

Panasonic
ideas for life

Digital Disk Recorder
WJ-HD220



Network Capability Standard
Simple, Dependable Hard Disk Recording



A Wide Variety of Basic Features, Plus Smoother Control from Your PC.

High image quality with minimal degradation no matter how many times you record and play back. No need to change and store tapes, so costs are lower. Quick retrieval of exactly the scenes you want. Plus, full-featured surveillance capability. This advanced hard disk storage system makes recording simple, and easy.



Recording Live Monitoring

Up to 420-Day complete input from up to eight cameras (NORMAL 720H x 286V Mode, Extended Mode, 0.1 FPS)

With a 120GB hard disk as standard equipment, you have enough storage for up to 420-day (10,120 hours) of video input from eight cameras.* Options include the addition of a second 120GB hard disk, for up to 240GB of storage. Once installed, addressing is automatic. No additional operations are required.

*See the DISK DATA REFERENCE CHART at the foot of this page.

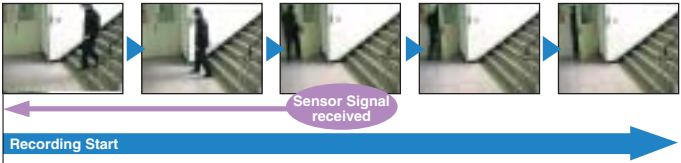
Twice as long in SIF Mode

The WJ-HD220 also supports SIF (352H x 286V) Mode, which reduces image data volume by half, thus doubling the number of days / hours of data that the hard disk can store.

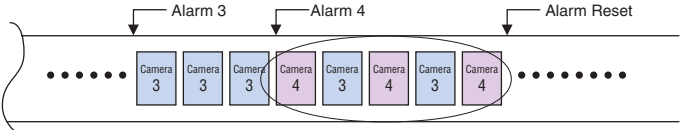
Cache captures images before sensor signals movement

Pre-Alarm Screen

This feature allows you to view images from up to five seconds before alarm signals are received from external sensors or motion detectors.

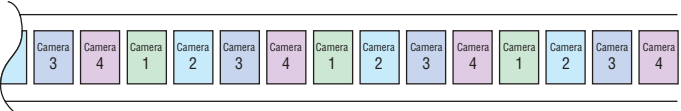


When multiple alarms are received, images from all alarmed cameras are captured.

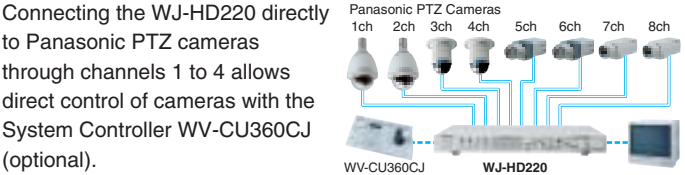


Time-lapse Images

This feature allows you to pre-set each camera to capture images at pre-determined intervals.

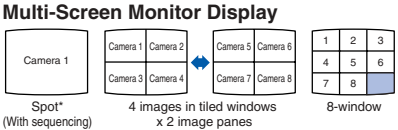


Coaxial cabling supports direct control of cameras



Choose Multi-screen or Spot Monitor / or Both

On the back of the WJ-HD220 you will find two monitor output connectors, one for a Spot Monitor and one for a Multi-screen Monitor. The Multi-Screen Monitor allows you to view images from several cameras at once.



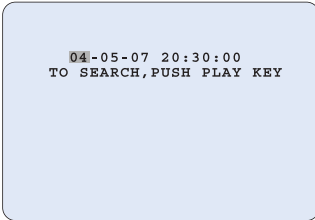
*Spot Monitor can be used to view input from other cameras.

Search & Playback

Instantly retrieve the scenes you want to see

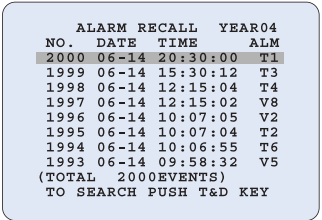
Direct (Time & Date) Search

Enter year, month, day and time. The system plays back the closest image to the date and time you specify.



List Search

Display list of times when alarm signal was received. Just click on the one you want to play back.



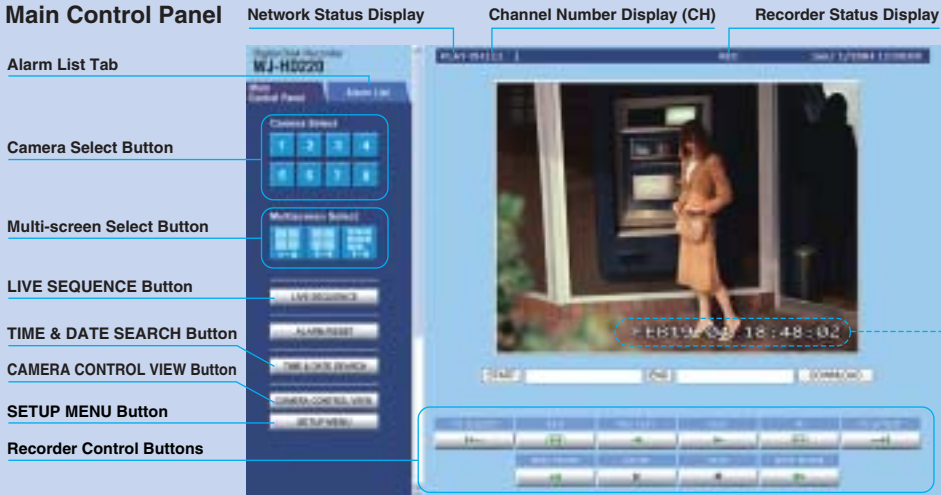
Easy back-up with a VTR

The front panel is equipped with a video output connector. To copy images stored in the WJ-HD220, hook up a VTR, video camera or printer.



Network

The WJ-HD220 is equipped with a 10Base-T/100Base-TX interface as standard equipment, allowing remote control from a Microsoft® Internet Explorer browser via the Internet, an LAN or WAN.



Standard Network Features

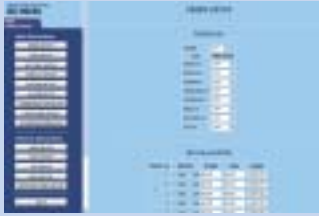
- Live Monitoring
- Recording
- Playback recorded image
- Camera Control
- Time & Date / List Search
- Image storage on a PC
- Alarm notification
- Setup

Embedded date and time stamp display

Embedding the date and time in the JPEG image enhances reliability. When used as evidence, it strengthens criminal cases.

Setup is Simple

Just click on the setup menu button and the menu opens. The menu makes it easy to select the WJ-HD220 and network settings you need.



Alarm List Search Feature

Use date, time and camera channel to quickly search a list of up to 9,999 alarms.



FTP Viewer Software WV-AS20 (optional)

Installation of the optional WV-AS20 software allows you to download image data stored in the WJ-HD220.

- Up to 10 WJ-HD220 Digital Disk Recorders can be registered.
- Images can be automatically downloaded at pre-set times.
- The zoom feature enlarges images up to 5x.



Loaded with Handy Surveillance Features

Multi-language Capability

The OSD Setup, installation menus and HTML can be displayed in seven languages: English, German, French, Italian, Spanish, Russian*, and Chinese*.

*Russian and Chinese in HTML only

Simultaneous Recording, Playback, Live or Network

Recording continues during playback, live monitoring, and network operations.

Electronic Zoom

Both played back and live images can be zoomed 2x or 4x* to examine details.

*2x only in SIF Mode

Motion Detector Feature

Sensor detects movement in the area under surveillance and automatically displays the scene.

DISK DATA REFERENCE CHART PAL Colour Video Signal, 120GB, Audio Signal: Off

NORMAL Mode													
Recording Mode	Hours (Days)	24 (1)	48 (2)	72 (3)	96 (4)	120 (5)	180 (7.5)	240 (10)	480 (20)	960 (40)	1,200 (50)	1,440 (60)	4,320 (180)
Extended	FPS	25.0	—	12.5	—	8.3	5.0	3.5	2.0	1.0	—	0.5	—
Normal	FPS	25.0	12.5	—	8.3	6.2	3.5	2.0	1.0	—	—	0.5	0.1
Fine	FPS	25.0	12.5	8.3	—	6.2	3.5	2.0	1.0	—	—	0.5	0.1
Super Fine	FPS	25.0	12.5	8.3	6.2	5.0	—	2.0	1.0	—	0.5	—	—

(FPS : Frame Per Second)

SIF Mode													
Recording Mode	Hours (Days)	48 (2)	72 (3)	96 (4)	120 (5)	180 (7.5)	240 (10)	480 (20)	960 (40)	1,200 (50)	1,440 (60)	2,160 (90)	8,640 (360)
Extended	FPS	—	25.0	—	12.5	—	8.3	3.5	2.0	—	1.0	—	0.1
Normal	FPS	25.0	—	—	12.5	8.3	6.2	2.0	—	—	1.0	—	0.1
Fine	FPS	25.0	—	—	12.5	8.3	6.2	2.0	—	—	1.0	—	0.1
Super Fine	FPS	25.0	—	12.5	8.3	6.2	5.0	2.0	—	1.0	—	0.5	—

(FPS : Frame Per Second)

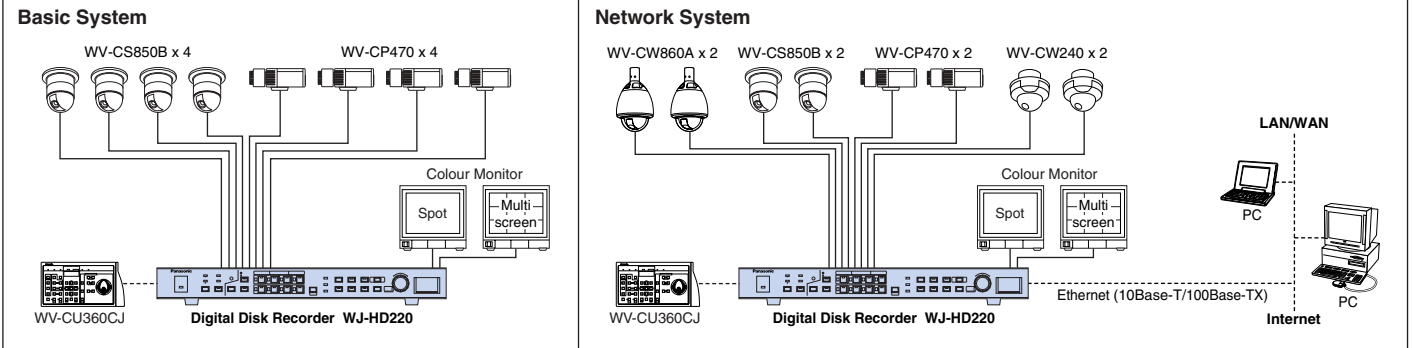
NORMAL Mode													
Capture Rate	FPS	25	12.5	8.3	6.2	5.0	3.5	2.0	1.0	0.5	0.1		
Extended	Hours	40	80	120	160	200	280	480	1,010	2,020	10,120		
Normal	Hours	30	65	100	135	165	230	400	840	1,680	8,440		
Fine	Hours	30	60	90	120	150	210	360	750	1,510	7,580		
Super Fine	Hours	20	45	70	95	120	165	290	600	1,210	6,060		

(Hours)

SIF Mode													
Capture Rate	FPS	25	12.5	8.3	6.2	5.0	3.5	2.0	1.0	0.5	0.1		
Extended	Hours	80	160	240	320	400	560	970	2,020	4,050	20,250		
Normal	Hours	65	135	200	270	330	470	810	1,680	3,370	16,880		
Fine	Hours	60	120	180	240	300	420	720	1,510	3,030	15,170		
Super Fine	Hours	45	95	145	190	240	330	580	1,210	2,420	12,130		

(above figures are approximately, actual recording time may differ.)

SYSTEM EXAMPLES



All photographs and menus are simulated and shown for the purpose of explanation. Actual images may differ.

MAJOR OPERATING CONTROLS

Front View

- ① Operate Indicator
- ② Alarm Indicator
- ③ Alarm Suspension Indicator
- ④ Alarm Reset Button
- ⑤ Timer Indicator
- ⑥ Remote Indicator
- ⑦ Lock Button
- ⑧ Daylight Saving Time
- ⑨ On Screen Display Button
- ⑩ Monitor Selection Button
- ⑪ Sequence Button
- ⑫ Camera Selection Buttons
- ⑬ Multiscreen Selection Button
- ⑭ HDD Access Indicator
- ⑮ FULL Indicator
- ⑯ Error Indicator
- ⑰ Stop and Setup/Escape Button
- ⑱ Playback Button
- ⑲ Recording Button
- ⑳ Recording Stop Button
- ㉑ Alarm Search Button
- ㉒ Step Playback & Down Button
- ㉓ Skip Playback & Up Button
- ㉔ Time and Date Search Button
- ㉕ JogDial
- ㉖ Audio Out
- ㉗ Video Out
- ㉘ Audio Input Connector
- ㉙ Audio Output Connector
- ㉚ Video Input Connector
- ㉛ Video Output Connector
- ㉜ Spot Output Connector
- ㉝ Multiscreen Output Connector
- ㉞ Alarm/Remote Port
- ㉟ RS232C Port
- ㊱ Mode Setup DIP Switch

Rear View

- ㉚ 10Base-T/100Base-TX
- ㉛ Data Port
- ㉜ Cooling Fan
- ㉝ Power Switch
- ㉞ Signal Ground Terminal
- ㉟ Power Cord

Alarm/Remote Connection

① Alarm Reset In ② Alarm In 1 ③ Alarm In 2 ④ Alarm Recovery Out 1 ⑤ Alarm Recovery Out 2 ⑥ Alarm Out 1 ⑦ Alarm Out 2	⑧ Disk End Out ⑨ Warning Out ⑩ Alarm In 3 ⑪ Alarm In 4 ⑫ REC Status Out ⑬ Time Adjust In ⑭ Time Adjust Out	⑮ Alarm In 5 ⑯ Alarm In 6 ⑰ Alarm In 7 ⑱ Alarm In 8 ⑲ Signal GND ⑳ Signal GND ㉑ Play Status Out ㉒ EXT REC MODE In ㉓ No Connection ㉔ Sequence In ㉕ Sequence Out
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SPECIFICATIONS PAL

General	
Power Source Required	220 V - 240 V AC, 50 Hz
Power Consumption	45 W
Ambient Operating Temperature	+5°C - +45°C
Ambient Operating Humidity	Less than 85 %
Dimensions	420 mm (W) x 44 mm (H) x 350 mm (D)
Weight	5.2 kg
Input	
Video Input	1.0 V[p-p]/75 Ω Composite video signal with 75 Ω Automatic Termination / Looping through (x8)
Audio Input	-10 dB 10 kΩ unbalanced, RCA standard jack
Image Process	
Compression System	JPEG
Pixel Rate	Normal; 720H x 286V (Effective pixels 656H x 272V) SIF; 352H x 286V
Refresh Rate	25 FPS maximum
Output	
Video Output	1.0 V[p-p]/75 Ω Composite video signal/Looping through (x8)
Video Output Front Panel	1.0 V[p-p]/75 Ω Composite video signal (x1)
Audio Output	-10 dB 600 Ω unbalanced, RCA standard jack (x1)
Audio Output Front Panel	-10 dB 600 Ω unbalanced, RCA standard jack (x1)
Spot Monitor Output	1.0 V[p-p]/75 Ω Composite video signal (x1)
Multiscreen Monitor Output	1.0 V[p-p]/75 Ω Composite video signal (x1)
Control Port	
Alarm/Remote Port	25-pin Full Pitch D-sub connector (x1) Alarm Input 1-8, Alarm Reset Input, EXT REC Input, Time Adjust Input, Sequence Input: Low-active, Non-voltage N.O. Contact, ≥100 ms Alarm Recovery Output 1, Disk End Status Output, Time Adjust Output, Warning Output, REC Status Output, Sequence Output: Low-active, Open-collector, 24 V DC 100 mA max. Alarm Output 1, Play Status Output: Low-active, Open-collector, 12 V DC 100 mA max. Alarm Output 2: High-active, 12 V 4.7 kΩ Alarm Recovery Output 2: High-active, 12 V DC 220 Ω
RS-485 (PS • Data)	6-conductor modular jack (RJ-11)
RS-232C	9-pin D-sub connector
10/100BASE-TX Port	10Base-T and 100Base-TX, 8-conductor modular jack (RJ-45) Protocol Installed: TCP/IP, HTTP, FTP, SMTP, SNMP, DNS, DDNS Security: Password-protected
Hard Disk Drive	
Built-in	120 GB (x1)
Extension	Optional 1 unit, available using built-in bracket

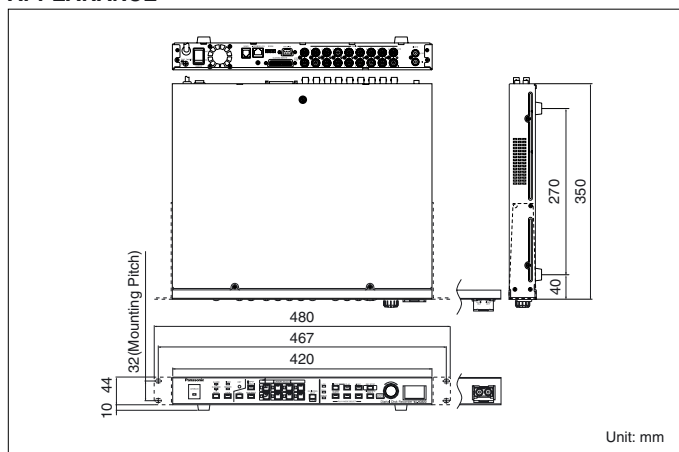
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Important – Safety Precaution: carefully read the operating instructions and installation manual before using this product.

• All photographs and menus are simulated and shown for the purpose of explanation. Actual images may differ.

• Weights and dimensions are approximate. • Specifications are subject to change without notice. • These products may be subject to export control regulations.

APPEARANCE



OPTIONAL COMPONENTS & ACCESSORIES

Weather Proof & Vandal Resistant Colour Dome Cameras WV-CW860A Series SDII	Super Dynamic II Colour Dome Cameras WV-CS850B Series SDII	FTP Viewer Software WV-AS20
Vandal Proof Super Dynamic II Colour Cameras WV-CW470A Series SDII	Vandal Proof Colour Cameras WV-CW240 Series SDII	System Controller WV-CU360CJ
Super Dynamic II Colour Surveillance Cameras WV-CP470 Series SDII (Lens: option)	1/3-type DSP Colour CCD Cameras WV-CP240 Series SDII (Lens: option)	PS•Data

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