

# Technical Newsletter

April.2024 Service Operation Team

## Contents

### Technical Information

- Guide for IP speaker contact signal interlocking method
- Guide for multi-channel camera lens module replacement
- Wisenet mobile Ver. v2.07.03 update
- SD card recommended specification guide

### Latest Firmware Information

## Guide for IP speaker contact signal interlocking method(1/2)

Info. Type

 Quality

 Settings

 Repair

 S/W

 Etc

### ● Configuration condition

- When using a single IP speaker(1 unit) alone (Model: All IP speaker models)

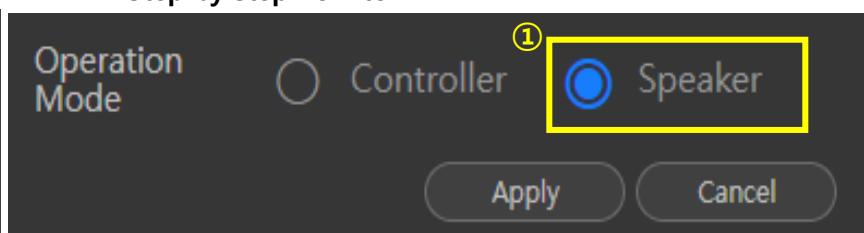
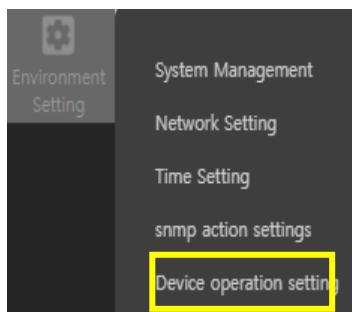
### ● Working scenario

- When a contact signal (infrared sensor, contact button, emergency bell, etc.) is delivered into the IP speaker, the pre-set sound is broadcasted

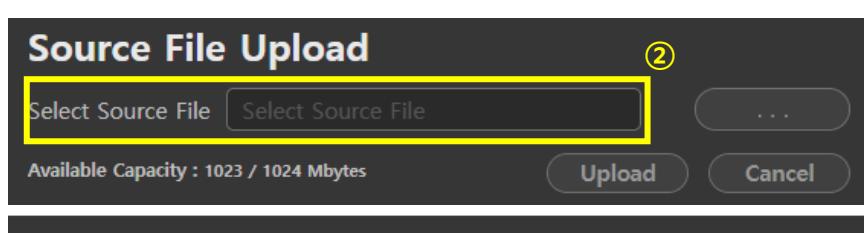
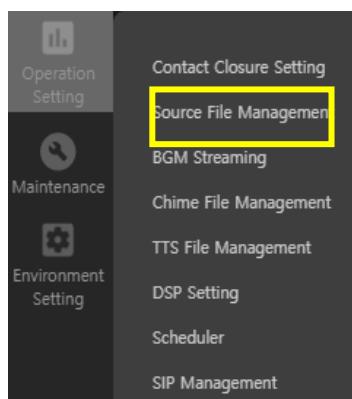
### ● Step by step how to

- ① Set as 'Speaker mode'(default) → ② Upload audio source file → ③ Set as 'controller mode'
- ④ Device registration(Speaker's IP) → ⑤ Zone registration(Speaker's IP) →
- ⑥ Set event & preset → ⑦ Set play

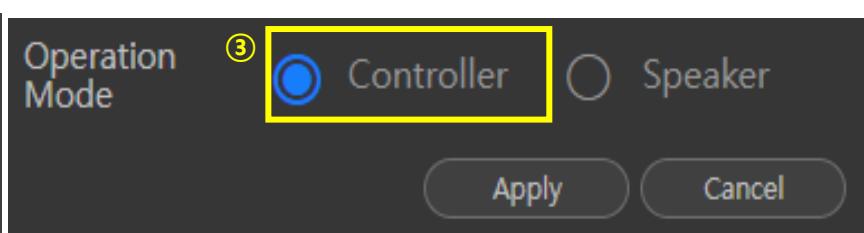
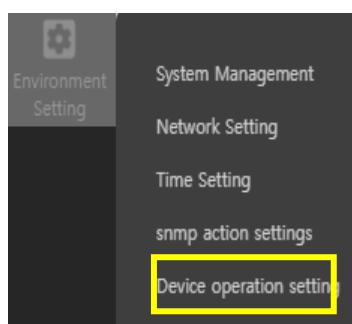
#### <Step by step how to>



① How to set 'Speaker mode' : Environment setting→ Device operation setting→ Select 'Speaker' in Operation mode → Apply



② Source file upload : Operation setting→ Source file management → select and upload a audio source→ Check the audio file list



③ How to set 'Controller mode' : Environment setting→ Device operation setting→ Select 'Controller' in operation mode→ Apply

## Guide for IP speaker contact signal interlocking method(2/2)

Info. Type
 Quality
 Settings
 Repair
 S/W
 Etc

④ Device Registration

⑤ Zone Registration

⑥ Event & Preset

### Device Search (Searched count : 0)

| IP address    | Devcie name | Devcie Location | Model name | Version  |
|---------------|-------------|-----------------|------------|----------|
| 192.168.1.100 | SPA-W100    | -               | SPA-W100   | 3.4.4.24 |

④ Device registration → Device search → Register IP address of speaker

| Zone Name | IP Address    | Channel        |
|-----------|---------------|----------------|
| test      | 192.168.1.100 | audio_output_1 |

⑤ Zone registration → Insert Zone name → Register IP address of speaker → Register channel(Output channel of speaker)

| Event |            |               |          |                 |             |
|-------|------------|---------------|----------|-----------------|-------------|
| No    | IP address | Device Name   | CP       | VP              | Description |
| + -   | 10000      | 192.168.1.100 | SPA-W100 | drycontact_in_1 |             |

⑥ Event & Preset → Register IP address of speaker → Select CP(Contact point) of the speaker

⑦ Local File Play

| Use                                 | IP address    | Device Name | Local File | Play count |
|-------------------------------------|---------------|-------------|------------|------------|
| <input checked="" type="checkbox"/> | 192.168.1.100 | SPA-W100    | notify.wav | 1          |

⑦ Set local file play → Register IP address of speaker → Select audio source file → Set play count

⚠

1. When using a single IP speaker(1unit) alone, it could have a limited use of some features as the scenario is a minimal interworking configuration
2. For TTS input languages, each region may have different supported languages

## Guide for multi-channel camera lens module replacement

Info. Type

 Quality  Settings  Repair  S/W  Etc

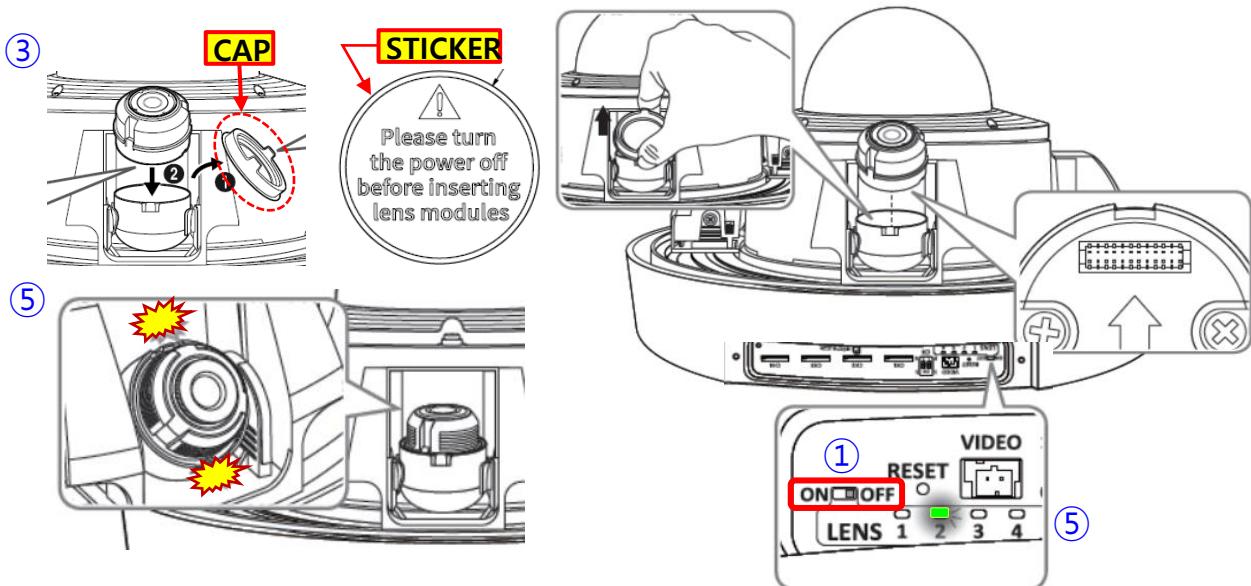
- **Model** : 5CH, 4CH, 2CH Multi-channel camera (eg. PNM-9322VQP/9085QRZ/9000VD etc.)

- **Purpose**

- To provide a guide for multi-channel camera lens module replacement without generating risk of PCB damage

- **How to replace lens module**

- 1) Make sure power is not connected(HPoE) and the power switch is 'OFF'
- 2) Remove defected lens module
- 3) Remove the cap from the lens module and insert the lens module align with the connector until it hooks properly with 'Click' sound
  - Make sure all four channels are not flipped
- 4) Turn the power switch 'ON' and connect power(HPoE)
- 5) Check if lens module is attached correctly, the lens module status light will illuminate green
  - If the lens module is not attached correctly, the lens module status light will illuminate red



! 1. Removing and inserting the lens module without turning off the power may result in a board failure  
2. PTZ calibration error occurs if any of all four lens is flipped  
3. Avoid touching the lens separately, as it is shipped from the factory with the focus adjusted during the manufacturing inspection.

## Wisenet mobile Ver. v2.07.03 update

Info. Type

 Quality  Settings  Repair  S/W  Etc

- **Model :** Wisenet mobile (iOS/Android)

- **SW version :** v2.07.02 → v2.07.03

- **Updates**

| Category    | Contents   |
|-------------|--|
| Improvement | <p><b>■ Improved Two-Way Talk howling issue(iOS)</b></p> <ul style="list-style-type: none"> <li>. Used iOS's own AEC(Acoustic Echo Cancellation) to prevent the phenomenon that mobile speaker output is re-entered through microphone</li> </ul> <p>※ For Android, Eco Cancellation feature is already applied itself</p> |
|             | <p><b>■ Improved audio voice drooping during Two-Way Talk(Android)</b></p> <ul style="list-style-type: none"> <li>. Improved audio voice drooping by modifying code to ensure that the Two-way talk UI is displayed normally</li> </ul>  |
| Bug fix     | <p><b>■ Bug fix for Two-Way Talk disconnection(iOS)</b></p> <ul style="list-style-type: none"> <li>. Removed abnormal data which was inserted intermittently among audio data by modifying the logic for microphone audio buffer initialization</li> </ul>   |
|             | <p><b>■ Bug fix for the symptom that Live connection is unavailable under wi-fi when SSM is registered with local IP (Android)</b></p> <ul style="list-style-type: none"> <li>. Modified to use IP information which was inserted by customer when trying to connect RTSP URL using IP</li> </ul>                          |

Q1) What is One-way Talk ?

One-way communication is when a sender transmits a message to a receiver in a way that does not allow the receiver to respond.  
EX) Radio

Q2) What is Two-way Talk ?

Two-way communication involves feedback from the receiver to the sender.  
EX) Telephone



# SD card recommended specification guide

Info. Type

 Quality  Settings  Repair  S/W  Etc

## ● Model

- Network cameras (For SD card alarm, event recording supportive models)

## ● SD card operating specification

- Enable SD card status only in Device Record On state
- Overwrite Enable checked
  - . If free size is 20% or less of total capacity, secures free size by deleting the oldest data
- Overwrite Enable unchecked
  - . If free size is 20% or less of total capacity, it stops recording

### [Example]

For SD card event recording, it uses only 93GB out of total 120GB and leaves 20% capacity as available space

|                                  | Device  | Recording | Available | Total     | Status    |
|----------------------------------|---------|-----------|-----------|-----------|-----------|
| <input checked="" type="radio"/> | SD Card | On        | 26.20 GB  | 119.05 GB | Installed |
| <input type="radio"/>            | NAS     | Off       | 0 MB      | 0 MB      | None      |



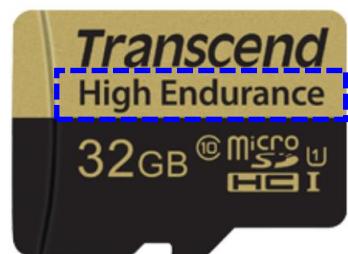
Leaving 20% capacity is not an error, it is an intended operating specification for stable operation

## ● SD card recommended specification guide

- Recommended use of an industrial grade (or higher) SD card for reliable operation

### [SD card selection]

- . SD Type : MLC Type
- . Recommended manufacturer
  - : SanDisk, Transcend
  - \* Grade
    - : Above or equal to High endurance grade



[High Endurance, Industrial grade SD cards]

## DVR

| Model              | File                              | Date       | Ver.    | Remark  |
|--------------------|-----------------------------------|------------|---------|---|
| ARD-410<br>ARD-810 | ARD-810_5.31.32<br>_230525160458  | 2023/05/25 | 5.31.32 | <ul style="list-style-type: none"> <li>- Addressed an issue where DDNS ID was occasionally not issued</li> </ul>            |
| ARD-1610           | ARD-1610_5.31.32<br>_230525165929 | 2023/05/25 | 5.31.32 |   |
| HRX-434/435        | HRX-435_4.52.62<br>_240214195734  | 2024/02/22 | 4.52.62 | - Security improved   |
| HRX-835/1632       | HRX-1632_4.52.52<br>_240112120109 | 2024/01/23 | 4.52.52 | - Increased the compatibility with some 4MP cameras (only applicable to HRX-835 models)                                     |
| HRX-1634/1635      | HRX-1635_5.31.42<br>_231023102331 | 2023/11/02 | 5.31.42 | - Corrected an error where an analog camera intermittently displayed a channel number like a multi-directional camera (MDC) |

## NVR

| Model   | File                                 | Date       | Ver.    | Remark  |
|---|--------------------------------------|------------|---------|---|
| ARN-410S<br>ARN-810S<br>ARN-1610S             | ARN-1610S_5.08.22<br>_230206121706   | 2023/02/06 | 5.08.22 | - HDD performance improved  |
| PRN-1600B2<br>PRN-3200B2/B4<br>PRN-6400B4/DB4 | PRN-6400DB4_5.30.72<br>_231107202437 | 2023/11/14 | 5.30.72 | <ul style="list-style-type: none"> <li>- Corrected an issue that caused the [Dynamic layout] feature to malfunction</li> <li>- Fixed mouse-click errors in some pop-up windows</li> <li>- Corrected an issue that prevented you from inserting spaces in the [NVR name] entry box in the Web viewer</li> <li>- Corrected the howling issue that intermittently happened when you played videos using an AAC codec on Wisenet mobile</li> <li>- Changed the domain name from hanwha-security to hanwhavision to reflect the new company name</li> <li>- Improved the backup speed of remote clients (SSM, NVR, Web viewer, SMV, etc.)</li> </ul> |
| QRN-830S<br>QRN-1630S<br>XRN-815S             | QRN-1630S_5.06.52<br>_230626173233   | 2023/08/10 | 5.06.52 | - Removed support for fan-related events and logs   |
| XRN-3010A                                     | XRN-3010-PKG_v2.70<br>_231213080451  | 2024/01/23 | 2.70    | - Security improved   |
| QRN-430S<br>XRN-420S                          | XRN-420S_5.01.62<br>_231128194047    | 2023/12/11 | 5.01.62 | - Security improved   |
| XRN-3220B4<br>XRN-6420B4<br>XRN-6420DB4       | XRN-6420DB4_5.32.12<br>_231116112359 | 2024/01/09 | 5.32.12 | - Security improved   |
| XRN-810S                                      | xrn-x10x-pkg_v2.70<br>_231213065458  | 2024/01/02 | 2.70    | - Security improved   |

## Network Camera

| Model  | File                                    | Date       | Ver.    | Remark  |
|--|---|------------|---------|---|
| ANV-L6012R<br>ANO-L6012R   | ANO-L6012R_1.41.03<br>_20230322_R30     | 2023/03/22 | 1.41.03 | <ul style="list-style-type: none"> <li>- Fixed language error in Japanese version</li> <li>- Fixed an error where [Tampering detection] function did not operate after a certain time</li> </ul>                              |
| ANV-L7012R<br>ANO-L7012R   | ANO-L7012R_1.41.03<br>_20230322_R116    | 2023/03/22 | 1.41.03 | <ul style="list-style-type: none"> <li>- Added the ability to set the minimum bitrate of a profile to 10 kbps</li> <li>- Added the ability to use HTTP and HTTPS at the same time</li> </ul>                                  |
| ANV-L7082R<br>ANO-L7082R   | ANO-L7082R_1.41.03<br>_20230322_R88     | 2023/03/22 | 1.41.03 |   |
| LND/V-6012R<br>LND-6022R<br>LNV-6072R  | LNO-6072R_1.41.13<br>_20231109_R165     | 2023/11/28 | 1.41.13 | <ul style="list-style-type: none"> <li>- 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</li> </ul>                                    |
| PNM-12082RVD   | PNM-12082RVD_2.22.01<br>_20240103_R165  | 2024/01/10 | 2.22.01 | <ul style="list-style-type: none"> <li>- Changed the corporate name to Hanwha Vision in the web viewer as the name changed to Hanwha Vision</li> </ul>  |
| PNM-7082RVD  | PNM-7082RVD_2.22.01<br>_20240103_R136   | 2024/01/10 | 2.22.01 |   |
| PNM-8082VT   | PNM-8082VT_2.22.00<br>_20231103_R219    | 2023/11/14 | 2.22.00 | <ul style="list-style-type: none"> <li>- Corrected an issue where the [Time schedule] feature did not intermittently work after the camera rebooted</li> </ul>  |
| PNM-9031RV   | PNM-9031RV_2.22.01<br>_20231101_R542    | 2023/11/28 | 2.22.01 | <ul style="list-style-type: none"> <li>- Fixed language errors in Japanese version [v2.22.00, PNM]</li> </ul>   |
| PNM-9084RQZ1<br>PNM-9085RQZ1   | PNM-9084QZ_2.22.02<br>_20231109_R380    | 2023/11/28 | 2.22.02 | <ul style="list-style-type: none"> <li>- Fixed an issue where video streaming was interrupted for the live and recording in the camera registered to NVR or Genetec</li> </ul>  |
| PNM-C12083RVD  | PNM-C12083RVD_2.21.03<br>_20231025_R352 | 2023/11/23 | 2.21.03 | <ul style="list-style-type: none"> <li>- Added support for the Cisco Discovery Protocol (CDP) used in CISCO switches</li> </ul>   |
| PNV-A9081R   | PNO-A9081R_2.21.13<br>_20230414_R782    | 2023/10/10 | 2.21.13 | <ul style="list-style-type: none"> <li>- Added a function where you can select attributes to send to object metadata</li> </ul>   |
| QNF-8010   | QNF-8010_2.10.02<br>_20220401_R411      | 2022/04/01 | 2.10.02 | <ul style="list-style-type: none"> <li>- Added certificate management function</li> </ul>   |
| QNF-9010   | QNF-9010_2.11.03<br>_20230509_R444      | 2022/06/20 | 2.11.03 | <ul style="list-style-type: none"> <li>- Added an option to choose a TLS version</li> </ul>   |
| QND-6011<br>QND/O/V-6012R<br>QND/O/V-6022R<br>QND/O/V-6072R<br>QND/O/V-6082R | QNO-6082R_1.41.16<br>_20231109_R401     | 2023/11/28 | 1.41.16 | <ul style="list-style-type: none"> <li>- 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</li> </ul>                                    |
| QND/O/V-6012R1<br>QND/O/V-6022R1<br>QND/O/V-6082R1                           | QNO-6082R1_1.41.05<br>_20230426_R32     | 2023/05/09 | 1.41.05 | <ul style="list-style-type: none"> <li>- 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</li> </ul>                                    |
| QND/O/V-7012R<br>QND-7022R<br>QND/O/V-7082R                                  | QNO-7082R_1.41.16<br>_20231109_R171     | 2023/11/28 | 1.41.16 | <ul style="list-style-type: none"> <li>- Added the DLL auto tune function to address the camera rebooting issue caused by the fixed DLL value</li> </ul>  |
| QND/O/V-8010R<br>QND/E-8011R<br>QND/O/V-8020R<br>QND/O/V-8080R               | QNO-8080R_1.41.16<br>_20231109_R364     | 2023/11/28 | 1.41.16 | <ul style="list-style-type: none"> <li>- Added options to configure GOV, dynamic GOV, and dynamic FPS settings of the recording profile. In case of configuration, however, the video may not be recorded properly</li> </ul> |

## Network Camera

| Model                          | File                                  | Date       | Ver.    | Remark   |
|--------------------------------|---------------------------------------|------------|---------|--|
| QNP-6250(H)<br>QNP-6320H       | QNP-6320H_2.21.04<br>_20230623_R205   | 2023/06/28 | 2.21.04 | - Added auto tracking function   |
| QNO-C8083R<br>QNV-C8083R       | QNV-C8083R_2.21.10<br>_20230908_R311  | 2023/09/20 | 2.21.10 | - Added video analytics features ([People counting], [Heatmap], [Queue management], and [Vehicle counting])  |
| XNB-6000                       | XNB-6000_2.10.06<br>_20240108_R698    | 2024/02/02 | 2.10.06 | - Improved SUNAPI API of Events status   |
| XNB-6001                       | XNB-6001_2.10.04<br>_20230516_R574    | 2023/06/02 | 2.10.04 | - Added setting option to enable or disable simple focus function after [Day/Night] mode operation   |
| XND-6020R                      | XND-6020R_2.10.02<br>_20220401_R596   | 2022/04/20 | 2.10.02 | <ul style="list-style-type: none"> <li>- Added certificate management function</li> <li>- Added [Exclusive PTZ control] function to give priority to PTZ control to a specific user and restrict control commands of other users</li> </ul>  |
| XND-8020R                      | XND-8020R_2.10.02<br>_20220401_R599   | 2022/04/20 | 2.10.02 |  |
| XNV-6011                       | XNV-6011_2.10.02<br>_20220117_R573    | 2022/02/07 | 2.10.02 |  |
| XND/V-6080R<br>XND/V-6080(V)   | XND-6080_2.22.01<br>_20240108_R595    | 2024/01/08 | 2.22.00 | - Corrected an issue that disabled streaming and stopped Common Gateway Interface (CGI) working in certain circumstances when you access the web viewer after adding a camera to Genetec using the ONVIF protocol  |
| XND/V-C6083RV<br>XND/V-C7083RV | XND-C7083RV_2.22.03<br>_20231025_R410 | 2023/11/14 | 2.22.03 | <ul style="list-style-type: none"> <li>- Corrected an issue where the [Time schedule] feature did not intermittently work after the camera rebooted</li> <li>- Corrected an issue where the admin password wasn't changed when you tried changing the admin password using the ONVIF protocol</li> </ul> |
| XNV-C8083R<br>XNV-C9083R       | XND-C9083RV_2.22.03<br>_20231025_R429 | 2023/11/14 | 2.22.03 |  |
| XNF-8010R(RV)                  | XNF-8010R_2.10.04<br>_20230328_R640   | 2023/05/11 | 2.10.04 | - When setting the H.264/H.265 codec, you can set the minimum bitrate to 10 kbps   |
| XNF-9010RV                     | XNF-9010RV_2.22.03<br>_20231025_R448  | 2023/11/14 | 2.22.03 | - Fixed an issue where the web page was not opened after a virtual channel was added to it   |
| XNF-9013RV                     | XNF-9013RV<br>_2.22.02_20231027_R333  | 2023/11/14 | 2.22.02 | - Corrected an issue where the [Time schedule] feature did not intermittently work after the camera rebooted   |
| XNP-6400(R)                    | XNP-9250R_2.22.01<br>_20231031_R344   | 2023/11/14 | 2.22.01 | - Added a function to configure the MTU size between 1,280 and 1,500 in [Setup] > [Basic] > [IP & Port] > [IP address]   |
| XND/O/V-8082R<br>XNV-9082R     | XNV-9082R_2.22.03<br>_20231025_R472   | 2023/11/14 | 2.22.03 | - Fixed an issue where the web page was not opened after a virtual channel was added to it   |

## Encoder / Decoder

| Model    | Filename                           | Date       | Version | Release Note  |
|----------|------------------------------------|------------|---------|---|
| SPD-152  | SPD-152_5.10.32<br>_230508130731   | 2023/05/10 | 5.10.32 | <ul style="list-style-type: none"> <li>- Deleted the function of synchronizing a decoder SPD-152 with a camera audio</li> <li>- Enable the sequence to operate in the latest layout configuration when the decode restarts after it reboots in operation of layout sequence functions</li> <li>- Increased the maximum number of layouts from 10 to 20 for layout configuration and operation of layout sequence</li> </ul> |
| SPE-420  | SPE-420_2.21.02<br>_20230803_R152  | 2023/08/11 | 2.21.02 | <ul style="list-style-type: none"> <li>- Fix the problem that when you change the external PTZ connection port to COAX for all channels, the external PTZ settings item disappears in the webviewer</li> </ul>  |
| SPE-1630 | SPE-1630_2.21.01<br>_20230309_R149 | 2023/03/24 | 2.21.01 | <ul style="list-style-type: none"> <li>- Added a function to display the time in "Month-Day-Year Hour:Minute" format if H.264 or H.265 codec is applied</li> <li>- Fixed an error where ONVIF discovery communication was not available between a camera and Wisenet Device Manager in a certain circumstance</li> </ul>  |

## Software

| Model          | Filename | Date       | Version                                 |
|----------------|----------|------------|---|
| Wisenet SSM    | 2.15.02  | 2023/03/15 | - Bug fixes and functional improvements |
| Wisenet Viewer | 1.04.00  | 2023/02/23 | - Bug fixes and functional improvements |
| Smart Viewer   | 4.9.13   | 2022/05/18 | - Bug fixes and functional improvements |
| Wisenet mobile | 2.07.03  | 2024/04/01 | - Bug fixes and functional improvements |

## HDD Compatibility List

**Revision 11.24**

**Release date : 2023.12.14**

[Hanwhavision.com](http://Hanwhavision.com) > Support > Data Center > HDD Compatibility

**Major change**

1. New model : XRN-6420DB4
  - ST6000VX008-2ZP1, ST4000VX015-3CU1, ST8000VX009-2ZP1, WD8001PURA-64B6VY0
2. WD PURU Series Restrictions Added: XRN-6420DB4
  - WD42PURU-64C4CY0, WD63PURU-64C4FY0
  - Only products produced after July 15, 2023