

**Panasonic**  
ideas for life

Digital Disk Recorders  
**WJ-HD316**  
**WJ-HD309**

Version 1.50

The Comprehensive Digital Recording Solution



DIGITAL DISK RECORDERS  
**WJ-HD300**  
SERIES



# The WJ-HD300 Series offers high quality pictures and disk saving recording utilizing a new compression technology.

Panasonic presents the new WJ-HD300 Series with a unique new system featuring a high compression ratio of 1/30 for practical use. Under the "All-in-One Solution" concept, all the vital recording components and features are condensed into one unit. With one single unit, unprecedented, highly reliable surveillance recording is possible in a wide range of applications. The WJ-HD300 Series also features System Scalability to meet extended user needs.

## 1/30 Super Compression: Proprietary Algorithm, Core Development of the WJ-HD300 Series

- New algorithm divides entire screen into high and low frequency elements to reduce artificial distortion and noise compared to conventional compression.
- In addition, the mode-A compression data calculation within four (4) field images (called "Temporal Transforms"), outputs data according to the amount of movement: "No Movement," "Slow Speed Movement," "Medium Speed Movement," and "High Speed Movement." Redundant data can be reduced through this compression process.



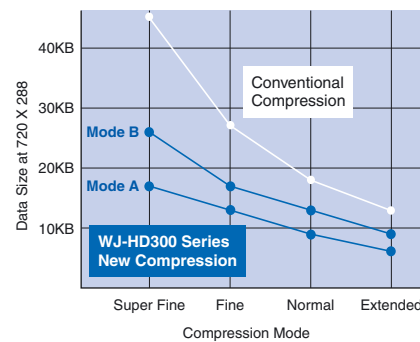
WJ-HD316

WJ-HD309

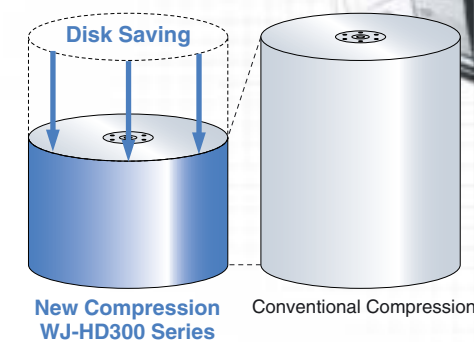
### Picture Quality & Disk Saving

Compared to a conventional algorithm, the data compression ratio has improved approximately 1.5 ~ 2, depending on object and compression mode.

#### Data Size and Compression Mode



#### Comparison



# All in One Solution

### Instinctive Operation

Simple and instinctive, the functional base layout of the WJ-HD300 Series front panel is designed for ease-of-use. Eight (8)\* directly connected Panasonic dome cameras can be controlled from the front panel. Also, the GUI based menu screen enables quick set up for flexible, more complex operations. (\* Six (6) cameras for the WJ-HD309)

#### OPERATION BASE LAYOUT



#### GUI BASE MENU



### Value Added Features

The WJ-HD300 Series is equipped with the latest value added features to satisfy your requirements such as system reliability, operation efficiency, and cost savings.

#### Features include:

- High-density recording: 50 ips\* (100 ips\* @SIF)
- Full rate live multi screen: 50 ips\*
- Simultaneous Live/Rec./Playback/Network
- 16 independent recording profiles
- Disk partitioning: Normal, Alarm, and Copy
- RAID 5 and mirror redundant recording
- Advanced VMD (Video Motion Detector): Area, vector, and duration.
- Various Network Operations: Live, PTZ control, Recording, Playback, and Downloading
- Network and serial open architecture

(\* ips = image per second)

\*The above all photographs were taken for the purpose of explanation ; actual images may differ.



# Superior surveillance made possible by state-of-the-art digital features.

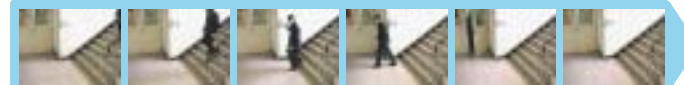


## High-Refresh Rate Recording

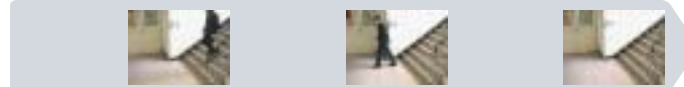
High-speed digital processing enables high-refresh rate recording — to ensure critical moments are not missed.

Max. **25** image per sec. @ 720 x 576 (FRAME/PAL)  
 Max. **50** image per sec. @ 720 x 288 (FIELD/PAL)  
 Max. **100** image per sec. @ 352 x 288 (SIF/PAL)

### WJ-HD300 Series



Conventional

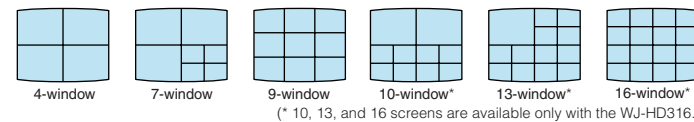


## Full Rate Live Multi-Screen

Even when images from multiple cameras are displayed on a multi-screen, live monitoring can be achieved on all cameras at a full rate of 50 ips (image per second). Experience real-time, full surveillance with full-rate video images.



### Multi-screen in versatile variations



## 16 Independent Recording Profiles

### Flexible recording setup

Independent recording settings (recording mode/recording rate/picture quality) for each camera\* enables flexible setup.  
 (\*16 cameras for the WJ-HD316 and 9 cameras for the WJ-HD309.)

- **Recording mode:** Manual / Schedule / Event / Emergency
- **Recording rate:** Set the ips (image per second) as needed.
- **Picture quality:** Super Fine / Fine / Normal / Extended

### User-friendly setup

The user friendly GUI supports easy and smooth setup while confirming current status graphically.

### GUI Setup Menu

(ips = image per second)

Recording Action PROG 1

Recording Program 1

Resolution: FIELD

Recording Table

CAM	MANUAL REC		SCHEDULE		EVENT(PRE)		EVENT(POST)			
	RATE	QUALITY	RATE	QUALITY	RATE	QUALITY	RATE	QUALITY		
CAM1	AUTO	EXA	1ips	EXA	1ips	FQB	5s	2ips	EXB	30s
CAM2	AUTO	NQA	1ips	NQA	1ips	FQB	5s	2ips	NQB	30s
CAM3	AUTO	FQA	1ips	FQA	1ips	FQB	5s	2ips	FQB	10s
CAM4	AUTO	SFA	1ips	SFA	1ips	SFB	5s	2ips	SFB	20s
CAM5	AUTO	NQA	1ips	EXA	1ips	EXB	5s	1ips	EXB	30s
CAM6	AUTO	FQA	1ips	NQA	1ips	NOB	5s	1ips	NQB	30s
CAM7	AUTO	SFA	1ips	FQA	1ips	FQB	5s	1ips	FQB	30s
CAM8	AUTO	SFA	1ips	NQA	1ips	SFB	5s	1ips	SFB	30s
CAM9	AUTO	EXA	OFF	---	1ips	EXB	5s	1ips	EXB	30s
CAM10	AUTO	NQA	OFF	---	1ips	NOB	5s	1ips	NQB	30s
CAM11	AUTO	FQA	OFF	---	1ips	FQB	5s	1ips	FQB	30s
CAM12	AUTO	SFA	OFF	---	1ips	SFB	5s	1ips	SFB	30s
CAM13	AUTO	EXA	1ips	EXA	1ips	SFB	5s	1ips	EXB	10s
CAM14	AUTO	NQA	1ips	NQA	1ips	SFB	5s	1ips	NQB	30s
CAM15	AUTO	FQA	1ips	FQA	1ips	FQB	5s	1ips	FQB	30s
CAM16	AUTO	SFA	1ips	SFA	1ips	SFB	5s	1ips	SFB	30s

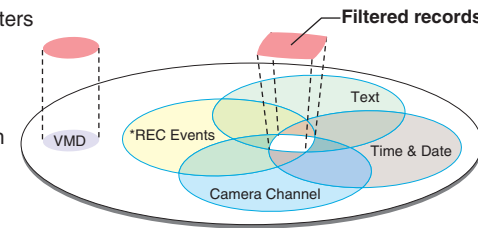
### Actual recording result (Example)

CAM	Manual		Schedule		Event	
	Mode	Rate	Mode	Rate	Mode	Rate
CAM1	1ips	EXA	2ips	EXB	1ips	EXA
CAM2	1ips	NQA	2ips	NQB	1ips	NQA
CAM3	1ips	FQA	2ips	FQB	1ips	FQA
CAM4	1ips	SFA	2ips	SFB	1ips	SFA
CAM5	1ips	EXA	1ips	NQA	1ips	EXA
CAM6	1ips	NQA	1ips	FQA	1ips	NQA
CAM7	1ips	FQA	1ips	SFA	1ips	FQA
CAM8	1ips	NQA	1ips	SFA	1ips	NQA
CAM9	1ips	EXA	OFF	---	1ips	EXA
CAM10	1ips	NQA	OFF	---	1ips	NQA
CAM11	1ips	FQA	OFF	---	1ips	FQA
CAM12	1ips	SFA	OFF	---	1ips	SFA
CAM13	1ips	EXA	1ips	EXB	1ips	EXA
CAM14	1ips	NQA	1ips	NQB	1ips	NQA
CAM15	1ips	FQA	1ips	FQB	1ips	FQA
CAM16	1ips	SFA	1ips	SFB	1ips	SFA

## Instant Search and Playback

### Filtered Search

Various parameters/filters such as time & date, camera channel, REC events, text and VMD enables instant search and playback from mass recorded data.



### \* REC Event filter

REC mode	Emergency, Event, Schedule, Manual
Alarm mode	VMD, Terminal, Command, Video loss

### Filtered Search (Example)

Filter parameters

Time & Date : 9:40-10:10  
 CAM Channel : CAM1 · CAM2 · CAM3 · CAM4  
 REC mode : Event  
 Alarm mode : VMD · TRM · COM · LOSS

CAM1	Manual	VMD	TRM
CAM2	COM		
CAM3	VMD	LOSS	
CAM4	Manual		
CAM5	Manual	VMD	TRM

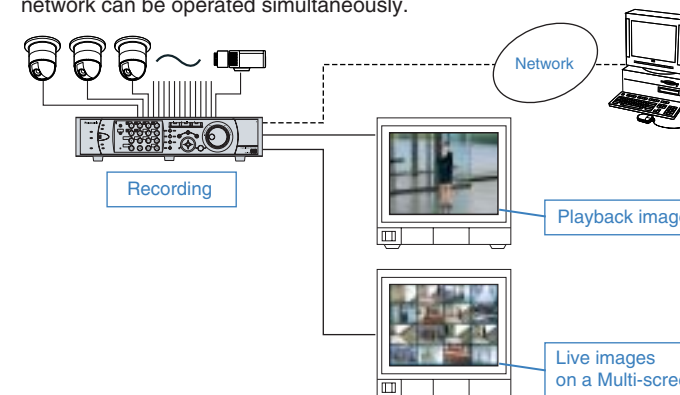
### Thumbnail Display

In addition to search result by "list", "thumbnail" display is available for visual confirmation.



## Live / Recording / Playback / Network Simultaneous Performance

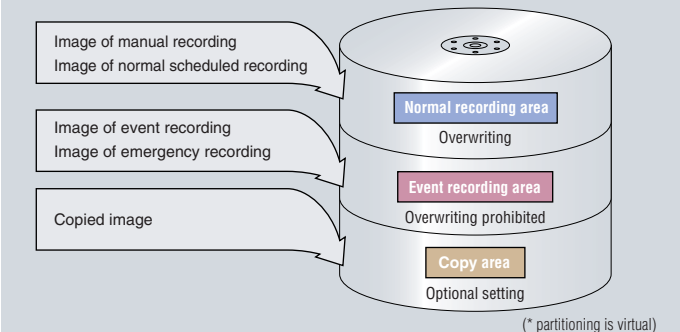
By adopting high speed signal processing, live / recording / playback / network can be operated simultaneously.



## Disk Management

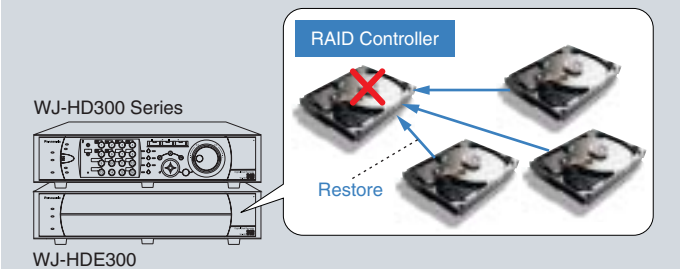
### Hard Disk Partitioning Function\* automatically selects the partition to be recorded.

The hard disk is divided into three partitions: "Normal Recording," "Event Recording," and "Copy." Image data is automatically recorded to the appropriate partition according to the recording mode. For the normal recording partition, the data is overwritten when the capacity is full. The event recording partition prohibits overwriting to protect data. Copy partition prepares data for retrieval to external medium.



### RAID5 / Mirroring Function

RAID5 distributes image data to multiple hard disks in the extension unit. Upon hard disk breakdown, lost data can be restored from other hard disks. When using one WJ-HD300 Series unit, mirroring function is available for data backup.



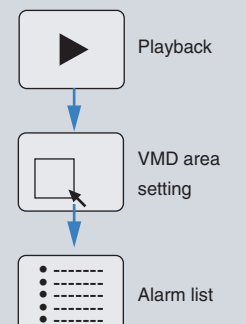
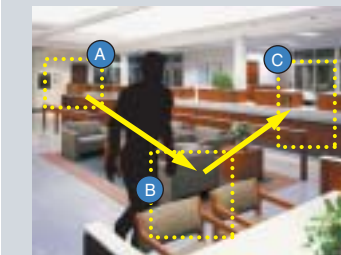
## Advanced VMD

### A new mode is added for sophisticated VMD detection.

### Playback VMD

One VMD area can set one playback image for motion search.

### DETECT VECTOR & DURATION



\*The above all photographs were taken for the purpose of explanation ; actual images may differ. 5

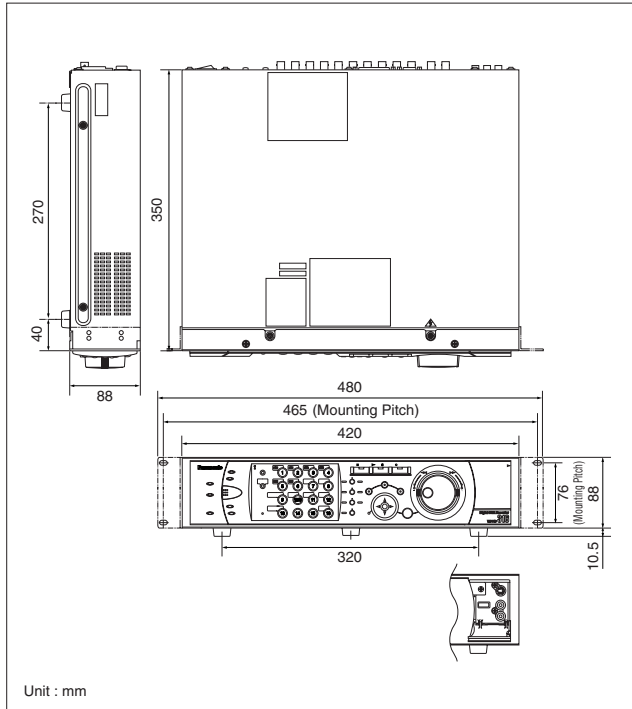
**MAJOR OPERATING CONTROLS: WJ-HD316**

**Front View**

**Rear View**

<ul style="list-style-type: none"> <li>1 Operate Indicator</li> <li>2 Alarm Suspension Indicator</li> <li>3 Alarm Indicator</li> <li>4 Alarm Reset Button</li> <li>5 Error Indicator</li> <li>6 Timer Indicator</li> <li>7 HDD Access Indicators</li> <li>8 Monitor Switch Button</li> <li>9 Shift Button</li> <li>10 Camera Selection Buttons</li> </ul>	<ul style="list-style-type: none"> <li>11 Pan, Tilt, Latest Recorded Image Playback Button</li> <li>12 Zoom, Focus, A - B Repeat Button</li> <li>13 Iris, Listing Button</li> <li>14 Preset, Auto Pan Button</li> <li>15 Stop Button</li> <li>16 Play/Pause Button</li> <li>17 Record Button</li> <li>18 Slow Button</li> <li>19 Search Button</li> <li>20 Setup, Escape Button</li> </ul>	<ul style="list-style-type: none"> <li>21 Busy Indicator</li> <li>22 Arrow Buttons</li> <li>23 Set Button</li> <li>24 Jog Dial</li> <li>25 Shuttle Ring</li> <li>26 Connectors Cover</li> <li>27 Copy Port</li> <li>28 S-Video Output Connector</li> <li>29 Video Output Connector</li> <li>30 Audio Output Connector</li> </ul>	<ul style="list-style-type: none"> <li>1 Audio Input Connectors</li> <li>2 Audio Output Connector</li> <li>3 Video Input Connectors</li> <li>4 Video Output Connectors</li> <li>5 Monitor Output Connector</li> <li>6 Cascade In Connector</li> <li>7 Serial Connector</li> <li>8 Monitor Connector</li> <li>9 Alarm Connector</li> <li>10 Alarm/Control Connector</li> <li>11 PS-Data Ports</li> <li>12 Mode Switches</li> <li>13 RS485 Ports</li> <li>14 Network Port</li> <li>15 Copy Port</li> <li>16 Extra Storage Port</li> <li>17 Power Switch</li> <li>18 Signal Ground Terminal</li> <li>19 Power Cord Inlet</li> </ul>
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**DIMENSIONS: WJ-HD316**



**SPECIFICATIONS: WJ-HD316 [PAL]**

<b>General</b>	
Power Source	220 V - 240 V AC, 50 Hz
Power Consumption	85 W
Ambient Operating Temperature	+5°C - +45°C
Ambient Operating Humidity	Less than 90 %
Dimensions	420 mm (W) x 88 mm (H) x 350 mm (D) (excluding rubber feet and projections)
Weight	9.5 kg
<b>Input/Output</b>	
Video	Video Input Connectors 1 V [P-P] / 75 Ω, with auto termination loop-thru, vertical timing pulse multiplexed, x8 (1 to 8 CH) (BNC) 1 V [P-P] / 75 Ω, with auto-termination loop-thru, x8 (9 to 16 CH) (BNC)
	Cascade Input Connector 1 V [P-P] / 75 Ω (BNC)
	Video Output Connectors 1 V [P-P] / 75 Ω, active loop-thru output, x8 (1 to 8 CH) (BNC)*1 1 V [P-P] / 75 Ω, active loop-thru output, x8 (9 to 16 CH) (BNC)
	Monitor Output Connectors 1 V [P-P] / 75 Ω, x2 (BNC)
	Monitor Output Connector (VGA) RGB output, x1 (15-pin D-sub)
	S-Video Output Connector Y = 1 V [P-P] / 75 Ω, C = 0.3 V [P-P] / 75 Ω, x1 (S-video output connector)
	Video Output Connector (Front Panel) 1 V [P-P] / 75 Ω, x1 (RCA pin)
Audio	Audio Input Connectors -10 dB, 10 KΩ, x4 (RCA pin)
	Audio Output Connectors -10 dB, 600 Ω, unbalanced, x2 (RCA pin)
Others	Expansion Connector High-speed serial interface, 480 Mbps (theoretical value), x1
	Copy Connectors High-speed serial interface, 480 Mbps (theoretical value), x2
	Control Connectors Emergency recording input <sup>2</sup> , additional space warning output <sup>3</sup> (for devices connected to copy connectors), HDD trouble output <sup>3</sup> , camera trouble output <sup>3</sup> , trouble output <sup>3</sup> , electricity failure recovery completion output <sup>4</sup> , time adjust input/output <sup>5</sup> , sequence switching input/output <sup>5</sup> , electricity failure detection input <sup>2</sup> , external recording mode switching <sup>2</sup> (25-pin D-sub), +5 V output <sup>7</sup>
	Alarm Port 1 to 8 CH alarm input <sup>6</sup> , 1 to 16 CH alarm input <sup>2</sup> , 1 to 16 alarm output <sup>3</sup> , alarm recovery input <sup>2</sup> , alarm suspension input <sup>9</sup> (25-pin D-sub)
	RS-485 Ports RS-485 (full duplex/half duplex <sup>8</sup> ), x2 (RJ-11)
	DATA Ports RS-485, x2 (RJ-11)
	SERIAL Connector RS-232C, x1 (9-pin D-sub)
	Ethernet Port 10 Base-T/100 Base-TX (RJ-45)

\*1. When power is not supplied, video output signal was not sent from the unit even if video input signal is supplied.  
 \*2. Non-voltage N.O. Contact, 100 mA, +5 V pull-up \*3. Open collector output, maximum under conditions of 24 V DC and 100 mA or less \*4. High (+12 V, 6.3 mA) \*5. 30 KΩ, 5 V pull-up, -100 mA, N.O. Contact \*6. 5 V pull-up, -100 mA, Non-voltage N.O. Contact input \*7. 240 mA at maximum \*8. Changeable with the mode switch

**DISK DATA REFERENCE CHART**

• PAL colour video signal • Recording images from a single camera channel • 160GB HDD • Auto mode • Manual recording • Audio OFF

**COLOUR FINE** Field Mode (Sampling Pixel Size: 720 x 288)

One Camera ch (ips*)	SFB	FQB	NQB	EXB
0.1	9,530	14,300	19,070	28,610
0.5	1,900	2,860	3,810	5,720
1	950	1,430	1,900	2,860
5	190	280	380	570
6.3	150	220	300	450
12.5	70	110	150	220
25	30	50	70	110
50	10	20	30	50

\*ips (image per second) (Hours)

**COLOUR STD** Field Mode (Sampling Pixel Size: 720 x 288)

One Camera ch (ips*)	SFB	FQB	NQB	EXB
0.1	12,710	19,070	25,430	38,150
0.5	2,540	3,810	5,080	7,630
1	1,270	1,900	2,540	3,810
5	250	380	500	760
6.3	200	300	400	600
12.5	100	150	200	300
25	50	70	100	150
50	20	30	50	70

\*ips (image per second) (Hours)

**COLOUR FINE** SIF Mode (Sampling Pixel Size: 352 x 288)

One Camera ch (ips*)	SFB	FQB	NQB	EXB
0.1	19,070	28,610	38,150	57,220
0.5	3,810	5,720	7,630	11,440
1	1,900	2,860	3,810	5,720
5	380	570	760	1,140
6.3	300	450	600	900
12.5	150	220	300	450
25	70	110	150	220
50	30	50	70	110

\*ips (image per second) (Hours)

**COLOUR STD** SIF Mode (Sampling Pixel Size: 352 x 288)

One Camera ch (ips*)	SFB	FQB	NQB	EXB
0.1	25,430	38,150	50,860	76,300
0.5	5,080	7,630	10,170	15,260
1	2,540	3,810	5,080	7,630
5	500	760	1,010	1,520
6.3	400	600	800	1,210
12.5	200	300	400	610
25	100	150	200	300
50	50	70	100	150

\*ips (image per second) (Hours)

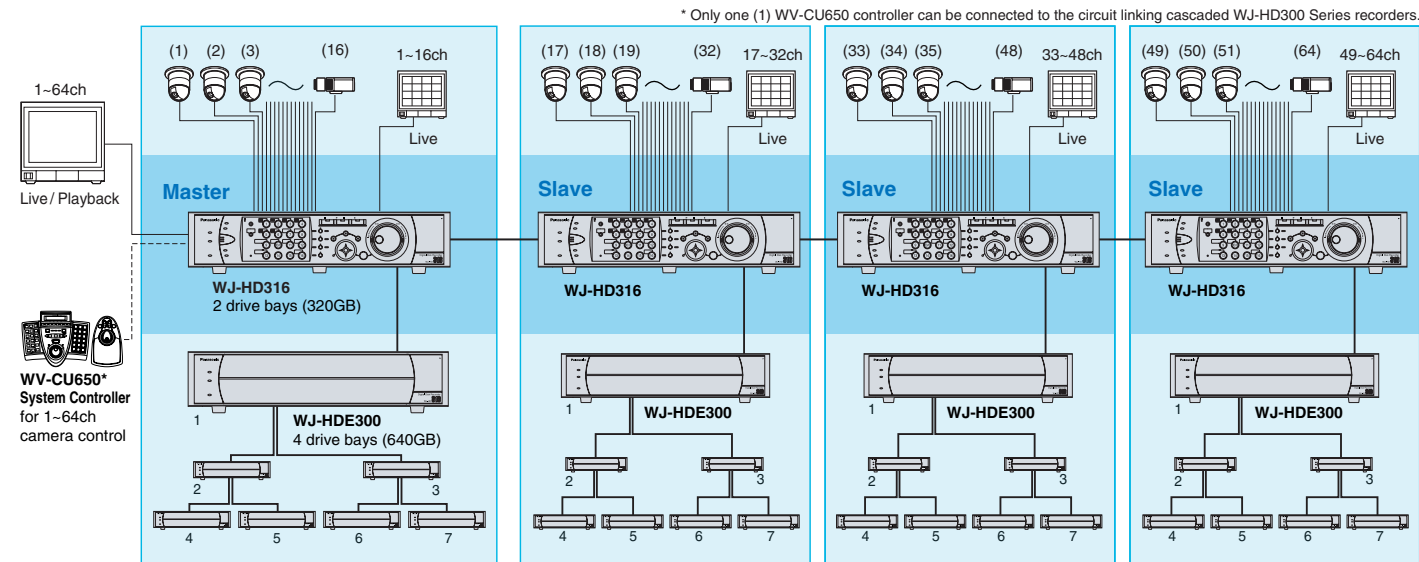
(above figures are approximate, actual recording time may differ depending on picture imaging under the conditions) \*The above all photographs were taken for the purpose of explanation ; actual images may differ. 7



### System Scalability:

#### Viewing cascade connection (up to 4 main units)

Up to four (4) WJ-HD316 units can be cascaded to increase maximum 64 video inputs. All 64 cameras can be switched and viewed in live and playback from the master, while each slave unit has its own live viewing monitor.

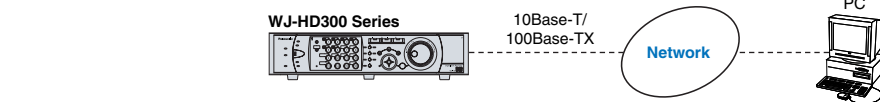


#### Expandable to 4.8 Terabytes (TB)

In addition to a total 320 GB capacity of the main unit WJ-HD316/309, one WJ-HDE300 extension unit provides up to 640 GB. With seven (7) extension units, the maximum capacity can be extended up to 4.8 TB to satisfy long recording requirements.

### Built-In Network Interface:

Network functions include live image monitoring through multi-screen display, camera PTZ control, recording/search/playback, downloading image/log data, e-mail notification, and setup data upload/download.

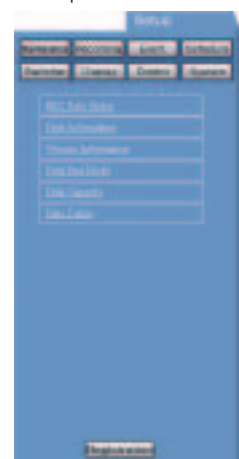


#### Network Operating Menu



**Control Tab**  
The switcher function for live monitoring is operable.

**Setup Tab**  
Setup of WJ-HD300 Series can be performed.



**Cam Tab** Remote control the camera selected on control tab page. (Only for 1-8ch Panasonic PTZ dome cameras)



**HDD Tab** Operation for recorded images such as playback or downloading (saving) to PC.



### System Controller

## WV-CU650



#### KEY FEATURES

• Controller for the WJ-HD300 Series of Digital Disk Recorders

#### Integrated System Control

##### Camera Control

- Detached joystick controls Pan/Tilt and Zoom, allowing seamless tracking.
- Larger numeric keypad provides direct access to cameras.

##### Recorder Control

- Jog Dial and Shuttle Ring for smoother control
- Dedicated Record, Play, and Search buttons

##### Switcher Control

- Image switching and sequencing buttons for Matrix System150

#### Easy to Operate While Focused on Surveillance

##### Universal Design for Right or Left Hand Use

- Detached joystick pad
- Layout with Jog Dial and Shuttle Ring in centre

##### More Comfortable Extended Surveillance

- Soft padding on joystick
- Adjustable joystick height for large or small hands
- Designed with a low centre of gravity and adjustable angle to minimize strain

##### Instinctive Operation

- Cockpit style button layout

#### System Management Capability

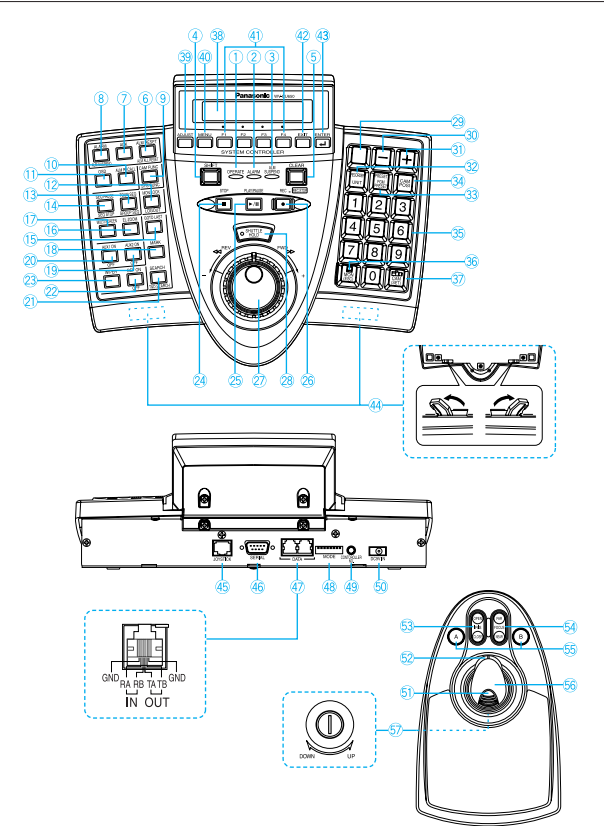
- User level management for registered users
- User assignable buttons: four in main unit plus three in palm rest
- Setup data can be transferred via RS485 to another WV-CU650.

#### SPECIFICATIONS (PAL) (for WJ-HD300 Series)

<b>Power Source</b>	9 V DC, 300 mA (using the supplied AC adapter)
<b>Power Source (supplied AC adapter)</b>	230 V AC, 50 Hz, 150 mA
<b>Data Output/Input Port</b>	6-conductor modular jack (RS-485, Full duplex) x2
<b>Serial Port</b>	9-pin D-sub connector
<b>Controller Number</b>	1 to 8 (rotary switch)
<b>Ambient Operating Temperature</b>	-10°C to +50°C
<b>Unit Number Selection</b>	Up to 16 (PS-Data)
<b>Monitor Number Selection</b>	1 to 2
<b>Camera Number Selection</b>	1 to 256 (up to 16 WJ-HD316)
<b>Dimensions (W x H x D)</b>	Main Unit: 290 x 111 x 221 mm 3D Joystick Unit: 134 x 146 x 218 mm
<b>Weight (without the AC adapter)</b>	Main Unit: 1.3 kg 3D Joystick Unit: 0.8 kg

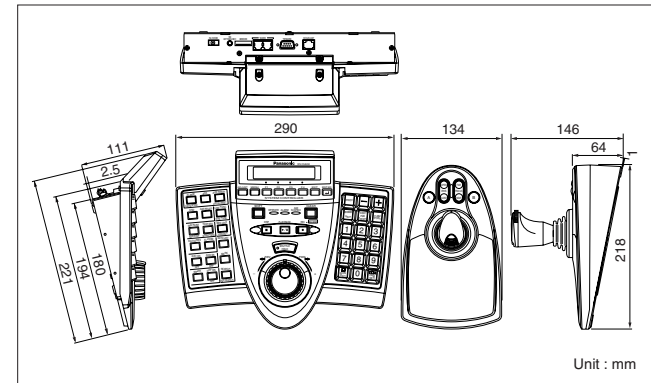
### The Surveillance Cockpit for Total Control of the WJ-HD300 Series

#### MAJOR OPERATING CONTROLS



- 1 Operation Indicator
- 2 Alarm Indicator
- 3 Alarm Suspend Indicator
- 4 Shift Button
- 5 Clear Button
- 6 Alarm Reset/Alarm All Reset Button
- 7 Alarm Acknowledge Button
- 8 Alarm/Alarm Suspend Button
- 9 Camera Function/System Function Button
- 10 Alarm Recall Button
- 11 On-Screen Display Button
- 12 Monitor Lock/Logout Button
- 13 Tour Sequence/Group Sequence Button
- 14 Sequence Pause/Sequence Stop Button
- 15 Go To Last Button
- 16 Electronic Zoom Button
- 17 Multiscreen Selection Button
- 18 Mark Button
- 19 Auxiliary 2 ON/OFF Button
- 20 Auxiliary 1 ON/OFF Button
- 21 Shift Button and Date Search Button
- 22 Defroster Button
- 23 Wiper Button
- 24 Stop Button
- 25 Play/Pause Button
- 26 Recording Button
- 27 Shuttle Ring (Outside)/JogDial (Inside)
- 28 History Hold Button
- 29 Preset/Program Preset Button
- 30 Camera Position Button
- 31 Recorder/Unit Selection Button
- 32 Recorder/Program Preset Button
- 33 Camera Position Button
- 34 Numeric Buttons
- 35 Monitor/Escape Button
- 36 Camera/Set Button
- 37 LCD
- 38 Adjustment Button
- 39 Menu Button
- 40 Function Buttons
- 41 Exit Button
- 42 Enter Button
- 43 Joystick Connector
- 44 Feet
- 45 Data Ports
- 46 Mode Selection Switches
- 47 Controller Number Switch
- 48 DC 9V Input Jack
- 49 Serial Port
- 50 Joystick Connector
- 51 DC 9V Input Jack
- 52 Mode Selection Switches
- 53 Controller Number Switch
- 54 DC 9V Input Jack
- 55 Serial Port
- 56 Joystick Connector
- 57 DC 9V Input Jack
- 58 Mode Selection Switches
- 59 Controller Number Switch
- 60 DC 9V Input Jack
- 61 Serial Port
- 62 Joystick Connector
- 63 DC 9V Input Jack
- 64 Mode Selection Switches
- 65 Controller Number Switch
- 66 DC 9V Input Jack
- 67 Serial Port
- 68 Joystick Connector
- 69 DC 9V Input Jack
- 70 Mode Selection Switches
- 71 Controller Number Switch
- 72 DC 9V Input Jack
- 73 Serial Port
- 74 Joystick Connector
- 75 DC 9V Input Jack
- 76 Mode Selection Switches
- 77 Controller Number Switch
- 78 DC 9V Input Jack
- 79 Serial Port
- 80 Joystick Connector
- 81 DC 9V Input Jack
- 82 Mode Selection Switches
- 83 Controller Number Switch
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- 85 Serial Port
- 86 Joystick Connector
- 87 DC 9V Input Jack
- 88 Mode Selection Switches
- 89 Controller Number Switch
- 90 DC 9V Input Jack
- 91 Serial Port
- 92 Joystick Connector
- 93 DC 9V Input Jack
- 94 Mode Selection Switches
- 95 Controller Number Switch
- 96 DC 9V Input Jack
- 97 Serial Port
- 98 Joystick Connector
- 99 DC 9V Input Jack
- 100 Mode Selection Switches
- 101 Controller Number Switch
- 102 DC 9V Input Jack
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#### DIMENSIONS

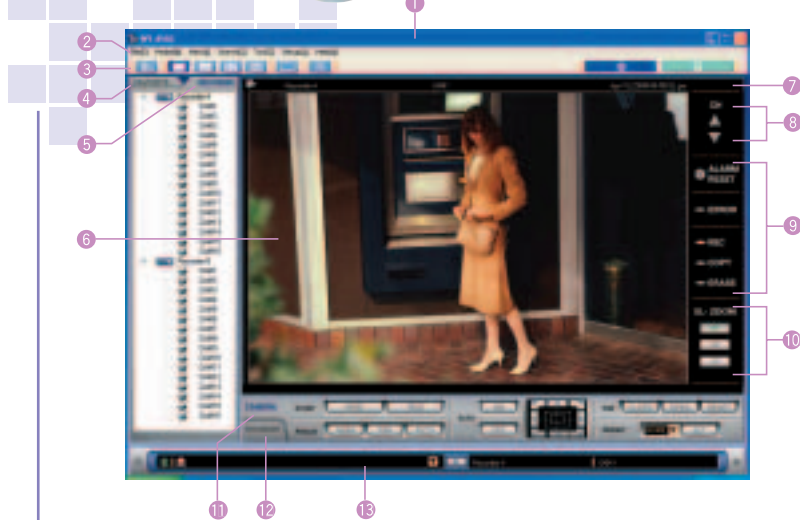


### Disk Recorder Management Software

## WV-AS60

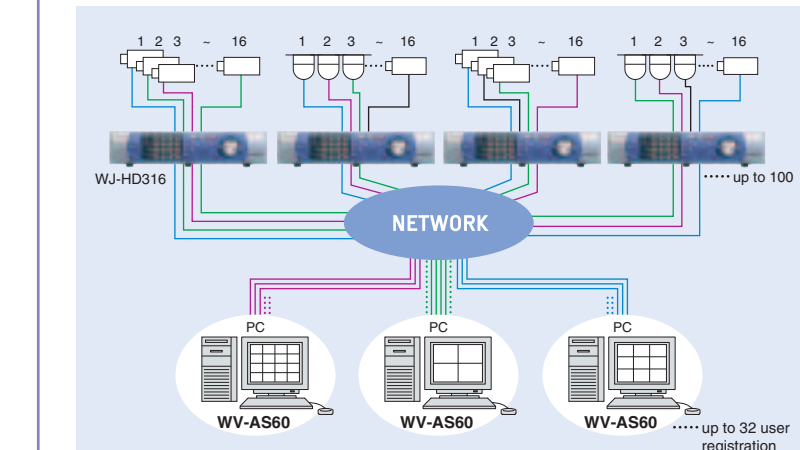


### The Software for Integrated Management of Up to 100 WJ-HD300 Series



- 1 Title Bar
- 2 Menu Bar
- 3 Tool Bar
- 4 FAVORITE Tab
- 5 RECORDER Tab
- 6 Image Display Area
- 7 Information Display Area
- 8 Channel Search Buttons
- 9 Recorder Status Display Area
- 10 Electronic Zoom Operation Area
- 11 Camera Control Panel
- 12 Recorder Control Panel
- 13 Status Bar

#### SYSTEM DIAGRAM



#### SPECIFICATIONS (PAL)

<b>WJ-HD300 Series Registration Capacity</b>	up to 100 sets
<b>User Registration Capacity</b>	up to 32 users
<b>User Types</b>	5 types
<b>Schedule Registration Capacity</b>	up to 400 schedules
<b>Favorite Registration Capacity</b>	up to 500
<b>Simultaneous Downloads</b>	up to 10 accesses
<b>Simultaneous Camera Image Displays</b>	up to 16 cameras
<b>Simultaneous File Playbacks</b>	up to 4 files

\*In the case of several WJ-HD300 Series software, use a PC in which 4 WV-AS60 are installed for simultaneous access to 1 recorder. (Simultaneous access control depends on the recorder.)

#### OPERATING ENVIRONMENT

This PC software can be installed in PCs with the following environments

<b>OS</b>	Microsoft® Windows® 2000 Professional SP4 Microsoft® Windows® XP Professional or Home Edition SP1
<b>Computer</b>	IBM PC / AT Compatible
<b>CPU</b>	Pentium® 4, 1.4 GHz or above
<b>Memory</b>	512MB or above
<b>Hard Disk Capacity</b>	About 40MB level is required for application installation.* (Full-colour environment is recommended) (1024 x 768 pixel resolution level or above, HIGH colour 16 bits or above)
<b>Interface</b>	10 / 100Mbps network interface card installed
<b>Web Browser</b>	Microsoft® Internet Explorer 6.0 SP1

\*It is necessary to prepare space to receive files from the recorder that is separate from the application installation.

\*Trademark and registered trademark  
 • Microsoft®, Windows® are registered trademarks of U.S. Microsoft Corporation or the corresponding Microsoft Corporation of another country.  
 • Intel® and Pentium® are registered trademarks or trademarks of Intel Corporation of the U.S. or the corresponding Intel Corporation of another country and subsidiary companies.  
 • Adobe®, Adobe logo, and Acrobat® are trademarks of Adobe Systems Incorporated (Adobe Systems Co.).  
 • Other company names and product names are trademarks or registered trademarks of the respective companies.



**STANDARD PRODUCT CONFIGURATIONS**

**OPTIONAL COMPONENTS & ACCESSORIES**

Digital Disk Recorders  
**WJ-HD316** (16ch)  
**WJ-HD309** (9ch)



- Built-in 160GB HDD unit, and 1 drive bay for optional HDD unit
- Built-in an Ethernet port

Extension Unit  
**WJ-HDE300**  
 (4 drive bays for optional HDD units)



System Controllers  
**WV-CU360CJ**  
**WV-CU650**

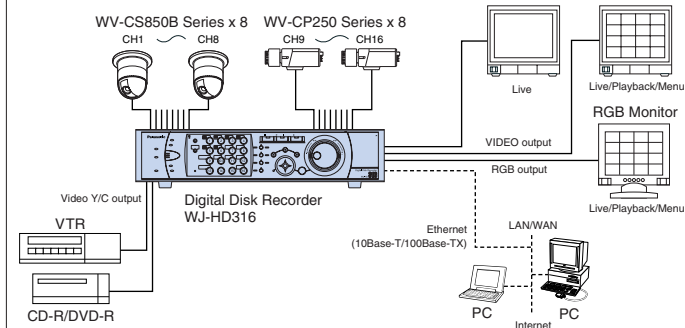


Disk Recorder Management Software  
**WV-AS60**

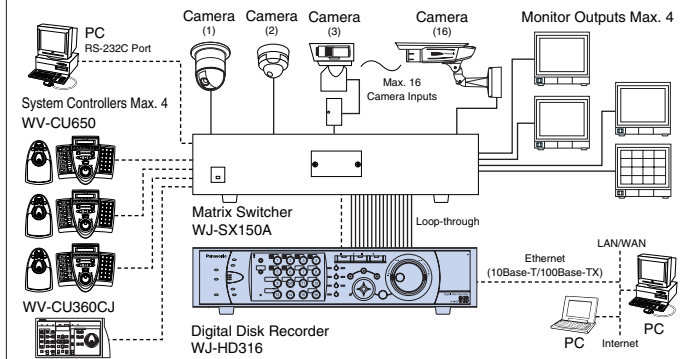


**SYSTEM EXAMPLES**

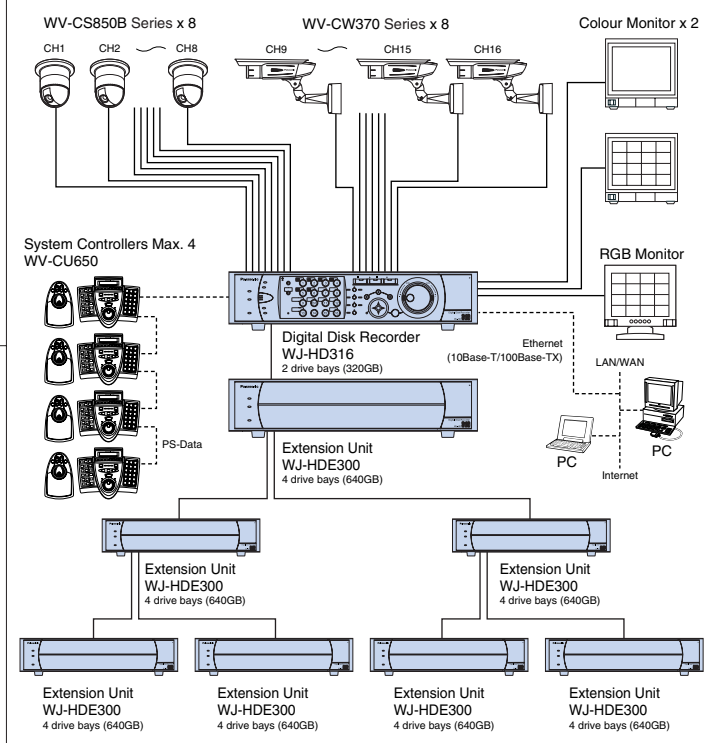
**1 Basic System Configurations**



**2 With optional Panasonic Matrix System 150**



**3 Up to 4.8TB Capabilities with Optional Extension Unit & HDDs**



**OPTIONAL SURVEILLANCE EQUIPMENTS**

**COLOUR SURVEILLANCE CAMERAS**

Weather Proof & Vandal Resistant  
 Colour Dome Cameras  
**WV-CW860A Series**



**SDII**

Super Dynamic II  
 Colour Dome Cameras  
**WV-CS850B Series**



**SDII**

Weather Proof  
 Super Dynamic II Colour Cameras  
**WV-CW370 Series**



**SDII**

Vandal Proof  
 Super Dynamic II Colour Cameras  
**WV-CW470A Series**



**SDII**

Colour Dome Camera  
**WV-CF224**



1/2-type CCD  
 Colour Surveillance Cameras  
**WV-CL920A Series**



(Lens: option)

Super Dynamic II  
 Colour Surveillance Cameras  
**WV-CP470 Series**



**SDII**

(Lens: option)

Compact Colour  
 Surveillance Cameras  
**WV-CP250 Series**



(Lens: option)

1/3-type DSP  
 Colour CCD Cameras  
**WV-CP240 Series**



(Lens: option)

**MATRIX SYSTEM 150**



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

- 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.

**DISTRIBUTED BY:**

**Panasonic System Solutions Company**  
**Matsushita Electric Industrial Co., Ltd.**  
 4-3-1, Tsunashima-higashi, Kohoku-ku, Yokohama,  
 223-8639, Japan  
 Tel 81(0)45-540-5769  
 Fax 81(0)45-540-5773  
 URL <http://panasonic.co.jp/psc/cctv/en/index.html>

**Panasonic**

Panasonic is the brandname of Matsushita Electric.  
 Printed in Japan WJ-JHHD300C(2N-717B)