



Network Disk Recorder with expandable capacity for digital image data from up to 32 Network Cameras

Key Features



- H.264, MPEG-4 and JPEG multi format
- Up to 32 network cameras can be connected and recorded.
- Various Recording Modes: Manual, Schedule, Event (Pre/Post), Emergency, External Timer
- Various alarm sources include 16x Terminal inputs, 16x Camera alarms, Panasonic Alarm Protocol. Flexible alarm actions include Alarm recording, E-mail notification, Alarm message, Camera positioning, FTP image transfer, Terminal output, Panasonic alarm protocol output, Buzzer and Indicator.
- Panasonic Camera Control: Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode (depending on camera model).
- Cameras may be assigned to one of the 8 groups to meet application requirements.
- Flexible Playback Controls: A-B Repeat, Goto Date (Jump to specific time/date), Goto Last (Jump to 5 sec. ~ 5 min. before the record end).
- Various Display Modes: Spot, Quad (8 patterns), Spot Sequence, Quad Sequence.
- 8 Quad screens are fully programmable. Any of the 32 cameras can be assigned to any area of the Quad screens.
- Filtered Search: Time & Date, Event Type, Camera number, Text
- Recorded images can be downloaded to a PC.
- Downloadable viewer software allows playback of images downloaded from the Recorder.
- 2 setup modes available, Quick/Advanced at users' preference.
- 2 built-in network interfaces (10Base-T/100Base-TX) for camera access and client access. Operation by one port is also possible.
- Quick IP Setup for Panasonic i-Pro series network cameras
- Bandwidth control: 32 k / 64 k / 128 k / 256 k / 512 k / 1,024 k / 2 M / 5 M / 10 M (bps) and unlimited
- Up to 8 clients can monitor images and control WJ-ND300A simultaneously.
- Image transfer to FTP server: Recorded image upon alarm and/or live image periodically
- Performance measurement function for appropriate recording frame rate setup

- Images recorded on the SD memory card in the i-Pro series cameras can be downloaded to the recorder manually. In addition, recordings upon network failure can be transferred automatically when the recorder is in non-recording status.
- Alarm notification by e-mail.
- User/Host authentication, 4 user levels and User-Camera View/Control partitioning set up for sophisticated user management of up to 32 user registrations.
- Multi-recorder, Multi-site system can be made with optional WV-ASM100 i-Pro Management Software.
- Front panel LCD screen for status display
- HDD capacity is expandable with 4 HDD slots in the main unit and up to 6 WJ-HDE300 optional Extension Units each with 4 HDD slots.
- Disk partitioning for flexible record management: Normal, Event, Copy
- HDD Safety Mode to protect HDDs during the installation of WJ-ND300A
- RAID5 capability with optional WJ-NDB301 RAID5 Board

Standard Accessories

- | | | | |
|--------------------------------------|--------|--|---------|
| • CD-ROM* | 1 pc. | • Rack Mount Bracket Fixing Screw ... | 4 pcs. |
| • Installation Guide | 1 pc. | • Hard Disk Drive Fixing Screw | |
| The followings are for installation: | | (w/sleeve and damper) | 12 pcs. |
| • Power Cord (NTSC model) | 1 pc. | * The CD-ROM contains the operating instructions (PDFs) and the setup tools (Panasonic IP setup software, etc.). | |
| • Power Cord (PAL model) | 2 pcs. | | |
| • Rack Mount Bracket | 2 pcs. | | |

Optional Accessories

<p>RAID5 Board WJ-NDB301</p> 	<p>Extension Unit WJ-HDE300 (4 HDD slots for optional HDD units)</p>  <p>Power Source : 120 V AC, 60 Hz (NTSC) 220 ~ 240 V AC, 50 Hz (PAL)</p> <p>Power Consumption: approx. 85 W (including 4 HDDs when installed)</p> <p>Dimensions : 420 mm (W) x 88 mm (H) x 350 mm (D) (19-9/16" (W) x 3-7/16" (H) x 13-13/16" (D)) (excluding rubber feet and projections)</p> <p>Weight : 7.2 kg (16 lbs.) (When no HDD exist)</p>
--	---

Specifications

TV System	NTSC	PAL
Supported Cameras	Panasonic i-Pro series Network cameras. (Contact Panasonic for BB series and Axis® cameras)	
Cameras	Supported Image Format: H.264, MPEG-4 (Specific cameras), JPEG, M-JPEG	
	Supported Image Resolution: 1,280 x 960, 960 x 720, 640 x 480, 320 x 240 (Depending on the camera)	
	Maximum Number of Cameras: 32	
Recording	Recording Mode: Manual recording, Scheduled recording, Emergency recording, External timer recording, Event recording	
	Pre-alarm Recording: Up to 60 minutes. Dedicated HDD for Pre-alarm is required	
	Scheduled Recording Mode: 4 programs, 6 time zones/day, Independent setup for each day of the week.	
	Frame Rate/Camera: Up to 30 ips (Depending on the camera and Network)	
Browser GUI	Camera Control: Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode	
	REC/Playback Control: REC, PLAY, Rev PLAY, Pause, Stop, FF, REW, Prev Record, Next Record, Prev Image, Next Image, A-B Repeat, Goto Date, Goto Last (5 sec. ~ 5 min.), Text display	
	Search Mode: Search criteria: Time date, Event type, Camera number, Text ON/OFF	
	Display Mode: Spot/Quad (8 patterns)/Spot Sequence/Quad Sequence (Live, Playback)	
	Camera Grouping: 8 groups each with 16 characters title	
	Image Download: Recorded data of selected camera and time range (up to 20 min.) can be downloaded to a PC. Viewer software can be downloaded separately.	
	SD Memory Data Download: Image data in the SD memory installed in the selected camera can be transferred to the recorder.	
	Copy: Recorded data of selected cameras and time date range can be copied to the COPY partition.	
	Camera Title: On the browser, Up to 16 characters	
	Clock Display: On the browser. Time: 12H/24H, Date: 3 formats	
	Alarm Control: Reset, Suspend	
	Digital Zoom: Up to 4 times	
	Text Attachment: Free comment can be attached for each record and reviewed at later time. Up to 200 characters	
	System Log: Operator access (100), Network error (1,000), Error (100), Event (750)	
	Time Synchronization: Terminal (Master or Slave), NTP (Client)	
	Summer Time: User definable (using menu setup)	
	GUI / System Setup Language: English, French, Italian, Spanish, German, Russian, Chinese, Japanese	
	Supported OS and Browser Combination: Microsoft® Windows® 7 Professional 64 bit/32 bit & Windows® Internet Explorer® 8.0 32 bit, Microsoft® Windows Vista® 32 bit SP1 & Windows® Internet Explorer® 7.0, Microsoft® Windows® XP Home/Professional SP3 & Windows® Internet Explorer® 6.0 The language of OS must be the same as selected GUI language.	
	Required PC	JPEG/MPEG-4 CPU: Intel® Pentium® 4 3.0 GHz or faster, RAM: 1 GB or more, VRAM: 128 MB or more (Min. 64 MB), Microsoft® DirectX® 9.0c or later H.264 CPU: Intel® Core™ i7-920 or faster, RAM: 3 GB or more, VRAM: 128 MB or more (Min. 64 MB), Microsoft® DirectX® 9.0c or later
Alarm/Event	Alarm Source	16x Terminal inputs, 16x Camera alarms, Panasonic Alarm Protocol
	Event Mode	Alarm/Activity/OFF
	Alarm Action	Alarm recording, E-mail notification, Alarm message, Camera positioning, FTP image transfer, Terminal output, Panasonic alarm protocol output, Buzzer, Indicator
	Alarm Control	Reset, Suspend
	Event Log	750
Network	Network Interface	Camera port: 10Base-T/100Base-TX (RJ-45) Client port: 10Base-T/100Base-TX (RJ-45) Maintenance port: 10Base-T (RJ-45)
	Maximum Band Width	Total 97 Mbps
	Bandwidth Control (Client Port)	32 k / 64 k / 128 k / 256 k / 512 k / 1,024 k / 2 M / 5 M / 10 M (bps) and unlimited
	Supported Protocol	TCP/IP, UDP/IP, HTTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, RTP
	E-mail	Upon Alarm or Warning
	No. of Client at a Time	8
	User Registration	Up to 32 users
	User Level	4 Levels (Programmable)
	Partitioning	User - Camera (View only, View & Control, No Access)
	Security Method	User authentication (ID and Password), Host authentication (IP address), Alteration detection
External Interface	Alarm Connector (25pin D-sub)	Alarm
	Alarm/Control Connector (25pin D-sub)	Alarm output 8 ~ 16 ² , Alarm suspension input ¹ , Alarm reset input ¹ , Emergency recording input ¹ , Power outage detection input ¹ , External recording mode switching ¹ , Power outage recovery completion output ³ , Time adjustment input/output ⁴ , +5 V output ⁵
	Error/Warning	Network error output ² , Available disk space warning output ² , HDD error output ² , Camera error output ² , Error output ²
	External Storage	High-speed serial interface 480 Mbps (theoretical value) for WJ-HDE300 Extension Unit
	RS-232C	For servicing purpose only
HDD	Type	1x 3.5 inch 250 GB HDD (Factory default), Up to 4x 2 TB HDDs can be installed. (Contact Panasonic for detail)
	Maximum Capacity	56 TB (with 6x WJ-HDE300 Extension Units, 4x 2 TB HDDs installed in each unit)
	RAID	RAID5 supported (with WJ-NDB301 RAID5 Board)
	Partitioning	Normal/Event/Copy
Viewer Software	Playback Control	Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image
	Additional Functions	Alteration detection, Save as JPEG, Two times zoom, Print
	Supported OS, Language	Same as browser GUI, Language of the software will be English
Admin Software	Supported OS, Language	Same as browser GUI, Language of the software will be English
Quick IP Setup Software	Supported OS, Language	Same as browser GUI, Language of the software will be English

Trademarks and registered trademarks

– Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
– Axis is a registered trademark of Axis Communications AB.
– "Super Dynamic", "SDII", "SDIII" and "i-Pro" logos are trademarks or registered trademarks of Panasonic Corporation.

Important

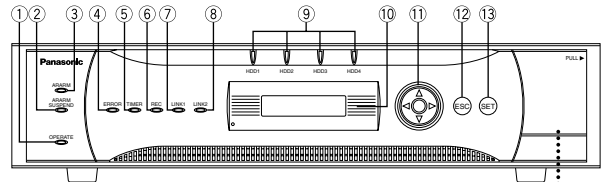
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.
– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

TV System	NTSC	PAL
General	Safety/EMC Standard: UL (6500), FCC (Part15 ClassA), C-UL (E60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), GOST (GOST R 51558)
Specifications	Power Source: 120 V AC, 60 Hz	220 ~ 240 V AC, 50 Hz
	Power Consumption: approx. 85 W	
	Ambient Operating Temperature: +5 °C ~ +45 °C (41 °F ~ 113 °F)	
	Ambient Operating Humidity: 5 % ~ 90 % (without condensation)	
	Maximum Operating Altitude: 2,000 m (6,500 feet) above sea level	
	Dimensions: 420 mm (W) x 88 mm (H) x 350 mm (D) (16-9/16" (W) x 3-7/16" (H) x 13-3/4" (D)) (excluding rubber feet and projections)	
	Weight: 8.3 kg (18.3 lbs.)	

*1: Non-voltage make contact, +5 V pull-up 150 Ω *2: Open collector output, 24 V max., -100 mA
*3: High (+5 V ~ +12 V, 6.3 mA maximum) *4: 52 kΩ, 5 V pull-up, -100 mA / make contact *5: 200 mA at maximum

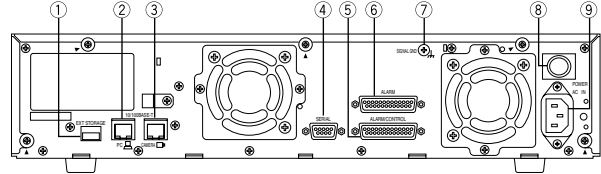
Part Names and Functions

Front View



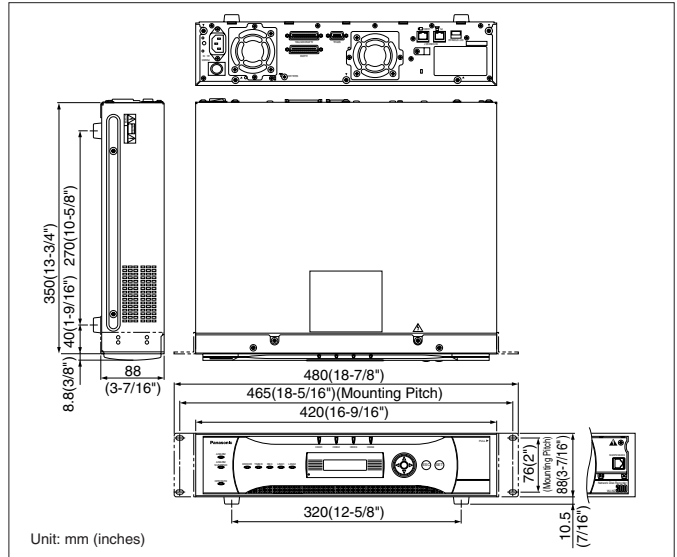
- | | |
|------------------------------|-------------------------|
| ① Operate Indicator | ⑧ PC Link Indicator |
| ② Alarm Suspension Indicator | ⑨ HDD Access Indicators |
| ③ Alarm Indicator | ⑩ LCD |
| ④ Error Indicator | ⑪ Arrow Button |
| ⑤ Timer Indicator | ⑫ Escape Button |
| ⑥ Recording Indicator | ⑬ Set Button |
| ⑦ Camera Link Indicator | ⑭ Maintenance Port |

Rear View



- | | |
|--|--------------------------|
| ① External Storage Connector | ⑥ Alarm Connector |
| ② Client PC Port | ⑦ Signal Ground Terminal |
| ③ Camera Port | ⑧ Power Switch |
| ④ Serial Connector (for maintenance purpose) | ⑨ Power Cord Inlet |
| ⑤ Alarm/Control Connector | |

Appearance



- All TV pictures are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- All product pictures are NTSC models.

DISTRIBUTED BY:

Panasonic®

<http://panasonic.net/security/>

Printed in Japan (2A-001BL)