

Netcansee NETWORK CAMERA SYSTEM



***Network-based surveillance
with outstanding TOA-quality images
and sound***

With the new TOA Network Camera System you can clearly capture any situation live and in real time.



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The TOA Network Camera System simultaneously transmits MPEG-4 format video for real-time monitoring, enabling smooth flowing images for live monitoring from a remote location.

The N-CC2360 Network Color Camera features a built-in condenser microphone, making it possible to simultaneously transmit both images and high-quality sound from the surveillance area. This technology is exclusively available in TOA's Network Camera System, developed by our Audio Product Engineers.

The N-CC2564 Network Combination Dome Camera is capable of high-speed PTZ movements, allowing users immediate access to their desired location.

TOA's Network Camera System is ideal for any application including hospitals, railway stations, shopping malls, universities, factories and offices.

NETWORK-BASED SYSTEM ADVANTAGES

- Video surveillance and control from a remote location.
- Simultaneous control of system components and bi-directional audio signal and video transmission with minimal cables.
- Offers flexible, versatile system expansion.
- Clear, crisp images and high-quality audio through the system's digital transmission.



Simultaneous transmission of MPEG-4 and JPEG

Simultaneous MPEG-4 and JPEG transmission enables monitoring at a low transmission rate with smooth image movement, along with simultaneous recording of high-quality JPEG images.

Bidirectional, high-quality audio transmission

The N-CC2360, N-CC2564, N-VT2010 and N-VR2010 are all capable of bidirectional audio transmission, and the N-CC2360 features a built-in microphone instead of an audio input terminal. This enables it to capture sounds in the surveillance area, as well as images, providing monitoring personnel with a more accurate sense of the atmosphere of the site. Connecting the audio output terminals on the N-CC2360 or N-CC2564 to an amplifier with speaker enables audio transmission from the monitoring party to the surveillance area.

PoE (Power over Ethernet) eliminates the need for a dedicated power cable.

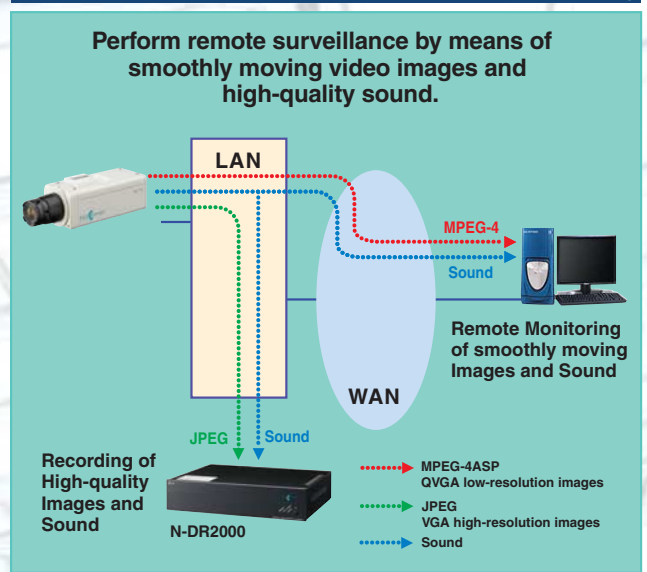
Because the N-CC2360, N-VT2010 and N-VR2010 are compatible with PoE, power can be provided over a network. This contributes to simplification of wiring installation work, and reduction of cost.

N-VT2010 and N-VR2010 are equipped with 12V DC output.

These units can provide power to compact cameras (CV Series) and remote controllers, reducing the number of cables needed by the system.



Transmission of MPEG-4, JPEG and Sound simultaneously



N-CC2360 Network Color Camera

N-CC2360 can be connected directly to a LAN (10 BASE-T/100BASE-TX).

- PoE capability
- Built-in microphone and audio output terminal allows bidirectional audio transmission
- Wide Dynamic Range and Day & Night functions
- Motion Detection
- Privacy Masking (up to 4 locations)



(Lens is optional)



N-VT2010 Network Video Transmitter

N-VT2010 can be connected directly to a LAN and transmits analog camera's video and audio signals over the network.

- Connection for analog camera to digitally transmit images to a network
- 12V DC Power Supply (ex. For CV Series Camera)
- PoE capability
- Bidirectional audio transmission (Audio input × 1, Audio output × 1)



N-VR2010 Network Video Receiver

N-VR2010 allows displaying digital image data from a network camera or network video transmitter on an analog monitor screen.

- 12V DC Power Supply (ex. For Remote Controller)
- PoE capability
- Bidirectional audio transmission (Audio input × 1, Audio output × 1)



with Ceiling Mount Cover C-BC511C

N-CC2564 Network Combination Dome Camera

N-CC2564 can be connected directly to a LAN (10 BASE-T/100BASE-TX).

- Bidirectional audio transmission (Audio input x 1, Audio output x 1)
- Rotation range: horizontal 360° continuous; vertical +5° to -185°
- High-speed horizontal and vertical rotations of up to 360°/sec.
- 23X optical zoom
- 255 preset positions
- Wide Dynamic Range and Day & Night functions
- Motion Detection
- Privacy Masking (up to 8 locations)



N-DR2000 Network Video Recorder

N-DR2000 allows images and audio from network cameras, as well as event data, to be recorded, distributed, and stored over a network.

- 640GB Storage Capacity (320GB x 2)
- Can record images from up to 16 network cameras or network video transmitters at once
- Up to 8 recorded images and audio tracks can be played back simultaneously.
- Browser-based setup

BRACKETS AND COVERS



C-BC511A
Ceiling Mount Bracket



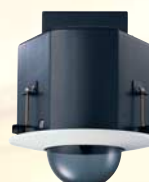
C-BC511C
Ceiling Mount Cover



C-BC511U
Flush Ceiling Mount Bracket



C-BC511C-S
Ceiling Mount Cover (Smoked)



C-BC511U-S
Flush Ceiling Mount Bracket (Smoked)



C-BC511P
Ceiling Suspension Bracket



C-BC511W
Wall Mount Bracket



Software Decoder

TOA's software decoder allows camera images to be monitored on a PC without needing a receiver.

N-SD2000

Up to four MPEG-4 images can be displayed simultaneously. Control of TOA Network Color Camera, Network Combination Dome Camera, Digital Video Recorder, Multiplexer and Combination Dome Camera.

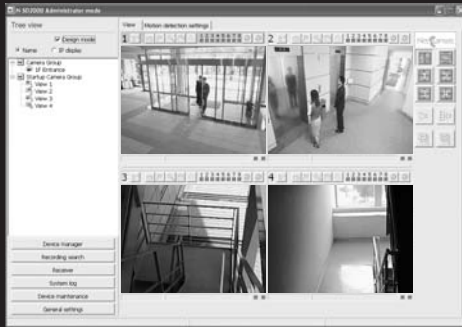
N-SD0160

Up to sixteen JPEG images can be displayed simultaneously. These images can also be recorded directly onto the PC's hard disk.

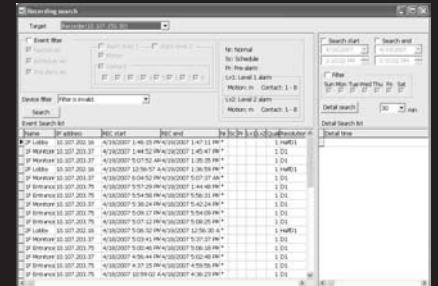
TOA's Software Decoder: Versatile and smart software that optimizes Network Camera System operation

■ N-SD2000

Allows monitoring of MPEG-4 images from four surveillance cameras at a time. Can handle images from up to 2,000 surveillance cameras.



Display of images recorded on the N-DR2000 and easy search for images users want to view



Point-view/Zoom-view Functions

While monitoring live images from the combination dome camera, clicking on any point with the mouse moves that point to the center of the screen. (Point-view)

An area selected by dragging the mouse is zoomed up for display. (Zoom-view)

Bidirectional Audio Transmission

Enables pick-up of sound from the surveillance area, as well as issuing a voice warning to an intruder.

Remote Control

Network Color Cameras, Network Combination Dome Cameras, Digital Video Recorders and Combination Dome Cameras can be remotely controlled.

Motion Detection Function can be easily set and checked.



Data recorded on the Network Video Recorder can be exported onto a PC.

■ N-SD0160

Sixteen images from Network Color Camera, Network Combination Dome Camera and Network Video Transmitter can be monitored simultaneously.



Can handle images from up to 100 surveillance cameras (Display only 16 images at a time).

Recording onto the PC hard disk

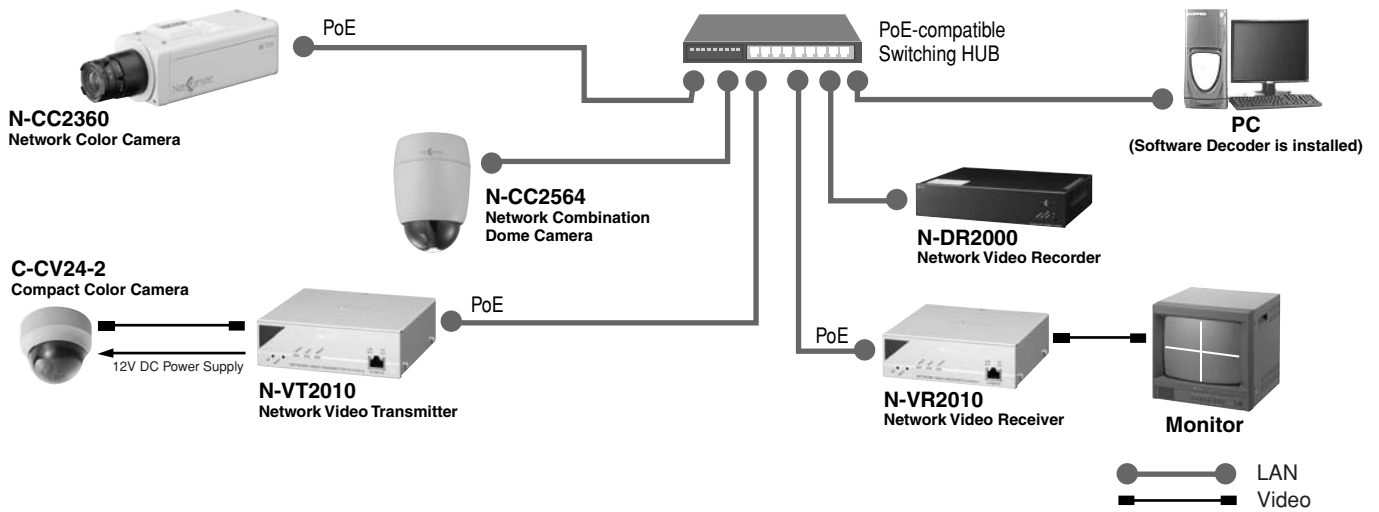
Up to 5 minutes of the displaying network camera can be manually recorded onto the hard disk of the PC, as well as up to 30 minutes of recording that starts automatically when an alarm signal is detected.

Remote Control

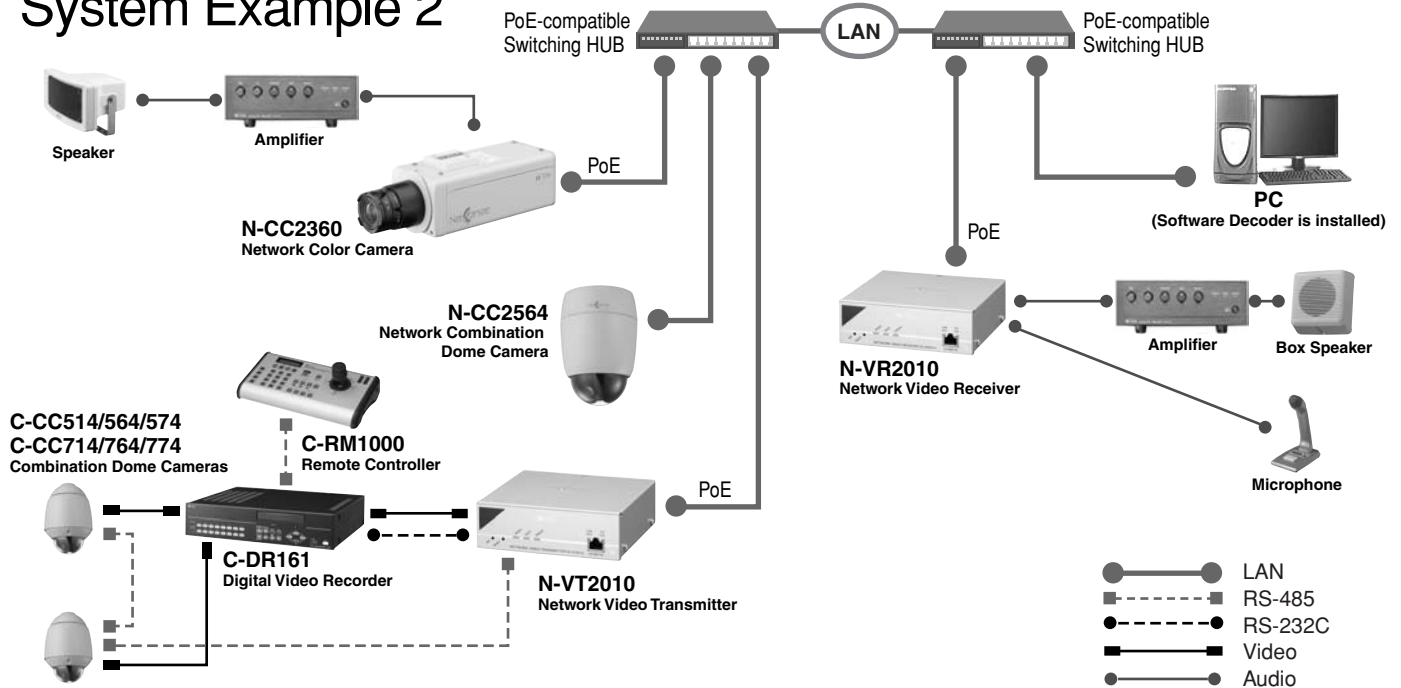
Network Combination Dome Camera can be remotely controlled.



System Example 1



System Example 2



SPECIFICATIONS

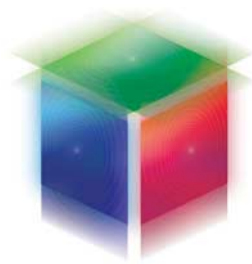
Model No.	N-CC2360 Network Color Camera
Power Req.	24 V AC, 50/60 Hz or 24 V DC or PoE (IEEE802.3af)
Power Consumption	13 W (at 24 V AC), (8 W:PoE, 350 mA; 24 V DC)
Microphone	Omnidirectional, electret condenser microphone
Camera	
Image Device	1/3 type IT-CCD
Number of Effective Pixels	768 (H) × 494 (V) (380,000 pixels)
Minimum Required Illumination	0.5 lx (50 IRE), 0.1 lx (20 IRE) (F 1.0) (sensitivity up: OFF) (color mode) 0.01 lx (F 1.0) (sensitivity up: ON) (B&W mode, incandescent lamp)
Other Functions	Privacy masking (up to 4), Electronic zoom (2x), Horizontal/Vertical reverse, Flickering reduction (DIP switch), Focus adjustment switch (DIP switch), Chroma level: Normal/Manual (MIN – MAX), Enhancer: Normal/Manual (soft – sharp)
Network	
Video Compression/Resolution	MPEG-4: D1 (720 × 480), Half D1 (720 × 240), QVGA (320 × 240) JPEG: D1 (720 × 480), Half D1 (720 × 240), VGA (640 × 480), QVGA (320 × 240), QQVGA (160 × 120)
Frame Rate	MPEG-4 (D1, max. 30 fps) + JPEG (D1, max. 5 fps)
Audio Compression/Decompression	Sub-band ADPCM, PCM (non-compression)
Audio Sampling Frequency	8 kHz, 32 kHz
Finish	Case: Surface-treated steel plate, sand gray, paint
Dimensions	69.3 (W) × 64.8 (H) × 157.3 (D) mm (2.73" × 2.55" × 6.19")
Weight	670 g (1.48 lb)
Accessory	CD-ROM (Software decoder: N-SD2000, Manuals (PDF)) × 1, Power conversion cable × 1

Model No.	N-CC2564 Network Combination Dome Camera
Power Req.	24 V AC, 50/60 Hz
Power Consumption	20 W (normal operation), 25 W max. (1.6 A max.)
Video Output	VBS 1.0 V(p-p), 75Ω, BNC-R jack, NTSC
Camera	
Image Device	1/4 type CCD
Resolution	Horizontal: 480 lines (at center)
Minimum Required Illumination	High-sensitivity function OFF: 3 lx (50 IRE), 1 lx (20IRE) High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20IRE)
No. of Preset Positions	255 Positions + Home
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
Other Functions	Auto Flip, Freeze preset, Manual limit, Privacy masking (up to 8), Motion detection (each 8 presets at each 4 positions)
Lens	
Zooming	23x
Effective Focal Length	f = 3.6 - 82.8mm (23X)
Effective Angle of View	Horizontal: 54° (W) – 2.5° (T)/Vertical: 41.6° (W) – 1.9° (T)
Network	
Video Compression/Resolution	MPEG-4: D1 (720 × 480), Half D1 (720 × 240), QVGA (320 × 240) JPEG: D1 (720 × 480), Half D1 (720 × 240), VGA (640 × 480), QVGA (320 × 240), QQVGA (160 × 120)
Frame Rate	MPEG-4 (D1, max. 30 fps) + JPEG (D1, max. 5 fps)
Audio Compression/Decompression	Sub-band ADPCM, PCM (non-compression)
Audio Sampling Frequency	8 kHz, 32 kHz
Operating Temperature	-10°C to 50°C (+14°F to +122°F) (Continuously active for operation at temperature below 0°C (+32°F))
Finish	Base: PC/ABS resin, cool gray, Camera: PC/ABS resin, black
Dimensions	ø168 × 234 (H) mm (ø6.61" × 9.21")
Weight	2 kg (4.41 lb)
Accessory	Camera mounting screw × 4, Safety wire × 1, Category5 shielded coupler (female to female) × 1, Extension connector (Alarm input, AUX contact output) × 1 each, CD-ROM (Software decoder: N-SD2000, Manuals (PDF)) × 1

Model No.	N-VT2010 Network Video Transmitter
Power Req.	24 V AC, 50/60 Hz or 24 V DC or PoE (IEEE802.3af)
Power Consumption	10 W: at 24 V AC (9 W: PoE, 400 mA; 24 V DC)
Power Output	12 V DC, max. 0.2 A, screwless connector
Serial Port	RS-232C: D-sub connector (9 pins, male), RS-485: screwless connector
Network	
Video Compression/Resolution	MPEG-4: D1 (720 × 480), Half D1 (720 × 240), QVGA (320 × 240) JPEG: D1 (720 × 480), Half D1 (720 × 240), VGA (640 × 480), QVGA (320 × 240), QQVGA (160 × 120)
Frame Rate	MPEG-4 (D1, max. 30 fps) + JPEG (D1, max. 5 fps)
Audio Compression/Decompression	Sub-band ADPCM, PCM (non-compression)
Audio Sampling Frequency	8 kHz, 32 kHz
Simultaneous Connected Number	5 (MPEG-4: 4, JPEG: 1), In streaming mode: No limit (MPEG-4 only)
Other Function	Password authentication, Motion detection function
Finish	Case: Surface-treated steel plate, silver, paint
Dimensions	136 (W) × 44 (H) × 127.9 (D) mm (5.35" × 1.73" × 5.04")
Weight	700 g (1.54 lb)
Accessory	CD-ROM (Software decoder: N-SD2000, Manuals (PDF)) × 1, Power conversion cable × 1

Model No.	N-VR2010 Network Video Receiver
Power Req.	24 V AC, 50/60 Hz or 24 V DC or PoE (IEEE802.3af)
Power Consumption	10 W: at 24 V AC (9 W: PoE, 400 mA; 24 V DC)
Power Output	12 V DC, max. 0.2 A, screwless connector
Network	
Video Compression/Resolution	MPEG-4, D1 (720 × 480), Half D1 (720 × 240), QVGA (320 × 240)
Frame Rate	MPEG-4: D1, max. 30 fps
Audio Compression/Decompression	Sub-band ADPCM, PCM (non-compression)
Audio Sampling Frequency	8 kHz, 32 kHz
Image Transfer Rate	MPEG-4: 4 Mbps max
Other Function	Password authentication
Finish	Case: Surface-treated steel plate, silver, paint
Dimensions	136 (W) × 44 (H) × 127.9 (D) mm (5.35" × 1.73" × 5.04")
Weight	700 g (1.54 lb)
Accessory	Power conversion cable × 1

Model No.	N-DR2000 Network Video Recorder
Power Req.	110-120 V AC, 50/60 Hz
Power Consumption	57 W (0.8 A)
Recording Storage	HDD S-ATA 640 GB (320 GB X 2)
Network	
Recording Method	Video: JPEG Audio: sub-band ADPCM, PCM (non-compression)
Number of Simultaneous Recording	Up to 16 stations (Network camera or Network video transmitter)
Other Functions	Alert notification via e-mail, time synchronization, operating log
Finish	Case: Pre-coated steel plate, black
Dimensions	420 (W) × 88.7 (H) × 320.5 (D) mm (16.54" × 3.49" × 12.62")
Weight	6.1 kg (13.45 lb)
Accessory	Power cord (2 m (6.56 ft)) × 1, CD-ROM (Update Disk) × 1



**Human Society with
Security & Safety**

TOA Corporation
www.toa.jp

Specifications are subject to change without notice.
Printed in Japan (0708) 833-52-371-60 u