Panasonic
ideas for life

Network Disk Recorder
Version 2.3 **WJ-ND200**

NTSC **WJ-ND200K** (120 V AC) PAL **WJ-ND200K** (220 ~ 240 V AC)

Network Disk Recorder with 2 removable HDD slots for digital image data from up to 16 Network Cameras

Key Features

- MPEG-4 and JPEG multi format
- Up to 16 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 alarm, 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 LED.
- Panasonic Camera Control: Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode (depending on camera model).
- Audio from the **i-Pro** network cameras can be recorded and played back, G.726 (ADPCM) 32 kbps.
- Cameras may be assigned to one of the 4 groups to meet application requirements.
- 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 (4 patterns), Spot Sequence, Quad Sequence (Sequence: Live only).
- 4 Quad screens are fully programmable. Any of the 16 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.
- Built-in network interface (10Base-T / 100Base-TX) for recording and client access
- 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 4 clients can monitor image and control WJ-ND200 simultaneously.
- Image transfer to FTP server: Recorded image upon alarm and/or live image periodically
- Performance measurement function for appropriate recording frame rate setup
- SD memory recordings initiated by network failure in the **i-Pro** series cameras can be transferred automatically or manually to the recorder even when the recorder is in recording status.
- Up to 2 removable HDDs can be installed. (2.5 inch Serial ATA HDD)
- The removable HDD can be connected to a PC via WJ-HDC20 Connection Unit and played back with provided HDD viewer software. (NTSC model only)
- 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.
- RAID1 mirroring capability
- Vertical installation is possible with the optional WV-Q201 Vertical Stand.

Standard Accessories

- CD-ROM* ..... 1 pc.
- Installation Guide ..... 1 pc.

* The CD-ROM contains the operating instructions (PDFs and the software).

The followings are for installation:
- Power Cord (NTSC model) ..... 1 pc.
- Power Cord (PAL model) ..... 2 pcs.
- Key ..... 2 pcs.
- Brace (for the power cord) ..... 1 pc.

Optional Accessories

Rack Mount Bracket
WV-Q200

Vertical Stand
WV-Q201

Removable HDD
WJ-HDD32
(320 GB)

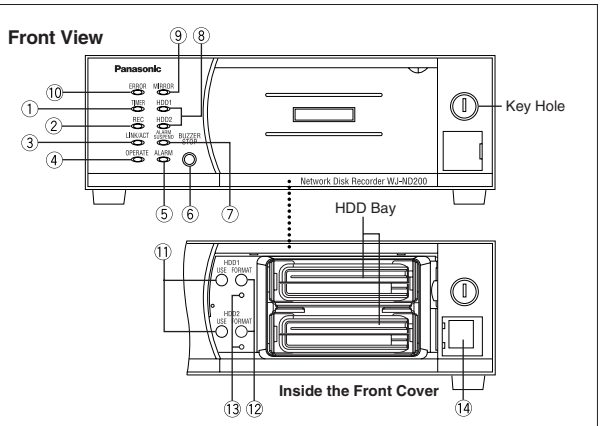
Connection Unit
WJ-HDC20
(NTSC only)

Specifications

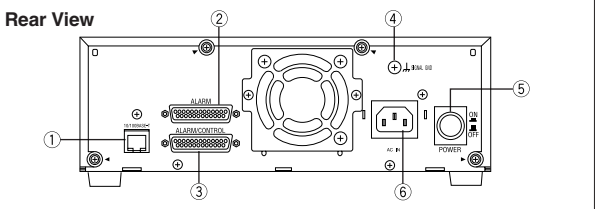
TV System			NTSC	PAL
Supported Cameras	Supported Cameras		Panasonic i-Pro series Network cameras, BB series (specific models) and Axis® (specific models)	
	Supported Image Format		MPEG-4 (Specific cameras), JPEG, M-JPEG	
	Supported Image Resolution		1,280 x 960, 960 x 720, 640 x 480, 320 x 240 (Depending on the camera)	
	Supported Audio Format		G.726 (ADPCM) 32 kbps	
	Maximum Number of Cameras		16	
Recording	Recording Mode		Manual, Event, Schedule, Emergency, External timer	
	Pre-alarm Recording		Up to 30 seconds	
	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)	
Browser GUI	Camera Control		Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode, Click centering, Wheel zoom, Zoom reset	
	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.), Text display	
	Search Mode		Search criteria: Time date, Event type, Camera number, Text ON/OFF	
	Display Mode		4x Spot/Quad groups/Spot Sequence/Quad Sequence (Sequence: Live only)	
	Camera Grouping		4 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		SD recording associated with network error in the i-Pro series cameras can automatically be transferred to the recorder.	
	Camera Title		On the browser, Up to 16 characters	
	Clock Display		On the browser. Time: 12H/24H, Date: 3 formats (YY.MM.DD, MMM.DD.YY, DD.MMM.YY)	
	Alarm Control		Reset, Suspend	
	Digital Zoom		Up to 4 times, Mouse wheel control supported	
	Text Attachment		Free comment can be attached for each record and reviewed at later time. Up to 200 characters	
	System Logs		Operator access (100), Network error (1,000), Error (100), Event (750)	
	System Setup		Setup page in English, French, Italian, Spanish, German, Russian, Chinese, Japanese	
	Time Synchronization		Terminal (Master or Slave), NTP (Client)	
	Summer Time		User definable (using menu setup)	
	GUI Language		English, French, Italian, Spanish, German, Russian, Chinese, Japanese	
	Supported OS		Microsoft® Windows Vista® Business 32 bit, Microsoft® Windows® XP Home/Professional SP2 The language of the OS must be same as selected GUI language.	
	Supported Browser		Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business 32 bit), Microsoft® Internet Explorer® 6.0 SP2 (Microsoft® Windows® XP Home/Professional SP2)	
	Required PC		CPU: Intel® Pentium® 4 3.0 GHz or faster, RAM: 512 MB or more, Microsoft® DirectX® 9.0c or later	
Alarm/ Event	Alarm Source		16 x Terminal inputs, 16 x Camera alarms, Panasonic Alarm Protocol	
	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 logs	
Network	Network Interface		10Base-T/100Base-TX (RJ-45)	
	Maintenance Port		10Base-T (RJ-45)	
	Maximum Band Width		Total 48 Mbps	
	Bandwidth Control		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		4	
	FTP Client		Upon alarm or Periodic transfer	
	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	
HDD	Type		Up to 2 removable HDDs (2.5 inch Serial ATA HDD)	
	RAID		RAID1 Mirroring mode supported	
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		Same as browser GUI, Language of the software is English.	
HDD Viewer Software	Playback Control		Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image	
	Additional Functions		Search (Time date, Event type, Camera number), Save as JPEG, Print, HDD Check	
	Supported OS		Same as Viewer software, Language of the software is English.	
Admin Software	Supported OS		Same as Viewer software, Language of the software is English.	
Quick IP Setup Software	Supported OS		Same as Viewer software, Language of the software is English.	
General Specifications	Safety/EMC Standard		UL (6500), FCC (Part15 ClassA), C-UL (E60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), GOST (GOST R 51558)
	Power Source		120 V AC, 60 Hz	220 ~ 240 V AC, 50 Hz
	Power Consumption		approx. 35 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		270 mm (W) x 88 mm (H) x 360 mm (D) (10-5/8"(W) x 3-1/2"(H) x 14-1/4"(D)) (excluding rubber feet and projections)	
	Weight		4.7 kg (10.3 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

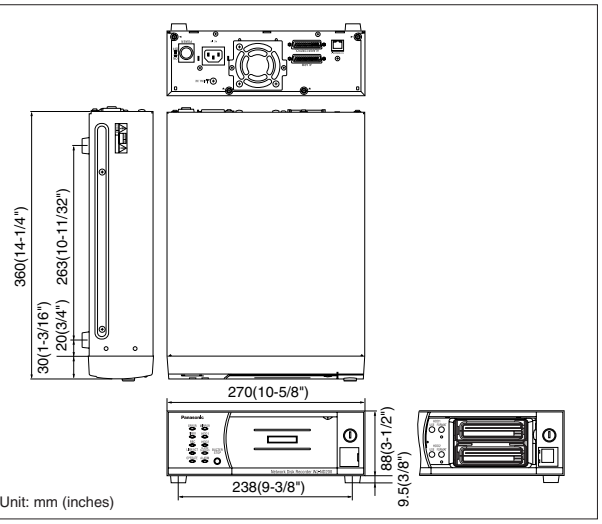


① Timer Indicator
② Recording Indicator
③ Link Indicator
④ Operate Indicator
⑤ Alarm Indicator
⑥ Buzzer Stop Button
⑦ Alarm Suspension Indicator
⑧ HDD Access Indicators
⑨ Mirroring Indicator
⑩ Error Indicator
⑪ USE Button
⑫ FORMAT Button
⑬ Write Protection Indicator
⑭ Maintenance Port



① Network Port
② Alarm Connector (ALARM, 25pin D-sub, Female)
③ Alarm/Control Connector (ALARM/CONTROL, 25pin D-sub)
④ Signal Ground Terminal (SIGNAL GND)
⑤ Power Switch
⑥ Power Cord Inlet

Appearance



Unit: mm (inches)

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.
– Intel and Pentium are trademarks of Intel Corporation.
– "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.

- 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-002CA)