

2nd generation of DeepinMind NVR V4.40.400

Build200803 Release Notes

(2020-08-14)

Firmware Basic Information	Firmware Version:	V4.40.400 Build200803
	SDK Version:	V6.1.4.45_build20200525
	Play Library (PlayCtrl.dll)	V7.3.8.45
	Web version	V4.0.1 build200803
	Client version	V3.3.2.2 build20200728

Reason of Upgrade

Add new features and optimize product performance.

New features

1. New feature – Support EzvizSDK2.0

- 1) Support connect the corresponding neutral cloud platform.
- 2) Resolve device connect platform with invalid history verification code.
- 3) Prohibit ABCDER devices from being added to the platform.
- 4) Live view supports a maximum of 64 channels simultaneously.
- 5) EZVIZ playback can support up to 4 channels, 1/4 times speed, 1/2 times speed, 2\4\8 times speed.
- 6) The maximum 64 + 4 stream encryption, stream format: H264、H265、Smarth264、Smarth265.
- 7) It supports PTZ preset point control, intercom with IPC and manual capture, supports upgrade specified device by platform integrated EZVIZ SAAS service (Grayscale upgrade), supports EZVIZ timing.
- 8) It does not support video cloud storage, ant soldiers and one button do not disturb configuration.

2. Support intelligent application based on EZVIZ SAAS service component platform

- 1) EZVIZ SDK transmission mode integrates face library management and face data management (face library batch asynchronously import, face library addition, deletion and modification, human data user-defined ID).

2) EZVIZ SDK transmission mode integrates face capture, face comparison, stranger, personnel frequency, perimeter protection, front-end mixed target capture, and back-end video structuralization alarm upload.

3) EZVIZ SDK transmits channel information of device and image center storage.

3. EZVIZ matching menu

1) Support process of EZVIZ/HC client scanning QR code to enter and add device.

2) Support general browser to scan QR code and pop up app download page.

4. Support ISUP 5.0 protocol

1) Device will reboot while ISUP 5.0 turn to Ehome 2.0/2.6.

2) Add a serial port command, the bit stream can be switched between RTP and PS, and the device will reboot; the default format of bit stream output is RTP.

3) The secret key rules: cannot be set to null and ABCDEF.

4) Video playback by file is not supported.

5) Support the voice intercom between the platform and IP channels on the device, support the platform to capture pictures through protocol linkage, and upload the captured pictures to the Wuhan cloud platform (maximum of 5 in 1 second).

5. Support ISAPI protocol transmission based on ISUP 5.0

Achieve intelligent functions by ISAPI transmission

1) Maintenance of device.

2) IO.

3) Resource status of device.

4) Video capability.

5) PTZ capability.

6) Recording capability.

7) Face distribution and image import.

8) Video event capability.

9) Intelligent event configuration.

6. Support analysis function of real-time video structuralization.

1) Support configuration of video structuralization.

2) Updated the algorithm version.

3) Machine, non-human target extraction and retrieval, achieve alarm upload extension of the human body and vehicle attributes.

4) Face comparison and black and white list of vehicles based on video structuralization.

5) Solve the problem that the model of low version algorithm can't be compared with the model of high version and search image by image.

7. Intelligent retrieval

1) Achieve asynchronous retrieval of face/human body images on remote platform.

2) Face retrieval speed improved (32G SSD iDS-76/77/9600NXI does not support it)

3) Support asynchronous retrieval of human body via searching image by image.

4) Vehicle does not support local search image by image.

5) Support remote human body attributes and actual retrieval. The remote retrieval only supports 5 searches at the same time, and one local search can be performed while remote retrieval. The remote retrieval results can be retained for 30 minutes at most.

8. SSD management

1) Capacity distribution display in SSD.

2) SSD Firmware can be upgraded together with software package or SSD Firmware can be upgraded separately. The upgrade package is not released to the public, only used by technical support personnel and R&D department.

3) Operation log add SSD operation log: upgrade SSD record log.

4) Support format, initialization and other data maintenance operations, but only the admin user has permission to format and initialize.

9. Post intelligent face capture.

1) Capture threshold (default 0-10, range 0-100) (the default value is the same as the front-end 10, and remains unchanged after FD4.3).

2) Face capture algorithm update version: V4.5.1

10. Post intelligent face comparison

1) Face comparison algorithm is upgraded to V4.5.3.

2) When the version is upgraded or degraded, the obsolete or unmodeled images will be remodeled.

3) Support serial port command one button forced remodeling, and the progress can be viewed.

4) The face scoring function is turned off by default. The face scoring parameters: pupil distance is 18 by default, pitch angle is 35 degrees, left and right angles are 55 degrees by default.

5) Face attributes of supporting the storage and alarm upload: gender (male, female), age group (infant, child, juvenile, adolescent, youth, middle-aged, middle-aged and elderly, elderly), wearing glasses (with glasses, without, with sunglasses), expression (neutral, happy, surprised, afraid, disgusted, sad, angry), mask (with, without), beard (with, without).

6. Support local GUI and remote platform for face comparison/Stranger alarm retrieval, such as by event retrieval, attribute retrieval, name retrieval, and image retrieval.

7) Support non real time face comparison and analysis of all channels.

11. Personnel frequency

1) High frequency statistical period

Previous 128G SSD iDS-76/77/9600NXI, the maximum cycle of high frequency is 365 days.

2) The maximum number of high frequency triggered alarms in a single day is 200 times, and it is only recorded as 200 times if it occurs more than 200 times.

3) Specifications of passers-by library:

In the 128G SSD of iDS-76/77/9600NXI, face library 100,000(10G), stranger library 100,000(10G), high and low frequency data (22G, statistical cycle 365 days);

In the 32G SSD of iDS-76/77/9600NXI, face library 100,000(10G), stranger library 100,000(5G), high and low frequency data (11G, statistical cycle 365 days);

4) When the version is upgraded/degraded, solved the problem that the images of passers-by library/alarm library are not modeled due to the algorithm version replacement.

5) When the high-frequency alarm is turned on, the web interface can view the frequency in the statistical period in real time.

6) Support high frequency alarm retrieval and exporting report.

12. Low frequency statistical alarm

1) Support the configuration, trigger, display, retrieval and report export of low frequency alarm.

13. Perimeter protection function

1) When the algorithm is updated to PED 1.9.0, 1080p, the conventional distance support 16 channels, the medium distance support 12 channels, and the long distance only supports 8 channels.

2) Target filter page: add 2 buttons for maximum target and minimum target.

14. Alarm receiving display of browser

1) Support the configuration of alarm reception.

2) Support the reception and display of alarm related to face, human body, vehicle and non-motor vehicle.

15. Support SSD smart information display

1) Support to view SSD smart information of local and Web.

16. Access to IPC supporting advanced mobile detection

1) Support advanced mobile detection configuration.

17. Support access to siren camera

1) Support sound and light configuration.

18. Support EZVIZ downlink transmission ISAPI protocol

19. Support password reset through HC/GV scanning device QR code

20. Access to thermal camera

1) Access to front-end thermal temperature measurement alarm.

2) Access to front end thermal face capture temperature measurement alarm.

3) Support remote temperature real time data stream.

21. Support Chinese standard agreement

1) Support IPC to access NVR with GB28181 protocol through router or 4G network.

2) It can still access the NVR normally with GB28181 after the IP of IPC changes.

Modified functions

1. Fix the issue that the platform can't get custom added channel by Ehome protocol

2. Improved face intelligent platform access efficiency

- 1) Optimize the face library service error code.
- 2) Optimize Wuhan cloud image download and response message parsing logic.

3. Fix known problems

- 1) AAC audio data is not protected, device reboot probably.
- 2) NVR alarm capture delay.
- 3) Abnormal connection of IPSAN (can be connected but not online).
- 4) There are repeated recording and playback bounce when cutting segments in smart video recording.
- 5) When the camera adds IP address with multiple spaces, the alarm fails to upload to the platform.
- 6) It cannot include special characters when configure IPC name on NVR.
- 7) Deployment failed by ISAPI protocol.
- 8) Decoding exception when the number of NALU in the third-party camera is too large.
- 9) NVR reboot due to large camera private information data.

4. Important update

- 1) When the reserved mailbox is activated and edited by users, it can be saved successfully if the character of the mailbox is blank.
- 2) Black and white list English name adjustment: blacklist to blocklist, whitelist to allowlist.
- 3) Modified name of SSD Firmware package: GML is used if language is not distinguished, and GM is used if neutral/standard configuration is not distinguished.
- 4) Modify the enable configuration of SNMPv3 on the web page to ensure normal opening and closing.

Related product list:

2 nd generation of DeepinMind NVR	Overseas (16/32/64 channels) iDS-9600NXI-I8/X(B) iDS-9600NXI-I16/X(B)
--	---

iDS-9600NXI-I8/8F(B)
iDS-9600NXI-I16/8F(B)
iDS-9600NXI-I8/16S(B)
iDS-9600NXI-I16/16S(B)
iDS-7700NXI-I4/16S(B)(two HDMI)
iDS-7700NXI-I4/16P/16S(B) (two HDMI)
iDS-7700NXI-I4/X(B)(two HDMI)
iDS-7700NXI-I4/16P/X(B) (two HDMI)
iDS-6716NXI-I/16S(B)
iDS-6708NXI-I/8F(B)

Customer Impact and Recommended Action

This new firmware upgrade is to improve product performance, and will take effect automatically after upgrading from previous versions. We'd like to inform you the above changes. Also, we are sorry for any possible inconvenience of use-habit changes caused by this action.

For questions or concerns, please contact our local technical support team.

Note:

- Hikvision has all rights to alter, modify and cancel this notice.
- Hikvision doesn't give any guarantee for old models' stock.
- Hikvision is not liable for any typing or printing errors.
- For special model's change details, please contact our local technical support team.

Hikvision Digital Technology CO., Ltd.
No. 555 Qianmo Road, Binjiang District, Hangzhou 310052,
China
Tel: +86-571-8807-5998
FAX: +86-571-8993-5635
Email: support@hikvision.com