Panasonic
ideas for life

Preliminary

i-pro

MPEG-4 JPEG

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

Key Features

- MPEG-4 and JPEG multi format
- Up to 64 network cameras can be connected without extra license fee and their images can be recorded simultaneously.
- 200 Mbps high throughput: Best match with Megapixel **i-Pro** Network Cameras
- Various Recording Modes: Manual, Schedule including Event (Pre/Post), Emergency. Schedule mode 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 up to 64 **i-Pro** network cameras can be recorded and played back, G.726 (ADPCM) 32 kbps.
- Cameras can be assigned to one of the 8 groups for easier browsing.
- Flexible playback controls: 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).
- Filtered search: Time & Date, Event Type, Camera number.
- VMD search: Motion in a specified area in the recorded images can quickly be searched (works with WJ-NT314).
- 2x, 4x Digital zoom (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, Panasonic alarm protocol output, Buzzer and LED.
- 2x built-in network interfaces (10Base-T / 100Base-TX / 1000Base-T) for camera recording and client access
- 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 for 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 recording status.

- Setup can be made with the user friendly browser GUI. Multilingual options include English / French / Spanish / Germany / Italian / Russian / Chinese / Japanese.
- 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 recorded data encryption for data security
- Multi-recorder-Multi-site-system can be made with optional WV-ASM100 i-Pro Management Software.
- Equipped with a 500 GB Serial ATA HDD. Up to 9 Serial ATA HDDs can be installed with the provided canisters. With hot plug support, the HDDs can be removed without interrupting the recording.
- HDD capacity is expandable up to 27 TB with 9 HDD slots in the main unit and five optional WJ-HDE400 Hard Disk Extension Units each with 9 HDD slots.
- Disk partitioning including Normal, Event, Pre-Event, Copy for flexible record management
- RAID5/6 redundant recording for data security
- 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.
	• Handle fixing screw for
The following are for installation:	Rack Mounting Bracket .... 4 pcs.
• Power Cord (NTSC model) .... 1 pc.	• Washer .... 4 pcs.
• Power Cord (PAL model) .... 2 pcs.	• HDD canister .... 8 pcs.
• Key .... 2 pcs.	• HDD fixing Screw for HDD canister... 48 pcs.

Optional Accessory

Hard Disk Extension Unit
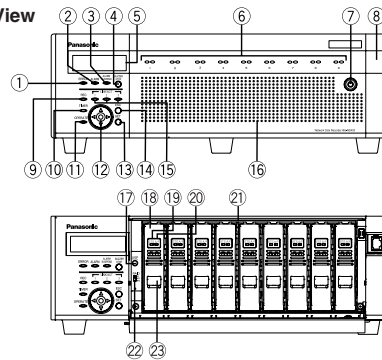**WJ-HDE400**

Specifications

TV System		NTSC	PAL
Supported Cameras	Supported Cameras	Panasonic i-Pro series Network cameras (Contact Panasonic for BB series and Axis® cameras)	
	Supported Image Format	MPEG-4, JPEG, M-JPEG	
	Supported Image Resolution	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	Manual, Schedule including Event (Pre/Post), Emergency	
	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)	
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, Goto Date, Goto Last (5 sec. ~ 5 min.), Area select	
	Search Mode	Filtered search: Time date, Event type, Camera number. VMD search: one detection areas per search (works with 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 separately.	
	SD Memory Data Download	Images recorded in the SD card in the i-Pro series cameras can be transferred to the recorder automatically.	
	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	
	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	
	Supported OS	Microsoft® Windows Vista® Bussiness 32 bit. Microsoft® Windows® XP Home Edition SP2 Microsoft® Windows® XP Professional SP2. The language of the OS must be same as selected GUI language.	
	Supported Browser	Windows® Internet Explorer® 7.0 Microsoft® Internet Explorer® 6.0 SP2	
Alarm/ Event	Alarm Source	32x Terminal inputs, 64x 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 / 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	
	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 ~ 7, 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	1x 3.5 inch 500 GB Serial ATA HDD (Factory default), Up to 9x 500 GB HDDs can be installed.	
	Maximum Capacity	27 TB (with 5x WJ-HDE400 Extension Units, 9x 500 GB HDDs installed in each unit)	
	RAID	RAID 5/6 supported	
	Partitioning	Normal / Event / Pre-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	
General Specifications	Safety/EMC Standard	UL (UL60065, FCC (Part15 ClassA), C-UL (CAN/CSAC22.2 No.60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), C-Tick
	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	14 kg (30.9 lbs.) with 1 HDD (Factory default) 20 kg (44.15 lbs.) with 9 HDDs	

*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
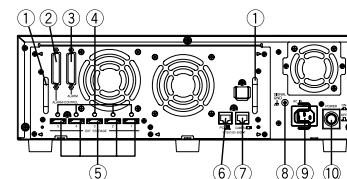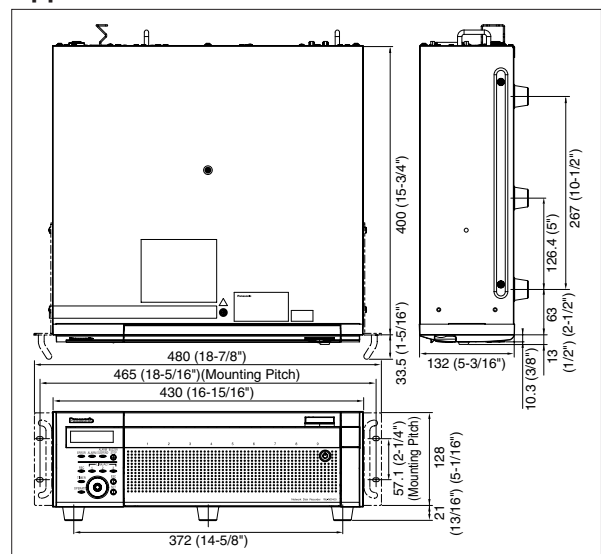
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Part Names and Functions

Front View

① Error Indicator	⑨ Recording Indicator	⑰ USE Button
② Alarm Indicator	⑩ Timer Indicator	⑱ HDD Unit
③ Alarm Suspention Indicator	⑪ Operate Indicator	⑲ HDD Status Indicator
④ Buzzer Stop Button	⑫ Arrow Buttons	⑳ HDD Access Indicator
⑤ LCD	⑬ SET Button	㉑ HDD Bay Slots
⑥ HDD Indicators	⑭ Escape Button	㉒ RAID Mode Switch
⑦ Key Hole	⑮ Link Indicators	㉓ Removal Knob
⑧ Maintenance Port	⑯ Front Cover	

Rear View

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

Appearance

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