



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

Key Features

- MPEG-4 and JPEG multi format.
- Up to 32 network cameras can be connected and recorded.
- Various Recording Mode: Manual, Schedule, Event (Pre/Post), Emergency, External Timer.
- Various alarm sources such as 16x Terminal inputs, 16x Camera alarms, Panasonic Alarm Protocol, and flexible alarm actions such as Alarm recording, E-mail notification, Alarm message, Camera positioning, FTP image transfer, Terminal output, Panasonic alarm protocol output, Buzzer and LED.
- Panasonic Camera control: Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode (depending on Camera model).
- Cameras may be assigned to one of the eight 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 mode: Spot, Quad (8 patterns), Spot Sequence, Quad Sequence.
- Eight 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.
- Two setup modes available, Quick/Advanced at users' preference.
- Two 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.

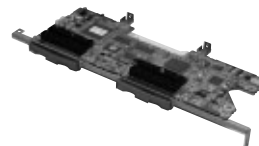
- Images recorded on the SD memory card in the i-Pro series cameras can be downloaded to the recorder manually. In addition, recordings upon network failure can be transferred automatically when the recorder is in non-recording status.
- Alarm notification by E-mail.
- User/Host authentication, 4 user 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-AS65 or WV-ASM100 management software.
- Front panel LCD screen for status display.
- HDD capacity is expandable with four HDD bays in the main unit and up to six WJ-HDE300 optional Extension Units each with four bays.
- 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 (w/sleeve and damper) | 12 pcs. |
- The following are for installation:
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|---------------------------------|--------|--|
| • 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

RAID5 Board
WJ-NDB301



Extension Unit
WJ-HDE300

(4 drive bays for optional HDD units)



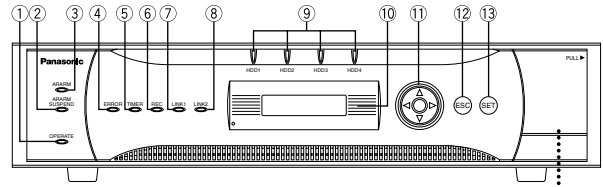
Specifications

TV System	NTSC	PAL
Supported Cameras	Panasonic i-Pro series Network cameras. (Contact Panasonic for BB series and Axis cameras)	
Supported Image Format	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 Windows®2000 Professional SP4, Windows®XP Home/ Professional SP2 English, German, French, Italian, Spanish. Supported Browser Internet Explorer 6.0 SP1, SP2	
Alarm/Event	Alarm Source 16 x Terminal inputs, 16 x 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, LED. 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 Email 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 input 1 ~ 16 ¹ , Alarm output 1 ~ 7 ² Alarm/Control Connector (25pin D-sub) Alarm Alarm output 8 ~ 16 ² Alarm suspension input ¹ , Alarm reset input ¹ Control 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 EXT Stage RS-232C High-speed serial interface 480 Mbps (theoretical value) for WJ-HDE300 Extension Unit. For servicing purpose only.	
HDD	Type 1 x 3.5-type 250 GB HDD (Factory default), Up to 4 x 500 GB HDDs can be installed. (Contact Panasonic for detail) Maximum Capacity 14 TB (with 6 x WJ-HDE300 Extension Units, 4 x 500 GB 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	
General Specifications	Safety/EMC Standard UL (6500 Edition2), FCC (Part15 ClassA), CE (EN60065, EN55022, EN55024, ClassB), C-UL (E60065), DOC (ICES003 ClassA), GOST (R 51558) 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 % (no 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, -100 mA, +5 V pull-up *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

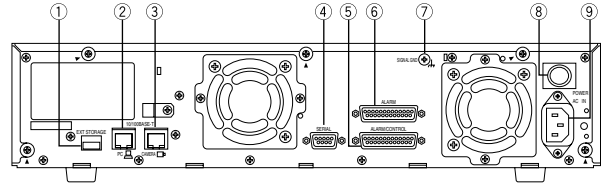
Major Operating Controls & Terminals

Front View



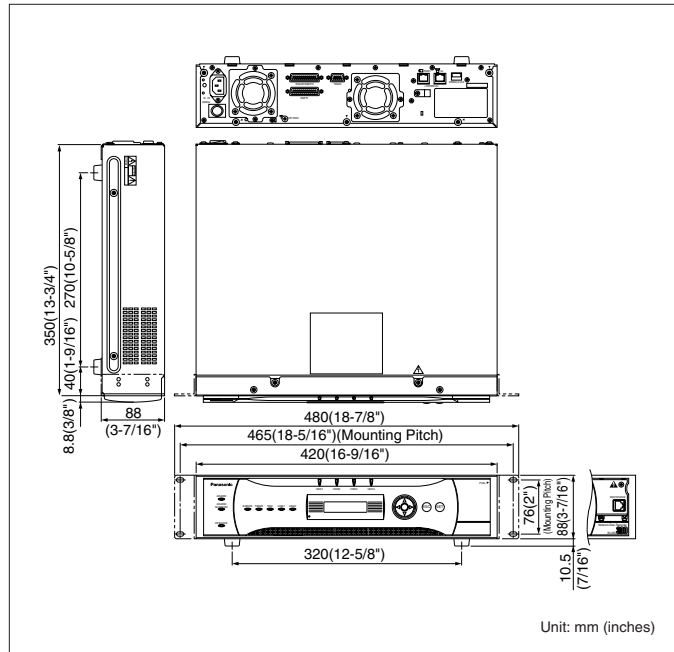
- ① Operate Indicator
- ② Alarm Suspension Indicator
- ③ Alarm Indicator
- ④ Error Indicator
- ⑤ Timer Indicator
- ⑥ Recording Indicator
- ⑦ Camera Link Indicator
- ⑧ PC Link Indicator
- ⑨ HDD Access Indicators
- ⑩ LCD
- ⑪ Arrow Button
- ⑫ Escape Button
- ⑬ Set Button
- ⑭ Maintenance Port

Rear View



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

Appearance



Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- SD logo is a trademark.
- Axis is a registered trademark of Axis Communications AB.

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.

- All TV pictures/menu are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- Product pictures shown in this catalog are all NTSC models.

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