



High performance Network Disk Recorder for Megapixel i-Pro Network Cameras with 9 Serial ATA HDD slots

Key Features

- H264, MPEG-4, JPEG multi-format supported.
- Up to 64 network cameras can be connected without extra license fee and their images can be recorded simultaneously.
- A total of 200 Mbps high throughput including up to 128Mbps for camera site. Best match with Megapixel **i-Pro** Network Cameras.
- Flexible Recording Mode: Emergency, SCHEDULE including Schedule, Manual and Event (Pre/Post). SCHEDULE includes eight recording programs with individual recording mode for each camera, and 6 time schedules per day.
- Panasonic camera control: Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode (depending on camera model).
- Audio from **i-Pro** network cameras can be recorded and played back.
- Cameras can be assigned to one of the 8 groups for easier browsing.
- Flexible playback controls: 7steps FF/REW, Goto Date (Jump to specific time/date), Goto Last (Jump to 5 sec. ~ 5 min. before the record end).
- Various display modes: Spot, Quad (16 patterns), Spot Sequence, Quad Sequence (Live).
- Event Search: Desired record can be searched by various criteria such as Time & Date, Event Type, Camera number and Text on/off.
- Playback VMD Search: Motion in a specified area in the recorded images can quickly be searched (works with supported **i-Pro** cameras and encoders).
- 2x, 4x Digital zoom with Pan/Tilt control for zoomed area (Live/Playback).
- Recorded images can be downloaded to a PC. Downloadable viewer software allows playback of images downloaded from the recorder.
- Various alarm sources include 32x Terminal inputs, 64x Camera alarms, Panasonic Alarm Protocol. Flexible alarm actions include Event recording, E-mail notification, Alarm message, Camera positioning, FTP image transfer, Terminal output, Indication on browser, Panasonic alarm protocol output, Buzzer and LED.
- 2x giga bit network interfaces for camera recording and client access, and 1x maintenance port (10Base-T).
- Up to 16 clients can monitor images and control WJ-ND400 simultaneously.
- FTP client function enables periodic live image transfer or recorded image transfer in response to an alarm.
- Performance measurement function allows appropriate recording frame rate setup.
- Images recorded in the SD memory card in **i-Pro** network cameras can be transferred to the recorder automatically even when the

recorder is in SCHEDULE recording operation.

- Setup can be made with the user friendly browser GUI. Multilingual options include English / French / Spanish / Germany / Italian / Russian / Chinese / Japanese / Custom.
- User/Host authentication, 4 programmable user levels, 16 user priorities and User-Camera View/Control partitioning set up for sophisticated user management. Up to 32 user registrations
- Alteration detection and RAID5/6 redundant recording for data security.
- Multi-recorder-Multi-site-system can be made with optional WV-ASM100 i-Pro Management Software.
- Up to 9 Serial ATA HDDs can be installed with the provided canisters. With hot plug support, one or two HDDs can be removed without interrupting the recording in RAID mode.
- HDD capacity is expandable up to 54 HDD slots (9 HDD slots in the main unit and 5 optional WJ-HDE400 Hard Disk Extension Units each with 9 HDD slots).
- Disk partitioning including Normal, Event, Pre-Event, Copy for flexible record management.
- Superior reliability with an embedded OS compared to PC-based system.

Standard Accessories

• CD-ROM*	1 pc.	• Label	1 pc.
• Installation Guide	1 pc.	• Rack Mounting Bracket	2 pcs.
• Quick Reference Guide	1 pc.	• Rack Mounting Bracket fixing screw ...	6 pcs.
* The CD-ROM contains the operating instructions (PDFs)		• Handle for Rack Mounting Bracket ...	2 pcs.
The following are for installation:		• Handle fixing screw for Rack Mounting Bracket	4 pcs.
• Power Cord (NTSC model)	1 pc.	• Washer	4 pcs.
• Power Cord (PAL model)	2 pcs.	• HDD canister	9 pcs.
• Key	2 pcs.	• HDD fixing Screw for HDD canister ...	54 pcs.

Optional Accessory

Hard Disk Extension Unit		Power Source :	120 V AC, 60 Hz (NTSC) 220 ~ 240 V AC, 50 Hz (PAL)
WJ-HDE400		Power Consumption:	approx. 130 W
		Dimensions :	430 mm (W) x 132 mm (H) x 400 mm (D) (16-15/16" (W) x 5-3/16" (H) x 15-12/16" (D)) (excluding rubber feet and projections)
		Weight :	13.5 kg (29.8 lbs.) (When no HDD exist) 20 kg (44.1 lbs.) (When 9 HDDs are installed)



Specifications

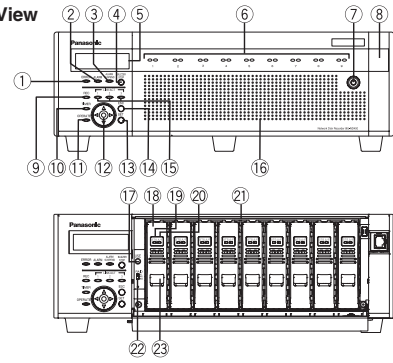
TV System	NTSC	PAL
Supported Cameras	Panasonic i-Pro series Network cameras (Contact Panasonic for BB series and Axis® cameras)	
	Supported Image Format H.264, MPEG-4, JPEG, M-JPEG	
	Supported Image Resolution 2,048 x 1,536, 1,280 x 960, 960 x 720, 640 x 480, 320 x 240 (Depending on the camera)	
	Supported Audio Format G.726 (ADPCM) 32 kbps	
	Maximum Number of Cameras 64	
Recording	Recording Mode Emergency, SCHEDULE including Schedule, Manual and Event (Pre/Post).	
	Pre-Event Recording Up to 15 minutes with dedicated HDD for Pre-Event. Shorter Pre-Event recording is possible without dedicated HDD.	
	Scheduled Recording Mode 8 programs, 6 time zones/day, Independent setup for each day of the week	
	Frame Rate/Camera Up to 30 ips (Depending on the Camera)	
	Camera Control Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode	
Browser GUI	REC/Playback Control REC, PLAY, Rev PLAY, Pause, Stop, FF, REW, Prev Record, Next Record, Prev Image, Next image, Goto Date, Goto Last (5 sec. ~ 5 min.)	
	Search Mode REC Event Search: Time date, Event type, Camera number Playback VMD Search: one detection area per search (works with supported i-Pro cameras/ WJ-NT314)	
	Display Mode Spot/Quad (16 patterns) / Spot Sequence / Quad Sequence (Sequence: Live only)	
	Camera Grouping 8 groups each with 16 characters title	
	Image Download Recorded data of selected camera and time range can be downloaded to a PC. Viewer software can be downloaded from the recorder.	
	SD Memory Data Download Images recorded in the SD card in the i-Pro series cameras can be transferred to the recorder automatically or manually.	
	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: 12 H/24 H, Date: 3 formats (YY.MM.DD, MMM.DD.YY, DD.MMM.YY)	
	Alarm Control Reset, Suspend	
	Digital Zoom 2x, 4x, with Pan/Tilt control for zoomed area.	
	System Log Operator access (100), Network error (1,000), Error (100), Event (750)	
	System Setup Setup page in English, French, Italian, Spanish, German, Russian, Chinese, Japanese	
	GUI Language English, French, Italian, Spanish, German, Russian, Chinese, Japanese, Custom	
	Supported OS Microsoft® Windows Vista® 32 bit SP1 Microsoft® Windows® XP Home Edition SP3 Microsoft® Windows® XP Professional SP3 The language of the OS must be same as selected GUI language.	
Alarm/Event	Supported Browser Windows® Internet Explorer® 7.0 Microsoft® Internet Explorer® 6.0 SP2	
	Alarm Source 32x Terminal inputs, 64x Camera alarms, Panasonic Alarm Protocol	
	Event Mode Off / On	
	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	
Network	Event log 750	
	Network Interface Camera port: 10Base-T / 100Base-TX / 1000Base-T (RJ-45) Client port: 10Base-T / 100Base-TX / 1000Base-T (RJ-45) Maintenance port: 10Base-T (RJ-45)	
	Maximum Band Width Total 200 Mbps, Camera port 128Mbps	
	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	
	FTP Client Upon alarm or Periodic transfer	
	No. of Simultaneous Users 16	
	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, HTTP Port No. (1 ~ 65,535 except for reserved numbers), FTP Port No. (1 ~ 65,535 except for reserved numbers)	
External Interface	Alarm Connector (D-sub25pin)	Alarm Alarm input 1 ~ 17, 17 ~ 32*1
	Alarm/Control Connector (D-sub25pin)	Alarm Alarm input 8 ~ 16*1, 1x Alarm output*2, 1x Alarm reset input*1, 1x Alarm suspend 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 Storage	High-speed serial interface 1.5 Gbps (theoretical value) Only for WJ-HDE400 Extension Unit
Other Functions	Time Synchronization Terminal (Master or Slave), NTP (Server/Client)	
	Summer Time User definable (using menu setup)	
	HDD Type 3.5 inch Serial ATA HDD, Up to 9x HDDs can be installed.	
Viewer Software	Maximum Capacity 54 HDD slots (with 5x WJ-HDE400 Extension Units, 9x HDDs installed in each unit)	
	RAID RAID 5/6 supported	
	Partitioning Normal / Event / Pre-Event / Copy	
	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	
General Specifications	Supported OS, Language Same as browser GUI, Language of the software will be English	
	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), CE (EN60065, EN55022 ClassB, C-UL (CAN/CSA C22.2 No.60065), EN55024), GOST (GOST R 51558), DOC (ICES003 ClassA)
		Power Source 120 V AC, 60 Hz 220 ~ 240 AC, 50 Hz
		Power Consumption approx. 170 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 430 mm (W) x 132 mm (H) x 400 mm (D) (16-15/16" (W) x 5-3/16" (H) x 15-3/4" (D)) (excluding rubber feet and projections)	
	Weight 13 kg (28.6 lbs.) without Canister and HDD 20 kg (44.15 lbs.) with 9 HDDs	

*1: Non-voltage make contact, +5 V pull-up 150 *2: Open collector output, 24 V max., -100 mA

*3: High (+5 V ~ +12 V, 6.3 mA maximum) *4: 52 k, 5 V pull-up, -100 mA make contact *5: 200 mA at maximum

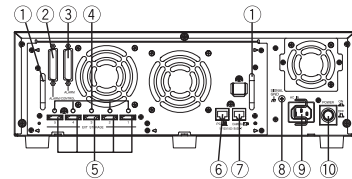
Part Names and Functions

Front View



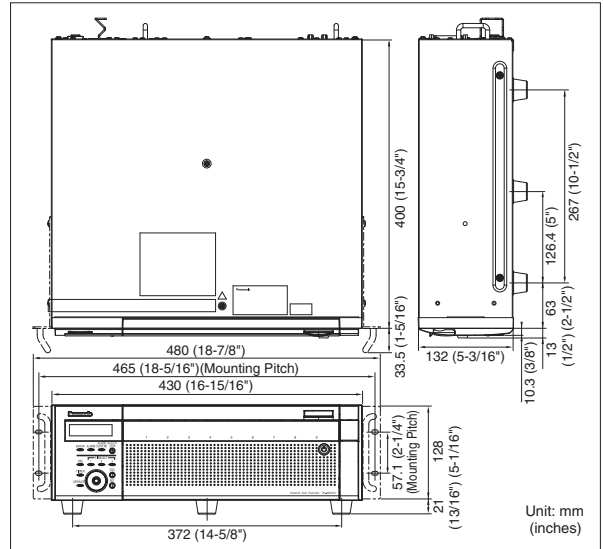
- ① Error Indicator
- ② Alarm Indicator
- ③ Alarm Suspension Indicator
- ④ Buzzer Stop Button
- ⑤ LCD
- ⑥ HDD Indicators
- ⑦ Key Hole
- ⑧ Maintenance Port
- ⑨ Recording Indicator
- ⑩ Timer Indicator
- ⑪ Operate Indicator
- ⑫ Arrow Buttons
- ⑬ SET Button
- ⑭ Escape Button
- ⑮ Link Indicators
- ⑯ USE Button
- ⑰ HDD Unit
- ⑱ HDD Status Indicator
- ⑲ HDD Access Indicator
- ⑳ HDD Bay Slots
- ㉑ RAID Mode Switch
- ㉒ Removal Knob

Rear View



- ① Handle for Maintenance
- ② Alarm/Control Connector
- ③ Alarm Connector
- ④ Cable Clamp Fixing Holes
- ⑤ External Storage Connector
- ⑥ Client PC Port
- ⑦ Camera Port
- ⑧ Signal GND Terminal
- ⑨ Power Cord Inlet
- ⑩ Power Switch

Appearance



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", "SDI", "SDII" 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.

- All TV pictures are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- All product pictures are NTSC models.

DISTRIBUTED BY:

Panasonic®

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

(WJ-ND400_SPEC_1.pdf)