

# Network Disk Recorder WJ-ND200

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



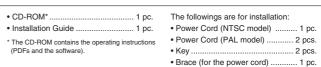
## Network Disk Recorder with 2 removable HDD slots for digital image data from up to 16 Network Cameras

### **Key Features**

- H.264, 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 Indicator.
- 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 s ~ 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
- $\bullet$  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 type Serial ATA HDD)
- The removable HDD can be connected to a PC via USB-SATA convertible cable and played back with provided HDD viewer software.
- · 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**



## **Optional Accessories**



## **Specifications**

TV System	ı		NTSC PAL		
	Supported Car	neras	Panasonic i-PRO series Network cameras, BB series (specific models) and Axis® (specific models)		
Cameras	Supported Imag	ge 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)		
Ī	Supported Audio Format		G.726 (ADPCM) 32 kbps		
	Maximum Number of Cameras		16		
Recording	Recording Mode		Manual, Event, Schedule, Emergency, External timer		
Ī	Pre-alarm Recording		Up to 30 seconds		
Ī	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	Camera Control Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program				
GUI	REC/Playback Control		(up to 256), Auto mode, Click centering, Wheel zoom, Zoom reset		
İ			REC, PLAY, Rev PLAY, Pause, Stop, FF, REW, Prev Record, Next Record,		
			Prev Image, Next Image, Goto Date, Goto Last (5 s ~ 5 min.), Text display		
Ì	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		
Ì	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		SD recording associated with network error in the i-PRO series cameras		
	Download		can automatically be transferred to the recorder.		
İ	Camera Title		On the browser, Up to 16 characters		
ŀ	Clock Display		On the browser, Op to 16 characters  On the browser. Time: 12H/24H, Date: 3 formats (YY.MM.DD, MMM.DD.YY, DD.MMM.YY)		
İ	Alarm Control		Reset, Suspend		
ŀ	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		
ł	System Logs		Operator access (100), Network error (1,000), Error (100), Event (750)		
ł	System Logs System Setup		Setup page in English, French, Italian, Spanish, German, Russian, Chinese, Japanese		
			Terminal (Master or Slave), NTP (Client)		
	Time Synchronization		User definable (using menu setup)		
	Summer Time		English, French, Italian, Spanish, German, Russian, Chinese, Japanese		
	GUI Language		Microsoft® Windows® 7 Professional 64 bit/32 bit & Windows® Internet Explorer® 8.0 32 bit		
	Supported OS		Microsoft® Windows Vista® 32 bit SP1 & Windows® Internet Explorer® 7.0		
	and Browser		Microsoft® Windows® XP Home/Professional SP3 & Windows® Internet Explorer® 6.0		
	Combination				
		IDEO/	The language of OS must be the same as selected GUI language.		
	Required PC	JPEG/	CPU: Intel® Pentium® 4 3.0 GHz or faster, RAM: 1 GB or more,		
		MPEG-4	, , , , ,		
		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 I				
Alarm/	Alarm Source		16 x Terminal inputs, 16 x Camera alarms, Panasonic Alarm Protocol		
Event	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 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		
ļ	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 Registrat	ion	Up to 32 users		
Ī	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			Alarm input 1 ~ 16*1, Alarm output 1 ~ 7*2		
Interface	(25pin D-sub)				
İ	Alarm/Control	Alarm	Alarm output 8 ~ 16*2, Alarm suspension input*1, Alarm reset input*1		
	Connector	Control	Emergency recording input*1, Power outage detection input*1, External recording mode switching*1		
	(25pin D-sub)		Power outage recovery completion output*3, Time adjustment input/output*4, +5 V output*5		
		Error/	Network error output*2, Available disk space warning output*2,		
		Warning	HDD error output <sup>2</sup> , Camera error output <sup>2</sup> , Error output <sup>2</sup>		
HDD	Type		Up to 2 removable HDDs (2.5 type Serial ATA HDD)		
טטה	RAID		RAID1 Mirroring mode supported		
ı	Playback Control		Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image		
Viewer	Additional Functions		Alteration detection, Save as JPEG, Two times zoom, Print		
			Same as browser GUI,		
	Additional Fun		Same as browser GHI		
			•		
Software	Additional Fun Supported OS		Language of the software is English.		
Software	Additional Fun Supported OS Playback Cont	rol	Language of the software is English. Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image		
Software HDD Viewer	Additional Fun Supported OS Playback Cont Additional Fun	rol ctions	Language of the software is English. Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image Search (Time date, Event type, Camera number), Save as JPEG, Print, HDD Check		
Software HDD Viewer Software	Additional Fun Supported OS Playback Cont Additional Fun Supported OS	rol	Language of the software is English.  Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image Search (Time date, Event type, Camera number), Save as JPEG, Print, HDD Check Same as browser GUI, Language of the software is English.		
	Additional Fun Supported OS Playback Cont Additional Fun	rol ctions	Language of the software is English. Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image Search (Time date, Event type, Camera number), Save as JPEG, Print, HDD Check		

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   "Super Dynamic", "SDII", "SDII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered. trademarks of Panasonic Corporation.

- Important

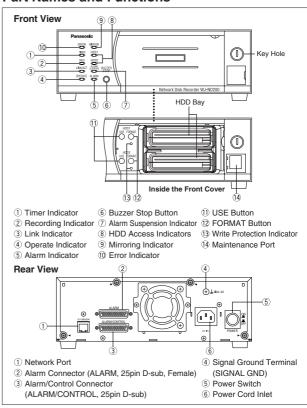
   Safety Precaution: carefully read the operating instructions and installation manual before using this product.

   Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

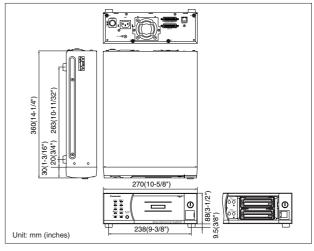
TV System	1	NTSC	PAL
General	Safety/EMC Standard	UL (6500), FCC (Part15 ClassA),	CE (EN60065, EN55022 ClassB,
Specifications		C-UL (E60065), DOC (ICES003 ClassA)	EN55024), GOST (GOST R 51558)
	Power Source	120 V AC, 60 Hz	220 ~ 240 V AC, 50 Hz
	Power Consumption	approx. 35 W	
	Ambient Operating Temperature	+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)	
	Mass	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  $\sim$  +12 V, 6.3 mA maximum) \*4: 52 k $\Omega$ , 5 V pull-up, -100 mA / make contact \*5: 200 mA at maximum

## **Part Names and Functions**



## **Appearance**



- All TV pictures are simulated.
- Masses 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.

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