Panasonic
ideas for life

Preliminary

MPEG-4 JPEG

Network Color Dome Camera with MPEG-4 & JPEG Dual Streaming, PoE (Power over Ethernet), 3.6x Variable-Focal Lens

The new Panasonic WV-NF284 is the newest addition to the Panasonic **i-Pro** Series lineup, a compact, stylish network color dome camera with MPEG-4 & JPEG dual streaming.

Select JPEG or MPEG-4 only, and this camera can transmit VGA (640 x 480) images at up to 30 fps. Or using both combines seamless video monitoring of MPEG-4 with high resolution JPEG recording. The 1/4-type progressive scan CCD captures moving subjects with minimal blurring, and multicast (MPEG-4 only) is also supported.

Additional features include the 3.6x variable-focal lens (2.8 -10mm) that operates in light as low as 1.5 lux (0.15 fc). Power over Ethernet (PoE) IEEE802.3af supplies power and transmits images over the same LAN cable. A high-sensitivity microphone is built-in.
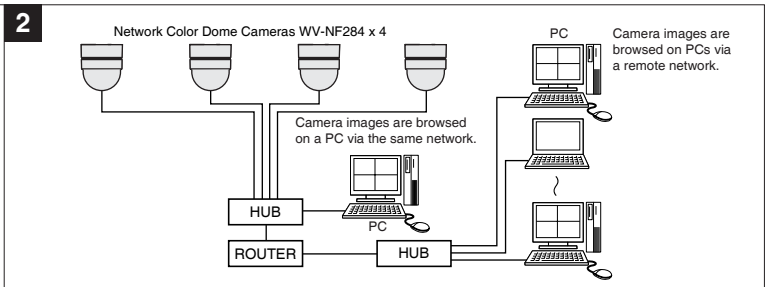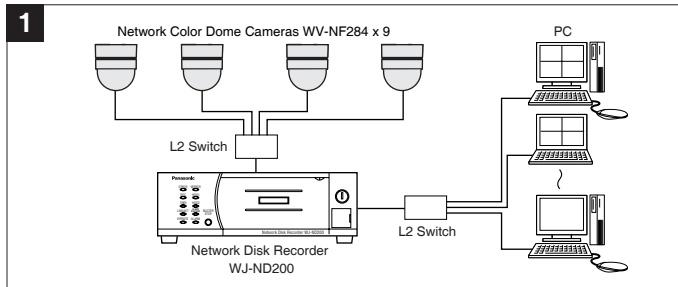
When the camera is connected to an optional **i-Pro** Series Network Disk Recorder, images backed up on the optional SD memory card (during network failure) will be automatically transmitted to the recorder when the network is restored. Additional features include Digital Motion Detection which allows users to program a system to record images automatically.

Reliable performance and easy set-up make the WV-NF284 the ideal network camera for school, transit, warehouse, mall and town security.

KEY FEATURES

- Built-in MPEG-4 and JPEG digital signal output at VGA image size with up to 30 fps.
- MPEG-4/JPEG dual stream output for simultaneous live monitoring and high resolution recording. (See the Frame Rate Chart for details.)
- 3.6x variable-focal lens (2.8 - 10mm).
- Power over Ethernet (PoE) IEEE 802.3af.
- Progressive scan type CCD image sensor.
- Internet Protocol: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP and SNMP.
- Image refresh rate: 0.1 fps - 30 fps.
- Bandwidth control: 64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps and unlimited.
- Built-in network interface (10Base-T / 100Base-TX) for remote monitoring by PC.
- Sensitivity of 1.5 lux (0.15 fc) at F1.4 with clear dome cover.
- Built-in SD Memory card slot for FTP backup.
- Multi screen display (4 screens x 2 groups).
- Built-in Alarm function for external security devices.
- Built-in digital motion detector.
- Built-in electronic zoom function (1x, 1.5x, 2x, 2.5x and 3x).
- Automatic electronic sensitivity enhancement.
- Built-in microphone (G.726).
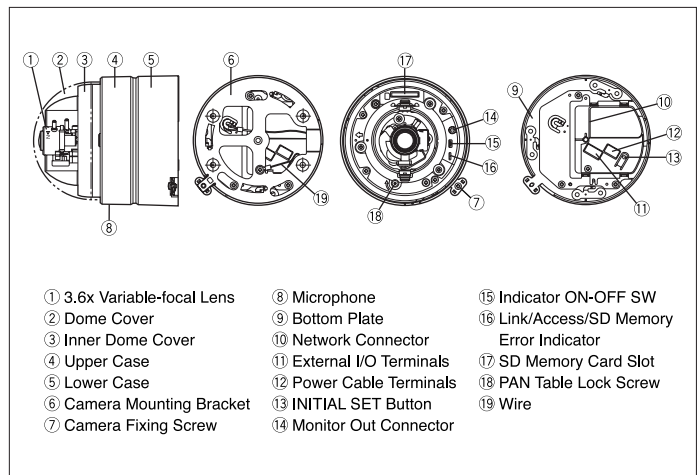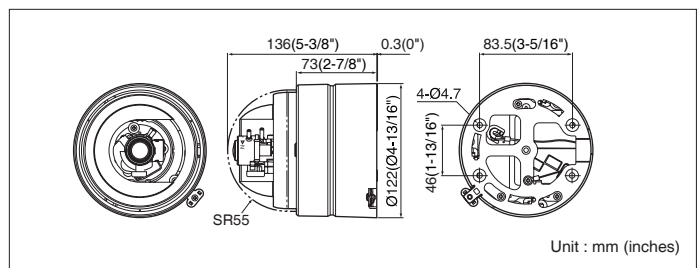- The 3-dimensional hinge (Pan, Tilt and Azimuth) makes adjustments easy.

SYSTEM EXAMPLES

1 Network Color Dome Cameras WV-NF284 x 9 — PC

L2 Switch

Network Disk Recorder WJ-ND200

L2 Switch

2 Network Color Dome Cameras WV-NF284 x 4 — PC — Camera images are browsed on PCs via a remote network.

Camera images are browsed on a PC via the same network.

HUB

ROUTER — HUB — PC

SPECIFICATIONS

Camera Section	
Pick Up Device	1/4-type progressive scan CCD sensor
Effective Pixels	659 (H) x 494 (V)
Scan Mode	Progressive scan
Scanning Area	3.59 (H) x 2.70 (V) mm
Minimum Illumination	1.5 lux (0.15 fc) with clear dome cover (Tentative)
	0.19 lux (0.019 fc): at the time of Electronic Sensitivity Up function is 8x. (Tentative)
AGC	Always ON
Electronic Shutter	AUTO
Electronic Sensitivity Up	OFF, AUTO (2x, 4x, 8x,16x)
White Balance	AUTO / HOLD
Electronic Zoom	1x, 1.5x, 2x, 2.5x, 3x
Title Display	20 alphanumeric characters (Only a browser)
Motion Detector	On/Off Selectable, 1~4 areas, Sensitivity: High/Middle/Low
Back Focus Adjustment	Manual

Lens	
Type	3.6x variable focal lens
Focal Length	2.8 ~ 10 mm
Angular Field of View	H: 20.8° (TELE) ~ 73.5° (WIDE)
	V: 15.6° (TELE) ~ 54.4° (WIDE)
Aperture Ratio	1 : 1.3 (WIDE)
Min. Object Distance	1.2 m

Analog Output Section	
Signal	NTSC
Monitor Output	VBS 1.0 V [p-p] / 75 Ω , composite signal, ø3.5mm mini jack

Network Section		
Network		10Base-T / 100Base-TX, RJ45 connector for PoE
Image Resolution	JPEG	VGA (640 x 480), QVGA (320 x 240) max. 30 fps
	MPEG-4	VGA (640 x 480), QVGA (320 x 240) max. 30 fps
Image Compression & Transmission	JPEG	(Super Fine: 0 / Fine: 1~4 / Normal: 5~8 / Low: 9) selectable, Pull/Push mode
	MPEG-4	Image Quality (Fine / Normal / Low) selectable, unicast / multicast
Image Refresh Rate		0.1 fps ~ 30 fps
		(JPEG and MPEG-4 have a limit of a JPEG frame rate at the time of simultaneous movement)
Audio Compression Method		G.726 (ADPCM) 32 kbps/16 kbps Selectable
Traffic Control		64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps and unlimited
Internet Protocol		TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
OS		Windows 2000 Professional SP4, Windows XP Home/Professional SP2
Applicable Browser		Internet Explorer 6.0 SP2 (Windows XP Home/Professional SP2)
		Internet Explorer 6.0 SP1 (Only Windows 2000 Professional SP4)
FTP Client		Alarm image transfer, FTP periodic transfer
Multi Screen		8 screens (4 screens x 2 group)
Controller I/F		Ethernet
SD Memory Card		64MB, 128MB, 256MB, 512MB, 1GB and 2GB
		Panasonic SD Memory Card is recommended
External Input Terminals		Alarm input x1/Alarm output x1, AUX output x1
Power Supply	Power Terminal	24 V AC, 60 Hz,12 V DC
	Power over Ethernet (IEEE802.3af)	36 ~ 57 V DC (Class2 Powered Device in PoE)
Power Consumption		24 V AC 4.2 W, 12 V DC 350 mA (approx.), PoE 4.2 W (approx.) (Tentative)
Ambient Operating Temperature		–10 °C ~ +50 °C (14 °F ~ 122 °F)
Ambient Operating Humidity		Less than 90 %
Dimensions (D x H)		ø122 mm x 136 mm (ø4-13/16" x 5-3/8")
Weight		Approx. 650 g (1.43 lbs.) (Tentative)

MAJOR OPERATING CONTROLS & TERMINALS

① 3.6x Variable-focal Lens
② Dome Cover
③ Inner Dome Cover
④ Upper Case
⑤ Lower Case
⑥ Camera Mounting Bracket
⑦ Camera Fixing Screw
⑧ Microphone
⑨ Bottom Plate
⑩ Network Connector
⑪ External I/O Terminals
⑫ Power Cable Terminals
⑬ INITIAL SET Button
⑭ Monitor Out Connector
⑮ Indicator ON-OFF SW
⑯ Link/Access/SD Memory Error Indicator
⑰ SD Memory Card Slot
⑱ PAN Table Lock Screw
⑲ Wire

APPEARANCE

136(5-3/8") 0.3(0") 83.5(3-5/16")
73(2-7/8")
4-Ø4.7
Ø122(Ø4-13/16")
46(1-13/16")
Ø122 mm x 136 mm
SR55

Unit : mm (inches)

Frame Rate Chart

JPEG

Image Resolution	Mode	Image Settings									
		0 Super Fine	1 Fine	2	3	4	5 Normal	6	7	8	9 Low
VGA (640 x 480)	Image Size (KB)	128	96	80	64	56	48	40	32	28	24
	Frame Rate (fps)	10	14	17	21	24	30	30	30	30	30
	Bit Rate (Mbps)	10.2	10.8	10.9	10.8	10.8	11.5	9.6	7.7	6.7	5.8
QVGA (320 x 240)	Image Size (KB)	44	40	36	32	28	24	20	16	14	12
	Frame Rate (fps)	26	28	30	30	30	30	30	30	30	30
	Bit Rate (Mbps)	9.2	9.0	8.6	7.7	6.7	5.8	4.8	3.8	3.4	2.9

MPEG-4

Image Resolution	Mode	MPEG-4 Bit Rate Settings								
		4,096 kbps	3,072 kbps	2,048 kbps	1,536 kbps	1,024 kbps	512 kbps	256 kbps	128 kbps	64 kbps
VGA (640 x 480)	Low	30	30	30	25	22	10	5	2	1
	Normal	30	30	30	22	14	8	3	1	0.4
	Fine	27	22	19	13	9	4	1.5	0.5	0.2
QVGA (320 x 240)	Low	30	30	30	30	30	28	24	10	4
	Normal	30	30	30	29	28	24	12	4	1.5
	Fine	30	28	28	27	12	5	2	0.5	(fps)

(above all figures are approximate, actual figures may differ depending on the network under the conditions.)

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