

Technical Newsletter

February 2025 Service Operation Team

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Latest Firmware Information (2024 Dec ~ 2025 Jan)

Rebuilding time by HDD capacity

Info. Type

 Quality Settings Repair S/W Etc

● Target model

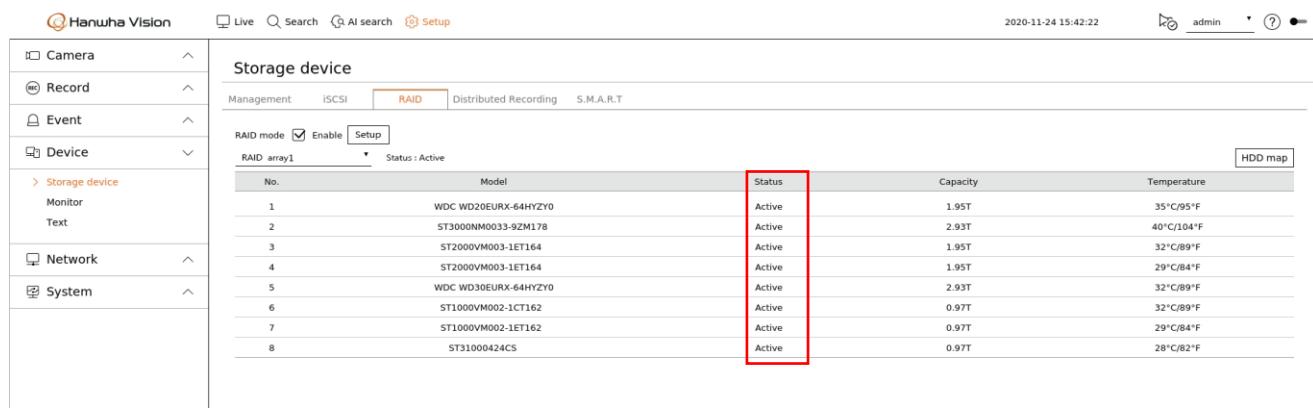
- x86 model (HW Raid product) and PRN-4011 NVR

● Rebuilding time

TEST model	HDD capacity			Recording : 0 Mbps		Recording : 320Mbps	
	Individual Capacity	Q'ty	Total capacity	RAID5	RIAD6	RAID5	RIAD6
PRN-6410DB4	4T	8	32T	16.8 hours	16.8 hours	38.0 hours	51.0 hours
	6T	8	48T	24.0 hours	24.0 hours	57.0 hours	76.5 hours
	8T	8	64T	36.0 hours	36.0 hours	76.0 hours	102.0 hours
	10T	8	80T	40.8 hours	40.8 hours	95.0 hours	127.5 hours

TEST model	HDD capacity			Recording : 0 Mbps		Recording : 320Mbps	
	Individual capacity	Q'ty	Total capacity	RAID5	RIAD6	RAID5	RIAD6
PRN-4011	4T	6	24T	28.8 hours		62.4 hours	105.6 hours
	6T	6	36T	43.2 hours		93.6 hours	158.4 hours
	8T	6	48T	57.6 hours		127.2 hours	211.2 hours

※ While the HDD is rebuilding, its status is displayed as 'Rebuilding'.



The screenshot shows the Hanwha Vision NVR software interface. On the left, there is a sidebar with navigation links: Camera, Record, Event, Device (selected), Storage device (sub-link), Network, and System. The main content area is titled 'Storage device' and shows 'Management' and 'RAID' tabs. The 'RAID' tab is selected. It displays 'RAID mode' with a checked 'Enable' checkbox and a 'Setup' button. Below this, 'RAID array1' is listed with a 'Status : Active'. A table lists 8 drives with their details: Model, Status, Capacity, and Temperature. All drives are marked as 'Active'. A red box highlights the 'Status' column.



Rebuilding time may vary depending on recording volume, RAID configuration environment, etc. Please use it for reference only.

Specifications for resolution change when using AI camera DPM function

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- AI camera with DPM (Dynamic Privacy Mask: real-time mosaic processing)

● Summary

- The resolution changes when using DPM. It does not return to the default value after disabling DPM.

This is not an error in the camera specifications.

● Information on resolution change specifications

- When the DPM function is enabled, the resolution is changed for AI processing.
※ Resolution : 2M or less/ Frame rate : 10
- After disabling the DPM function, the user can change the resolution and frame rate directly.

	Default	DPM ON	DPM OFF
Resolution	2560 X 1440	1920 X 1080	1920 X 1080
Frame rate	30	10	10

Video profile

Name	Codec	Type
MJPEG	MJPEG	Record / Event
H.264	H.264	Default
H.265	H.265	
MOBILE	H.264	

Profile type

Default profile
 Edge recording profile
 Digital PTZ profile
 Frame Lock profile
 DPM profile

Profile properties

Resolution: 1920 X 1080 (16:9)
Frame rate: 10
Maximum bitrate: 3072

You can choose a resolution equal to/less than 2M. The frame rate is fixed to 10.

About a new function of TNO-C3012TRA, (Tank Level Detection)

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- TNO-C3012TRA

● Description of a new function (Tank Level Detection)

- This function sets a region of interest (ROI) in a large-capacity storage facility (e.g. oil tank), uses the temperature difference between the filled area and the empty area to calculate the percentage of the filled area, and generate an event.



[Setting Flow]

ROI drawing on the video

Label the ROI

Detection Condition
Occupancy ratioDetection value
(10 - 100 %)**Low Level warning!**
(VMS, SCADA ...)

● Details

- Set ROI: Temperature detection > Temperature Type >> Tank level detection
- Determine the baseline of the water level by examining the sharp temperature difference between each vertical pixel line and the temperature similarity between horizontal pixels. Calculate the percentage of the area below the baseline to provide the Occupancy Ratio (%).

- There may be differences from the actual water level due to the camera angle and other factors in the installation environment.
- If the Tank Level Monitoring option is selected, only a rectangular ROI is supported.
- The ROI must not include the outside of the target.
- There must be no structures in front of the target.



How to search the HDD compatibility list on the website

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- All NVR models

● Summary

- The way to find the HDD compatibility list has changed from downloading a PDF document to searching for it on the web.

● How to search the HDD compatibility list

- Path: [HDD Compatibility : Hanwha Vision - Global Vision Solution Provider](#)

HDD Compatibility

⑥
[Excel download](#)

① Recorder model name:

② Brand:

③ Storage:

④ RAID: RAID RAID1

⑤ Discontinued: Yes

⑥ [Excel download](#)

- ① Search by Model Name : Click  and enter the NVR model name or select the desired model with the checkbox at the bottom.
- ② Search by Brand : Click  and select the desired brand with the checkbox.
- ③ Search by Storage Capacity : Click  and select the desired capacity with the checkbox.
- ④ RAID Support : Check when you want to see HDDs supporting RAID(RAID5,6) or/and RAID1
- ⑤ Discontinued : Click if you want to check discontinued HDDs in the compatibility list
- ⑥ Excel download : Download the search results. If there is no data filtering, the list of the entire HDDs will be downloaded.

● Example

- Search results of HDDs supporting the Western Digital RAID for the model XRN-6410DB4

Recorder Model		HDD	Brand	Storage	RAID	Discontinued
XRN-6410DB4		UltraStarWUS721010ALE6L40B42266 SATA 6Gb/s 256MB	Western Digital	10TB	RAID	
XRN-6410DB4		WD Purple WD102PURZ-85BXPY0 SATA 6Gb/s256MB	Western Digital	10TB	RAID	Yes
XRN-6410DB4		WD Purple WD102PURX-74WCLY0 SATA 6Gb/s256MB	Western Digital	10TB	RAID	Yes
XRN-6410DB4		WD Purple WD102PURX-64WCLY0 SATA 6Gb/s 256MB	Western Digital	10TB	RAID	Yes
XRN-6410DB4		Purple Pro WD101PURP-85B5BY0 SATA 6Gb/s256MB	Western Digital	10TB	RAID	Yes
XRN-6410DB4		Purple Pro WD101PURP-74B5BY0 SATA 6Gb/s256MB	Western Digital	10TB	RAID	Yes
XRN-6410DB4		Purple Pro WD101PURA-64B5KY0 SATA 6Gb/s256MB	Western Digital	10TB	RAID	Yes

New updated firmware (2024 Dec ~ 2025 Jan)

Category	MODEL NAME	FIRMWARE	VER	DATE	REMARK
NVR	ARD-410 ARD-810	ARD-810_5.31.42	5.31.42	2024-12-13	- Security improved
	ARD-1610	ARD-1610_5.31.42			
DVR	HRX-434 HRX-435	HRX-435_4.52.72	4.52.72	2024-12-13	- Security improved
	HRX-835 HRX-1632	HRX-1632_4.52.72			
	HRX-835A HRX-1634 HRX-1635	HRX-1635_5.31.82	5.31.82	2024-12-13	- Security improved
	HRX-435L	HRX-435FN_5.31.82			
Mobility	MGC-D8080 MGC-D8080LI	MGC-D8080LI_2.22.01	2.22.01	2024-12-18	<ul style="list-style-type: none"> - Added web viewer settings items and options (see release notes for details) - Added a feature to detect a blue license plate for electric vehicles - Changed the corporate name to Hanwha Vision in the web viewer
	MGC-F9010LI	MGC-F9010LI_2.22.01			
NW CAM	PNM-C32084RQZ	PNM-C32084RQZ_24.01.01	24.01.01	2024-12-14	<ul style="list-style-type: none"> - Integrated the WiseAI application supporting AI functionality - Improved the Jetson flashing upgrade functionality. - Corrected an issue that caused the camera to reboot intermittently due to failure in capturing video frames
	PNM-C9022RV	PNM-C9022RV_2.22.03	2.22.03	2025-01-16	<ul style="list-style-type: none"> - Improved the logic of the execution command for the LLDPd (Link Layer Discovery Protocol daemon) within the camera by adding "-ccc", allowing it to forcefully send CDP (Cisco Discovery Protocol) packets even if CDP switches are not detected
	XND-6083RV XNV/O-6083R XNB-6003	XND-6083RV_2.23.03			
	XNF-9013RV	XNF-9013RV_2.23.03			
	XNO-6123R XNV-6123R	XNV-6123R_2.23.03			
	QND/O-6012RG QND/O-6082RG	QND-6012RG_1.42.01	1.42.01	2024-12-17	<ul style="list-style-type: none"> - Corrected an issue where the [Help] icon to navigate to the Online Help page was not visible in the top right corner of the web viewer
	QND/O-8010RG QND/O-8080RG	QNO-8080RG_1.42.01			

New updated firmware (2024, NOV ~ DEC)

Category	MODEL NAME	FIRMWARE	VER	DATE	REMARK
NW CAM	PNO-A9311RLP	PNO-A9311RLP_2.21.01	2.21.01	2024-12-18	<ul style="list-style-type: none"> - Removed support for SD card-related CGI to prevent functionality conflicts within a camera equipped with Wisenet Road AI (an app installed on the open platform) using dedicated SD cards (Using the SD card for purposes other than Wisenet Road AI functionality will cause functionality conflicts.) - Downgraded from version 5.00_240111 to version 5.00_230629 to stabilize the Open platform version - Corrected an issue where the camera did not return to the home position after rebooting the camera, even after clicking the [Set home] button under the [Preset] tab in [PTZ]>[Preset setup] in the web viewer - Corrected an issue where the VMS recognized the event occurrence timestamp as being in the future due to incorrect timestamp information (indicated by the imageRef metadata element) sent from the camera - Corrected an issue where graphs that appeared under the [STATISTICS] tab was intermittently invisible on the page that appeared after clicking [Open platform] > [Go App] in the web viewer
	TNO-C3010TRA TNO-C3020TRA TNO-C3030TRA	TNO-C3010TRA_2.21.02	2.21.02	2024-12-06	<ul style="list-style-type: none"> - Added support for Cloud Connector - Improved the temperature detection event not to trigger consecutively when the conditions for the event to occur are maintained - Corrected an issue that didn't generate BestShot of the detected object that is small
	TNO-C3012TRA TNO-C3022TRA TNO-C3032TRA	TNO-C3012TRA_2.21.02			
	XNB-8000 XNO-8080R	XNB-8000_2.10.06	2.10.06	2024-12-14	<ul style="list-style-type: none"> - Improved SUNAPI API of Events status - Improved compatibility with 1TB SD card (512GB x 2) - 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 - Corrected an issue where the RTP timestamp appearing on the NVR's recorded video didn't match the actual time when you use an external company's VMS (video management system) to stream multicast video