_IPC-HX7XXX-Darwin_MultiLang_PN_V3.000.0000000.4.R.220720.zip
IPC	DH-IPC-HFW5241E P-ZE-27135	DH_IPC-HX5XXX-Volt_MultiLang_PN_Stream3_V2.840.0000000.18.R.220629.zip
IPC	DH-IPC-PFW5849P-A180-E2-ASTE-0360 B	DH_IPC-HX5(4)XXX-Taurus_MultiLang_PN_Stream3_V3.120.0000000.2.R.221021.zip
ITC	DHI-ITC415-PW6M-IZ	General_ITC(X15)(X37)-PW6M-XXX-C2_Eng_PN_Oversea_V2.626.0000000.4.R.220718.zip ShengChanTEST_ITC(X15)(X37)-PW6M-XXX-C2_Eng_PN_Oversea_AUTOTEST_V2.625.0000000.0.R.211118.zip
ITC	DHI-ITC431-RW1F-IRL8	General_ITC431-RW1F-IRL8(L)-C2_Eng_PN_Oversea_V4.003.0000000.0.R.220907.zip ShengChanTEST_ITC431-RW1F-IRL8(L)-C2_Eng_N_Oversea_V4.001.0000000.0.R.210907.zip
ITC	DHI-ITC952-AU3F-IRL8ZF1640	General_ITCX52-AF3F(RF2F)-(IR7)(IR8)-C1_Eng_PN_Oversea_V4.003.0000000.0.R.220526.zip ShengChanTEST_ITCX52-AF3F(RF2F)-(IR7)(IR8)-C1_Eng_PN_Oversea_V4.001.0000000.9.R.211126.zip
TPC	DHI-TPC-PT8441D-BM100Z56 L-BM-DC48-S23	General_TPC-NYX5400-BMXB_V1.000.0000000.0.R.220121.zip General_TPC-PTZ83-HNL-V_MCU_V2.401.0000000.2.R.220727.zip General_TPC-PT8XX1D-F-CODE_MCU_V2.401.0000000.1.R.220726.zip General_TPC-SD-Gram_PART_V2.830.0000000.0.R.220909.zip DH_TPC-PT8XX1D-B-S2_MultiLang_PN_V2.650.0000000.3.R.221013.zip
TPC	DHI-TPC-SD2241-TB7F8-DW-S2	General_TPC-NYX2200-MS-CTPGW_V1.000.0000000.4.R.20220812.zip DH_TPC-SD2X41-B-S2_MultiLang_PN_V2.650.0000000.6.R.220908.zip General_TPC-SD49XXX-HN_MCU_V2.401.0000000.1.R.191031.zip

Category	Model	Version
TPC	DHI-TPC-BF1241-TB7F8-DW-S2	DH_TPC-DF1241-TB-S2_MultiLang_PN_V2.650.0000000.8.R.221117.zip General_TPC-NYX2200-MS-CTPGW_V1.000.0000000.4.R.20220922.zip
SD	DH-SD5A225GB-HNR	General_SD5AXXXG-HN_MCU_V2.401.0000001.42.R.220811.zip DH_SD-Taurus_MultiLang_PN_Stream3-Normal_V2.820.0000013.1.R.220923.zip
SD	SD3A200-GNP-W-PV	General_SD-Leo_MultiLang_PN_Stream3_V2.811.0000009.0.R.220629.zip
VTO	DHI-VTO2202F-P-S2	DH_VTOXXXXD-G-S2_MultiLang_PN_PAAS_SIP_EMEA_V4.600.0000000.0.R.220813.zip
VTO	DHI-VTO6221E-P	DH_VTOX221E_MultiLang_PN_PAAS_SIP_EMEA_V4.600.0000000.0.R.220805.zip General_VTO3-6-MCU_V1.000.0000000.1.R.20181107.zip
Platform	DSS Pro	General_DSS-Client_Win64_IS_V8.002.0000000.0.R.20221210
Platform	SmartPSS Lite	2.7.05.01.01657-General_SmartPSSLite_Eng_Win64-Install_IS_V1.003.0000002.0.R.221230
App	DMSS	1.99.600
COS Pro	COS Pro	1.016.0000002
PlaySDK	PlaySDK	General_PlaySDK_Eng_Win64_IS_V3.045.100E000.0.R.230218.zip
Tool	ConfigTool	General_ConfigTool_ChnEng_V5.001.0000001.0.R.20220728
Tool	NetSDK	General_NetSDK_Eng_Linux64_IS_V3.055.0000001.0.R.211101.tar.gz
Tool	Player (including DiskManager)	General_NetSDK_Eng_Win64_IS_V3.055.0000001.0.R.211101.7z
Tool	NKB1000	General_NKB1000_Eng_V2.620.0000000.0.R.20180115.zip

1.7 Pending Issues

None

2 Update Guide

2.1 Introduction

This section introduces how to update the device to V4.003.0000000.0.R.240328. The device supports online update, and update by USB flash drive and Uboot.

2.2 Preparation



Check whether the device model and program version are correct before the update.

Before the update, please ensure that the following conditions are met.

- Update online: The device can work normally and is connected to the network.
- Update by USB or Uboot: You have imported the .bin update file to the USB flash drive. The USB flash drive is in FAT32 format.
- Update by Uboot: For NVR4X series products, you only need to place update.img file in the root directory of the USB flash drive.
- Make sure that the USB flash drive is inserted to the USB port of the device ; otherwise the update cannot be performed normally.

2.3 Instructions

2.3.1 Local Update on the Device

Procedure

Step 1 Log in to the local interface of the device.

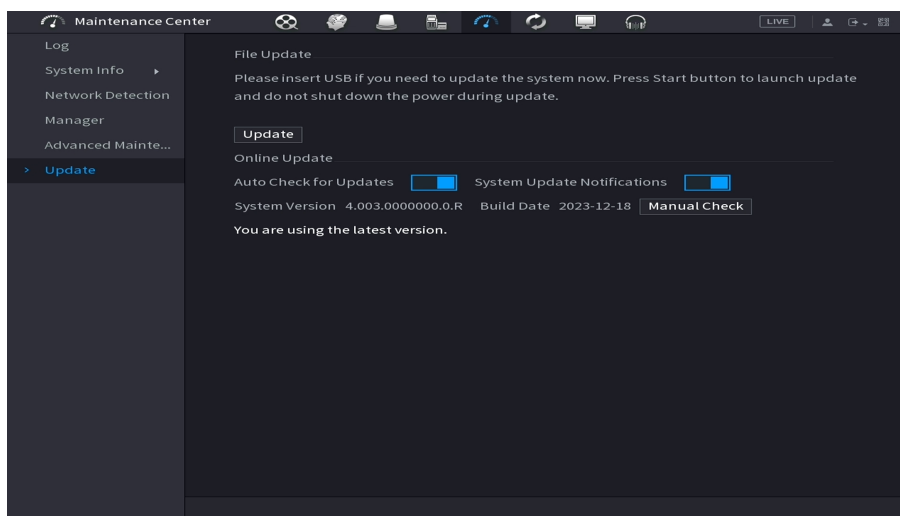
Step 2 Right-click on the live view page, and then select **Main Menu**.

Step 3 On the main menu page, select **Maintenance Center > Update >** .

Step 4 The system detects the program version.

- Auto check for update: Enable **Auto Check for Updates**.  Means it is enabled.
- Manual check: Click **Manual Check**.

Figure 2-1 System update



Step 5 Click **Update** to update the system.



When the system displays **You are using the latest version**, you do not need to update the system.

2.3.2 Updating by USB Flash Drive

Import .bin update file to update the system version.

Procedure

- Step 1** Insert the USB flash drive with the update file into the USB port of the device.
- Step 2** Log in to the local interface, right-click on the live view page, and then select **Main Menu**.
- Step 3** On the main menu page, select **Maintenance Center** > **Update** > .
- Step 4** Click **Browse** , select the update file, and then click **OK**.

2.3.3 Updating by Uboot

Uboot update means that when the device is powered on, the system automatically detects whether a USB device has been inserted, and whether there is an update file in the USB device. If it exists and the update file is detected correctly, the system will automatically update. When the device is abnormal, the device can also be updated except the serial port and TFTP (Trivial File Transfer Protocol).

Put u-boot.bin.img and update.img files in the root directory of the USB flash drive, insert the USB flash drive into the device, and then restart the device.

2.4 Checking for Update Success

No matter which method is used, log in to the system again after the update is complete to check whether the version is correct.