Hanwha Vision

Technical Newsletter

September 2024 Service Operation Team

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Latest Firmware Information

Instructions for Sleeve Fan Replacement

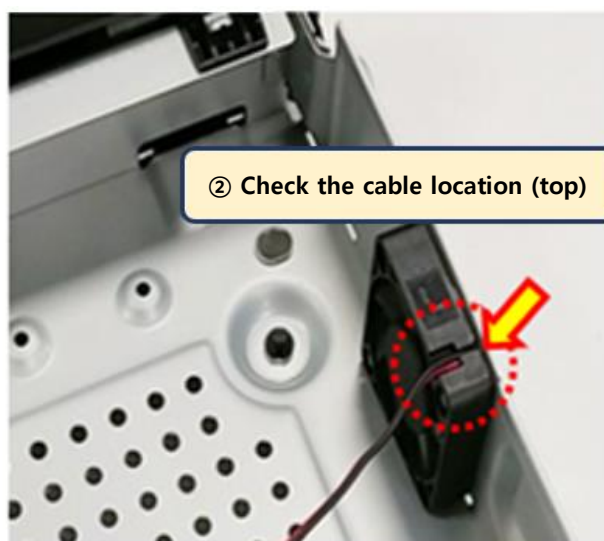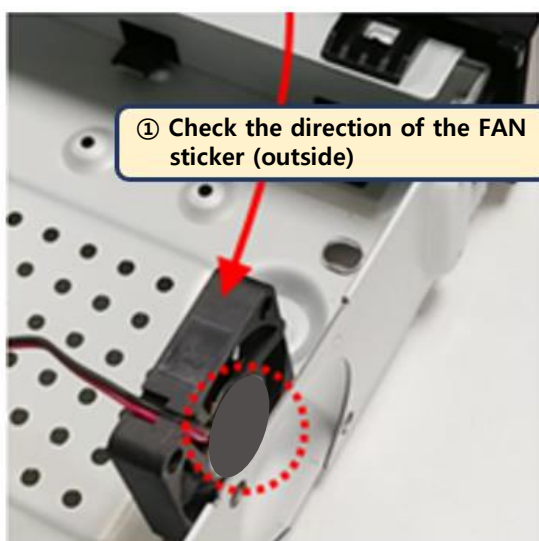| Info. Type	□Quality □Settings ■Repair □S/W □Etc

- **Target model** : HRX-1635/435, QRN-1630S/830S XRN-820S/815S, SPE-1630, ARD-1610, WRN-2010S/2110B1/2110SB1

- **Purpose** - Instructions for sleeve fan replacement

    . To disseminate precautions against cases of fan component deformation and noise generation due to use of non-standard screws and excessive tightening of screws.

- **Instructions for fan replacement**

① **Check the direction of the FAN sticker (outside)**

② **Check the cable location (top)**

③ **Fastening Torque: 4.0 ~ 5.0 Kgf.cm**

④ **Fasten the screws in two diagonal locations**

✓ Check points

Using screws of different specifications and excessive screw tightening can cause deformation and noise in the fan.

- Use genuine parts (Screws, Fan)

- Do not excessively tighten the screws for fixing the fan.

Update on Intel 8th-Gen NVR Changes (Ver. 5.34.12)

Info. Type	☐Quality ☐Settings ☐Repair ■S/W ☐Etc

● **Target model : Software version information : v5.30.72 → v5.34.12**

Types	Details
PRN **(15 Models)**	1600B2/1605B2/1610B2, 3200B2/B4/3210B2/B4, 3205B2/B4, 6400B4/DB4, 6405B4/DB4/6410B4/DB4
XRN **(16 Models)**	1620B2, 3210B2/RB2/B4, 6410B2/B2/B4/DB4, 1620SB1, 820S 6410DR/TE, 6410R/TE XRN-3210R/TE XRN-1620S/TE XRN-820S/TE XRN-6410B4/TU

● **Update Highlights**

Categories	Details
New	- Applied the Hanwha Vision logo / Added the quick sequence support. - Added the MD event auto-setting function for a camera and NVR when first registering the camera. - Added the notification restriction function using NVR alarm input / Added the automatic web viewer logout function. - Added the DHCP activation function when DHCP IP address allocation is possible in the installation wizard. - Added the MAC filtering function / Added the serial number display function. - Added the camera registration and channel setting functions in the web viewer installation wizard.
Improvements	- Increased the maximum number of concurrent P2P users from 3 to 10. - Changed the operation method of the Shift key on the virtual keyboard of the local UI from fixed to one-time operation. - Made an improvement to display the capacity required for USB backup - Made an improvement to security vulnerabilities - Adjusted the list of Secure Cipher Suites and Compatible Cipher Suites when setting up HTTPS TLS. - Unified audio output control scenarios/instant viewer playback specifications for live and play back modes. - Made an improvement to support passwords of up to 64 characters for administrator, user, and camera accounts. - Solved the problem that UDP multicast does not work when registering the camera RTSP. - Solved the problem that using Genetec for FLIR CM-6405-11-I ONVIF camera linkage causes the system to reboot. - Resolved the GSC(Genetec client) linkage issue - Made an improvement to the case where using ONVIF to request the NVR network interface information from the GSC(Genetec client). - Solved the problem of not being able to set camera settings and receive events when linking some cameras - Solved the problem that the QR code was not displayed in the language set when accessing the help QR code. - Solved the problem that the system intermittently reboots when outputting video by changing the layout in the local UI. - Solved the problem that the installed certificate disappears when rebooting the system after certificate installation. - Solved the problem that the system reboots during sequence operation - Solved the problem that the NVR reboots when the camera passes an abnormal CGI response. - Changed 'ONVIF port' to 'HTTP port' in the UI menu for manual ONVIF camera registration. - Solved the problem of rebooting caused by insufficient space in the HDD due to an increase in DB file size in a low bitrate environment.

Network Cable Types and User Guide

Info. Type	☐Quality ☐Settings ☐Repair ☐S/W ■Etc

● **Purpose**

- To provide information on the types of network cables to help you choose the right cable for your product.

Types	Form	Transmission Rate	Bandwidth
Cat.5	A cable in which insulated copper wires are twisted together.	100Mbps	100Mhz
Cat.5e		1Gbps	100MHz
Cat.6	A cable that has a built-in cross-plastic shield between the twisted copper wires to prevent interference.	1Gbps	250Mhz

● **Difference between UTP and FTP**

	Unshielded Twist Pair (UTP)	Foiled Twisted Pair (FTP)	Shielded Twist Pair (STP)
Features	A cable with twisted wires without shielding	A cable with twisted 4-pair wires shielded with aluminum	A cable with twisted 4-pair wires, each wrapped with an aluminum shield
Advantages	Low price	More resistant to noise than UTP	Excellent in noise prevention because it is double or triple shielded
Use	Home, office	Wiring in environments with high interference, factories, etc.	Outdoors or special environments where high current flows.
Grounding	**Impossible**	Possible	Possible

Cat5   Cat5e   Cat6

UTP   FTP   STP

● **Recommended Specifications**

- Cable length: 100m or shorter

- Cable specification: **Cat5e or higher**

- Cable resistance: ≤ 0.125 Ω/m

⚠ **Problems caused by using non-recommended cables**

- N/W connection may be frequently disconnected.
- PoE power supply may not work.
- Normally it works, but when the power load increases, the connection may be disconnected.

Network Camera Surge Protection Method

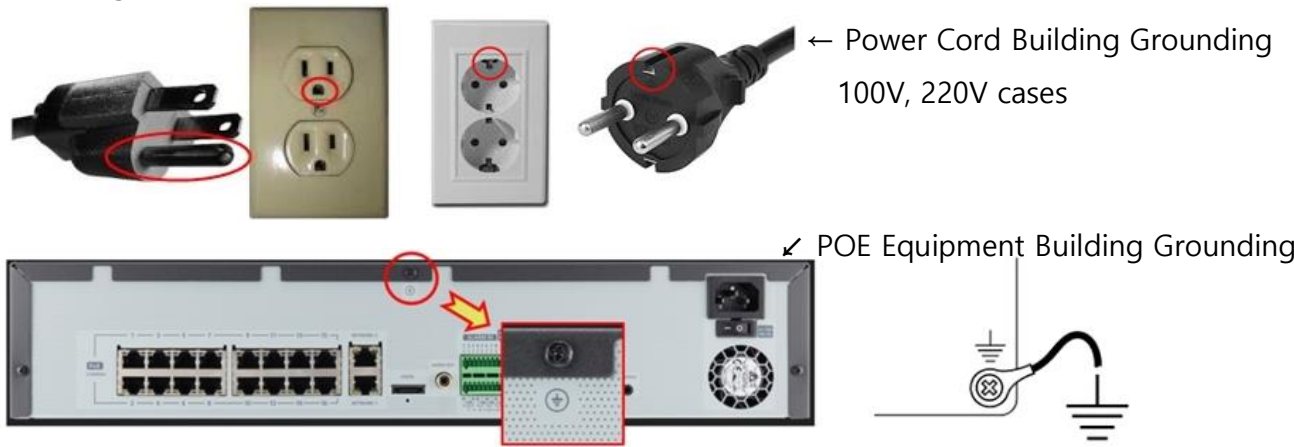| Info. Type	☐Quality ☐Settings ☐Repair ☐S/W ■Etc

● **Target model** : Network Cameras

● **Purpose**

 - To guide the Surge Protection method when installing network cameras on site

 . In the summer, lightning strikes are frequent; thus, there are frequent POE power supply
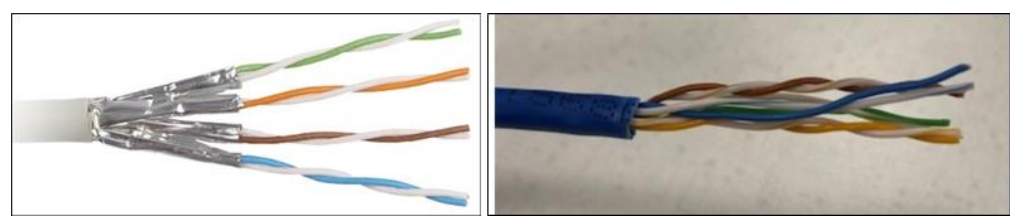   and camera failures caused by electrical surges.

   To prevent electrical surges, it is necessary to take measures such as grounding, using STP
   cables, and installing surge protectors.

● **Instructions on how to install network camera Surge Protection**

① Grounding outlets and POE equipment

← Power Cord Building Grounding
   100V, 220V cases

↙ POE Equipment Building Grounding

② Recommended use of STP cables

[STP LAN Cable: Surge Protection(O)]   [UTP LAN cable: Surge Protection(X)]

③ Recommended use of Surge Protectors

Surge Protector

Earth-Leakage
Circuit Breaker (ELCB)

New updated firmware (2024, JUL ~ AUG)

구분	Model Name	Firmware	Ver.	Date	Remark
DVR	HRX-1634/1635 HRX-835A	HRX-1635_5.31.72	5.31.72	2024-08-06	- Displays how much space is necessary for the backup when you back up a USB
NVR	KRN-1600	krn-1600-pkg_v2.70	2.70	2024-07-24	- Security improved
	KRN-3200	krn-3200-pkg_v2.70			
	ARN-6450 PRN-4011	prn-4011-pkg_v2.70			
	QRN-410S,810S QRN-1610S	qrn-x10s-pkg_v2.70			
	ARN-1650 XRN-1610(A,S,SA)	xrn-1610s-pkg_v2.70			
	XRN-811S	xrn-811s-pkg_v2.70			
	LRN-410S,810S	LRN-810S_3.06.42	3.06.42	2024-07-24	- Security improved
	LRN-1610S	LRN-1610S_3.06.42			
	QRN-1620S	QRN-1620S_3.06.42			
	QRN-420S,820S	QRN-820S_3.07.42	3.07.42	2024-07-24	- Security improved
	PRN-1600B2 PRN-1605B2 PRN-1610B2 PRN-3200B2(B4) PRN-3205B2(B4) PRN-3210B2(B4) PRN-6400B4(DB4) PRN-6405B4(DB4) PRN-6410B4(DB4) XRN-1620B2(SB1) XRN-3210B2(B4) XRN-3210RB2 XRN-6410B2(B4) XRN-6410DB4(RB2) XRN-820S	PRN-6400DB4_5.30.72	5.30.72	2024-07-02	- Corrected an issue that caused the [Dynamic layout] feature to malfunction - Fixed mouse-click errors in some pop-up windows - Corrected an issue that prevented you from inserting spaces in the [NVR name] entry box in the Web viewer - Corrected the howling issue that intermittently happened when you played videos using an AAC codec on Wisenet mobile - Changed the domain name from hanwha-security to hanwhavision to reflect the new company name - Improved the backup speed of remote clients (SSM, NVR, Web viewer, SMV, etc.) - Increased the responsiveness of some GUI pages
	QRN-830S,1630S XRN-815S	QRN-1630S_5.31.32	5.31.32	2024-08-06	- Displays how much space is necessary for the backup when you back up a USB

New updated firmware (2024, JUL ~ AUG)

구분	Model Name	Firmware	Ver.	Date	개선사항
NW CAM	QND-6011 QND-6021 QND/O/V-6012R QND/O/V-6022R QND/O/V-6032R QND/O/V-6072R QND/O/V-6073R QND/O/V-6082R QND/O/V-6083R	QNO-6082R_1.41.17	1.41.17	2024-07-06	Upgraded to the latest firmware . You cannot downgrade to a firmware lower than the following firmware, respectively. - QNO6082R_WW_ALL: 1.41.12_20211026_R286 - QNO6082R1_WW_ALL: 1.41.01_20211012_R19 - QNO7082R_WW_ALL: 1.41.02_210907_R102 - QNO6084R_WW_ALL: 1.41.01_20210907_R81
	QND/O/V-6012R1 QND/O/V-6022R1 QND/O/V-6032R1 QND/O/V-6072R1 QND/O/V-6082R1	QNO-6082R1_1.41.17			
	QNO/V-6014R QNO/V-6084R QND/O/V-7012R QND/O/V-7022R QND/O/V-7032R QND/O/V-7082R	QNO-6084R_1.41.17			
	XND-8020RW XND/V-8020R XND/V-8030R XND/V-8040R	XND-8020R_2.10.03	2.10.03	2024-07-17	- Fixed the issue where the video was intermittently broken in some decoders - Applied SUNAPI API improvements for event status to models that were not previously affected
	XNO-8020R XNO-8030R XNO-8040R	XNO-8020R_2.10.03			
	XND-8080R (RV,RW) XNV-8080R (RS,RSA,RW)	XND-8080R_2.10.04	2.10.04		
	XNB-8000 XNO-8080R	XNB-8000_2.10.05	2.10.05		
	TNO-L4030TR TNO-L4040TR	TNO-L4040TR_2.21.10	2.21.10	2024-07-03	- Fixed an error with UI text on the [Temperature detection] page - Improved SUNAPI API of the [Temperature detection] feature - Fixed the proble m that the temperature of the [Include area] which is ROI was displayed incorrectly
	TNO-L4030T TNO-L4040T TNO-L4050T	TNO-L4050T_2.21.10			
	PNM-12082RVD	PNM-12082RVD_2.22.03	2.22.03	2024-07-09	- Corrected an issue where Chinese text didn't appear in the UI even after you chose the language as Chinese
	PNM-7082RVD	PNM-7082RVD_2.22.03			
	AIB-800	AIB-800_24.01.02	24.01.02	2024-08-21	- Added an RTSP protocol. - enabling detailed information about objects to be shown in BestShot. - PTZ camera's functions (including pan, tilt, zoom, and preset features) are now available on clients, such as NVR and SSM - Added support for AI Box to interwork with multi-directional cameras and encoders. - Enables you to choose a profile for AI analysis that is suitable for the camera's specifications - Added an application environment that supports multi-channels