

Technical Newsletter

October 2024 Service Operation Team

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Technology Information

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Latest Firmware Information

How to replace the mainboard/SSD memory in NVR when reusing HDD

Info. Type

☐Quality ☐Settings ☒Repair ☐S/W ☐Etc

- **Target Models : XRN-6410DB4, XRN-3210B2 , XRN-1620S , XRN-820S (x86 NVR model)**

● Purpose

- To guide you on how to preserve recorded video without loss so that duplicate data is not created when reusing the existing HDD after replacing the motherboard/SSD.

● How to restore DB when replacing the mainboard and SSD in X86 NVR

1) How to replace the motherboard

- ① Unmount HDD → ② Replace Motherboard → ③ Enter information (S/N, MAC address, UID) with CS-tool → ④ Install HDD → ⑤ **Automatically Restore settings saved on HDD** → ⑥ Inject the device certificate(HDD connection required)

2) How to replace SSD Memory (Firmware storage)

- ① Unmount HDD → ② Replace SSD Memory → ③ Set default model with HIT USB (B2, B4) → ④ Enter information (S/N, MAC address, UID) with CS-tool → ⑤ Mount HDD → ⑥ **Automatically Restore settings saved on HDD** → Inject the device certificate(HDD connection required)

✓ Check points

- A factory reset is performed after entering information (S/N, Mac address, UID) with CS-tool and clicking [Apply] button.
- An Automatical Restore is performed if mounting the existing HDD after completing the motherboard/SSD settings
- The device certificate requires that the PC be connected to an external network with the HDD connected.

※ Q&A (Common questions asked by customers)

1) Q : What if duplicate tables are created during recording and playback ?

- A: 1. If the MAC address changes, the device is recognized as a different one and a duplicate table is created.
2. If the GMT time has changed (if the time goes back to the past during recording)
3. If distributed storage is set

2) Q: How can I restore the existing settings without its backup file after replacing the motherboard?

- A : With CS-TOOL, you must first perform a factory reset of the motherboard to be replaced.
- To import the configuration file from HDD, there should be no configuration file on the motherboard.

3) Q: Is it possible to also back up distributed storage settings when backing up NVR settings?

- A : The distributed settings can also be saved and backed up (same as general recording)

Information on PoE power cable types and precautions

Info. Type

☐Quality ☐Settings ☐Repair ☐S/W ☒Etc

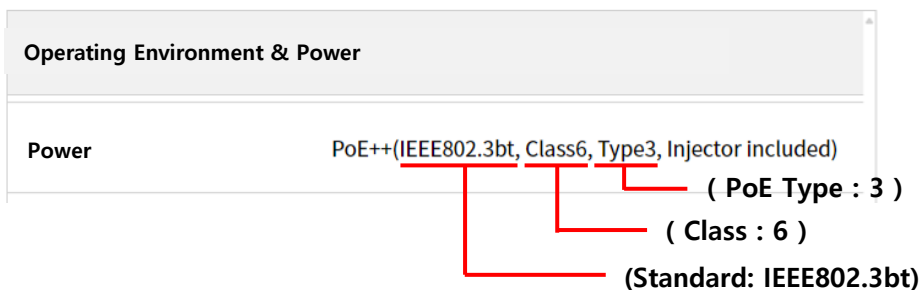
- **Purpose**

- To guide you through the selection and installation considerations for PoE suitable for our cameras.

- **PoE Power cable types**

Type Name	Standard	Class	Switch Power Output(Watt)	Device Power Input(Watt)	PoE Type
PoE	IEEE 802.3af	3	15.4	12.95	1
PoE+	IEEE 802.3at	4	30	25.5	2
PoE++	IEEE 802.3bt	5	45	40	3
		6	60	51	
High-Power PoE		7	75	62	4
		8	90	73	

Example) Recognizing the power specifications of the



✓ Precautions for PoE Installation

- . Cable: Use a **CAT5e or higher**. Minimize the distance between the system and the PoE switch
- . Check system compatibility: Check if the PoE Class provided by the camera and switch matches .
 - Check if the power provided by the PoE switch is sufficient.
 - * For products with a PoE Injector, it is recommended to use the included Injector
- . Environmental conditions: Avoid using cables that are too long (100M) or cheap cables with thin cores.
 - It is recommended to use shielded cables to minimize interference with other electronic devices.

Instructions on how to remove a card-type desiccant




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

● Desiccant Deletion Targets : All models with card-type desiccants attached












● Reasons for desiccant deletion

- The basic absorbent has been changed from Desipak to Desikhan. As a result, the limited moisture absorption capacity has been greatly enhanced.
- Since 'Moisture absorption quantity of Desikhan > Moisture absorption quantity of Desipak + Card-Type Desiccant', there is no need for card-type desiccants.

● Information on Desiccants

Type	Desipak	Card-Type Desiccant	Desikhan
Image			
Materials Code	PM02-003026A	TE15-000001A TE15-000002A	PM02-006173A
Moisture Absorption Limit	2.77g	(1A) 0.3g / (2A) 0.75g	9.84g

● Changes to the Installation Manual

Check the package items					Check the package items				
Make sure the package contains all of the following items:					Make sure the package contains all of the following items:				
Figure	Name	Qty	Use	Model	Figure	Name	Qty	Use	Model
	User's Manual	1		Commonly used for all models		User's Manual	1		Commonly used for all models
	Screw	2	For fixing when installing the product	Commonly used for all models		Screw	2	For fixing when installing the product	Commonly used for all models
	Spring Washers	2	For fixing when installing the product	Commonly used for all models		Spring Washers	2	For fixing when installing the product	Commonly used for all models
	Waterproof Washers	2	For fixing when installing the product	Commonly used for all models		Waterproof Washers	2	For fixing when installing the product	Commonly used for all models
	Waterproofing Gasket	1	Attached to the unused bracket installation hole	Commonly used for all models		Waterproofing Gasket	1	Attached to the unused bracket installation hole	Commonly used for all models
	Card-Type Desiccant	3	Attached when installing the product	QNB-2020RH/ QNB-2080RH/ QNB-5010RH/ QNB-5020RH/ ANB-2020RH/ ANB-5010RH/	Delete				

! Note

- Accessories may vary depending on the country in which the products are sold.
- Please contact our local technical representative for information on which models are subject to card-type desiccant removal.
- Effective: From February 2024

New updated firmware (2024, AUG ~ SEP)

	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	PRN-1600B2 PRN-1605B2 PRN-1610B2 PRN-3200B2(B4) PRN-3205B2(B4) PRN-3210B2(B4) PRN-6400B4(DB4) PRN-6405B4(DB4) PRN-6410B4(DB4)	PRN-6400DB4_5.34.12	5.34.12	2024-08-29	- Enables the NVR to interconnect with Genetec Security Center - Corrected an issue where mouse double-click didn't work after booting
	XRN-1620B2(SB1) XRN-3210B2(B4) XRN-3210RB2 XRN-6410B2(B4) XRN-6410DB4(RB2) XRN-820S				
NW CAM	AIB-800	AIB-800_24.01.02	24.01.02	2024-08-21	[New features] - Added an RTSP protocol. In the web viewer, you can select [RTSP] under [Protocol] in the [Manual registration] dialog box that appears when selecting [Camera] > [Camera settings] > [Manual] [Improvements and Changes] - Changed the [BestShot] feature to [BestShot & Attributes], 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. Additional PTZ functions (Swing, Tour, Trace, Group) are only allowed for control and view. - 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. In the web viewer, you can change the profile for AI analysis by clicking a drop-down arrow under [Profile] on the [AIBox profile] tab in [Camera] > [Profile information]. - Added an application environment that supports multi-channels, allowing analysis of up to 8 channels with a single application.
	PNB-A6001	PNB-A6001_2.21.08	2.21.08	2024-09-21	- Added support for AI Pack ※ Note that you need an individual license to install each application
	PNB-A9001	PNB-A9001_2.21.15	2.21.15	2024-09-21	
	PND-A6081RF PND-A6081RV PNO-A6081R PNV-A6081R	PNO-A6081R_2.21.08	2.21.08	2024-09-21	
	PND-A9081RF PND-A9081RV PNO-A9081R PNV-A9081R	PNO-A9081R_2.21.15	2.21.15	2024-09-21	
	TNF-9010	TNF-9010_2.12.10	2.12.10	2024-08-31	- Improved algorithms to enhance the accuracy of parking area occupancy detection