Panasonic
ideas for life

High Quality, Efficiency, and Reliability.
Panasonic's Mega Pixel Colour Network Camera Delivers Everything You Need.

Mega Pixel Colour Network Cameras
WV-NP1000
Series

MEGA Pixel

MPEG-4/JPEG

day/night

Auto Back Focus

MPEG-4 & JPEG Dual Stream Capable. For high-level 24-hour surveillance, the WV-NP1000 Series Mega Pixel Colour Network Cameras are ideal.

Panasonic introduces the new WV-NP1000 Series Mega Pixel Colour Network Cameras with a 1.25 Mega Pixel CCD. Dual streaming delivers both seamless motion MPEG-4 and high precision JPEG. Just as you would expect from Panasonic, the first to offer Auto Back Focus, this camera is also loaded with advanced features such as the SD Memory Card backup for network problems. With 600 TV lines of horizontal resolution, you can always count on high quality analogue output. Add the combination of networked operation convenience and high reliability, there's no question the WV-NP1000 Series are ideal for bank, office building, shopping mall, airport, and school surveillance applications, as well as other high-quality image transmission services.

(Lens : optional)

Wider Area, Higher Resolution

Equipped with Progressive Scan 1.25 Mega Pixel CCD

This 1,280 x 960 pixel CCD uses progressive scan to smoothly reproduce images of moving subjects. Plus, when comparing its 1,280 x 960 JPEG images with conventional VGA (640 x 480) JPEG images, the JPEG image is able to cover an area four times wider.

MEGA Pixel

Four Times Wider Area (Same Camera Position)
One camera covers a wider area.

Conventional (VGA 640 x 480)

WV-NP1000 Series (1,280 x 960)

Four Times Higher Resolution (Shooting Same Area)
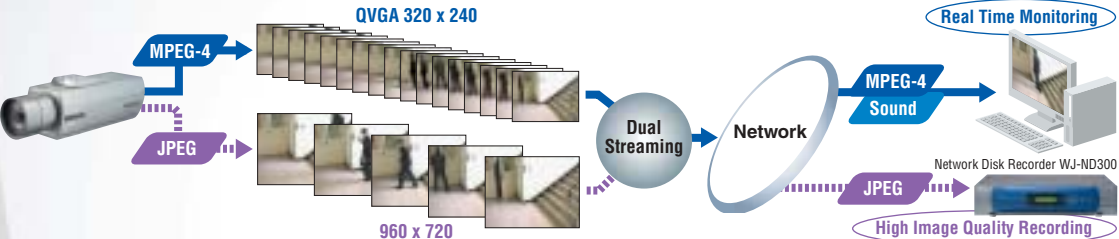Enlarged images show no loss of image quality, enabling superior electronic zoom.

Conventional   WV-NP1000 Series   Electronic Zoom

Real Time Monitoring & High Image Quality Recording

MPEG-4/JPEG Dual Streaming

This camera allows real time monitoring in MPEG-4 (QVGA 320 x 240: Max. 25 fps) while simultaneously shooting high-resolution JPEG (960 x 720: Max. 7.5 fps) images. While supporting a highly efficient network environment, it also provides high reliability required by surveillance applications.

MPEG-4/JPEG

QVGA 320 x 240

MPEG-4

JPEG

960 x 720

Dual Streaming → Network

Real Time Monitoring

MPEG-4 Sound

Network Disk Recorder WJ-ND300

JPEG

High Image Quality Recording
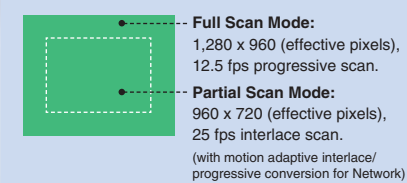
Full Rate MPEG-4/JPEG

Transmits at High Frame Rate

In Partial Scan Mode, this camera can capture VGA (640 x 480) MPEG-4/JPEG images and output them over your network at 25 fps. (For details, please see Frame Rate Chart.)

Two CCD Scan Modes

- **Full Scan Mode:**
  1,280 x 960 (effective pixels), 12.5 fps progressive scan.
- **Partial Scan Mode:**
  960 x 720 (effective pixels), 25 fps interlace scan.
  (with motion adaptive interlace/ progressive conversion for Network)

You can choose the best-fit image size from a rich array of alternatives.

Compression Format / Scan Mode		JPEG		MPEG-4	
		VGA 640 x 480	QVGA 320 x 240	VGA 640 x 480	QVGA 320 x 240
Full Scan Mode (Max. 12.5 fps*)	1,280 x 960	640 x 480	320 x 240	640 x 480	320 x 240
Partial Scan Mode (Max. 25 fps*)	960 x 720	640 x 480	320 x 240	640 x 480	320 x 240

*Camera frame rate, not transmitting over network, always available for analogue surveillance.

Advanced 24-Hour Surveillance Features

Day/Night Switching for 24-hour Surveillance

As the area around the camera darkens, it automatically switches to black and white mode. Then, when the lighting brightens, it automatically switches back to full-colour mode, allowing use of a single camera for 24-hour surveillance.

Day   Night

Day/Night Switching

In Lighting as Low as 0.06 lux (B/W mode, at F1.4 lens)

When using the optional F1.4 lens, colour mode captures clear images in lighting as low as 1.0 lux. In black and white mode, the lighting can be as low as 0.06 lux. Sensitivity can be electronically enhanced up to 32x.

600 TV Lines Horizontal Resolution (Full Scanning Mode, in Colour)

Analogue output resolution is 600 TV lines in colour mode, 780 TV lines in black and white.

Auto Image Stabilizer Reduces Image Blurring

The Auto Image Stabilizer feature automatically adjusts for camera shake caused by strong wings or vibration from passing trains or trucks, keeping images clear and easy to read.

Conventional   WV-NP1000 Series

Auto Back Focus for Perfect Focus 24 Hours a Day

This features adjusts the position of the CCD as the camera switches to black and white mode, keeping focus sharp and clear. In addition, one-push Auto Focus eliminates the need for manual focus adjustment during installation. Focus can also be adjusted remotely, using the setup menu or optional controller.

Camera Head
Lens
Day/Night Mechanism
Whole CCD Printed Circuit Board moves to focus point

Scene Change Detection Alerts You to Interference with Cameras

An alarm notification is sent if the camera is interfered with (i.e. covered, spray painted, lens removed, or camera direction changed).

Alarm
Sprayed

Motion Detection Warns of Movement in the Area Under Surveillance

You can set up to four search areas as well as sensitivity and direction. An alarm signal is transmitted when motion is detected.

Privacy Zone Masking for Up to Eight Locations

Up to eight zones can be hidden when the area under surveillance includes private areas.

Sound Detection Features

Each camera is equipped with a high-sensitivity microphone, allowing for complete monitoring of the situation (ITU-T Standard G.726 sound capability).

A Wealth of Handy Alarm Features

Cameras can be preset to respond to alarms from external sensors, Scene Change Detection, built-in Motion Detector sensors or command alarms from other equipment transmitted over the LAN.

External Device Operation

Signals transmitted from the alarm output connector on the back of the camera can be used to activate lights, buzzers or other external devices.

FTP Server Forwarding

JPEG images can be forwarded to a designated FTP server (10-5,000 frames/ 0.1 fps - 1 fps refresh rate).
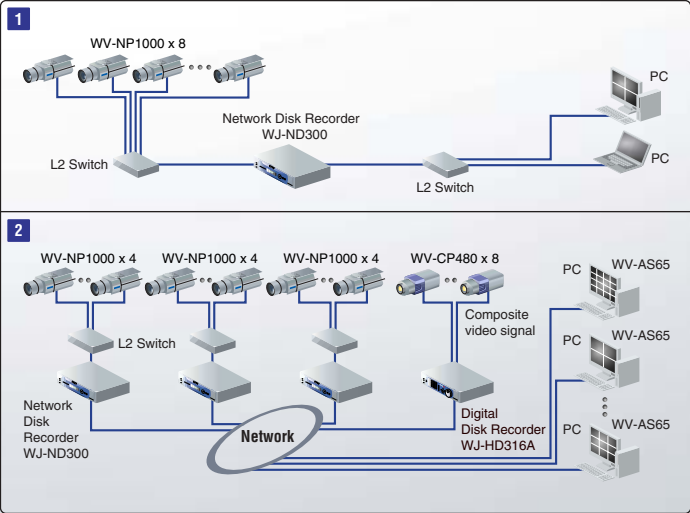
Alarm E-mail Notification

E-mail alarms can be sent to up to four e-mail addresses. Mail subject lines can be up to 50 characters long. Mail body text can be up to 200 characters long.
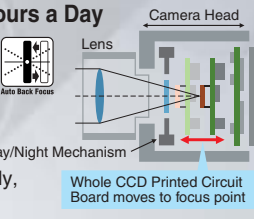
Automatic Alarm Transmission

Alarm signals can be transmitted automatically to the WJ-ND300 Network Disk Recorder, e.g., to switch to a higher frame rate.

Security Features Just in Case

SD Memory Card Slot

If your network crashes, these cameras can automatically backup* surveillance images on the SD Memory Card (optional), thus allowing you to check captured images while the network was down. *Only when images are being transmitted regularly to an FTP server.
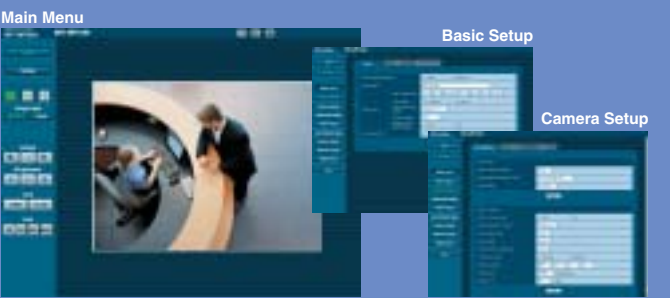
Authorized Access Management Features

Access can be authorized for up to eight IP hosts and restricted by name and password to up to 16 users. Each host or user can be granted any of three levels of access.
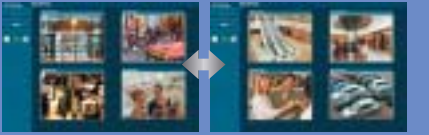
Three Access Levels
- **Administrator** ········· Access to all operations and settings
- **Camera Control** ········· Access to image display and camera controls
- **Live Only** ········· Access to image display only

System Examples

1
WV-NP1000 x 8
Network Disk Recorder WJ-ND300
L2 Switch
L2 Switch
PC
PC

2
WV-NP1000 x 4   WV-NP1000 x 4   WV-NP1000 x 4   WV-CP480 x 8   PC   WV-AS65
L2 Switch
Network Disk Recorder WJ-ND300
Network
Composite video signal
Digital Disk Recorder WJ-HD316A
PC   WV-AS65
PC   WV-AS65

Simple Operation and Settings Screen
Main Menu
Basic Setup
Camera Setup

Monitoring Using Up to Eight Network Cameras
Images from up to four cameras can be displayed simultaneously. Switching allows use of up to eight cameras.

The above photographs were taken for the purpose of this explanation; actual performance and images may vary depending on environmental or other conditions.

Frame Rate Chart

JPEG (MPEG-4 OFF)

Image Resolution	Mode	0 Super Fine	1 Fine	2	3	4	5 Normal	6	7	8	9 Low
1,280 x 960 Full Scan Mode	Image Size (KB)	320	256	224	192	160	128	96	80	64	48
	Frame Rate (fps)	5	6	8	9	11	12.5	12.5	12.5	12.5	12.5
	Bit Rate (Mbps)	12.8	12.3	14.3	13.8	14.1	12.8	9.6	8.0	6.4	4.8
VGA (640 x 480) Full Scan Mode	Image Size (KB)	128	96	80	64	56	48	40	32	28	24
	Frame Rate (fps)	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
	Bit Rate (Mbps)	12.8	9.6	8.0	6.4	5.6	4.8	4.0	3.2	2.8	2.4
QVGA (320 x 240) Full Scan Mode	Image Size (KB)	44	40	36	32	28	24	20	16	14	12
	Frame Rate (fps)	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
	Bit Rate (Mbps)	4.4	4.0	3.6	3.2	2.8	2.4	2.0	1.6	1.4	1.2
960 x 720 Partial Scan Mode	Image Size (KB)	240	192	152	120	96	72	60	48	42	36
	Frame Rate (fps)	6	8	10	13	16	22	23	24	24	24
	Bit Rate (Mbps)	11.5	12.3	12.2	12.5	12.3	12.7	11.0	9.2	8.1	6.9
VGA (640 x 480) Partial Scan Mode	Image Size (KB)	128	96	80	64	56	48	40	32	28	24
	Frame Rate (fps)	12	16	18	24	24	25	25	25	25	25
	Bit Rate (Mbps)	12.3	12.3	11.5	12.3	10.8	9.6	8.0	6.4	5.6	4.8
QVGA (320 x 240) Partial Scan Mode	Image Size (KB)	44	40	36	32	28	24	20	16	14	12
	Frame Rate (fps)	25	25	25	25	25	25	25	25	25	25
	Bit Rate (Mbps)	8.8	8.0	7.2	6.4	5.6	4.8	4.0	3.2	2.8	2.4

(above all figures are approximate, actual figures may differ depending on the network under the conditions.)
(system requirements of above figures are recommendable PC with CPU; Pentium®4 2.4 GHz or faster)

MPEG-4 (1 User)

Image Resolution	Mode	4,096	3,072	2,048	1,536	1,024	512	256	128	64
VGA (640 x 480) Full Scan Mode	Low (fps)	12.5	12.5	12.5	12.5	9.4	4.7	2.1	1	0.6
	Normal (fps)	12.5	12.5	12.5	10.2	7.5	3	1.6	1	0.6
	Fine (fps)	12.5	11.2	10	8	4.7	2.4	1	1	0.6
QVGA (320 x 240) Full Scan Mode	Low (fps)	12.5	12.5	12.5	12.5	12.5	12.5	9	4.5	2.2
	Normal (fps)	12.5	12.5	12.5	12.5	12.5	12.5	7.5	3.1	1.6
	Fine (fps)	12.5	12.5	12.5	12.5	12.5	9	4.5	2.2	1
VGA (640 x 480) Partial Scan Mode	Low (fps)	25	25	25	19	12.5	6	3.2	1.4	0.8
	Normal (fps)	25	25	25	19	12.2	5.9	3	1.4	0.8
	Fine (fps)	25	23	20	16	11.4	4.3	2.2	1	0.8
QVGA (320 x 240) Partial Scan Mode	Low (fps)	25	25	25	25	25	25	12	5.8	2.9
	Normal (fps)	25	25	25	25	25	18.5	10.5	4	2.2
	Fine (fps)	25	25	25	25	24.5	12.4	6	3	1.4

DUAL Mode

Scan Mode	JPEG		MPEG-4 (User No.)		
	Size	Frame Rate (fps)	4,096 kbps	2,048 kbps	1,024 kbps
Full Scan Mode	1,280 x 960	5	3	5	7
	1,280 x 960	2	4	7	7
	1,280 x 960	1	4	7	7
Partial Scan Mode	960 x 720	5	–	–	7
	960 x 720	2	4	7	7
	960 x 720	1	4	7	7
Partial Scan Mode	VGA	5	4	7	7
	VGA	2	4	7	7
	VGA	1	4	7	7

How to read the DUAL Mode chart: • For example, the first line shows that in Full Scan Mode, up to three users can access MPEG-4 images at 4,096 kbps while 1,280 x 960 size JPEG images are being recorded at 5 fps.
• MPEG-4 is unicast transmission and normal mode. • Frame rate of MPEG-4 is same as MPEG-4 only.

SPECIFICATIONS: WV-NP1000 Series

Model No.	WV-NP1000	WV-NP1004
General Specifications		
Power Source	AC 220 V - 240 V 50 Hz	AC 24 V 50 Hz
Power Consumption	Approx. 10.5 W	Approx. 9.5 W
Ambient Temperature	–10 °C - +50 °C	
Ambient Humidity	90 % or less	
Controller Interface	Coaxial multiplex/Ethernet	
External I/O Terminals	DAY/NIGHT IN x1, AUX OUT x1, ALARM IN x1, ALARM OUT x1	
Dimensions (W x H x D)	84 x 83 x 197.5 mm (excluding connectors/terminals)	
Weight	Approx. 0.97 kg	
CAMERA		
Image Sensor	1/3-type interline transfer CCD	
Effective Pixels	Full scanning mode: 1,296 (H) x 966 (V) Partial scanning mode: 960 (H) x 720 (V)	
Scanning Area	Full scanning mode: 4.8 mm (H) x 3.6 mm (V) Partial scanning mode: 3.6 mm (H) x 2.7 mm (V)	
Scanning System	Full Scanning Mode: 12.5 fps progressive scan, Partial Scanning Mode: 25 fps 2:1 interlace scan (with motion adaptive interlace/progressive conversion for network)	
AGC	ON (LOW, MID, HIGH)/OFF	
Aperture Control	ALC/ALC+/ELC (BLC ON/OFF available)	
Electronic Shutter	Full scanning mode: OFF(1/12.5), 1/25, 1/50, 1/60, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 s Partial scanning mode: OFF(1/50), 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 s	
Sensitivity Up	OFF, x2AUTO, x4AUTO, x6AUTO, x10AUTO*, x2FIX, x4FIX, x6FIX, x10FIX*, x16FIX*, x32FIX* (*Selectable only when "Partial scan" is selected for the resolution setting.)	
White Balance	ATW1/ATW2/AWC	
DNR	LOW/HIGH	
Colour/BW	AUTO1/AUTO2/EXT/ON/OFF	
Electronic Zoom	x5	
Image Stabilizer	ON/OFF	
Camera ID	Up to 16 characters ON/OFF	
VMD Alarm	ON/OFF, 4 areas available	
Back Focus	ABF/MANUAL/CL/BW	
ALC Lens Drive	DC drive	
Lens Mount	CS-mount	
Analogue		
Signal	PAL	
Video Output	VBS: 1.0 V [p-p] / 75 Ω, composite (BNC)	
Scanning Frequency	Horizontal: 15.625 kHz Vertical: 50 Hz	
Synchronization	Internal synchronization, VD2 synchronization	
Resolution		
Full Scanning Mode	Horizontal: 600 TV lines (in colour), 780 TV lines (in B/W) Vertical: 450 TV lines	
Partial Scanning Mode	Horizontal: 540 TV lines (in colour), 570 TV lines (in B/W) Vertical: 400 TV lines	
S/N	50 dB or more (AGC OFF)	
Minimum Illumination	1.0 lux (in colour), 0.06 lux (in B/W) [F1.4 optional lens, AGC ON (HIGH), Full Scanning Mode (shutter speed 1/25 s) / Partial Scanning Mode (Electronic shutter speed OFF 1/50 s)]	
Network		
Network	10BASE-T/100BASE-TX, RJ45 connector	
Resolution		
Full Scanning Mode	JPEG: 1,280 x 960/VGA (640 x 480)/QVGA (320 x 240) MPEG-4: VGA (640 x 480)/QVGA (320 x 240), up to 12.5 fps	
Partial Scanning Mode	JPEG: 960 x 720/VGA (640 x 480)/QVGA (320 x 240) MPEG-4: VGA (640 x 480)/QVGA (320 x 240), up to 25 fps	
Image Compression Method		
JPEG	Image quality: 0 SUPER FINE/1 FINE/2/3/4/5 NORMAL/6/7/8/9 LOW (10 steps: 0-9) Transmission type: PULL/PUSH	
MPEG-4	Image quality: LOW/NORMAL/FINE Transmission type: UNICAST/MULTICAST Max. bit rate: 64 kbps/128 kbps/256 kbps/1,024 kbps/1,536 kbps/2,048 kbps/3,072 kbps/4,096 kbps	
Refresh Interval (JPEG)	0.1 fps - 25 fps (Frame rate of JPEG will be limited when operating both JPEG and MPEG images.)	
Audio Compression Method	G.726 (ADPCM) 32 kbps/64 kbps	
Bandwidth Control	64 kbps/128 kbps/256 kbps/512 kbps/1,024 kbps/2,048 kbps/4,096 kbps/10 Mbps/Unlimited	
Protocol	TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP	
OS	Microsoft® Windows® 2000 Professional SP4, Microsoft® Windows® XP Home Edition SP2, Microsoft® Windows® XP Professional SP2	
Web Browser	Internet Explorer 6.0 Service Pack2	
Maximum Concurrent Access Number	8 (Depends on network conditions.)	
FTP Client	Alarm image transmission, FTP periodic transmission (When failed to transmit, backup on an optional SD memory card is available.)	
Multi-Screen	Images from 8 cameras (4 cameras x 2 groups) can be displayed.	
SD Memory Card	Manufactured by Panasonic Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB	

SPECIFICATIONS: WV-LZA62/2

Focal Length	2.8 - 6 mm	Angular Field of View	H: 47.9° (Tele) 99.6° (Wide) V: 35.6° (Tele) 72.9° (Wide)
Aperture Ratio	F1.4 (Wide) to F176, close F2.1 (Tele) to F176, close	Minimum Object Distance	1.2 m - ∞
		Mount	Special C-Mount
Iris Type	Automatic	Weight	118 g
Image Size	4.8 (H) x 3.6 (V) mm (ø6 mm)	Dimensions (W x H x D)	64 x 60 x 60.9 mm

MAJOR OPERATING CONTROLS & TERMINALS

Top

Bottom

Rear   WV-NP1000

Side

WV-NP1004

① Safety Wire Holder
② SD Memory Card Slot Cover
③ Screw Holes for the Camera Mounting Bracket (1/4-20UNC)
④ Screw Hole for the Camera Mounting Bracket (1/4-20UNC)
⑤ AC Inlet 220 V - 240 V 50 Hz (only for the WV-NP1000)
⑥ AC 24 V Terminal (only for the WV-NP1004)
⑦ SD Memory Card Error Indicator (red)
⑧ Link Indicator
⑨ Network Connector (RJ-45 Terminal)
⑩ Access Indicator
⑪ Video Out Connector
⑫ Power Indicator (green)
⑬ External I/O Terminals
⑭ Microphone
⑮ Tripod Mount Base
⑯ Fixing Screw for Transportation
⑰ Cover for the Operation Buttons
⑱ ALC Lens Connector
❶ INITIAL SET Button
❷ UP Button
❸ SET, ABF/MENU Button
❹ LEFT/NEAR Button
❺ DOWN Button
❻ RIGHT/FAR Button

DIMENSIONS

55 18 2-1/4-20UNC(For Camera Mount) Depth: 10mm
84
34.5 10
73
38.5
197.5

WV-NP1000

55 1/4-20UNC(For Camera Mount) Depth: 10mm

WV-NP1004

Unit : mm

OPTIONAL COMPONENTS & ACCESSORIES

2x Variable Focal Lens
WV-LZA62/2
2.8 - 6 mm
F1.4 (wide)
F2.1 (tele)

Network Disk Recorder
WJ-ND300
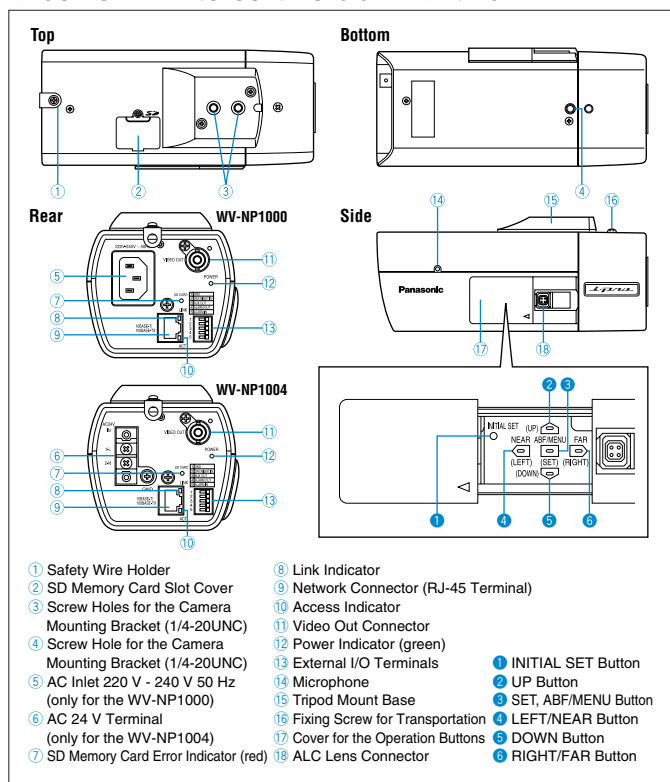
Management PC Software
WV-AS65

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Important – Safety Precaution: carefully read the operating instructions and installation manual before using this product.
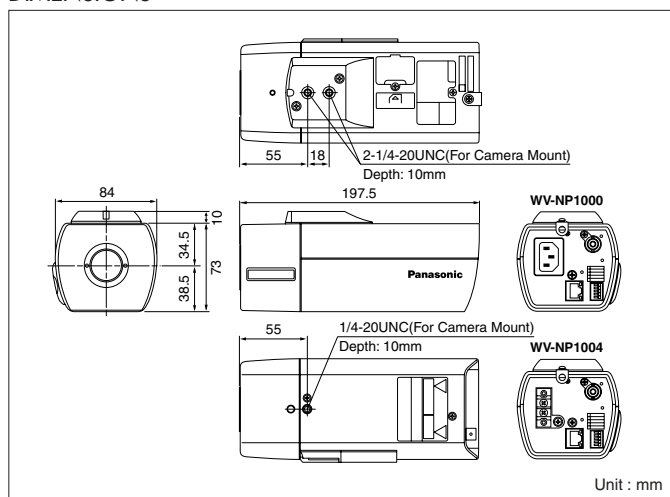– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.
• All TV pictures are simulated. • Weights and dimensions are approximate. • Specifications are subject to change without notice. • These products may be subject to export control regulations.