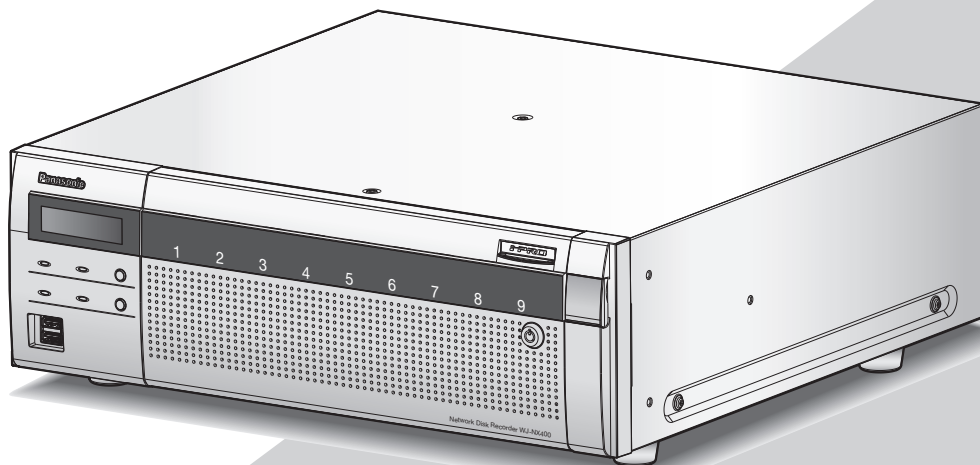


Panasonic®

Important Information

Network Disk Recorder

Model No. **WJ-NX400K**
WJ-NX400K/G
WJ-NX400K/GJ



HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

The model number is abbreviated in some descriptions in this manual.
WJ-NX400K/GJ is the same model as the network Disk Recorder WJ-NX400K/G.

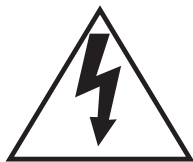
Safety Information

WARNING:

- This apparatus must be earthed.
- Apparatus shall be connected to a main socket outlet with a protective earthing connection.
- The mains plug or an appliance coupler shall remain readily operable.
- To prevent fire or electric shock hazard, do not expose this apparatus to rain or moisture.
- The apparatus should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, should be placed on the apparatus.
- All work related to the installation of this product should be made by qualified service personnel or system installers.
- For PERMANENTLY CONNECTED APPARATUS provided neither with an all-pole MAINS SWITCH nor an all-all pole circuit breaker, the installation shall be carried out in accordance with all applicable installation rules.
- The connections should comply with local electrical code.

CAUTION:

Before attempting to connect or operate this product, please read the label on the bottom.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Power disconnection. Unit with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is in the ON position. Unplug the power cord to disconnect the main power for all units.

~ : Alternating current symbol

For Denmark, Finland, Norway, Sweden

In **English**: "The equipment must be connected to an earthed mains socket-outlet".

In **Danish**: "Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord".

In **Finnish**: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan".

In **Norwegian**: "Apparatet må tilkoples jordet stikkontakt".

In **Swedish**: "Apparaten skall anslutas till jordat uttag".

For U.S. and Canada:

WJ-NX400K

For Europe and other countries:

WJ-NX400K/G, WJ-NX400K/GJ

UL listed model No.:

WJ-NX400K

For Canada

CAN ICES-3(A)/NMB-3(A)

For U.S.A.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For U.S.A.

The model number and serial number of this product may be found on the surface of the unit.

You should note the model number and serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

Safety Information (continued)



For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amp and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

How to replace the fuse

The location of the differs according to the type of AC mains plug (figures A and B).

Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

Open the fuse cover with a screwdriver and replace the fuse and close or attach the fuse cover.

Figure A

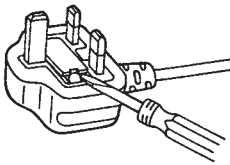
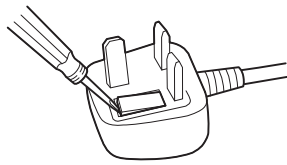


Figure B



Important safety instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation holes. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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Introduction

Preface

The network disk recorders WJ-NX400K and WJ-NX400K/G (hereinafter, recorders) equipped H.265 CODEC and are designed for use within a H.265 surveillance system, and record images/audio from up to 64 network cameras (hereinafter, cameras) on the hard disk drives (HDDs). Number of cameras to be used in the system (64 cameras in basic system) can be increased to 96 and 128 (maximum) by purchasing the Additional Camera Kit (WJ-NXE40, WJ-NXE40W).

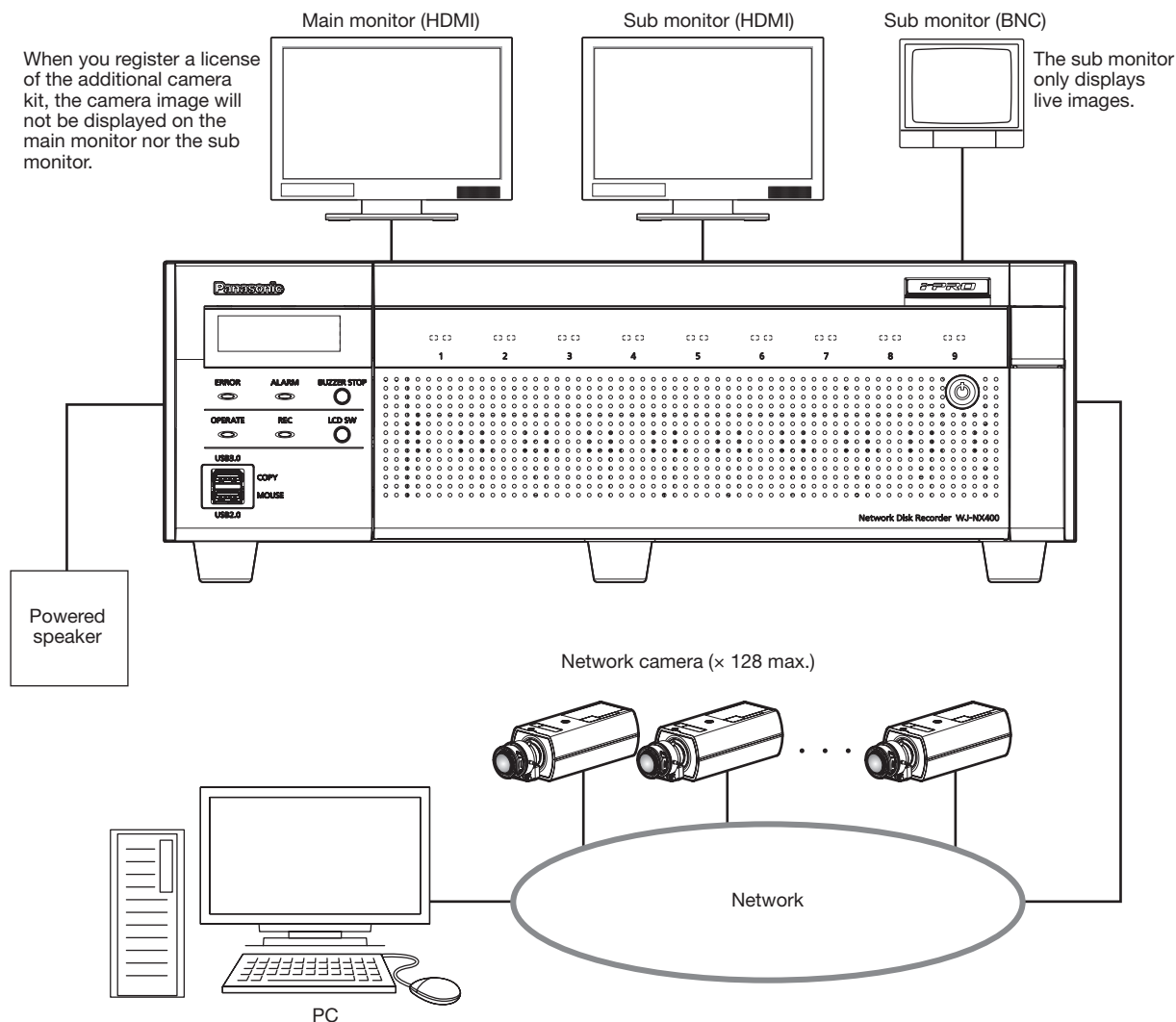
The optional HDDs encased in the provided HDD canisters (hereinafter referred as HDD units) can easily be installed/removed in/ from this recorder.

This recorder can connect the extension unit WJ-HXE400 (option) up to five and support up to 54 HDDs.

This recorder supports connection with a monitor equipped with the HDMI (High-Definition Multimedia Interface) connector. Connection using an HDMI cable (optional) offers display of playback/live images with superior quality.

It is possible to display images from multiple cameras, switch those images and perform basic operation of the camera.

System Configuration



Standard accessories

CD-ROM*1	1 pc.
Mouse	1 pc.
Installation Guide	1 pc.
Quick Reference Guide	1 pc.
Warranty (for U.S. field only)	1 pc.
Activation Key Card	1 pc.
Terminal Plug (12 pin)	2 pcs.
Terminal Plug (16 pin)	2 pcs.
Cable Clamp (for fixing cable connected to Terminal Plug)	1 pc.
Dust caps for the front USBs*2	2 pcs.
Power cord (WJ-NX400K)	1 pc.
Power cord (WJ-NX400K/G)	2 pcs.
Key	2 pcs.
Label*3	1 pc.
Rack mounting bracket	2 pcs.
Rack mounting bracket fixing screw	6 pcs.
Rack handle	2 pcs.
Screws for the rack handle	4 pcs.
Washer	4 pcs.
HDD canister	9 pcs.
HDD fixing screw	54 pcs.
Power cord clamp	1 pc.

*1 The CD-ROM contains the operating instructions (PDFs). Make sure to read them when installing or setting the recorder.

*2 Put the dust caps for the front USBs on the front copy port and mouse connection port to prevent dust brought by fan's intake while you are not using a mouse or an external storage device.

*3 This label is the same one found on the surface of this product. Keep it in view when installing this product in the rack.

About the user manuals

There are 4 sets of operating instructions for the WJ-NX400K, WJ-NX400K/G as follows.

Installation Guide (Printed):	Contains procedures of how to install/connect this product with devices and descriptions about "Easy start".
Important Information (this document):	Contains preface, precautions, and major operating controls and their functions and specifications.
Operating Instructions (PDF):	Contains descriptions of how to configure the required settings and how to operate this product. Refer to the Panasonic support website (https://security.panasonic.com/download/).
Quick Reference Guide:	Contains descriptions of how to operate functions frequently used.

Adobe® Reader® is required to read the PDF files on the provided CD-ROM. When Adobe® Reader® is not installed on the PC, download the latest Adobe® Reader® from the Adobe web site and install it.

Depending on descriptions, the model name of this recorder may be omitted as "NX400" in the manuals and on the setup. Refer to "readme.txt" on the provided CD-ROM for further information about the dedicated software (option) that receives and displays the event and error information, compatible cameras and their versions.

Refer to the Panasonic support website (<https://security.panasonic.com/support>) for latest information about the compatible cameras and functions to be added or changed by firmware upgrade.

The external appearance in the document may differ from the actual product within no influence range on operation due to improvement of the product.

System requirements for a PC

It is recommended to operate this unit using a PC that meets the following system requirements.

OS:	Microsoft® Windows® 7*1, Microsoft® Windows® 8.1, Microsoft® Windows® 10
Web browser:	Windows® Internet Explorer® 11 (32-bit)
CPU:	Intel® Core™ i7-860
Memory:	4 GB or more
Monitor:	1024 × 768 pixels or more, 24-bit True color or better
Network interface:	10BASE-T/100BASE-TX/1000BASE-T 1 port
Audio:	Sound card (When using the audio function)
Others:	CD-ROM drive: It is necessary to refer to the operating instructions on the provided CD-ROM. DirectX® 9.0c or later Adobe® Reader® : CD-ROM drive: It is necessary to refer to the operating instructions on the provided CD-ROM.

*1 Windows® XP compatibility mode is unavailable.

Important:

- Refer to the Panasonic support website (<https://security.panasonic.com/support>) for information about the latest operation verification of the supported operating systems and web browsers.
- If using a PC that does not meet the above system requirements, it may cause problems such as slow imaging or the browser becomes inoperable.
Microsoft® Windows® RT, Microsoft® Windows® 7 Starter and Microsoft Edge are not supported.
- When using Microsoft® Windows® 8.1, use it in the desktop. The software cannot be used in the Modern UI design.

Note:

- Refer to "Notes about versions of Windows®/Internet Explorer®" (PDF) for further information about system requirements for a PC and precautions when using Microsoft® Windows® or Windows® Internet Explorer®.
-

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- Intel and Intel Core are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.
- All other trademarks identified herein are the property of their respective owners.

Abbreviations

The following abbreviations are used in this manual.

Microsoft® Windows® 8.1 is described as Windows 8.

Microsoft® Windows® 7 is described as Windows 7.

Windows® Internet Explorer® 11 is described as Internet Explorer.

GPL/LGPL

- This product contains software licensed under GPL (GNU General Public License), LGPL (GNU Lesser General Public License), etc.
- Customers can duplicate, distribute and modify the source code of the software under license of GPL and/or LGPL.
- Refer to the "readme.txt" file on the provided CD-ROM for further information about the source code of the software contained in this product and copyright notice comprised in the GPL/LGPL software.
- Please note that Panasonic shall not respond to any inquiries regarding the source code.

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Except for open source software licensed under GPL/LGPL and so on, distributing, copying, disassembling, reverse compiling and reverse engineering of the software provided with this product are all expressly prohibited. In addition, exporting any software provided with this product violating export laws is prohibited.

Disclaimer of warranty

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- (2) ANY INCONVENIENCE, LOSS, OR DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;
- (3) ALL MALFUNCTIONS OR TROUBLES FROM UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER, REGARDLESS OF THE CAUSE OF THE MALFUNCTION OR TROUBLE;
- (4) INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;
- (5) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;
- (6) ANY CLAIM OR ACTION FOR DAMAGES BROUGHT BY ANY PERSON OR ORGANIZATION AS A PHOTOGRAPHED SUBJECT DUE TO VIOLATION OF PRIVACY CONCERNING A SURVEILLANCE CAMERA'S PICTURE OR SAVED DATA, FOR SOME REASON (INCLUDING USE WHEN USER AUTHENTICATION ON THE AUTHENTICATION SETTING SCREEN IS SET TO OFF), BECOMING PUBLIC OR BEING USED FOR ANY PURPOSE;
- (7) LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE (INCLUDING INITIALIZATION OF THE PRODUCT DUE TO FORGOTTEN AUTHENTICATION INFORMATION SUCH AS A USER NAME AND PASSWORD).

Warranty for U.S.

WJ-NX400K is warranted for three years. Refer to the warranty (accessory) about further information.

Network security

As you will use this unit connected to a network, your attention is called to the following security risks.

- ① Leakage or theft of information through this unit
- ② Use of this unit for illegal operations by persons with malicious intent
- ③ Interference with or stoppage of this unit by persons with malicious intent

It is your responsibility to take precautions such as those described below to protect yourself against the above network security risks.

- Use this unit in a network secured by a firewall, etc.
- If this unit is connected to a network that includes PCs, make sure that the system is not infected by computer viruses or other malicious entities (using a regularly updated anti-virus program, anti-spyware program, etc.).
- Protect your network against unauthorized access by restricting users to those who log in with an authorized user name and password set by using user authentication.
- Apply measures such as user authentication to protect your network against leakage or theft of information, including image data, authentication information (user names and passwords), alarm mail information, FTP server information and DDNS server information.
- After the unit is accessed by the administrator, make sure to close the browser.
- Change the administrator password periodically. Keep the authentication information (your user name and password) in a safe place free from public view.
- Do not install the camera in locations where the camera or the cables can be destroyed or damaged by persons with malicious intent.

Limitation of liability

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THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS.

CHANGES ARE ADDED TO THE INFORMATION HEREIN, AT ANY TIME, FOR THE IMPROVEMENTS OF THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT (S).

About HDD Unit

To install a hard disk drive in the recorder, it is necessary to assemble an HDD unit (encase the hard disk drive in the HDD canister). The HDD unit is designed to easily install/remove the hard disk drive in/from the recorder.

Contact your dealer about purchasing, installing, and replacing the hard disk drives.

About Additional Camera Kit (option)

Number of cameras to be used in the system (64 cameras in basic system) can be increased to 96 and 128 (maximum) by purchasing the Additional Camera Kit (WJ-NXE40, WJ-NXE40W: option). Refer to following table regarding camera numbers.

Additional Camera Kit WJ-NXE40, WJ-NXE40W (license for 32 cameras)	NX400 only (No additional license)	one Additional Camera Kit (one additional license)	two Additional Camera Kit (two additional licenses)
	up to 64 cameras	up to 96 cameras	up to 128 cameras

Important:

- The following functions are not available when registering the additional camera kit license.
 - Display of the camera image on the main and the sub monitors connected to the recorder
 - * Camera images will be displayed on the web browser of the PC, but not on the main or sub monitor.
 - Fisheye correction display of fisheye cameras
 - * Please use video monitoring software WV-ASM300 (option, as of February 2017) when you use fisheye image correction display.
 - Display, search, playback and copy of the recorded image on the main monitor connected to the recorder
 - Sub-stream recording
 - Re-encoding transmission
 - A part of setup menu operation
 - * The main monitor displays not a camera image but a special menu. The sub monitors turn black.
-

About Secure Communication Kit (option)

Registering a license of a secure communication kit (option) to the recorder enables secure communication with cameras. Each secure communication kit differs in the number of cameras that can be registered as shown in the table below. Use several licenses as necessary.

WJ-NXS01, WJ-NXS01W	WJ-NXS04, WJ-NXS04W	WJ-NXS16, WJ-NXS16W	WJ-NXS32, WJ-NXS32W
1 camera	4 cameras	16 cameras	32 cameras

Precautions

Refer installation work to the dealer.

Installation work requires technique and experiences. Failure to observe this may cause fire, electric shock, injury, or damage to the product.

- Be sure to consult the dealer.

Do not disassemble nor alter this product.

Failure to observe this may cause fire or electric shock.

- Ask your dealer for inspection and repair.

Do not insert any foreign objects.

Do not allow any foreign object or liquid such as water, a metallic part, etc. to enter since it may cause fire or electric shock.

- If it happens, disconnect the power plug from the electric outlet immediately and contact your dealer.

Stop the operation immediately when something is wrong with this product.

When smoke goes up from the product or the smell of smoke comes from the product, continued use will result in fire, injury, or damage to the product.

- Turn off the power of this product immediately, and then contact your dealer.

Avoid placing receptacles that contain liquids such as water on/near this product.

If liquid spills onto this product, it may cause fire or an electric shock.

- If it happens, disconnect the power plug from the electric outlet immediately and contact your dealer.

Clean the power plug periodically to keep it dust free.

Dust can cause the insulation to be damaged and cause a fire.

- When cleaning, disconnect the power plug and wipe with a clean dry cloth.

Do not install this product in an unstable location.

Selecting an inappropriate installation surface may cause the product to fall down or topple over, resulting in injury.

Do not touch this product, power cord and connected cables when thunder is heard.

Failure to observe this may cause electric shock.

Do not connect/disconnect the power plug with wet hands.

Failure to observe this may cause electric shock.

Avoid doing anything that can damage the power cord/plug.

Do not damage, modify, forcefully bend, twist, stretch or bundle the power cord, and do not put a heavy thing on the power cord.

Using a damaged power cord can cause electric shock, short circuit, fire, etc.

- Contact your dealer for repair of the power cord and plug.

Grounding

The power plug of this product is 2-prong plug equipped with a grounding terminal. Use this product after confirming that grounding is properly installed.

If grounding is not installed properly, it may cause ground leakage or damage the product resulting in electric shock.

- Contact the dealer for details. (The grounding installation cost is not included in the price of this product.)

Do not engage in work related to the installation and wiring during the power is on.

Failure to observe this may cause fire or electric shock.

Hold the power plug to disconnect the power cord.

Do not pull the power cord since it can cause fire, electric shock, etc.

Connect the power plug firmly.

If the power plug is not connected firmly, it can cause fire, electric shock, etc.

- Do not use the damaged power cord and loose electric outlets.

Do not connect to outlets or wiring device if their ratings are beyond the specified rating.

If the rating goes over the specified rating such by putting many loads on one electric outlet, it can cause generation of heat resulting in fire.

Do not strike or give a strong shock to this product

Failure to observe this may cause fire or electric shock.

Avoid placing this product in locations which are subject to humidity and dust.

Failure to observe this may cause fire or electric shock.

Do not block the ventilation holes.

Doing so can cause fire since it can raise the temperature inside this product high.

Precautions (continued)

Precautions for use

When the product is accessible from the Internet

To prevent unauthorized access, note the following.

- Leave user authentication turned on.
- Periodically change passwords that are used to access the product.

Refer to the Operating Instructions (PDF) on the Panasonic support website for information about how to change passwords.

Power source

The input power source for this product is 120 V AC 60 Hz (WJ-NX400K), 220 V - 240 V AC 50 Hz/ 60 Hz (WJ-NX400K/G).

Do not connect to the outlet that provides the power to equipment that requires a measurable amount of power (such as a copy machine, air conditioner, etc.). Avoid placing this product in locations where is subject to water.

* The provided power cord(s) is (are) dedicated to the use with this product. Do not use with any other device. Also, do not use any other power cord with this product.

Ambient operating temperature

Use this product at temperatures between +5 °C to +45 °C {41 °F to 113 °F}. Failure to do so may damage the internal parts or cause malfunction.

* Performance and lifetime of hard disk drives are easily affected by heat (used at high temperature). It is recommended to use this product at a temperature of approx. +25 °C {77 °F}.

POWER switch

The POWER switch is located at the rear of this product. Even though the POWER switch is set to "OFF", the power supply will not be cut. To cut the power supply, remove the power plug of this product from the AC outlet.

Built-in backup battery

- Do not expose the built-in battery to excessive heat such as sunlight, fire, etc.

Hard disk drive (HDD)

- Hard disk drives are precision devices. Handle them with care. It is possible to damage them if they are moved while their motors are still running.
- Please be forewarned that any loss of information on the HDD is not guaranteed under any circumstances.
- Do not move or install this product just after turning the power on or off (for around 30 seconds.) The hard disk drives are running.
- The HDD is consumable and the lifetime differs depending on the operational environment. Write errors may occur frequently after around 20,000 hours of each HDD operation and head and motor deterioration may occur after around 30,000 hour of operation. They will reach the end of their lifetime after 30,000 hours of operation if they have been used at the recommended ambient temperature (approx. +25 °C {77 °F}).

- To prevent data loss from disk crashes, it is recommended to keep the ambient operating temperature at approx. +25 °C {77 °F} and to replace them after around 18000 hours of operation.

You can check the operating time of each HDD in "Operation" of the "HDD information" tab under "Maintenance" under "Advanced" from the setup menu.

- When hard disk drive trouble occurs, replace it immediately. Contact your dealer about servicing.

About external storage devices (External HDD and USB memory)

- An external hard disk drive or a USB memory that is compatible with USB3.0 can be connected to the copy port to use as the external storage device.
- Use external storage devices formatted in exFAT, FAT (FAT16) or FAT32.
- USB media recognizable by the recorder can be formatted by the recorder. Refer to Operating Instructions (PDF) for the format procedure.
- External storage devices requiring password authentication or a special driver or using an encryption function cannot be used.

Prevent condensation from forming

If this happens, it can cause malfunction.

Leave it switched off for around 2 hours in the following cases.

- When this product is placed in an extremely humid place.
- When this product is placed in a room where a heater has just been turned on.
- When this product is moved from an air-conditioned room to a humid and high-temperature room.

About the monitor

When displaying the same image on the PC monitor for a long time, it may cause image burn-in on the PC monitor.

Cleaning

- Turn the power off, and then use a soft cloth to clean this product.
- Do not use strong or abrasive detergents when cleaning the body.
- When using a chemical cloth for cleaning, read the caution provided with the chemical cloth product.

Product disposal/transfer

Images saved on the storage device used with this product may lead to personal information leakage. When it is necessary to dispose or give this product to someone, even when for repair, make sure that there is no data on the hard disk drives.

Precautions (continued)

Indication label

Refer to the indication label placed on the surface of this product for the equipment classification and power source, etc.

AVC Patent Portfolio License

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

About reboot of this product

In the following cases, this product will automatically reboot to continue recording.

- When the software of this product has detected the internal error and reboot becomes necessary.

Disclaimer of warranty on recorded data

Panasonic assumes no responsibility or liability, directly or indirectly, for failure of recording or editing including loss of data due to any reason or cause which does not exclude repair or maintenance of this product regardless whether the subject is hard disk or other parts.

Packing box, Cushion, HDD unit holding bracket

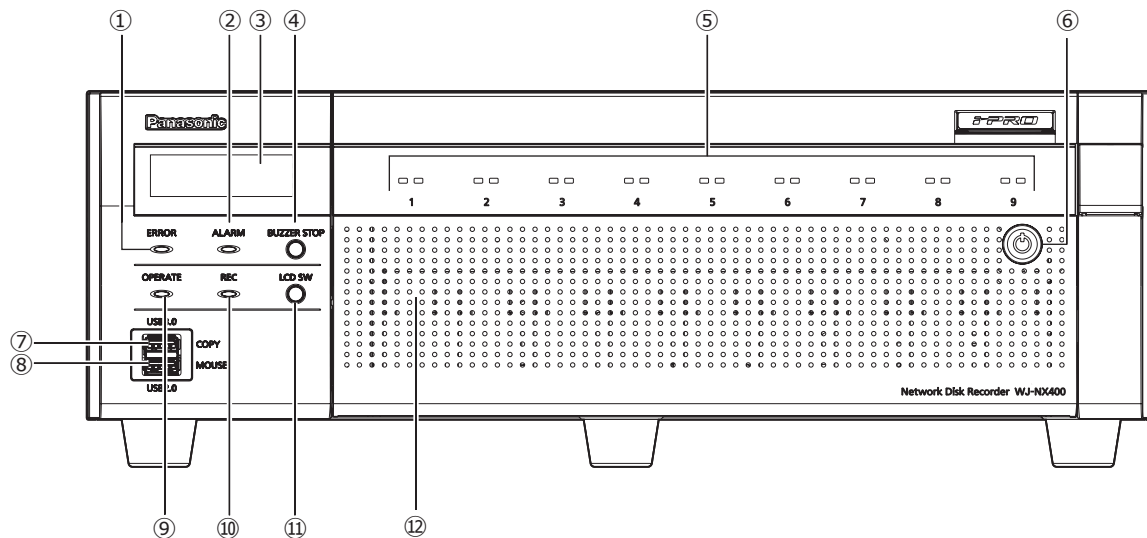
When transporting the recorder, it is necessary the Packing case, Cushion and HDD unit holding bracket to prevent the recorder from damage by fall or vibration. Keep them properly to use again.

About transportation

The recorder weighs over 10 kg {22.1 lbs}. Be careful not to drop the recorder when installing it into a rack. Dropping may cause damage, deformation of the recorder, or injury.

Major operating controls and their functions

Front view



① Error indicator [ERROR]

Blinks when an error that can become a problem for the recorder to run the system occurs.

Blinks red: System error (Network link error, HDD error, Recording error, etc.)

Blinks orange: Thermal error, cooling fan malfunction, etc. Shows a solid light when automatically reset from an error status.

② Alarm indicator [ALARM]

Blinks when an alarm occurs, and lights when the alarm output stops. This indicator will go off when the [Reset] button (see Operating Instructions (PDF)) is clicked.

③ LCD

Indicates the day and time, the status of the recorder (error status, etc.), or the name of the functions available using the buttons on the front panel of the recorder. The recorder requires a main monitor or a PC for settings. You cannot setup the settings using the LCD of the recorder only.

④ Buzzer stop button [BUZZER STOP]

Press this button to stop the buzzer that started sounding at an alarm/error occurrence. Refer to the Operating Instructions (PDF) for further information about alarms and errors.

⑤ HDD access indicator (1~9)

It transmits the HDD status indicator and the HDD access indicator installed in the front cover.

HDD status indicator (left side)

Indicates the operational status of the respective hard disk drive. (see Page 17)

HDD access indicator (right side)

Indicates the status (access/failure) of the respective hard disk drive. (see Page 17)

Basically, each indicator will indicate the status of the respective HDD units (HDD unit 1 to 9), but each indicator will be the same when the system error occurs.

Important:

- When the indicator lights red in the RAID1/RAID5/RAID6 mode, replace the HDD unit with the error immediately. Contact your dealer about replacing the HDD unit.
- In the RAID5 mode:
When 2 or more HDD access indicators light/blink red, it may be impossible to recover data on the respective hard disk drives.
- In the RAID6 mode:
When 3 or more HDD access indicators light/blink red, it may be impossible to recover data on the respective hard disk drives.

⑥ Key hole

Use the provided key to open/close the front cover. Keep the key in a safe place.

Lock the front cover: Insert, push and turn the key to the left.

Unlock the front cover: Insert, push and turn the key to the right.

⑦ Copy port (USB3.0) [COPY]

Connect an external storage device (external Hard disk drive, USB memory) to this port and copy images and audio recorded on the hard disk drive. An external storage device can also be connected to the copy port on the rear. Use either of them.

* Mouse connection is also available.

⑧ Mouse connection port (USB2.0) [MOUSE]

The provided mouse is connected to this port. A mouse can be connected to the mouse connection port on the rear. Use either of them.

⑨ Operation indicator [OPERATE]

Lights when the power is on.

Major operating controls and their functions (continued)

⑩ Recording indicator [REC]

Lights orange when recording is being performed.

⑪ LCD menu switching button [LCD SW]

Use this button to switch menus on LCD, i.e. from/to the date/time display (default) to/from the IP address display of the recorder.

If an error message is displayed on the LCD, the message will be deleted if this button is pushed and it will return to the date/time display.

⑫ Front cover

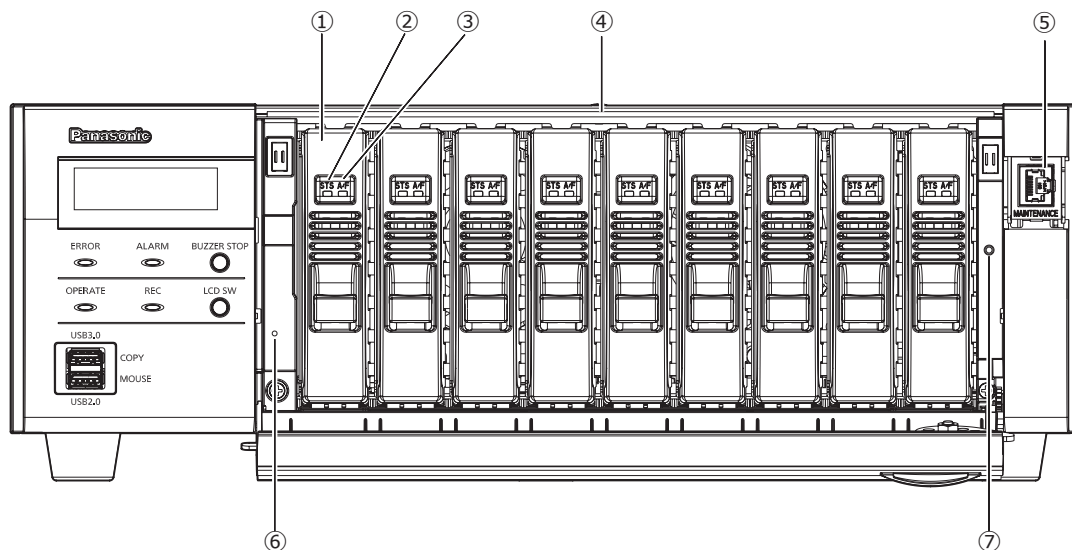
Open the front cover when adding/replacing the HDD unit.

Keep this cover closed and locked during normal operation.

Major operating controls and their functions (continued)

Inside the front cover

* The following illustration shows that 9 HDD units are installed with the "HDD unit holding brackets" removed.



① HDD units [Option]

Only the hard disk drive encased in the dedicated hard disk drive canister (HDD units) can be installed in the recorder.

Contact your dealer about purchasing, installing, and replacing the hard disk drives.

② HDD status indicator [STS]

Indicates the operational status of the respective hard disk drive.

Lights green: Indicates that the power of the (formatted) hard disk is on.

Blinks green: Indicates that the respective hard disk drive is for playback use only.
(Recording is unavailable using the respective hard disk drive.)

Blinks orange: Indicates that the respective hard disk drive is currently being formatted, added or removed.

Blinks red: Indicates that formatting of the hard disk drive has failed.

Off: Indicates that the power of the hard disk drive is off,
Indicates that the hard disk drive is not connected/
recognized.

③ HDD access/failure indicator (A/F)

Indicates the status (access/failure) of the respective hard disk drive.

When an HDD failure (error) occurs during operation in the RAID1/RAID5/RAID6 mode, the indicator will light/
blink red.

Blinks green: Indicates that the respective hard disk drive is being accessed.

Off: Indicates that the respective hard disk drive is not being accessed.

Lights red: Indicates that the respective hard disk drive is faulty (which can be recovered by replacing the hard disk drive)

In the RAID1/RAID5 mode, it indicates that the respective hard disk drive is the first faulty drive.

In the RAID6 mode, it indicates that the respective hard disk drives are the first and second faulty drive.

Blinks red: Indicates that the respective hard disk drive is faulty (which cannot be recovered even by replacing the hard disk drive)

In the RAID5 mode, it indicates that the respective hard disk drive is the second faulty drive.

In the RAID6 mode, it indicates that the respective hard disk drive is the third faulty drive.

Blinks orange: Indicates the drive in data recovery in RAID1/RAID5/RAID6 mode (it may appear that the indicator lights orange when recovery is being processed at high speed)

④ HDD slots

Up to 9 HDD units can be installed.

⑤ Maintenance port (For maintenance purpose only)

Use this port to connect directly to a PC and perform maintenance operations. Do not use for normal operation.

⑥ Restart switch

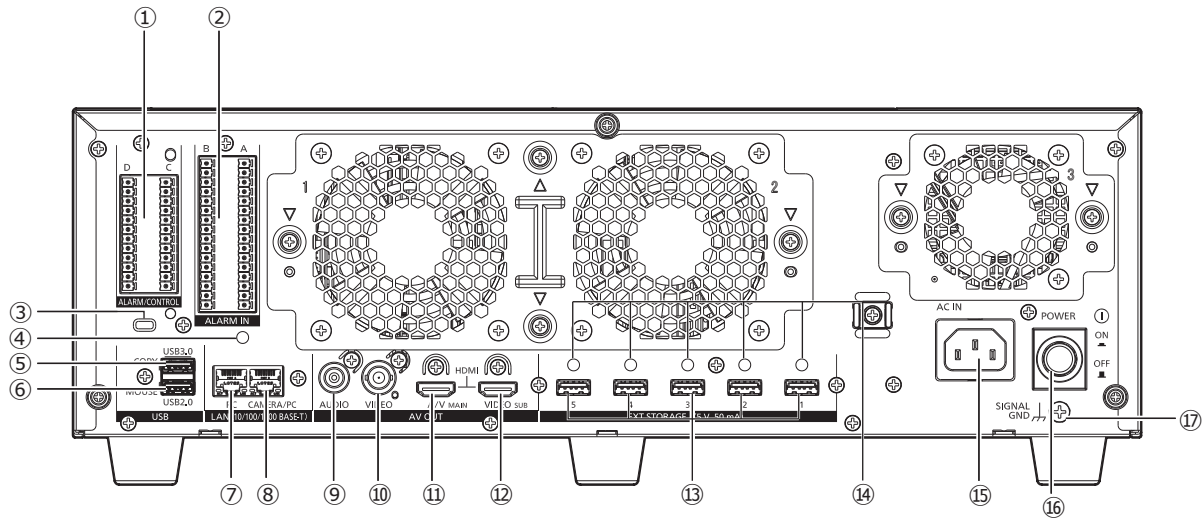
Restarts the recorder. Insert a fine stick, like a paper clip and keep pressing for more than 5 seconds.

⑦ HDD unit holding bracket fixing thread hole

Use this hole to fix the HDD unit holding bracket when transporting the recorder.

Major operating controls and their functions (continued)

Rear view



① Alarm/Control connector [ALARM/CONTROL]

This connector is used when connecting with an external device such as a sensor or anti-theft door switch that output alarm signals, or when connecting an alarm device such as a buzzer or a lamp to the external equipment. The two provided terminal plug (12 pin) can be mounted.

② Alarm In connector [ALARM IN]

It is used when connecting with an external device such as a sensor or anti-theft door switch that output alarm signals. The two provided terminal block plugs (16) can be mounted.

③ Security wire hole

Mount the lock device for the anti-theft security wire.

④ Cable clamp fixing hole (for fixing terminal block cable)

This is a fitting hole for the (provided) clam to tie and fix the terminal block cables. Refer to page 19 for fitting.

⑤ Copy port (USB3.0) [COPY]

Connect an external storage device (external Hard disk drive, USB memory) to this port and copy images and audio recorded on the hard disk drive. An external storage device can also be connected to the copy port on the front. Use either of them.

* Mouse connection is also available.

⑥ Mouse connection port (USB2.0) [MOUSE]

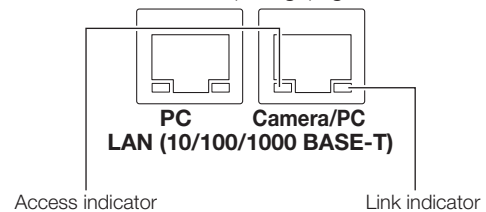
The provided mouse is connected to this port. The mouse can be connected to the mouse connection ports on the front. Use either of them.

⑦ Network port (PC port) [PC]

Connect the recorder with a PC via a network compatible with 10BASE-T, 100BASE-TX or 1000BASE-T. Use this port when the cameras and the PC are connected to different network.

⑧ Network port (Camera/PC port) [CAMERA/PC]

Connect the recorder with a PC and cameras via a network compatible with 10BASE-T, 100BASE-TX or 1000BASE-T. When the port is being accessed, the access indicator (green) blinks. When the port is being linked, the link indicator (orange) lights.



⑨ Audio output connector (RCA pin jack) [AUDIO OUT]

Connect such device as a powered speaker. Same audio output to the main monitor will be output from this connector.

⑩ Video output connector (BNC) [VIDEO OUT]

Connect a sub monitor (BNC) to this connector. Same images output from the sub monitor output connector (HDMI) will be output from this connector. The default is NTSC output. The setup menu will not be displayed.

⑪ Main monitor output connector (HDMI) [A/V OUT MAIN]

This connector is used to connect to an HDMI-ready monitor (the main monitor). It displays live images, recorded images, or the setup menu of the recorder.

⑫ Sub monitor output connector (HDMI) [VIDEO OUT SUB]

This connector is used to connect to an HDMI-ready monitor (sub monitor). Only the live images will be displayed.

Major operating controls and their functions (continued)

⑬ External storage connector [EXT STORAGE (5 V 50 mA)]

Connect the optional extension unit (WJ-HXE400) to this connector using the dedicated connection cable provided with the extension unit.

Make sure to connect the extension units in order from external storage connector number 1.

⑭ Cable clamps fixing holes

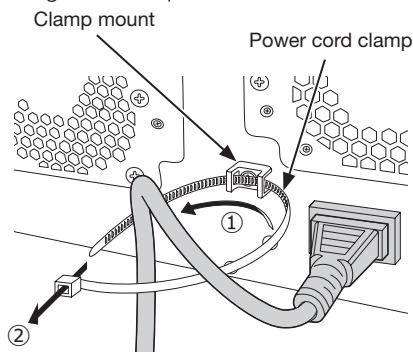
Fit the cable clamp (provided with the extension unit) to fix the connection cable. Refer to the operating instructions of the extension unit WJ-HXE400 for further information.

⑮ Power cord inlet [AC IN]

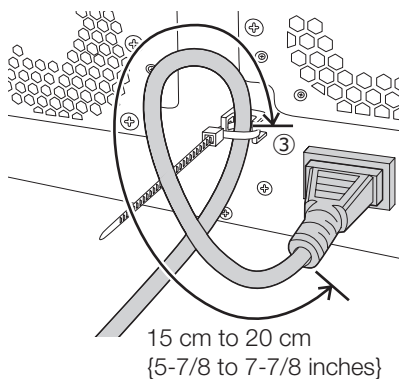
Connect the provided power cord to this inlet. The power plug of the recorder is 2-prong plug equipped with a grounding terminal.

How to use the power cord clamp

Fix the power cord at 15 cm to 20 cm {5-7/8 to 7-7/8 inches} from the connector with the provided power cord clamp passed through the clamp mount.



- ① Pass the power cord clamp through the clamp mount.
- ② Make a ring with the power cord clamp as shown in the illustration to tighten the power cord.



- ③ Tighten the power cord at 15 cm to 20 cm {5-7/8 to 7-7/8 inches} from the connector and fix it to the clamp mount.
Cut the unnecessary part of the power cord clamp as necessary.

⑯ [POWER] switch

Press it to turn on the power. Press it again to turn off the power.

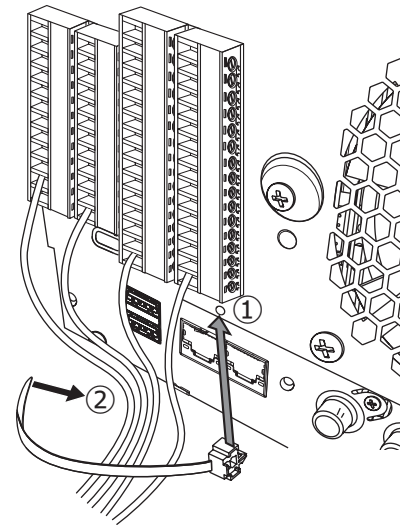
Important:

- Turn on the power of all extension units first if connected, and then turn on the power of the recorder.
- Turn off the power of the recorder first when turning off the power.

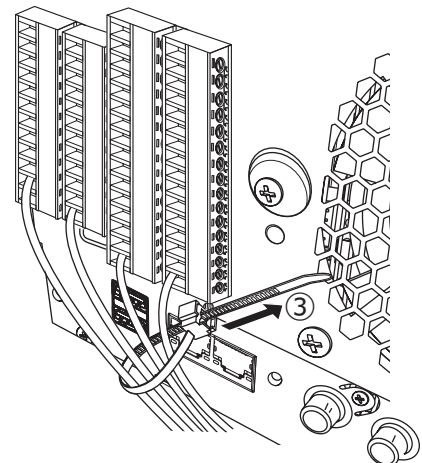
⑰ SIGNAL GND terminal [SIGNAL GND]

Connect this terminal with the SIGNAL GND terminals of the devices in the system for signal ground. When operating the recorder and the devices in the system without signal ground, noise may be produced.

Fitting of the cable clamp (for fixing the terminal block cables)



- ① Insert the (provided) cable clamp into the cable clamp fitting hole.
- ② Tie cables of the ALARM/CONTROL terminals and of the ALARM IN terminal with the cable tie of the cable clamp (provided).
Tie the cables to the downward-right so that they do not block the network port.



- ③ Fasten the cable tie of the cable clamp (provided) and fix it to the upward-right.

User/Host management

It is necessary to register users who operate the recorder and hosts (PC) that accesses the recorder via a network such as a LAN. Up to 32 users can be registered.

It is possible to register the following for the user information.

Item	Description
User name	User name is to be registered to log in to the recorder. The user name will be entered at the time of login.
Password	Password is to be registered to log in to the recorder together with the user name. The password will be entered at the time of login.
Level	Users are classified into the following levels depending on the available operations. Administrator/Manager/Operator/Viewer/Logged out The administrators can perform all the configurations and operations. It is possible to select in advance the functions that can be controlled by users at other levels. (Operating Instructions (PDF))
Priority level	Priority level indicates the operational priority. Users at each level are assigned the fixed priorities ranging from "0" (Highest) to "4" (Low). Administrator 0 Highest Manager 1 High Operator 2 Viewer 3 Logged out 4 Low When the two or more users at the same level perform the same operation, the recorder will be controlled in accordance with the latest operation.
Default screen	Select a startup screen to be displayed on the main monitor or a PC screen after login from the following.

When operating from a PC via a network

Operation of the recorder can be made using a PC via a network. Up to 16 hosts (PCs) can access the recorder at the same time.

When another host (PC) tries to log in to the recorder after 16 hosts (PCs) have already logged in, the user with the lowest priority will be logged out. When the user who is trying to log in has the same priority as the users who have already logged in, the user whose login is the earlier is logged out.

When accessing the recorder from a PC via a network, the log-in authentication method is different as follows depending on the "User authentication" settings of the "Basic" tab under "User management" under "Advanced" from the setup menu.

(Operating Instructions (PDF))

User authentication setting	User/Host to log in	Remarks
Off	Log in as an administrator.	
On (default)	Log in as a registered user.	The login window will be displayed.

HDD unit

Handle the HDD units

To install a hard disk drive in the recorder, it is necessary to assemble an HDD unit (encase the hard disk drive in the HDD canister). The HDD unit is designed to easily install/remove the hard disk drive in/from the recorder. Contact your dealer about purchasing, installing, and replacing the hard disk drives.

Important:

- The HDD unit is a precision device. Handle them with care. Vibration and shocks may cause failure of the HDD unit.
- Before transportation, read "HDD unit holding bracket" (this page) and "When you transport the recorder" (Page 22).
- Do not move or install this product just after turning the power on or off (for around 30 seconds.) The hard disk drives are running.
- Install the HDD units in order starting with disk slot 1.
- Once the operation has started in RAID1*, RAID5* or RAID6* mode, do not change the position of the HDD unit. If they are changed, it may become impossible to read recorded data.

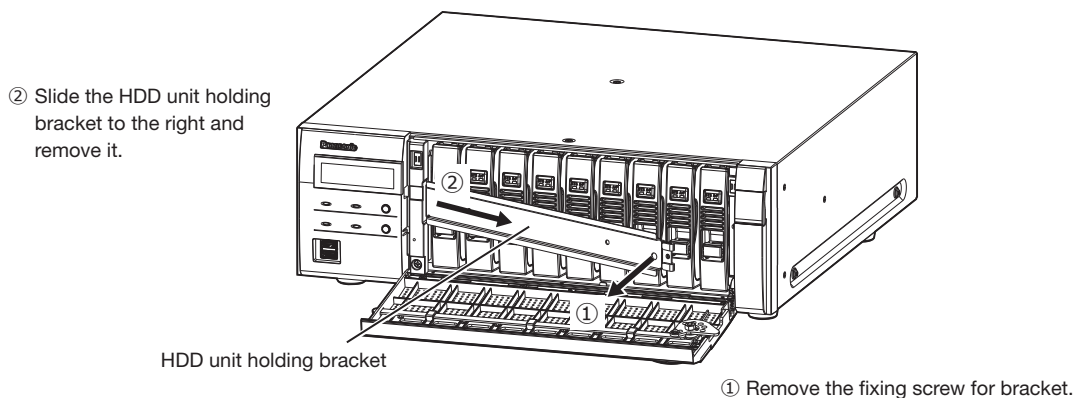
* Refer to Operation/Settings of the Operating Instructions for RAID mode.

HDD unit holding bracket

The recorder has the "HDD unit holding bracket" in the HDD unit slot, screwed in at the factory before shipment. To install the HDD unit in the recorder, remove the "HDD unit holding bracket" first.

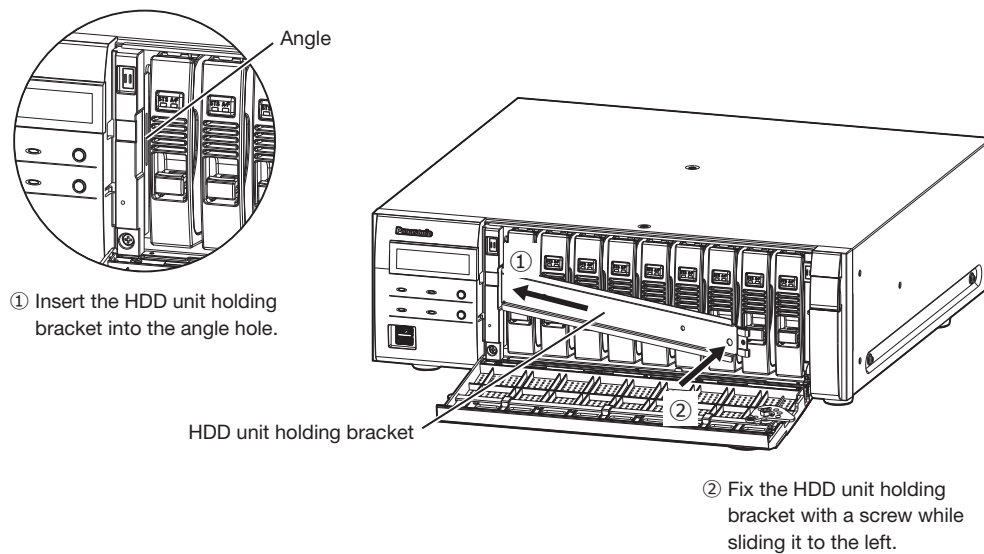
The "HDD unit holding bracket" and the screw for fixing the bracket are necessary to prevent the HDD unit from falling off during transportation. Keep them properly.

How to remove the HDD unit holding bracket



HDD unit (continued)

How to attach the HDD unit holding bracket

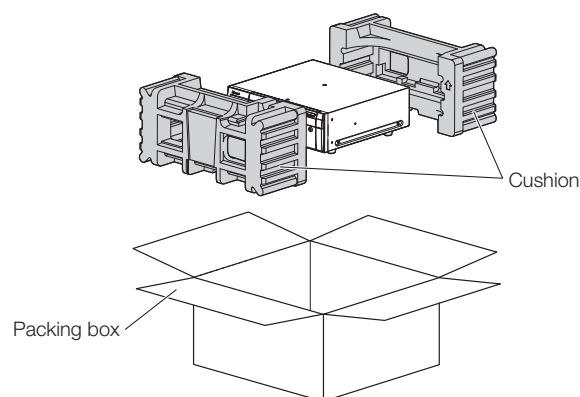


When you transport the recorder

- (1) Remove all the HDD units in the recorder or fit the HDD unit holding brackets and fix them with screws.
- (2) Put the recorder between the cushions and insert together into the packing box.

Important:

- The recorder weighs over 10 kg {22.1 lbs}. Be careful not to drop the recorder when installing it into a rack. Dropping may cause damage, deformation of the recorder, or injury.
-



Install the HDD unit in recorder

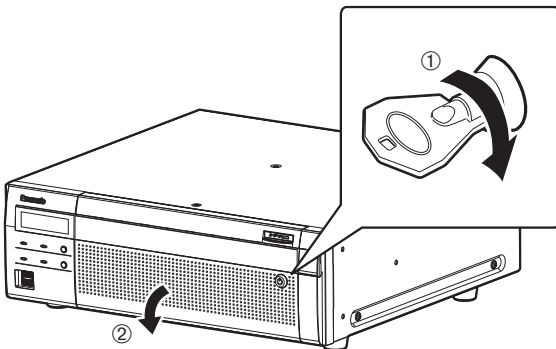
The illustration on this page is schematic. Details of the shape are omitted.

It is possible to install the HDD unit without stopping the operation (except when RAID1/RAID5 or RAID6 mode is in operation).

When the recorder has the "HDD unit holding bracket" attached at the factory before shipment, remove it before STEP 2.

Step 1

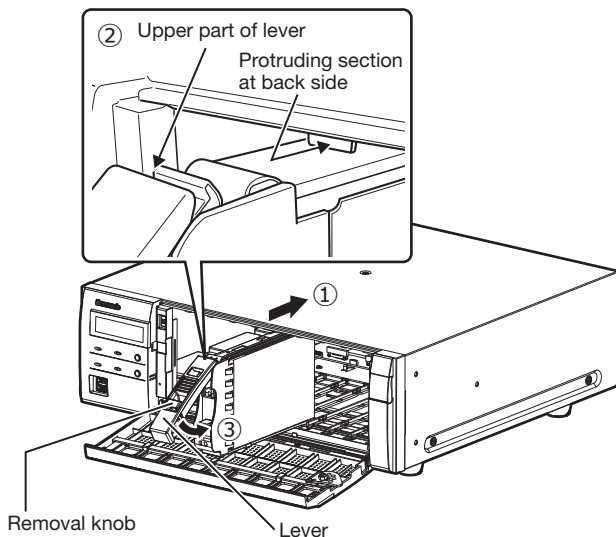
After inserting the provided key into the key hole on the front cover, push and turn it to the right to open the front cover.



Step 2

Insert the HDD units into the HDD slots in order starting from HDD1.

- ① Lift up the lever on the HDD unit while holding down the removal knob, and then insert the HDD unit all the way into the HDD slot.
Insert the HDD unit carefully without knocking it against anything (and without knocking against HDD units which are already inserted).
- ② Push the upper part of the lever securely until it hits the protruding section at the back side of disk slot top and then turn down the lever.
- ③ The removal knob fits into position with a "click" sound when turning down the lever.



Important:

- Insert the HDD units in order from the disk slot number 1.
- When mounting the HDD unit, be careful not to pinch your fingers with the lever.
- HDD is not recognized while HDD management screen is displayed. Close the HDD management screen and then install the HDD unit.

④ The LCD displays as follows.

MAIN - y
NEW HDD DETECT

* y is a slot number

Step 3

After installing all the HDD units, you need to set the operational mode and format the HDD. Refer to "Control the HDD" in Operation/Settings of the Operating Instructions (PDF) for the settings.

Remove the HDD units from recorder

When removing the HDD unit, it is necessary to perform the removal process in advance. When replacing the HDD unit, it is necessary to perform the removal process/the link process.

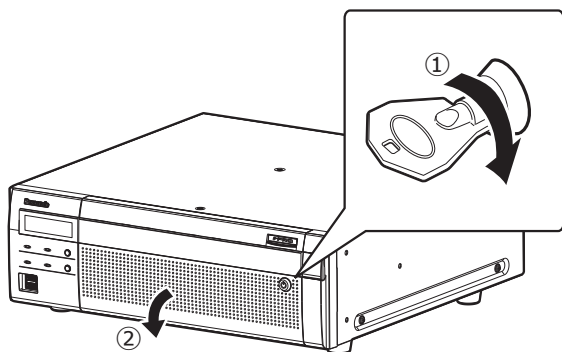
Important:

- Consult the dealer for the removal process/removal and the link process/installation of the HDD unit.
- Once the installation process is completed, the data in the HDD unit is deleted.

After the removing process is completed, the HDD unit can be removed even if the recorder is operating. The following explains procedures for how to remove the HDD unit after the removing process.

Step 1

After inserting the provided key into the key hole on the front cover, push and turn it to the right to open the front cover.



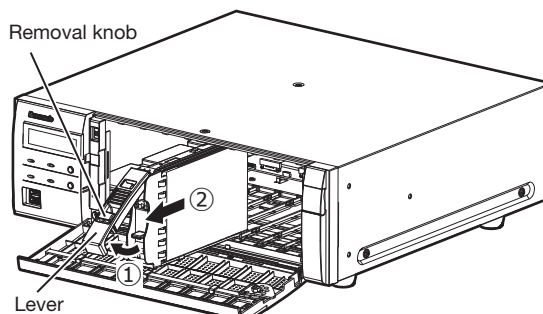
Step 2

Remove the HDD unit.

- ① Pull the lever up while holding down the removal knob on the HDD unit.
- ② Pull the HDD unit out from the HDD slot.
Pull the HDD unit out carefully so as not to drop it and handle it gently so as not to give it a shock or vibration.

Important:

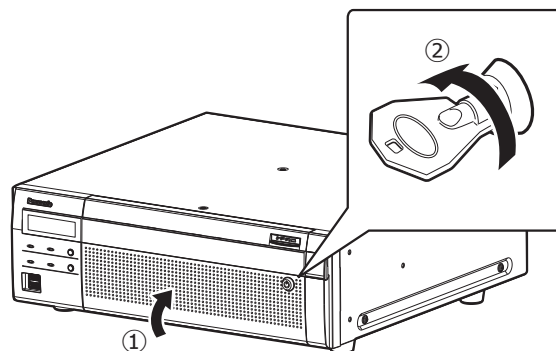
- When removing the HDD unit, be careful not to pinch your fingers with the lever.



Step 3

Close the front cover and lock it by pushing and turning the key to the left.

Keep the key in a safe place.



Remove the extension unit from recorder

When removing the extension unit, it is necessary to perform the removal process in advance. When replacing the extension unit, it is necessary to perform the removal process/the link process.

Important:

- Consult the dealer for the removal process/removal and the link process/installation of the extension unit.
- Once the installation process is completed, the data in the HDD unit of the extension unit is deleted.

Troubleshooting

Before asking for repairs, check the symptoms with the following table.

Contact your dealer if a problem cannot be solved even after checking and trying the solution in the table or a problem is not described below.

Symptom	Cause/solution	Ref. pages
Power is not turned on.	<ul style="list-style-type: none"> Is the power plug connected to the outlet firmly? Confirm the cable is firmly connected. 	–
	<ul style="list-style-type: none"> Check if the power cord is properly inserted into the power socket of the recorder. Check if it is connected firmly. 	19
Camera images are not displayed on the monitor.	<ul style="list-style-type: none"> Is the lens cap of the camera detached from the camera? Check whether the lens cap is removed. 	–
	<ul style="list-style-type: none"> Is the power of the camera and connected devices on? Check whether the power is supplied to the camera and the devices. 	–
	<ul style="list-style-type: none"> Confirm that the cables are connected correctly and firmly. Confirm the cables are firmly connected. 	Installation Guide
	<ul style="list-style-type: none"> Depending on the HDMI monitor, it may not be displayed properly. Turn the monitor off and on and check whether it is displayed. 	–
	<ul style="list-style-type: none"> Is the monitor luminance appropriately adjusted, or is the contrast appropriately adjusted? Check whether the settings are appropriate. 	–
	<ul style="list-style-type: none"> Users who have logged into the system may not be authorized to display the images from cameras. Check the user level settings of these users. 	Operating Instructions
	<ul style="list-style-type: none"> Have the licenses of the additional camera kit been registered? If you have increased the camera connection number, and the camera image on the monitor does not appear, please use the browser on your PC. 	10
Part of the displayed image is missing.	<ul style="list-style-type: none"> This phenomenon is caused by dispersion of display area on the monitor. This is not a malfunction. 	–
	<ul style="list-style-type: none"> When a function to automatically enlarge the images in the connected monitor is enabled, some part of the images may not be displayed depending on the photographic subject. 	–
Image is blurred.	<ul style="list-style-type: none"> Is the lens of the camera soiled with dirt or dust? Check whether the lens of the camera is clean. 	–
Cannot open the setup menu.	<ul style="list-style-type: none"> Users who have logged into the system may not be authorized to display the setup menu. Check the user level settings of these users. 	Operating Instructions
	<ul style="list-style-type: none"> Isn't it the sub monitor you are currently operating? The setup menu cannot be displayed on the sub monitor. 	Installation Guide
The images or embedded characters displayed on the monitor look blurry.	<ul style="list-style-type: none"> Depending on the photographic subject or HDMI monitor that is connected, images or embedded characters may look blurry. This phenomenon is not trouble. 	–
No alarm action is taken.	<ul style="list-style-type: none"> Check if alarm input signals are properly input to the ALARM/CONTROL connector at the rear panel. 	Installation Guide
	<ul style="list-style-type: none"> Are the settings of the alarm connector appropriate? 	Operating Instructions
	<ul style="list-style-type: none"> Is "Off" or "Recording only" selected for "Mode"? Check whether the settings are appropriate. 	Operating Instructions

Troubleshooting (continued)

Symptom	Cause/solution	Ref. pages
The "Communication error: Cam.cc" indication is displayed on the main monitor.	<ul style="list-style-type: none"> Confirm that the camera is connected correctly and firmly. Check the camera connection. 	Installation Guide
	<ul style="list-style-type: none"> If the connection is appropriate, the cable may be broken or the camera may be out of order. Consult the dealer. 	—
The "Thermal error" indication is displayed on the main monitor.	<ul style="list-style-type: none"> Check if the fan is malfunctioning. 	Operating Instructions
	<ul style="list-style-type: none"> Check if the recorder ventilation holes or cooling fan are blocked, and also check for dust collected around the ventilation holes. 	Installation Guide
	<ul style="list-style-type: none"> The ambient operating temperature is +5 °C to +45 °C {41 °F to 113 °F}. The "Thermal error" is displayed based on the internal thermal information of the HDD. If the "Thermal error" indication is displayed, it is recommended to change the installation environment so that the ambient temperature is maintained at approx. +25 °C {77 °F}. When the "Thermal error" indication is displayed frequently, contact your dealer. 	13
The clock of the recorder may keep bad time.	<ul style="list-style-type: none"> The clock function of the recorder is accurate within ±30 seconds per month. To keep the correct recording, set the time periodically, or enable the auto time adjustment function on the rear panel terminal, or configure the system using the NTP function so as to keep the correct current time. 	—
The hard disk drive is not recognized. The HDD status indicator does not light.	<ul style="list-style-type: none"> Make sure that the HDD unit is inserted all the way into the HDD slot. 	Installation Guide
	<ul style="list-style-type: none"> The hard disk drive is faulty. 	—
The HDD access indicator is being lit red/blinking red.	<ul style="list-style-type: none"> Make sure that the HDD units are installed in order from HDD1 to HDD9. Surely install the HDD units in order starting with HDD1. 	23
	<ul style="list-style-type: none"> The respective HDD unit is faulty in the RAID1/RAID5 or RAID6 mode. RAID1: the HDD access indicator of the HDD unit in failure will light red. RAID5: the HDD access indicator of the first HDD unit to fail will light red. The HDD access indicator of the second HDD unit to fail will blink red. RAID6: the HDD access indicators of the first and second HDD unit to fail will light red. The HDD access indicator of the third HDD unit to fail will blink red. 	17
Cannot recover data after replacing the HDD units in the RAID1/RAID5/RAID6 mode.	<ul style="list-style-type: none"> Make sure that the HDD unit is inserted all the way into the HDD slot. 	Installation Guide
	<ul style="list-style-type: none"> The hard disk drive on which there is data to be recovered is faulty. 	—
	<ul style="list-style-type: none"> Check if the capacity of the new hard disk drive is smaller than the original one's. 	—
The HDD access indicator blinks orange even when no recording or playback is being performed.	<ul style="list-style-type: none"> Make sure that recovery of data in the RAID1/RAID5/RAID6 mode is not being processed. 	Operating Instructions
The "EXTu ERR INITIAL ERR" indication is displayed on the LCD. (u: Unit number)	<ul style="list-style-type: none"> Connect the extension unit again after resetting its settings to the default. 	Operating Instructions
The error indicator blinks red.	<ul style="list-style-type: none"> A system error occurred. Contact your dealer. 	15

Troubleshooting (continued)

Inspect the power cord, power plug and connectors periodically.

Symptom	Cause/solution	Ref. pages
The power cord insulation is damaged.	<ul style="list-style-type: none">The power cord, connector, or power plug is damaged. This may result in electric shock or a fire. Unplug the power plug from the AC outlet immediately, and refer to qualified service personnel.	–
The power cord, plug and connectors get hot during use.		
The power cord gets hot when bent or stretched.		

Specifications

• General

Power source:	WJ-NX400K: 120 V AC, 60 Hz WJ-NX400K/G: 220 V to 240 V AC, 50 Hz/60 Hz
Power consumption:	WJ-NX400K: 125 W (230 VA) WJ-NX400K/G: 125 W (245 VA)
Ambient operating temperature:	Main body: +5 °C - +45 °C {41 °F - 113 °F} Mouse (accessory): +5 °C - +40 °C {41 °F - 104 °F}
Ambient operating humidity:	5 % to 90 % (non condensing)
Maximum operating altitude:	2000 m {6562 feet} above sea level
Recording compression method:	H.265, H.264, JPEG
Dimensions:	430 mm (W) × 132 mm (H) × 413 mm (D) (From Rack Mount Bracket 400 mm) {16-15/16 inches (W) × 5-3/16 inches (H) × 16-1/4 inches (D)} (excluding rubber feet and projections)
Mass:	When no HDD is installed: 11.5 kg {25.4 lbs} When 9 HDDs are installed: 20 kg {44.1 lbs}
Finish:	Front view: Solid metallic coating, Resin Top cover: Solid metallic coating, Zinc-coated steel Rear view: Zinc-coated steel

• Hard disk drive (Contact your dealer about purchasing hard disk drives.)

Hard disk drive:	3.5-inch hard disk drive (Up to 9 hard disk drives can be installed.) RAID1 (Available only when 2 or more hard disk drives are installed.) RAID5 (Available only when 3 or more hard disk drives are installed.) RAID6 (Available only when 4 or more hard disk drives are installed.)
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• Input/Output

Video:	Video output connector: 1 V [p-p]/75 Ω, ×1 (BNC) Monitor (HDMI) connector: HDMI, ×2 (19-pin, type A) Main monitor 3840 × 2160 (4K) p/30 Hz 3840 × 2160 (4K) p/25 Hz 1920 × 1080 p/60 Hz 1920 × 1080 i/60 Hz 1920 × 1080 p/50 Hz 1920 × 1080 i/50 Hz Sub monitor 1920 × 1080 p/60 Hz 1920 × 1080 i/60 Hz 1920 × 1080 p/50 Hz 1920 × 1080 i/50 Hz
Audio:	Audio output connector: -10 dBv, 600 Ω, unbalanced ×1 (RCA pin jack)
Mouse connection port:	High-speed serial interface, 480 Mbps (theoretical value), USB2.0, ×2
Copy port:	High-speed serial interface, 5 Gbps (theoretical value), USB3.0, ×2
External storage:	High-speed serial interface, 5 Gbps (theoretical value), ×5
Alarm IN connector:	Alarm input 1-32*1 (Terminal plug (16-pin) ×2)
Alarm/Control connector:	Network error output*2, Alarm reset input*1, Emergency recording input*1, Outage detection input*2, External recording mode switching input*1, HDD error output*2, Camera error output*2, Recorder error output*2, Recording error output*2, Time adjustment I/O*1*2, Alarm output*2, Outage processing end output*4, +5 V output*3 (Terminal plug (12 pin) ×2)
Network port (Camera/PC):	10BASE-T/100BASE-TX/1000BASE-T (RJ-45) ×1
Network port (PC):	10BASE-T/100BASE-TX/1000BASE-T (RJ-45) ×1
Maintenance port:	10BASE-T/100BASE-TX (RJ-45) ×1
Support protocols:	HTTP, RTP, RTSP, TCP/IP, UDP/IP, FTP (Server), SMTP, NTP (Server, Client), DNS, SNMP, POP3

Specifications (continued)

*1 Non-voltage make contact input +3.3 V pull-up Approx. 23 k Ω

*2 Open collector output 24 V DC max., –200 mA max.

*3 +5 V \pm 0.5 V 200 mA max.

*4 High (ON) DC 5 V/Low (OFF) DC 0 V

• Option (as of December 2017)

Additional Camera Kit (license for 32 cameras)	WJ-NXE40, WJ-NXE40W
Secure Communication Kit (license for 1 camera)	WJ-NXS01, WJ-NXS01W
Secure Communication Kit (license for 4 cameras)	WJ-NXS04, WJ-NXS04W
Secure Communication Kit (license for 16 cameras)	WJ-NXS16, WJ-NXS16W
Secure Communication Kit (license for 32 cameras)	WJ-NXS32, WJ-NXS32W
Extension Unit	WJ-HXE400 (Up to 5 units can be connected)

For U.S. and Canada:

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800 Gessner Rd, Suite 700 Houston, TX 77024
<https://www.security.us.panasonic.com/>

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1-877-495-0580
<https://www.panasonic.com/ca/>

For Europe and other countries:

Panasonic Corporation

<http://www.panasonic.com>

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