Hanwha Techwin

Network Camera Version 1.41 Release Note

v1.41
2023-03-22

Contact Information

Hanwha Techwin Co., Ltd.

Hanwha Techwin R&D Center, 6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488, Korea

www.hanwha-security.com

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Table of Contents

HTW Network Camera Version 1.41

This document describes the new and changed features of Hanwha Techwin network camera version 1.41.

> ⓘ Released on March 22, 2023

Common Features

[New Features]

- Supports Open Platform event: NUC Active state [1.41.02, TNO-3010T, TNO-3020T, TNO-3030T]

- Updated to ANPR application version 2.16 (application version is shown in the [Open Platform] menu) [v1.41.02, XNO-L6085RA, XNO-6085RA]

- After a factory reset, the motion detection setting is enabled by default [v1.41.02, QNV-6024RM, QNV-6023R] [v1.41.11, LNO-6072R, LND-6012R, LNO-6032R, LNV-6032R, LND-6022R, LND-6072R, LNO-6022R, LNV-6012R, LNV-6072R, LND-6032R, LNV-6022R, LNO-6012R]

- Analyzes after sorting age groups and gender when linking with Retail Insight [v1.41.02, PNO-A9081R, PND-A9081RV, PND-A9081RF, PNV-A9081R, PNB-A9001]

- Supports the function of uploading and playing back audio clip [v1.41.02, PNO-A9081R, PND-A9081RV, PND-A9081RF, PNV-A9081R, PNB-A9001]

- Analyzes after sorting age groups and gender when linking with Retail Insight [v1.41.02, PNO-A9081R, PND-A9081RV, PND-A9081RF, PNV-A9081R, PNB-A9001]

- Supports the function of uploading and playing back audio clip [v1.41.02, PNO-A9081R, PND-A9081RV, PND-A9081RF, PNV-A9081R, PNB-A9001]

- Added face mask detection function [v1.41.03, PNO-A9081R, PNB-A9001]

- Added mask attributes in AI metadata [v1.41.03, PNO-A9081R, PNB-A9001]

- [Social distancing detection] function added [v1.41.05, PNO-A9081R, PNB-A9001]

- SLA-C-I3910 lens additionally supported [v1.41.05, PNB-A9001]

- Added Dynamic FPS Function [v1.41.01, ANO-L6012R, ANO-L6022R, ANV-L6012] [v1.41.02, ANE-L6012R, ANO-L6082R, ANV-L6082R]

- Added option to grant user permission to access and set settings on [Video profile], [Camera

setup], and [Video and focus setup] ([Video setup] for models that do not support focus function) pages   [v1.41.13, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021]

[Improvements]

- Improved motion detection sensitivity. [1.41.01 QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021, LNO-6072R, LND-6012R, LNO-6032R, LNV-6032R, LND-6022R, LND-6072R, LNO-6022R, LNV-6012R, LNV-6072R, LND-6032R, LNV-6022R, LNO-6012R]

- Fixed an issue where HTTPS behavior error in Chrome browser version 80. [1.41.01 QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021, LNO-6072R, LND-6012R, LNO-6032R, LNV-6032R, LND-6022R, LND-6072R, LNO-6022R, LNV-6012R, LNV-6072R, LND-6032R, LNV-6022R, LNO-6012R]

- Changed the default value of Flip / Mirror for the Flat Eye model. [1.41.01 QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Modified the distance range of auto focus in [Quick Focus] mode [1.41.02 QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Supports the original image of Open Platform in the Hallway view mode [1.41.02, TNO-3010T, TNO-3020T, TNO-3030T]

- Supports Stratocast [1.41.10, LNO-6072R, LND-6012R, LNO-6032R, LNV-6032R, LND-6022R, LND-6072R, LNO-6022R, LNV-6012R, LNV-6072R, LND-6032R, LNV-6022R, LNO-6012R, QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021]

- Added a function to configure the administrator account ID [v1.41.03, PNM-9030V]

- Applied Genetec requests regarding Audio track and audio multicast [v1.41.03, PNM-9030V]

- Supports two more types of lenses (THEIA-SL410P/SL1250P) [v1.41.02, PNB-A9001]

- Supports four highest resolution modes (32M, 24M, 15M, 8M) [v1.41.01, TNB-9000]

- Supports 4K video output on the Live screen of Web Viewer [v1.41.01, TNB-9000]

- Fixed an issue where network IP and DNS settings were changed after firmware update [v1.41.04, PNM-9030V]

- Adjusted the size of QVGA IR sensor window [v1.41.03, TNO-3030T, TNO-3020T, TNO-3010T]

- Improved audio sensitivity of the internal microphone [1.41.10, QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021], [1.41.02, QNB-8002]

- 4 mega camera mode supports 16:9 resolution (2560*1440, 320*240 or 320*180) [1.41.03, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021], [1.41.02, QNB-8002]

- Modified the firmware in accordance with the change of Gyro sensor module [v1.41.02, QNP-6230RH] [v1.41.01, XNO-L6085R, XNO-L6085RA, XNO-6085RA, XND-6081REV, XND-8081REV] [v1.41.03, XNP-6320HG, XNP-6371RHG01] [v1.41.02, XNP-6320RHG] [v1.41.01, XNP-6341RH]

- Improved RTC driver setting error [v1.41.02, QNV-6025RM]

- Improved the issue of camera time failing to periodically sync with that of the NTP server [v1.41.02, QNV-6025RM]

- Supports ONVIF Test Tool v20.06 [1.41.03, XNP-6320HG] [1.41.02, XNP-6320RHG] [v1.41.01, XNO-L6120RG, XND-8080RG, XNO-6120RG] [v1.41.03, XNO-6120RG]

- Logs are provided when changing presets in [Camera setup] [1.41.11 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021] [1.41.04 QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [1.41.12 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021]

- Improved compatibility with NVR [1.41.11 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021] [1.41.04 QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [1.41.12 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021]

- Modified the firmware in accordance with the change of a real-time clock IC (RTC IC) [v1.41.04, XNP-6320HG]

- Adjusted the RTP Payload buffer to improve compatibility with specific NVRs [v1.41.02, QNV-6024RM, QNV-6023R] [v1.41.11, LNO-6072R, LND-6012R, LNO-6032R, LNV-6032R, LND-6022R, LND-6072R, LNO-6022R, LNV-6012R, LNV-6072R, LND-6032R, LNV-6022R, LNO-6012R] [v1.41.01, XNB-6000G01, XNP-6120HG] [1.41.02, KND-5080RG, XNO-6120RG] [v1.41.03, XNP-6320RHG, XNO-L6120RG] [v1.41.04, XND-6080RG, XND-6080RG01, XNO-6080RG, XNO-6080RG01, XNO-6085RG, XNO-6085RG01] [v1.41.06, XNO-6085RG] [v1.41.05, XNP-6302HG, XNP-6371RHG01]

- Supports two more types of lenses (THEIA-SL410P/SL1250P) [v1.41.02, PNB-A9001]

- Fixed an issue that does not send metadata when BestShot is disabled [v1.41.04, PNO-A9081R,

PNB-A9001]

- [Handover] function added to [Object detection] settings [v1.41.05, PNO-A9081R, PNB-A9001]

- [No. of people] and [Occupancy] parameters added to [Queue management] function [v1.41.05, PNO-A9081R, PNB-A9001]

- The Open Platform API 'Upload File Data' and 'App Command 2' have been added, and the overall API execution speed has been improved [v1.41.02, PNB-A9001LP, PNO-A9081RLP, PNV-A9081RLP]

- Fixed an error in the Open Platform API opensdk_getMountSize when mounting ext4 format SD card   [v1.41.02, PNB-A9001LP, PNO-A9081RLP, PNV-A9081RLP]

- Fixed a problem that the NTP server time was not reset to match the changed NTP server when the NTP server address setting was changed [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Added option to grant user permission to access and set settings on [Video profile], [Camera setup], and [Video and focus setup] ([Video setup] for models that do not support focus function) pages [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Fixed language error in Japanese version [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

- Fixed an error where [Tampering detection] function did not operate after a certain time [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]   [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-

6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

- Added the ability to set the minimum bitrate of a profile to 10 kbps [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

- Added the ability to use HTTP and HTTPS at the same time [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

- Fixed an error where the SNMP port opens while SNMP does not operate [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03,

ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

▪ Fixed an error where commands operate with a modified packet [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

▪ Fixed an error where ONVIF discovery communication was not available between a camera and Wisenet Device Manager in a certain circumstance [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R] [v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

▪ Removed unnecessary PHP scripts [v1.41.05, QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [v1.41.14, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021, QND-6073R, QND-6083R, QNO-6073R, QNO-6083R, QNV-6073R, QNV-6083R, AND-2010R, AND-2020R, KND-L2010R, KNO-L2022R] [v1.41.03, ANO-L6012R, ANO-L6022R, ANV-L6012R] [v1.41.03, ANO-L7012R, ANO-L7022R, ANO-L7072R, ANV-L7012R, ANV-L7072R]

[v1.41.03, ANE-L6012R, ANO-L6082R, ANV-L6082R] [v1.41.03, ANE-L7012R, ANO-L7082R, ANV-L7082R]

[Bug fixes]

- Fixes a problem that occurs when the camera integrates with Retail Insight. [1.41.00 QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R, QNV-6073R, QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Fixed an error where the pan does not reset when the pan is driven more than 3,000 times in one direction and out of step. [1.41.01 QNP-6230RH]

- Fixed an issue where the size of the object is not set in the motion detection when [Hallway view] is set to [90] or [270]. [v1.41.01, TNO-3030T]

- Improved the camera booting issue incurred by memory leak [v1.41.02, XNO-L6085RA, XNO-6085RA]

- Improved the issue of camera failing to boot due to Gyro sensor recognition error [v1.41.02, XNO-6085RA]

- Fixed the problem that if a smart codec is set while a profile that does not support smart codec is being played, the smart codec setting is applied even to a profile that does not support smart codec [1.41.11 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021] [1.41.04 QNO-8080R, QNV-8010R, QNO-8010R, QNV-8020R, QND-8020R, QND-8010R, QND-8030R, QNV-8030R, QNO-8020R, QNV-8080R, QND-8080R, QNO-8030R, QNE-8011R, QNE-8021R, QND-8011, QND-8021] [1.41.12 QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QND-6083R, QNO-6072R, QNV-6072R, QND-6072R, QND-6073R, QNV-6083R, QNV-6082R, QNO-6073R, QNV-6073R, QNO-6083R, QND-6082R, QND-6011, QND-6021]

- Fixed issue of IR setting option not being visible on the camera setting menu [1.41.02, XNO-

L6120RG]

- Fixed the problem that the Wisenet logo and online help icon were not visible in the camera web viewer [v1.41.05, XND-6080RG, XNO-6080RG, XNO-6085RG]

- Fixed timestamp errors [v1.41.01, PNB-A9001LP] [v1.41.01, PNO-A9081RLP, PNV-A9081RLP, PND-A9081RLP, PND-A9081RVLP, PND-A9081RFLP]

- Fixed a problem that the NTP server time was not reset to match the changed NTP server when the NTP server address setting was changed [v1.41.03, QNO-7082R] [v1.41.02, QNO-6084R] [v1.41.13, QND-6012R, QNO-6012R, QNV-6032R, QND-6022R, QNV-6012R, QND-6032R, QNO-6022R, QNO-6032R, QNV-6022R, QNO-6082R, QNO-6072R, QND-6072R, QNV-6072R, QNV-6082R, QND-6082R, QND-6011, QND-6021]

- Fixed an issue that, when [Video Rotation]'s [Hallway View] option is set to [90°] or [270°] and one of the [Flip] or [Mirror] options had been applied, the [Overlay] which displays the locations detected in IVA malfunctions. [v1.41.01, ANO-L7012R, ANO-L7022R, ANV-L7012R] [v1.41.01, ANE-L7012R, ANO-L7082R, ANV-L7012R]

  Note: On the ANO-L7012R, ANO-L7022R, and ANV-L7012R models, be sure to reset [Image preset mode] on the [Camera setup] page or perform a factory reset on the [Upgrade/Restart] page after upgrading from version 1.41.00 to another version.

Security Improvements

- Applied the X Series 1.4 software patch for security enhancement. [1.41.00 QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

  - Added a function to control Pan and Tilt individually in [Setup] > [Video & Audio] > [PTRZ Setup].

  - Added a function to configure the administrator account ID (admin).

  - Added a function to configure the MTU (Maximum Transmission Unit) size between 1,280 and 1,500 in [Setup] > [Basic] > [IP & Port] > [IP address].

  - Added the [Change host name] option to use the Common Name of a unique certificate instead of the host name of the camera, when the secure connection system is to HTTPS (Secure connection mode using a unique certificate).

  - Improved motion detection algorithm to increase the detection rate of recognize objects.

- Changed the Moscow time zone from UTC+4 to UTC+3.

- Allowed to use special characters (spaces # * + - / (   ) _ ,) for the camera OSD title in [Setup] > [Video & Audio] > [Camera Settings] > [OSD].

- Supported for using TL-WN823N (v2, v3) as a Wi-Fi dongle.

- Fixed an issue where the system restarts intermittently more than 49 days after starting the camera system.

▪ Added function to send email about the account lockout event to administrators if login fails more than 5 consecutive times (SMTP email must be enabled). [v1.41.03, PNM-9030V]

▪ Added encryption function to use SD card after authentication with password when saving video to SD card. [v1.41.05, PNM-9030V]

▪ Applied X series 3rd and 4th changes [v1.41.02, PNO-A9081R, PND-A9081RV, PND-A9081RF, PNV-A9081R, PNB-A9001]

- Saves sensitive information (password) in plain text

- Executes system command using SNMP setup logic

- Uses a low version of the net-snmp open source

- Cannot enter snmp community string special characters

- Uses the 3DES Cipher suite during the communication through TLS encryption

Protocol Improvements

▪ Supports ONVIF Profile T (with ONVIF protocol to delete the default video profile). [v1.41.03, PNM-9030V]

Open Platform Version 3.52 Patch

▪ Added NUC Active state event for Thermal cameras (The version 3.52 patch file should be installed in the Open Platform SDK with the 3.52 version installed.). [1.41.02, TNO-3010T, TNO-3020T, TNO-3030T]

Affected Products

Table 1. Product Family Based On Version 1.41

Major Model	Model Name
XNP-6320RH	QNP-6230RH
TNO-3030T	TNO-3030T
	TNO-3020T
	TNO-3010T
QNO-6082R	QNO-6072R
	QNO-6073R
	QNO-6082R
	QNO-6083R
	QND-6072R
	QND-6073R
	QND-6082R
	QND-6083R
	QNV-6072R
	QNV-6073R
	QNV-6082R
	QNV-6083R
	QND-6012R
	QND-6022R
	QND-6032R
	QNO-6012R
	QNO-6022R
	QNO-6032R
	QNV-6012R
	QNV-6022R
	QNV-6032R
	QND-6011
	QND-6021
QNO-8080R	QNO-8010R
	QNO-8020R
	QNO-8030R
	QNO-8080R
	QNV-8010R
	QNV-8020R
	QNV-8030R
	QNV-8080R

Major Model	Model Name
	QND-8010R
	QND-8020R
	QND-8030R
	QND-8080R
	QNE-8011R
	QNE-8021R
	QND-8011
	QND-8021
LNO-6072R	LNO-6072R
	LND-6012R
	LNO-6032R
	LNV-6032R
	LND-6022R
	LND-6072R
	LNO-6022R
	LNV-6012R
	LNV-6072R
	LND-6032R
	LNV-6022R
	LNO-6012R
PNM-9030V	PNM-9030V
TNB-9000	TNB-9000
QNB-8002	QNB-8002
XNO-L6085R	XNO-L6085R
XNO-L6085RA	XNO-L6085RA
XNO-6085RA	XNO-6085RA
XND-6081REV	XND-6081REV
XND-8081REV	XND-8081REV
XNP-6320HG	XNP-6320HG
XNP-6320RHG	XNP-6320RHG
XNP-6371RHG01	XNP-6371RHG01
QNV-6025RM	QNV-6025RM
XNP-6341RH	XNP-6341RH
XNO-L6120RG	XNO-L6120RG
QNV-6024RM	QNV-6024RM
	QNV-6023R
XNB-6000G01	XNB-6000G01

Major Model	Model Name
XNP-6120HG	XNP-6120HG
KND-5080RG	KND-5080RG
XNO-6120RG	XNO-6120RG
XNP-6320RHG	XNP-6320RHG
XNO-L6120RG	XNO-L6120RG
XND-6080RG	XND-6080RG
XND-6080RG01	XND-6080RG01
XNO-6080RG	XNO-6080RG
XNO-6080RG01	XNO-6080RG01
XNO-6085RG	XNO-6085RG
XNO-6085RG01	XNO-6085RG01
XNP-6302HG	XNP-6302HG
XNP-6371RHG01	XNP-6371RHG01
PNO-A9081R	PNO-A9081R PND-A9081RV PND-A9081RF PNV-A9081R PNB-A9001
PNO-A9081RLP	PNO-A9081RLP PNV-A9081RLP PND-A9081RLP PND-A9081RVLP PND-A9081RFLP
PNB-A9001LP	PNB-A9001LP
QNO-7082R	QNO-7082R
QNO-6084R	QNO-6084R
ANO-L6012R	ANO-L6012R ANO-L6022R ANV-L6012R
ANO-L7012R	ANO-L7012R ANO-L7022R ANO-L7072R ANV-L7012R ANV-L7072R
ANO-L6082R	ANE-L6012R ANO-L6082R ANV-L6082R

Major Model	Model Name
ANO-L7082R	ANE-L7012R
	ANO-L7082R
	ANV-L7082R
AND-2010R	AND-2010R
	AND-2020R
	KND-L2010R
	KNO-L2022R

HTW Network Camera Version 1.40

This document describes the new and changed features of Hanwha Techwin network camera version 1.40.

> ⓘ Released on June 24, 2022

Common Features

[New Features]

- Added a function to control Pan and Tilt individually in [Setup] > [Video & Audio] > [PTRZ Setup].

- Added a function to configure the administrator account ID (admin).

- Added a function to configure the MTU (Maximum Transmission Unit) size between 1,280 and 1,500 in [Setup] > [Basic] > [IP & Port] > [IP address].

- Added a [Set pan ground position] function to set the current pan angle to zero degrees in [Setup] > [PTZ] > [PT limit]. [v1.40.00, XNP-6120H, XNP-6371RH, XNP-6550RH, XNP-6320, XNP-6320H, XNP-6320HS, XNP-6320RH, XNP-6250RH] [v1.40.04, XNP-6321, XNP-6321H]

- Added a [Location setup] function that enables you to set to display direction information on the camera video. [v1.40.00, XNP-6120H, XNP-6040H, XNP-6371RH, XNP-6550RH, XNP-6320, XNP-6320H, XNP-6320HS, XNP-6320RH, XNP-6250RH] [v1.40.04, XNP-6321, XNP-6321H]

- Added an overlay option to display azimuth over the camera images in [Setup] > [Video & Audio] > [Camera Settings] > [OSD]. (PTZ cameras)

- Added a function to set up a trace using a preset already specified in [Setup] > [PTZ] > [PTZ setup] > [Trace]. (PTZ cameras)

- Added the [Change host name] option to use the Common Name of a unique certificate instead of the host name of the camera, when the secure connection system is to HTTPS (Secure connection mode using a unique certificate).

- Added the [Event activation time] function so that the people counting events are only received on a specific schedule in [Setup] > [Statistics] > [People counting] > [Setup]. (People counting supported cameras)

- Added a Rainbow 2 mode to the color palette. (Add purple to existing Rainbow mode) [1.40.02]

- Supports Open Platform event: NUC Active state [1.40.05 TNO-4030T, TNO-4040T, TNO-4041T,

TNO-4050T, TNO-4051T, TNU-4041T, TNU-4051T, TNO-4030TR, TNO-4040TR, TNO-4041TR]

▪ Added a slide show function, which plays a slide show on the monitor screen [1.40.03, TNB-6030]

▪ Enabled the [CVBS] option in the camera Web viewer [1.40.04, XNV-8081R, XND-8081RV, XND-8081RF]

▪ Default value of [Face detection] is set to off [1.40.05, TNB-6030, TNB-6031]

▪ Default value of [OSD] is set to off [1.40.05, TNB-6030, TNB-6031]

[Improvements]

▪ Improved motion detection algorithm to increase the detection rate of recognized objects.

▪ Changed the Moscow time zone from UTC+4 to UTC+3.

▪ Allowed to use special characters (spaces # * + - / (   ) _ ,) for the camera OSD title in [Setup] > [Video & Audio] > [Camera Settings] > [OSD].

▪ Supported for using TL-WN823N (v2, v3) as a Wi-Fi dongle.

▪ Increased the maximum number of multicast connections from 20 to 128. (PTZ cameras)

▪ Increased the maximum number of privacy areas from 24 to 32. (PTZ cameras)

▪ Changed the default WDR level for WDR mode from Medium to High. [1.40.02]

▪ Modified the distance range of auto focus in [Quick Focus] mode [1.40.03, XNO-L6080R, XNV-L6080, XNV-L6080R, XND-L6080V, XND-L6080R XND-L6080RV, XNO-L6080RA, XNV-L6080A, XNV-L6080RA, XND-L6080VA, XND-L6080RVA]

▪ Supports the original image of Open Platform in the Hallway view mode [1.40.05 TNO-4030T, TNO-4040T, TNO-4041T, TNO-4050T, TNO-4051T, TNU-4041T, TNU-4051T, TNO-4030TR, TNO-4040TR, TNO-4041TR]

▪ Fixed an issue where focus was lost when restoring settings using the setting backup file of a camera of the same model [1.40.03 XNO-6080R, XNB-6000, XND-6080, XND-6080R, XNV-6080, XNV-6080R, XND-6080V, XND-6080R, XNF-8010R, XNF-8010RV, XNF-8010RVM]

▪ Fixed an issue where the F-number value changed when simple focus was activated after setting the F-number in Iris manual mode [1.40.03 XNO-6080R, XNB-6000, XND-6080, XND-6080R, XNV-6080, XNV-6080R, XND-6080V, XND-6080RV]

▪ Fixed a case where no sound may be heard when setting ANR (audio noise reduction) [1.40.04, XNV-6080, XNV-6080R, XND-6080, XND-6080R, XND-6080V, XND-6080RV, XNF-8010R, XNF-

8010RV, XNF-8010RVM]

- Modified the firmware in accordance with the change of Gyro sensor module [v1.40.03, XND-6081RV, XND-8081RV, TNV-7010RC, XNZ-6320, XNP-6120H, XNP-6550RH, XNP-6371RH, XNP-6320, XNP-6320RH, XNP-6320RH, XNP-6250RH, XND-6085]

- Enhanced the stability of open application [1.40.04, XNB-6000, XNO-6080R] [1.40.03, XNB-6005, XNO-6085R, XNB-8000, XNO-8080R]

- Supports ONVIF Test Tool v20.06 [1.40.02, XNP-6040HG] [v1.40.04, XNP-6040HG]

- Modified the firmware in accordance with the change of a real-time clock IC (RTC IC) [v1.40.05, QNP-6230, XNP-6321H, QNP-6230H, XNP-6320H, XNP-6320, XNP-6321, XNP-6320HS]

- Adjusted the RTP Payload buffer to improve compatibility with specific NVRs [v1.40.02, XNV-6080RG] [v1.40.03, XNP-6040HG]

[Bug fixes]

- Fixed an issue where the system restarts intermittently more than 49 days after starting the camera system.

- Fixed an issue where the camera system restarts intermittently when installing certificates in [HTTPS] or [802.1x]. [1.40.02]

- Fixed an issue where the detected face area is not displayed in the video when a face detection event occurs. [1.40.02]

- Fixed an issue where the alarm inputs do not work properly when setting multiple alarm inputs. [1.40.02]

- Fixed an issue where fast-forward and fast-backward do not work properly when playing video recorded with MJPEG on the web viewer. [1.40.02]

- Fixed an issue where the size of the object is not set in the motion detection when [Hallway view] is set to [90] or [270]. [v1.40.04, TNO-4050T, TNO-4040TR, TNU-4051T]

- Fixed an issue where the detected area was not displayed in HDMI video when detecting a face after power was supplied for the first time. [v1.40.04, TNB-6030]

- Fixed an issue where the lens did not return to its previous position intermittently after initializing the lens. [v1.40.03, XNP-6320RH, XNP-6250RH]

- Fixed issue of IR setting option not being visible on the camera setting menu [1.40.05, XNO-

L6120R]

- ▪ Fixed issue of moving to PTZ preset location and moving to home functions when PTZ is in motion. [1.40.05, XNO-L6120R]

Security Improvements

- ▪ Revised security vulnerability by filtering special characters. [1.40.02]

Open Platform Version 3.52 Patch

- ▪ Added NUC Active state event for Thermal cameras (The version 3.52 patch file should be installed in the Open Platform SDK with the 3.52 version installed.). [1.40.05 TNO-4030T, TNO-4040T, TNO-4041T, TNO-4050T, TNO-4051T, TNU-4041T, TNU-4051T, TNO-4030TR, TNO-4040TR, TNO-4041TR]

Affected Products

Table 2. Product Family Based On Version 1.40

Major Model	Model Name
XNB-6000	XNB-6000
	KNB-2000
XNB-6001	XNB-6001
XNB-6005	XNB-6005
XNB-8000	XNB-8000
	KNB-5000N
XND-6010	XND-6010
XND-6011F	XND-6011F
XND-6020	KND-2020RN
XND-6020R	XND-6020R
XND-6080	XND-6080
	XND-K6080N
XND-6080R	XND-6080R
	KND-2080RN

Major Model	Model Name
XND-6080RV	XND-6080RV
XND-6080V	XND-6080V
XND-6081RV	XND-6081V
	XND-6081RV
	XNV-6081
	XNV-6081R
	XND-6081RF
	XND-6081F
XND-6085	XND-6085
XND-6085V	XND-6085V
XND-8020F	XND-8020F
XND-8020R	KND-5020RN
	XND-8020R
	XND-8020RW
XND-8030R	XND-8030R
XND-8040R	XND-8040R
XND-8080R	KND-5080RN
	XND-8080R
	XND-8080RW
XND-8080RV	XND-8080RV
XND-8081RV	XND-8081RV
	XNV-8081R
	XNV-8081
	XND-8081RF
XND-L6020R	XND-L6020R
XND-L6080R	XND-L6080R
XND-L6080RV	XND-L6080RV
XND-L6080V	XND-L6080V
XNF-8010R	XNF-8010R
	XNF-8010RW
XNF-8010RV	XNF-8010RV
	XNF-8010RVW
XNF-8010RVM	XNF-8010RVM
XNO-6010R	XNO-6010R
	KNO-2010RN
XNO-6120R	XNO-6020R

Major Model	Model Name
	KNO-2120RN
XNO-6080R	XNO-6080R
	XNO-6080RA
	KNO-2080RN
XNO-6080RS	XNO-6080RS
XNO-6085R	XNO-6085R
XNO-6120R	XNO-6120R
	KNO-2120RN
XNO-6120RS	XNO-6120RS
XNO-8020R	XNO-8020R
	KNO-5020RN
XNO-8030R	XNO-8030R
XNO-8040R	XNO-8040R
XNO-8080R	XNO-8080R
	XNO-8080RW
	KNO-5080RN
XNO-L6020R	XNO-L6020R
XNO-L6120R	XNO-L6120R
XNP-6040H	XNP-6040H
XNP-6120H	XNP-6120H
	KNP-2120HN
XNP-6320	XNP-6320
	QNP-6230
	QNP-6230H
	XNP-6321
	XNP-6321H
XNP-6320H	XNP-6320H
XNP-6320HS	XNP-6320HS
XNP-6320RH	XNP-6320RH
	XNP-6250RH
XNP-6371RH	XNP-6371RH
XNP-6550RH	XNP-6550RH
XNV-6010	XNV-6010
XNV-6011	XNV-6011
	XNV-6011W
XNV-6012	HTW-6012
XNV-6012M	XNV-6012M

Major Model	Model Name
XNV-6013M	XNV-6013M
XNV-6020R	XNV-6020R
XNV-6022R	XNV-6022R
XNV-6022RM	XNV-6022RM
XNV-6080	XNV-6080
XNV-6080R	XNV-6080R
XNV-6080RS	XNV-6080RS
XNV-6081Z	XNV-6081Z
	XND-6081VZ
	XND-6081FZ
XNV-6085	XNV-6085
XNV-6120	XNV-6120
XNV-6120R	XNV-6120R
XNV-6120RS	XNV-6120RS
XNV-8020R	XNV-8020R
XNV-8020RM	XNV-8020RMN
	XNV-8020RMP
XNV-8030R	XNV-8030R
XNV-8040R	XNV-8040R
XNV-8080R	XNV-8080R
	XNV-8080RW
XNV-8080RS	XNV-8080RS
XNV-8081Z	XNV-8081Z
	XND-8081VZ
	XND-8081FZ
XNV-L6080	XNV-L6080
	XNO-L6080R
XNV-L6080A	XNO-L6080RA
	XND-L6080RVA
	XNV-L6080RA
	XND-L6080VA
	XNV-L6080A
XNV-L6080R	XNV-L6080R
XNZ-6320	XNZ-6320
TNV-7010RC	TNV-7010RC
TNB-6030	TNB-6030
	TNB-6031

Major Model	Model Name
TNO-6010M	TNO-6010M
TNO-4050T	TNO-4030T
	TNO-4040T
	TNO-4050T
	TNO-4041T
	TNO-4051T
TNO-4040TR	TNO-4030TR
	TNO-4040TR
	TNO-4041TR
TNU-4051T	TNU-4041T
	TNU-4051T
XNP-6040HG	XNP-6040HG
XNO-L6120RG	XNO-L6120RG
XNV-6080RG	XNV-6080RG
XNP-6040HG	XNP-6040HG

HTW Network Camera Version 1.30

This document describes the new and changed features of Hanwha Techwin network camera version 1.30.

> ⓘ　Released on JUL 02, 2019

Caution

- Please note that you need to follow the steps below when you upgrade to 1.30 version from previous versions. [TNO-4050T, TNO-4051T, TNO-4040T, TNO-4041T, TNO-4030T, TNU-4041T, TNU-4051T]

  1) Upgrade to the bridge firmware. (Please do not use this version firmware other than upgrade purpose. We cannot guarantee anything with this version firmware)
  2) Upgrade to version 1.30 or later.
  - Please note that OSD configuration values will be reset when you upgrade 1.30 version from previous versions. [TNO-4050T, TNO-4051T, TNO-4040T, TNO-4041T, TNO-4030T, TNU-4041T, TNU-4051T]

  - Please note that OSD font change in all resolutions is not supported and OSD is not supported in 320x240 resolution from the version 1.30 or later. [TNO-4050T, TNO-4051T, TNO-4040T, TNO-4041T, TNO-4030T, TNU-4041T, TNU-4051T]

  - Please note that firmware downgrade from version 1.30 or later to lower version is not allowed. [TNO-4050T, TNO-4051T, TNO-4040T, TNO-4041T, TNO-4030T, TNU-4041T, TNU-4051T]

- Please note that downgrading to a version earlier than 1.30.01 may cause the following constraints [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]:

  - More than 25 privacy zones can not be deleted or modified.

  - If the camera name contains special characters (space # * + - / ( ) ,), you can not delete or modify the camera name.

  Please fix them before downgrading the system, or reset the system to factory default with [Except network parameter & open platform] selected.

Common Features

[New Features]

▪ Added a handover function in accordance with temperature detection event. [TNO-4050T, TNO-4051T, TNO-4040T, TNO-4041T, TNO-4030T, TNU-4041T, TNU-4051T, TNO-4030TR, TNO-4040TR, TNO-4041TR]

[Improvements]

▪ Supported a production automation function (nothing changed in user perspective). [1.30.01]

▪ Added a [Set pan ground position] function under [Setup] > [PTZ] > [PTlimit] to set the current pan angle to zero degrees. [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]

▪ Increased the maximum number of privacy areas from 24 to 32. [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]

▪ Increased the maximum number of multicast connections from 20 to 128. [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]

▪ Allowed a user to use special characters (space # * + - / ( ) _ ,) as camera name under [Setup] > [Camera setup] > [OSD] > [Title overlay]. [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]

▪ Added a function to save the predefined preset paths when setting the trace path for auto tracking. [1.30.01 XNP-6320, XNP-6320H, XNP-6320HS, XNP-6371RH]

[Bug fixes]

▪ Fixed an issue where white or black pixels appear on the upper right of the image due to an error in the image calibration algorithm. [1.30.02 TNO-4030T, TNO-4040T, TNO-4050T, TNO-4041T, TNO-4051T, TNO-4030TR, TNO-4040TR, TNO-4041TR, TNU-4041T, TNU-4051T]

Security Improvements

▪ Supported ONVIF Profile T (with ONVIF protocol to delete the default video profile).

▪ Added function to email account lockout events to administrators if login fails more than 5 consecutive times (SMTP email must be enabled).

▪ Added encryption setting function to use SD card after password authentication when saving video to SD card.

Affected Products

Table 3. Product Family Based On Version 1.30

Major Model	Model Name
XNB-6000	XNB-6000
	KNB-2000
XNB-6001	XNB-6001
XNB-6005	XNB-6005
XNB-8000	XNB-8000
	KNB-5000N
XND-6010	XND-6010
XND-6011F	XND-6011F
XND-6020	KND-2020RN
XND-6020R	XND-6020R
XND-6080	XND-6080
	XND-K6080N
XND-6080R	XND-6080R
	KND-2080RN
XND-6080RV	XND-6080RV
XND-6080V	XND-6080V
XND-6081RV	XND-6081V
	XND-6081RV
	XNV-6081
	XNV-6081R
	XND-6081RF
	XND-6081F
XND-6085	XND-6085
XND-6085V	XND-6085V
XND-8020F	XND-8020F
XND-8020R	XND-8020R
	KND-5020RN
XND-8030R	XND-8030R
XND-8040R	XND-8040R
XND-8080R	XND-8080R
	KND-5080RN
XND-8080RV	XND-8080RV
XND-8081RV	XND-8081RV

Major Model	Model Name
	XNV-8081R
	XNV-8081
XND-L6080R	XND-L6080R
XND-L6080RV	XND-L6080RV
XND-L6080V	XND-L6080V
XNF-8010R	XNF-8010R
	XNF-8010RW
XNF-8010RV	XNF-8010RV
	XNF-8010RVW
XNF-8010RVM	XNF-8010RVM
XNO-6010R	XNO-6010R
	KNO-2010RN
XNO-6020R	XNO-6020R
XNO-6080R	XNO-6080R
	XNO-6080RA
	KNO-2080RN
XNO-6080RS	XNO-6080RS
XNO-6085R	XNO-6085R
XNO-6120R	XNO-6120R
	KNO-2120RN
XNO-6120RS	XNO-6120RS
XNO-8020R	XNO-8020R
	KNO-5020RN
XNO-8030R	XNO-8030R
XNO-8040R	XNO-8040R
XNO-8080R	XNO-8080R
	XNO-8080RW
	KNO-5080RN
XNO-L6020R	XNO-L6020R
XNO-L6120R	XNO-L6120R
XNP-6040H	XNP-6040H
XNP-6120H	XNP-6120H
	KNP-2120HN
XNP-6230	XNP-6230
XNP-6230H	XNP-6230H
XNP-6320	XNP-6320
	XNP-6320H

Major Model	Model Name
XNP-6320	XNP-6320HS
	QNP-6230
	QNP-6230H
	XNP-6321
	XNP-6321H
XNP-6371RH	XNP-6371RH
XNP-6550RH	XNP-6550RH
XNV-6010	XNV-6010
XNV-6011	XNV-6011
	XNV-6011W
XNV-6012	XNV-6012
XNV-6012M	XNV-6012M
XNV-6013M	XNV-6013M
XNV-6020R	XNV-6020R
XNV-6022R	XNV-6022R
XNV-6022RM	XNV-6022RM
XNV-6080	XNV-6080
XNV-6080R	XNV-6080R
XNV-6080RS	XNV-6080RS
XNV-6081Z	XNV-6081Z
	XND-6081VZ
	XND-6081FZ
XNV-6085	XNV-6085
XNV-6120	XNV-6120
XNV-6120R	XNV-6120R
XNV-6120RS	XNV-6120RS
XNV-8020R	XNV-8020R
XNV-8020RM	XNV-8020RMN
	XNV-8020RMP
XNV-8030R	XNV-8030R
XNV-8040R	XNV-8040R
XNV-8080R	XNV-8080R
XNV-8080RS	XNV-8080RS
XNV-8081Z	XNV-8081Z
	XND-8081VZ
	XND-8081FZ
XNV-L6080	XNV-L6080

Major Model	Model Name
	XNO-L6080R
XNV-L6080A	XNO-L6080RA
	XND-L6080RVA
	XNV-L6080RA
	XND-L6080VA
	XNV-L6080A
XNV-L6080R	XNV-L6080R
XNZ-6320	XNZ-6320
TNO-4050T	TNO-4050T
	TNO-4051T
	TNO-4040T
	TNO-4041T
	TNO-4030T
TNU-4041T	TNU-4041T
	TNU-4051T
TNO-4040TR	TNO-4041TR
	TNO-4040TR
	TNO-4030TR
TNB-6030	TNB-6030
TNV-7010RC	TNV-7010RC

HTW Network Camera Version 1.21

This document describes the new and changed features of Hanwha Techwin network camera version 1.21.

> ⓘ Released on MAR 18, 2019

Common Features

[Improvements]

- Added function to push BI (People Counting / Queue Management / Heatmap) meta data to Wisenet Retail Insight. [1.21.12 XND-6010/XNV-6010, XNF-8010R/XNF-8010RV/XNF-8010RVM]

- Fixed an issue where the web page menu would not change after upgrading firmware due to remained browser cache. In some case, cache refresh (F5 reload key) is is required to display properly. [1.21.10]

- Added automatic correction function for horizontal noise that appears intermittently in image. [1.21.01 TNO-4040TR, TNO-4041TR, TNO-4030TR]

- Changed the maximum shutter value to 1/5000, when [Video & Audio] > [Camera Setup] > [Backlight] mode is set to WDR.   [1.21.02 QNO-6072R, QNO-6073R, QNO-6082R, QNO-6083R, QND-6072R, QND-6073R, QND-6082R, QND-6083R, QNV-6072R,QNV-6073R,   QNV-6082R, QNV-6083R, QND-6012R, QND-6022R, QND-6032R, QNO-6012R, QNO-6022R, QNO-6032R, QNV-6012R, QNV-6022R, QNV-6032R, QND-6011, QND-6021, QNO-8010R, QNO-8020R, QNO-8030R, QNO-8080R, QNV-8010R, QNV-8020R, QNV-8030R, QNV-8080R, QND-8010R, QND-8020R, QND-8030R, QND-8080R, QNE-8011R, QNE-8021R, QND-8011, QND-8021]

- Fixed an issue where the camera image appears in upside down or side to side. [1.21.02 QNE-8011R, QNE-8021].

[Bug fixes]

- Fixed an issue where in some case, an SD card was not recognized after booting. [1.21.12 TNO-4050T, TNO-4051T,TNO-4040T,TNO-4041T,TNO-4030T,TNU-4041T,TNU-4051T]

- Fixed an issue where an SD card error happened with EXT4 file system. [1.21.12 TNU-4041T, TNU-4051T]

- Fixed an issue where the live monitoring page would be stuck on the IE11 / Windows 10 OS in

case Plugin-Free profile configuration is higher than 20fps / 1920x1080 resolution. Now it will be reverted to 20fps automatically. [1.21.10]

- Fixed an issue where with 1.20 and 1.21 version, Genetec VMS didn't receive IVA events. [1.21.11]

- Fixed an issue where in some cases, creating a profiles didn't work through SUNAPI. [1.21.11]

- Fixed an issue of incorrect CropAreaCoordinate value in attributes.cgi through SUNAPI. [1.21.11]

- Fixed an issue where with 1.20 and 1.21 version, Genetec VMS didn't draw overlay boxes through metadata. [1.21.11]

- Fixed an issue where a camera would restart when a user changes sensitivity value in Camera [setup] > [Video & Audio] > [Audio setup] > [Audio in] > [Noise reduction] after upgrading to version 1.20 or 1.21. [1.21.11 TNO-4040T, TNO-4050T, TNO-4051T, TNO-4041T, TNO-4030T]

Affected Products

Table 3. Product Family Based On Version 1.21

Major Model	Model Name
XNB-6000	XNB-6000
	KNB-2000
	KNO-2080RN
	XNO-6080R
XNO-6010R	XNO-6010R
	KNO-2010RN
	XNO-6020R
XND-6010	XND-6010
	XNV-6010
XND-6020	KND-2020RN

Major Model	Model Name
XND-6080	XND-6080
	XND-K6080N
	KND-2080RN
	XND-6080R
	XND-6080RV
	XND-6080V
	XNV-6080
	XNV-6080R
	XNV-6080RS
XNB-8000	XNB-8000
	KNB-5000N
XNO-8020R	XNO-8020R
	XNO-8030R
	XNO-8040R
XND-8020R	XND-8020R
	KND-5020RN
	XND-8030R
	XND-8040R
	KNO-5020RN
	XNV-8020R
	XNV-8030R
	XNV-8040R
XND-8080R	XND-8080R
	KND-5080RN
	XND-8080RV
	XNV-8080R
	XNV-8080RS
XNF-8010R	XNF-8010R
	XNF-8010RW
	XNF-8010RV
	XNF-8010RVW
	XNF-8010RVM

Major Model	Model Name
XNO-6120R	XNO-6120R
	KNO-2120RN
	XNO-6120RS
	XNV-6120
	XNV-6120R
	XNV-6120RS
XND-L6080R	XND-L6080R
	XND-L6080RV
	XND-L6080V
	XNV-L6080
	XNV-L6080R
XNV-6012	XNV-6012
	XNV-6012M
	XNV-6013M
	XNV-6022R
	XNV-6022RM
XNB-6001	XNB-6001
	XNB-6005
	XND-6085
	XND-6085V
	XNO-6085R
XNB-6005	XNB-6005
	XND-6085
	XND-6085V
	XNO-6085R
XND-6011F	XND-6011F
XND-8020F	XND-8020F
XNP-6040H	XNP-6040H
XNP-6120H	XNP-6120H
	KNP-2120HN
XNP-6320	XNP-6320
	XNP-6320H
	XNP-6320HS
	QNP-6230
	QNP-6230H
XNP-6371RH	XNP-6371RH

Major Model	Model Name
XNV-6011	XNV-6011
	XNV-6011W
XNV-6085	XNV-6085
	XND-6085
	XND-6085V
TNB-6030	TNB-6030
XNZ-6320	XNZ-6320
TNO-4050T	TNO-4050T
	TNO-4051T
	TNO-4040T
	TNO-4041T
	TNO-4030T
TNU-4041T	TNU-4041T
	TNU-4051T
TNO-4040TR	TNO-4041TR
	TNO-4040TR
	TNO-4030TR
QNO-6082R	QNO-6072R
	QNO-6073R
	QNO-6082R
	QNO-6083R
	QND-6072R
	QND-6073R
	QND-6082R
	QND-6083R
	QNV-6072R
	QNV-6073R
	QNV-6082R
	QNV-6083R
	QND-6012R
	QND-6022R
	QND-6032R
	QNO-6012R
	QNO-6022R
	QNO-6032R
	QNV-6012R
	QNV-6022R

Major Model	Model Name
	QNV-6032R
	QND-6011
	QND-6021
QNO-8080R	QNO-8010R
	QNO-8020R
	QNO-8030R
	QNO-8080R
	QNV-8010R
	QNV-8020R
	QNV-8030R
	QNV-8080R
	QND-8010R
	QND-8020R
	QND-8030R
	QND-8080R
	QNE-8011R
	QNE-8021R
	QND-8011
	QND-8021

HTW Network Camera Version 1.20

This document describes the new and changed features of Hanwha Techwin network camera version 1.20.

> ⓘ Released on OCT 12, 2018

Common Features

[New Features]

- Added a function called Frame Lock to always maintain the number of frames/sec (fps) of one user selected profile when multi profiles are used.

- Added a function to configure the codec of profiles 1, 2 and 3.

- Added a hostname function.

- Supported LLDP as a steady-state power device.

- Added a function to configure overlay box for detected objects in motion detection, IVA, and face detection.

- Added a function to configure minimum/maximum object size in motion detection.

- Added a function to configure minimum duration in motion detection and Intrusion detection (up to 5 secs).

- Added an audio noise reduction function under Setup – Audio Setup – Audio Setup – Audio in.

- Added the USB connect/disconnect message in SNMP Trap Service.

- Added a function to enable/disable USB port under the Setup – Video & Audio - Video Setup.

- Added a function to configure home position and execute auto run (optical zoom cameras).

- Added queue management, heatmap, people counting (Mobile cameras).

- Added an option of new P-IRIS Tamron lens (P-IRIS supported cameras).

- Added a function to control pan/tilt, area zoom by mouse drag and control zoom by mouse wheel scroll in web viewer (optical zoom cameras and PTZ cameras).

- Added a shock detection function (XNV-6085, XND-6085, XND-6085V, XNP-6120H, XNP-6320H).

[Improvements]

- Improved a function to configure pan/tilt control speed (PTZ cameras).

    - Increased proportional PT mode options to 8 stages and setting is applied at 1x zoom ratio.

- Changed the factory defaults values of UPnP, Bonjour, and Link-Local IPv4 address to disable.

- Improved a function to configure all image parameters other than sensor mode for predefined image preset mode and added 2 UserPreset options.

    - After upgrading firmware from prior to 1.2 version, the previous UserPreset configuration will be applied to UserPreset1 and all schedule configurations will be reset.

- Improved the schedule configuration.

    - Expressed day of the week instead of date.

    - Changed the image preset schedule configuration to same as other schedule configuration.

- Improved indoor representation of WDR low and middle levels.

- Changed the default value of minimum shutter speed to provide optimized value to keep framerate.

- Improved day/night switching timing (Built-in IR LED models).

[Bug fixes]

- Fixed an issue that anti flicker configuration in UserPerset mode is not be applied after reboot.

- Fixed an issue that a certain key data does not work correctly in 802.1x certificate.

- Fixed an issue that the focus does not work correctly via Pelco-D protocol. (External RS-485 control supported models.)

- Fixed an issue that AF operation does not work due to Gyro sensor (PTZ cameras having Gyro sensor).

Security Improvements

- Removed Active-X/NPAPI plug-ins from the web viewer.

- Removed the PHP module from the web viewer.

- Added an SRTP function (TCP /UDP unicast).

Protocol Improvements

- Added a feature to send time data whit UTC format when a user searches recorded data in SD/NAS via SUNAPI protocol.

- Added an attribute that specifies the DPTZ, PTZ, and Zoom capabilities via SUNAPI protocol.

- Improved ONVIF features.

  - Supported motion area configuration in VideoAnalytics service.

  - Supported VideoSourceModes in Media service.

  - Supported UTF-8 format OSD control in Media service.

  - Supported PTZ PresetTour in PTZ service.

  - Supported firmware upgrade.

  - Supported "tns1: VideoSource/MotionAlarm" event.

- Applied the unified SNMP MIB. (Keep backward compatibility, the previous MIB files can be used.)

- Added the likelihood data of sound classification via metadata streaming.

Open Platform Version 3.50 Upgrade

- Added a function to create a profile.

- Added APIs to use the SUNAPI protocol.

- Added a feature to write and save system/event log data.

  ※ Open Platform SDK should be upgraded to 3.50 version.

Affected Products

Table 4. Product Family Based On Version 1.20

Major Model	Model Name
XNB-6000	XNB-6000
	KNB-2000
	KNO-2080RN
	XNO-6080R
	XNO-6080RA
	XNO-6080RS

Major Model	Model Name
XNO-6010R	XNO-6010R
	KNO-2010RN
	XNO-6020R
XND-6010	XND-6010
	XNV-6010
XND-6020	XND-6020R
	KND-2020RN
	XNV-6020R
XND-6080	XND-6080
	XND-K6080N
	KND-2080RN
	XND-6080R
	XND-6080RV
	XND-6080V
	XNV-6080
	XNV-6080R
	XNV-6080RS
XNB-8000	XNB-8000
	KNB-5000N
	KNO-5080RN
	XNO-8080R
	XNO-8080RW
XNO-8020R	XNO-8020R
	XNO-8030R
	XNO-8040R
XND-8020R	XND-8020R
	KND-5020RN
	XND-8030R
	XND-8040R
	KNO-5020RN
	XNV-8020R
	XNV-8020RMN
	XNV-8020RMP
	XNV-8030R
	XNV-8040R

Major Model	Model Name
XND-8080R	XND-8080R
	KND-5080RN
	XND-8080RV
	XNV-8080R
	XNV-8080RS
XNF-8010R	XNF-8010R
	XNF-8010RW
	XNF-8010RV
	XNF-8010RVW
	XNF-8010RVM
XNO-6120R	XNO-6120R
	KNO-2120RN
	XNO-6120RS
	XNV-6120
	XNV-6120R
	XNV-6120RS
XND-L6080R	XND-L6080R
	XND-L6080RV
	XND-L6080V
	XNV-L6080
	XNV-L6080R
XNV-6012	XNV-6012
	XNV-6012M
	XNV-6013M
	XNV-6022R
	XNV-6022RM
XNB-6001	XNB-6001
	XNB-6005
	XND-6085
	XND-6085V
	XNO-6085R
XNB-6005	XNB-6005
	XND-6085
	XND-6085V
	XNO-6085R
XND-6011F	XND-6011F
XND-8020F	XND-8020F

Major Model	Model Name
XNP-6040H	XNP-6040H
XNP-6120H	XNP-6120H
	KNP-2120HN
XNP-6320	XNP-6320
	XNP-6320H
	XNP-6320HS
	QNP-6230
	QNP-6230H
XNP-6371RH	XNP-6371RH
XNV-6011	XNV-6011
	XNV-6011W
XNV-6085	XNV-6085
	XND-6085
	XND-6085V
TNO-4050	TNO-4050
	TNO-4040
	TNO-4051
	TNO-4041
	TNO-4030
TNB-6030	TNB-6030

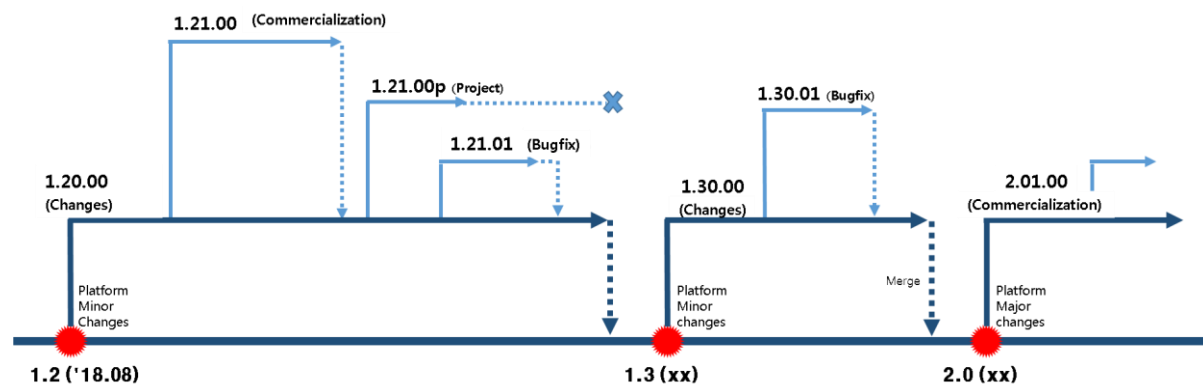# Attachment A. HTW camera version management

This describes the Hanwha Techwin network camera version rule. A camera version is updated when new features are added or bugs are fixed, and there are the following two categories:

- Platform change: Version update due to changes in the software platform structure and major feature changes

- Product change: Version update to fix reported bugs and solve potential problems

Camera Version Management Procedure

The firmware of Hanwha Techwin camera products are being developed based on the common platform, and this is developed across all camera product development.

Any features developed for a product firmware will be consolidated into the common platform and applied to new camera products accordingly.

Camera Version Rules

The camera version is structured as below and it is generated using the following rules.

<PlatformMajor>.<PlatformMinor><ProductMajor>.<ProductMinor>

Platform: Specifies the release version of the common platform

- Major: Reflects any changes in platform structure and major feature changes.

- Minor: Reflects upgrade with new features and consolidated changes that apply to all models.

Product: Specifies the product release version

- Major: Reflects the addition of major product features and changes.

- Minor: Reflects firmware changes for minor fixes that solve reported bugs and potential problems

Each firmware release is displayed using a unique number given to each release type and is a combination of a platform version and a product version. The following examples explain the version rules.

1.20.00
Platform Release   Product Release

Version 1.20.00 indicates the combination of platform version 1.2 and product version 0.00. It represents the first product that is applied with the common platform version 1.2.

1.22.10
Platform Release   Product Release

Version 1.22.10 indicates the combination of platform version 1.2 and product version 2.10. It represents a product that is applied with the common platform version 1.2 and updated twice.