

## 16ch Real-time H.264 Digital Disk Recorder **WJ-HD716**

## 16ch H.264 Digital Disk Recorder **WJ-HD616**

**NTSC** WJ-HD716 (120 V AC)    **PAL** WJ-HD716 (220 ~ 240 V AC)  
WJ-HD616 (120 V AC)    WJ-HD616 (220 ~ 240 V AC)



WJ-HD716

**HDMI**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**UniPhier** **SD5 Link**  
SuperDynamic

## H.264 High Picture Quality encoding with 16ch Real-time recording, HDMI Full HD display and *SD5Link*

### Key Features

- H.264 (High profile) codec with "UniPhier®" Panasonic's proprietary System LSI platform provides high quality and high compression encoding simultaneously.
- 16 analog video inputs including 16 (WJ-HD716) / 8 (WJ-HD616) Panasonic coax. camera control inputs and 4 audio inputs
- Real-time recording (WJ-HD716 only):  
480/400 ips (Field), 240/200 ips (Frame) (NTSC/PAL)  
\* WJ-HD616 features Field 240/200 ips and Frame 120/100 ips (NTSC/PAL)
- Live/Playback monitor out (HDMI, BNC) and Live monitor out (HDMI, BNC)
- 2x HDMI interfaces supporting dual 1080i (1,920 x 1,080) display
- Up to 960/800 ips at 16ch 2x monitors real-time live (NTSC/PAL)
- Various Display Modes: 4 / 7 / 8 / 9 / 12 / 16 split screen display
- **SD5Link** (Super Dynamic 5 Link) capability with i-VMD (intelligent-Video Motion Detection) alarm provides disk saving and easy search.
- Up to 5 recorders can be integrated in cascade connection mode for up to 80 cameras.
- Equipped with 4 HDD slots accessible from front panel
- DVD drive (optional) and SD/SDHC memory card slot for easy copy of recorded image data
- HDD capacity is expandable up to 31 HDDs (4 HDD slots in the main unit and 3 optional WJ-HDE400 Hard Disk Extension Units each with 9 HDD slots).
- RAID5/6 redundant recording with optional WJ-HDB601 RAID Board
- Up to 4 optional WV-CU650 system controllers can be connected by PS\*Data.
- Easy operation with GUI and USB mouse

- Remote monitoring available from Internet Explorer® and WV-ASM100
- H.264 image transfer at QVGA resolution for narrow network bandwidth
- Setup data of WJ-HD716/WJ-HD616 can be downloaded and uploaded with SD/SDHC memory card.
- User/Host authentication (Up to 32 user registrations)
- Up to 8 users can operate via network simultaneously.
- Excellent maintenance capability: Front HDD exchangeability, Front maintenance network port

### Standard Accessories

- |  |   |
|--|---|
| • CD-ROM* ..... 1 pc.  | • Rack Mount Bracket ..... 2 pcs.             |
| • Installation Guide ..... 1 pc.   | • Screw for Rack Mount Bracket ... 6 pcs.     |
| • Quick Reference Guide ..... 1 pc.  | • Rack Handle ..... 2 pcs.                    |
| * The CD-ROM contains the operating instructions (PDFs) and other manuals. | • Screw for Rack Handle ..... 4 pcs.          |
| The following are for installation:  | • Washer ..... 4 pcs.                         |
| • Power Cord (NTSC model) ..... 1 pc.                                      | • HDD Canister..... 1 pc.                     |
| • Power Cord (PAL model) ..... 2 pcs.                                      | • HDD Fixing Screw for HDD Canister... 6 pcs. |

### Optional Accessories

HDD with Canister CANISTER/1000	Hard Disk Extension Unit <b>WJ-HDE400</b>	i-Pro Management Software <b>WV-ASM100</b>
RAID Board <b>WJ-HDB601</b>		
Built-in DVD Drive <b>WJ-HDB611</b>		

## Specifications

TV System	NTSC	PAL		
Audio / Video IF	Video Inputs	WJ-HD716: 16x 1.0 V [p-p] / 75 Ω composite video inputs (BNC) 16x multiplexed control data (1 ~ 16 CH) Cascade IN: 2x HDMI, 1x BNC WJ-HD616: 16x 1.0 V [p-p] / 75 Ω composite video inputs (BNC) 8x multiplexed control data (1 ~ 8 CH) Cascade IN: 2x HDMI, 1x BNC		
	Video Outputs	16x 1.0 V [p-p] / 75 Ω composite video signal (BNC), active loop through outputs Monitor outputs: 2x HDMI, 2x 1.0 V [p-p] / 75 Ω composite video signal (BNC), Video output (front RCA): 1x 1.0 V [p-p] / 75 Ω composite video signal		
	Audio Inputs	4x -10 dBV, 10 KΩ (RCA) (1 ~ 4 CH)		
Audio / Video Format	Recording	H.264 (High profile) Frame (720 x 480 pixels) Field (720 x 240 pixels)	H.264 (High profile) Frame (720 x 576 pixels) Field (720 x 288 pixels)	
	Network	H.264 (High profile) QVGA (320 x 240 pixels): Recording independent Field/Frame: Recording dependent		
Recording	Frame Rate Total	WJ-HD716: 480 ips at Field, 240 ips at Frame WJ-HD616: 240 ips at Field, 120 ips at Frame	WJ-HD716: 400 ips at Field, 200 ips at Frame WJ-HD616: 200 ips at Field, 100 ips at Frame	
	Camera Control	Pan/Tilt, Zoom, Focus, Iris, Preset position call (up to 256), Auto mode		
Main Unit Functions	Multiscreen Mode	4 / 7 / 8 / 9 / 12 / 16 split screen display		
	Copy to External Media	DVD±R, SD/SDHC		
Browser GUI	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)		
	Network Interface	10Base-T / 100Base-TX (RJ-45) x1		
Network	Maintenance Interface	10Base-T / 100Base-TX (RJ-45) x1		
	No. of Client at a Time	8		
Alarm / Event	Alarm Source	16x Terminal inputs, 16x Camera alarm, PS-Data		
	Alarm	16x Alarm inputs (25 pin D-sub, Make contact, N.O./N.C.) 16x Alarm outputs (25 pin D-sub, Open collector, N.O./N.C.) 1x Alarm reset input, 1x Alarm suspend input		
External IF	EXT Storage	3x High speed serial interface. Only for WJ-HDE400 Extension Unit.		
	Recording	Emergency recording input, External recording mode input		
	Time Adjustment	Time adjustment input/output		
	Controls	Sequence switching signal input. Power outage detection output, Shut down ready output		
	PS-Data (RS-485) Controller	2x RS-485 (RJ-11) PS-Data compatible for control from WV-CU650 or Matrix Switcher WJ-SX650		
	RS-485 Camera Interface	2x RS-485 (RJ-11), 2/4wire, half duplex, for 1 ~ 16 CH		
	Mouse	USB Mouse port (Front) x1		
	SD/SDHC Slot	SD/SDHC Memory Card Slot (Front) x1		
	HDD	Type	3.5 inch Serial ATA HDD, Up to 4x HDDs can be installed.	
		Maximum HDD	31 HDDs (with 3x WJ-HDE400 extension units each with 9x HDD slots)	
General Specifications	RAID	RAID5/RAID6 supported (with WJ-HDB601)		
	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024)	
	Power Source	120 V AC, 60 Hz		
	Power Consumption	130 W		
	Ambient Operating Temperature	+5 °C ~ +45 °C (41 °F ~ 113 °F)		
	Ambient Operating Humidity	Less than 85 % (without condensation)		
	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 (approx.)	14 kg (30.8 lbs.) without HDD (Factory default),		
		17 kg (37.4 lbs.) with 4 HDDs		

### Trademarks and registered trademarks

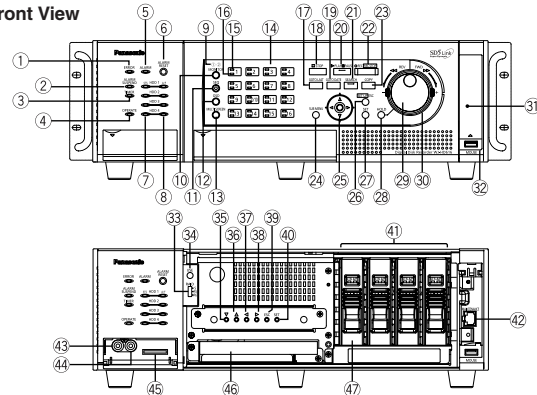
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### Important

- 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.

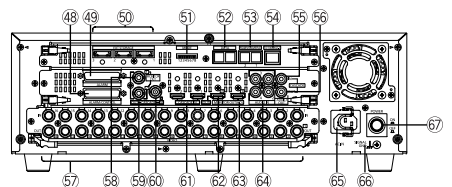
## Part Names and Functions

### Front View



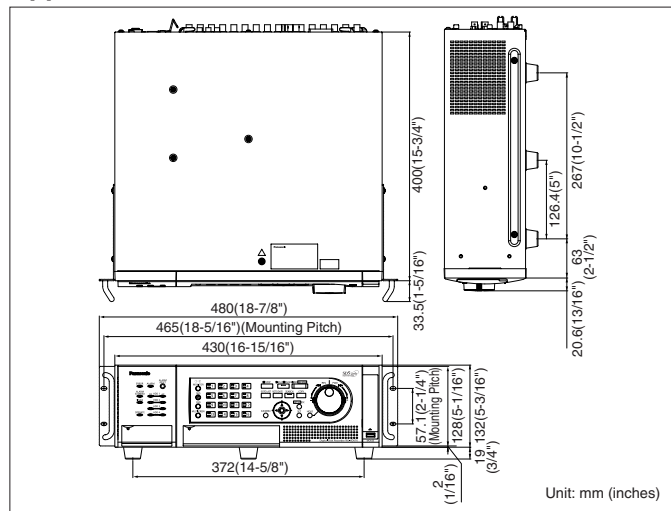
- |                              |                             |                          |
|------------------------------|-----------------------------|--------------------------|
| ① Error Indicator            | ⑱ GOTO LAST Button          | ⑳ RAID Mode Switch       |
| ② Alarm Suspension Indicator | ⑲ Stop Button               | ㉑ USE Button             |
| ③ Timer Indicator            | ⑳ GOTO DATE Button          | ㉒ Down Button            |
| ④ Operate Indicator          | ㉑ Play/Pause Button         | ㉓ Up Button              |
| ⑤ Alarm Indicator            | ㉒ Search Button             | ㉔ Left Button            |
| ⑥ Alarm Reset Button         | ㉓ Record/Record Stop Button | ㉕ Right Button           |
| ⑦ HDD Status Indicators      | ㉔ Copy Button               | ㉖ Escape Button          |
| ⑧ HDD Access Indicators      | ㉕ Sub-menu Button           | ㉗ Set Button             |
| ⑨ Monitor Indicators         | ㉖ Arrow Button              | ㉘ HDD Bay Slots          |
| ⑩ Monitor Switching Button   | ㉗ Setup/Escape Button       | ㉙ Maintenance Port       |
| ⑪ Sequence Button            | ㉘ Hold Button               | ㉚ Audio Output Connector |
| ⑫ OSD Button                 | ㉙ Jog Dial                  | ㉛ Video Output Connector |
| ⑬ Multi-screen Button        | ㉚ Shuttle Ring              | ㉜ SD/SDHC Card Slot      |
| ⑭ Camera Selection Buttons   | ㉛ Live/Playback Indicator   | ㉝ DVD Drive              |
| ⑮ Live/Playback Indicator    | ㉜ Maintenance Cover         | ㉞ HDD Unit               |
| ⑯ Record Indicator           | ㉝ Mouse Connector           |                          |

### Rear View



- |                                |                                     |                               |
|--------------------------------|-------------------------------------|-------------------------------|
| ④⑧ Alarm/Control Connector     | ⑤⑥ Audio Output Connector           | ⑤① Cascade In Connectors (HD) |
| ④⑨ Alarm Connector             | (Cascade Output)                    | ⑤② Monitor Output Connector 2 |
| ④⑩ External Storage Connectors | ⑤⑦ Video Input Connectors /         | (HDMI)(Cascade Output)        |
| ⑤① Mode Switches               | Video Output Connectors             | ⑤③ Monitor Output Connector 1 |
| ⑤② PS-Data Ports               | ⑤⑧ Monitor Output Connector 1 (BNC) | (HDMI)                        |
| ⑤③ RS-485 Ports                | ⑤⑨ Monitor Output Connector 2 (BNC) | ⑤④ Audio Input Connectors     |
| ⑤④ Network Port                | ⑤⑩ Monitor Output                   | ⑤⑤ Power Cord Inlet           |
| ⑤⑤ Audio Cascade In Connector  | ⑤⑩ Cascade In Connector (BNC)       | ⑤⑥ Signal Ground Terminal     |
|                                |                                     | ⑤⑦ Power Switch               |

## Appearance



- 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.

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