QNAP SECURITY

QNAP NVR-104

Network Surveillance System for SMB and SOHO
QNAP Network Video Recorder for IP Cameras

Live Monitoring, Recording, and Video Playback over the Internet Anytime, Anywhere

Secure Life, Secure Property

Environment Friendly
- Quiet
- Power-saving

All-in-one Recording Functions
- Continuous/ schedule/ manual recording
- Alarm recording (by motion detection or sensor triggered)
- Multiple alarm recording schedules
- Up to 120 fps (4 channels) QVGA/ CIF recording
  Up to 40 fps (4 channels) VGA recording
- High quality recording in Motion-JPEG and MPEG-4
- Audio recording (depends on camera)

High Reliability and Smart Features
- Supports UPS (Uninterruptible Power Supply) for 24x7 service
- Intelligent automatic system startup when power resumes after power outage
- Convenient video backup to external USB storage by one touch auto video backup button
- Advanced RAID (0/ 1/ JBOD)

  * RAID function is enabled via an external eSATA device

Powerful Surveillance Features
- Variety live video monitoring
- Multi-server monitoring (highly expandable for monitoring up to 120 channels from multiple QNAP NVR servers)
- Alarm notification on monitoring
- Smart control of PTZ & speed dome cameras on monitoring
- Digital zoom for monitoring and playback
- Multi-channel playback at different speed
- Search of recording data by date & time and recording type

Easy to Use
- Trouble-free 6-step installation
- Smart search of IP cameras for quick settings
- Drag and drop to change display order

Green NVR Solution
- Linux-embedded system with energy saving design (18W only)

Linux Embedded | **MJPEG MPEG4** | **Gigabit Ethernet** | **RAID 0/1/ JBOD** | **AUDIO**

Mega pixel | **MOTION DETECTION** | **TIME STAMP** AM 10:00 | **UPS Support** UPS Support APC | **SENSOR TRIGGERED** Alarm

Real-time monitoring
over the Internet anytime, anywhere !

QNAP NVR-104

Secure Life, Secure Property

The Most Affordable and Reliable NVR for SOHO and SMB

Designed for SMB and SOHO users, QNAP NVR-104 is an affordable and reliable network surveillance solution for remote monitoring and recording from **AXIS**, **ACTi**, **Arecont**, **Canon**, **D-Link**, **EDIMAX**, **ELMO**, **EtroVision**, **GANZ**, **iPUX**, **IQeye**, **LevelOne**, **MOBOTIX**, **Panasonic BB/ BL/ i-Pro**, **SANYO**, **SONY**, **TOSHIBA**, **TRENDnet**, **VIVOTEK**, and **Y-CAM** IP-based cameras. The NVR-104 supports up to 4-channel M-JPEG and MPEG-4 recording, and one high-speed SATA hard disk (up to 1TB) for long-term recording.

Featured with Linux-embedded architecture, the NVR-104 is more reliable than traditional PC-based solutions. As a standalone surveillance system, the NVR-104 is less vulnerable to virus attack and easier to maintain. The NVR-104 can be set up in an Ethernet-ready environment without any complicated wiring. The system settings can be managed via the IE browser anytime, anywhere. All the professional surveillance functions are embedded in the NVR without any extra software required.

The NVR-104 provides versatile professional recording modes, such as continuous recording, schedule recording, manual recording, motion-detection recording, event-triggered recording, pre-alarm and post-alarm recording etc. The recording data can be played over the Internet or accessed by samba, HTTP, or FTP.

In the live view monitoring, the unique multi-server monitoring function is supported. You can connect to the NVR-104 and add other QNAP NVR servers for monitoring up to 120 channels from a remote PC. Besides, you can use 1/ 4/ 6/ 8/ 9/ 10/ 12/ 16/ 20-channel mode, sequential display mode, and exclusive Picture-in-Picture mode for remote monitoring.

The NVR-104 is a green surveillance solution. Its power consumption is less than 18W, and it is equipped with a low-noise fan for quiet operation. The NVR-104 is an ideal network surveillance solution for monitoring in home, office, campus, parking lots, and chain stores etc.

Powerful Surveillance Features

• Multi-server Monitoring
You can connect to the NVR-104 and add other QNAP NVR servers for monitoring up to 120 channels over LAN or WAN.

• Variety Live Video Monitoring
- 1/ 4/ 6/ 8/ 9/ 10/ 12/ 16/ 20-channel display mode
- Sequential display mode
- Exclusive Picture-in-Picture mode

• Easy Drag and Drop Function on Monitoring
The NVR-104 provides drag and drop function to change the display order of the monitoring channels.

• Smart Control of PTZ & Speed Dome Cameras
You can adjust the PTZ cameras directly by the web user interface.

• Monitoring Preset Position Control
You can view different preset positions of the camera by clicking the number buttons on the monitoring page.
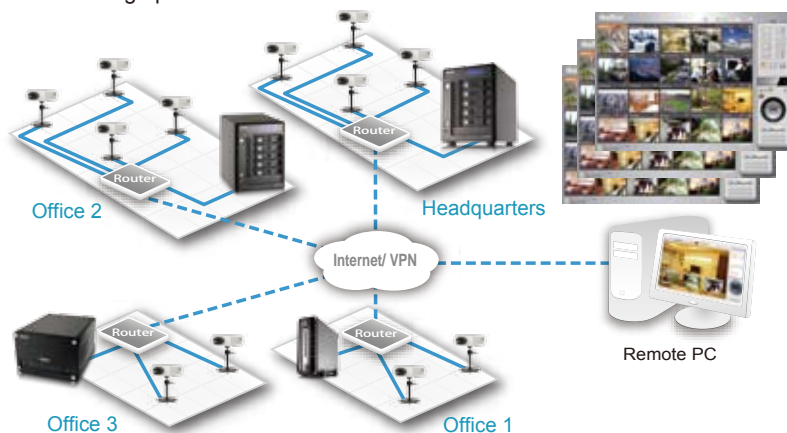
• Digital Zoom for Monitoring and Playback
The NVR-104 supports digital zoom for more flexible monitoring and playback. It is a powerful function for megapixel IP cameras.

• Video Snapshot
The snapshot function is supported on monitoring and playback page.

• Alarm Notification
When alarm recording is enabled and an event occurs, an alarm icon is shown instantly on monitoring page. You can click the icon to view the alert details.

• E-map for Easy Preview of the Camera Location
The NVR-104 provides an E-map function for you to upload the pictures of the monitoring location.

• All-in-one Recording Functions (up to 4 channels)
- Continuous/ schedule/ manual recording
- Alarm recording (by motion detected or sensor triggered)
- Multiple alarm recording schedules
- High quality recordings in Motion-JPEG and MPEG-4
- Audio recording (depends on camera)
- Megapixel recording
  - *Up to 15 schedules are supported for each camera

• Flexible Adjustment of the Length of Recording Files
You can flexibly adjust the length of the recording files.

- **Multi-channel Playback at Different Speed**
  You can use Express Quad View Playback to divide the selected time equally into four playback views or play the video of four cameras at the same time.

- **Easy Data Search by Date & Time and Recording Type**
  The NVR-104 supports quick search of recording data by date and time, and recording type.

- **Recordings can be Played by Windows Media Player®**
  You can play the files by Windows Media Player®. There is no need to install unique program or convert the files to other formats.

- **Convenient Recordings Playback**
  The NVR-104 adopts complete network-based management interface. You can download the recording data via the web and play the files from remote computer.

High Reliability and Smart Features

- **Advanced RAID (0/ 1/ JBOD)**
  (RAID function is enabled via an external eSATA device)
  The NVR-104 supports advanced RAID 1 mirroring for secure data protection by connecting to an external enclosure.
  * It is suggested to use an external eSATA device, e.g. QBack-35S.

- **Supports UPS System for 24x7 Service**
  With UPS, the NVR-104 can function normally in case of power outage or unstable power supply.

- **Intelligent Automatic System Startup**
  The NVR-104 supports intelligent power-on support. When enabled, the NVR turns on automatically when the power resumes after power outage.

- **Convenient Video Backup by One Touch Auto Backup Button**
  The video data can be exported to an external storage device by the one-touch copy button for ease of archiving.
  * It is suggested to use USB backup devices, e.g. QBack-25S, QBack-35S.

- **Smart Search of IP Cameras for Quick Settings**
  The NVR-104 supports IP camera search for quick setup.

- **Real-time Email Notification**
  Alert e-mails are sent to the administrator immediately in case of system error or emergent events.

Powerful Network Services

- **Built-in NTP Server/ DDNS Support**
- **Convenient Data Access**
  You can access the recording data on the NVR-104 by:
  Network Neighborhood (SMB/ CIFS)/ Web File Management (HTTP)/ FTP server.

Powerful Security Control

- **Authority Management**
  You can configure the monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users.

- **Host Access Control**
  You can specify the connections to be allowed and denied to access the NVR-104.

- **On-line User List**
  You can view the record of users currently logged on and previously logged on to the NVR-104.

- **Detailed Event Logs**
  The NVR-104 provides detailed event logs of system warning, hard disk error, network disconnection, UPS status, and users' networking services and recordings access record.

Excellent Hardware Design

- **Embedded System with Low Power Consumption**
  Built on Linux OS, the NVR-104 is less vulnerable to virus attack and more energy-saving than PC-based surveillance solutions.

Power Consumption	
QNAP NVR-104	18W
PC-based NVR solution	350W

- **Up to 1TB Storage Capacity, Expandable to 2TB through an External eSATA Device**
  The NVR-104 is an excellent choice for long-term recording and storing large amount of recording data.

- **Small-sized, Easy to Deploy**
  The NVR-104 occupies small space. It is easy to install and maintain.

Application: Live Monitoring, Recording, and Video Playback over the Internet Anytime, Anywhere

- **Home Care**
  - Home surveillance to secure life and property
  - Enhanced protection for kids, elders, and pets
  - Crime prevention
  - Evidence or aid to police investigations

- **Office Management**
  - Real-time office monitoring from remote locations
  - In-house office monitoring
  - Office security fortification
  - False alarm identification

- **Business Service**
  - Live production line monitoring for quality and security control
  - Department store/ mall onitoring
  - Shipping process recording
  - Crime prevention, e.g. shoplifting
  - Parking lot monitoring
  - Construction site monitoring
  - Convenience store security
  - Campus security
  - Server room security
  - Gas station security
  - Hotel security
  - Multiple remote offices/ factory sites live monitoring

↑Network surveillance installation for SOHO and SMB

↑Remote monitoring and playback over the Internet

↑Central surveillance deployment for international enterprise
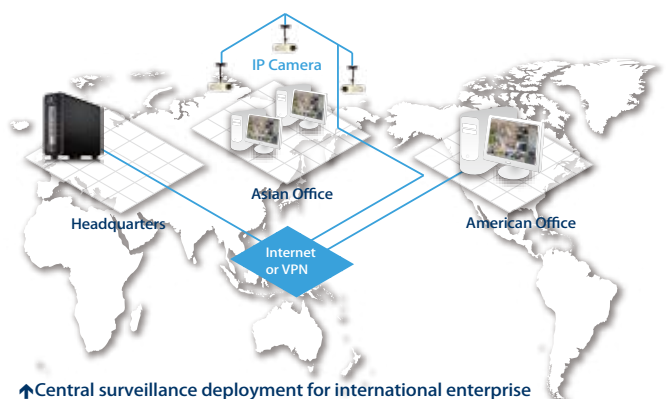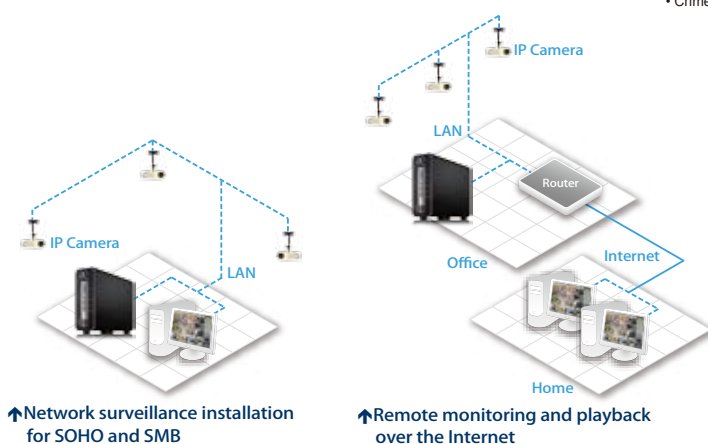
Hardware Specifications

HDD:
- Supports 1 x 3.5" SATA I/II HDD, up to 1TB storage capacity, expandable to 2TB via eSATA (the HDD is not included)

LAN Port:
- 1 x Gigabit RJ-45 Ethernet port

LED Indicators:
- Power, USB, status, LAN, hard disk USB: 3 x USB; for USB storage device (One Touch Auto Video Backup) and UPS device

Buttons:
- One touch auto video backup button, power button, reset button

Form Factor:
- Portable desktop

Hardware Dimensions:
- 165.5 (H) x 60 (W) x 218.4 (D) mm
- 6.52 (H) x 2.36 (W) x 8.6 (D) inch

Hardware Net Weight:
- 0.71 kg/ 1.57 lb (without HDD)

Color Box Shipping Weight:
- 1.57 kg/ 3.46 lb (without HDD)

Temperature:
- 0~40°C

Humidity:
- 0~85% R.H.

Power Supply:
- External power adaptor, 36W, 100~240V

Energy-saving Design:
- Low power consumption

Thermal Solution:
- Low noise fan

Secure Design:
- K-Lock security slot for theft prevention
- Power cord hook for kicking-off prevention

Brand	Models	NVR-104P 4 Channels	NVR-104V 4 Channels
AXIS	206M/ 207/ 207W/ 207M/ 207MW/ 209FD/ 209FD/ 210/ 210A/ 211A/ 211/ 211W/ 211M/ 212/ 213/ 214/ 215/ 216FD/ 216MFD/ 221/ 223M/ 225FD/ 231/ 232/ 233D/ 241Q/ 241QA/ 241S/ 241SA/ 243SA/ 247S/ P3301/ Q7401/ M1011/ M1011-W/ M1031-W	●	●
ACTi	ACM-123X/ ACM-1311/ ACM-143X/ ACM-3001/ ACM-3211/ ACM-3311/ ACM-34XX/ ACM-4100/ ACM-4200/ ACM-5001/ ACM-56XX/ ACM-5711/ ACM-7411/ ACM-8211/ ACM-8511/ CAM-5XXX/ CAM-6XXX/ ACD-2100/ ACD-2200/ SED-2140/ SED-2120	●	●
Arecont	AV 1300M/ AV 2100M/ AV 3130/ AV 3100	●	●
Canon	VB-C300/ VB-C300B/ VB-C50iR/ VB-C50i/ VB-C50FSi/ VB-C50Fi	●	
D-Link	DCS-2120/ DCS-3220/ DCS-3220(G)/ DCS-3420/ DCS-5220/ DCS-5300/ DCS-5300G/ DCS-6620/ DCS-6620G/ DCS-2121/ DCS-900(A)/ DCS-900(B)/ DCS-900(B2)		●
EDIMAX	IC-1510/ IC-3010(WG)/ IC-7000PT	●	●
ELMO	PTC-402C-IP	●	●
EtroVision	EV3130/ EV3131/ EV3131A/ EV3830/ EV6130/ EV6332/ EV6530	●	●
GANZ	ZN-D2024/ ZN-PT304L/ ZN-PT304WL/ ZN-YH305/ ZV-S306		●
iPUX	ICS 1001/ ICS 1011/ ICS 1003/ ICS 1013/ ICS 1300/ ICS 1310/ ICS 130A/ ICS 131A	●	●
IQeye	510/ 511/ 701/ 702/ 703/ 705/ 710D/ 711D/ 712D/ 752/ 753/ 755/ 802/ 803/ 805/ 811/ 852/ 853/ 855	●	●
LevelOne	FCS-0010/ WCS-0010/ FCS-0020/ WCS-0020/ FCS-1010/ WCS-2010/ FCS-1030/ WCS-2030/ FCS-1040/ WCS-2040/ FCS-1060/ WCS-2060/ FCS-1070/ WCS-2070/ FCS-109X/ WCS-109X/ FCS-3000/ FCS-3021/ FCS-5030		●
MOBOTIX	D12D-IT/ D12D-Sec/ D22M-Basic/ D22M-IT/ D22M-Sec/ M12D-IT/ M12D-Sec/ M12M-IT/ M12M-Sec/ M12M-Web/ M22M-IT/ M22M-Night/ M22M-Sec/ Q22M-Basic/ Q22M-Sec	●	●
Panasonic	BB-HCM580/ BB-HCM581/ BB-HCM527/ BB-HCM531/ BB-HCM511/ BB-HCM515/ BB-HCM547/ BL-C1/ BL-C10/ BL-C111/ BL-C131/ BL-C20/ BL-C30/ BL-C30K1/ BB-HCM481/ BB-HCM403/ BB-HCM381/ BB-HCM371/ BB-HCM331/ BB-HCM311/ BB-HCM110/ BB-HCM100/ KX-HCM280/ KX-HCM180/ BL-C11/ BL-C31/ NF282/ NF284/ NP1000/ NP1004/ NP244/ NS202(A)/ NW484/ WV-NP302/ WV-NP304/ WV-NP304V	●	
SANYO	VCC-P450/ VCC-P470/ VCC-PT490/ VCC-PT500/ VCC-9800		●
SONY	SNC-CS10/ SNC-CS11/ SNC-CS20/ SNC-CS50/ SNC-CM120/ SNC-DF40/ SNC-DF50/ SNC-DF70/ SNC-DF80/ SNC-DS10/ SNC-DS60/ SNC-DM110/ SNC-DM160/ SNC-P1/ SNC-P5/ SNC-RX530/ SNC-RX550/ SNC-RX570/ SNC-RZ25/ SNC-RZ30/ SNC-RZ50/ SNC-Z20	●	
TOSHIBA	IK-WB12/ IK-WB21	●	●
TRENDnet	TV-IP212/ TV-IP212W/ TV-IP312/ TV-IP312W/ TV-IP410/ TV-IP410W/ TV-IP422/ TV-IP422W	●	●
VIVOTEK	IP3112/ IP3122/ IP3111/ IP3121/ IP3132/ IP3135/ IP3137/ PT3112/ PT3122/ PT3117/ PT3127/ IP6112/ IP6122/ IP6117/ IP6127/ FD6112V/ FD6122V/ PZ6112/ PZ6122/ PZ6114/ PZ6124/ SD6112V/ SD6122V/ IP7131/ IP7132/ IP7133/ IP7134/ IP7135/ IP7137/ IP7138/ IP7139/ IP7142/ IP7151/ IP7152/ IZ7151/ PT7135/ PT7137/ PZ7151/ PZ7152/ SD7151/ FD7131/ FD7132/ FD7141/ VS 3102/ VS 3100P/ VS 7100		●
Y-CAM	Y-Cam White/ Y-Cam Black		

*For the latest information of the supported cameras, please visit QNAP Security website: http://www.qnapsecurity.com/pro_compatibility_camera.asp
**All the other trademarks mentioned herein are the property of their respective companies.
***Designs and specifications are subject to change without notice.

Software Specifications

Video

Display Mode:
- 1/ 4/ 6/ 8/ 9/ 10/ 12/ 16/ 20-channel display, Picture-in-Picture mode, sequential mode

Multi-server Monitoring:
- Up to 120 channels monitoring from multiple QNAP NVR servers

Recording Connection:
- Up to 4

Compression Format:
- M-JPEG and MPEG-4 (depend on IP camera)

Video Setting:
- Resolution, quality, frame rate

E-map:
- Upload E-map

Recording

Recording Mode:
- Continuous/ schedule/ manual recording
- Alarm recording/ multiple alarm recording schedules

Buffer Storage for Alarm Images (before & after events):
- Pre-recording: up to 300 sec; post–recording: up to 300 sec (total 600 sec/ 10 min)

Recording Performance:
- Up to 120 frames at QVGA (320x240) or CIF (320x240)
- Up to 40 frames at VGA (640x480)
  * Real performance may vary in different environment

File format:
- AVI

Playback (VioStor Player)

Playback Channel:
- Max 4-channel playback at the same time

Playback Mode:
- Play, pause, stop, reverse play, next/ previous frame, next/ previous video file, different speed control

Search Mode:
- By date & time and recording type

Playback Enhancement:
- Full screen display, video snapshot, digital zoom

Download:
- Download recordings via the web

Network

Support:
- HTTP, TCP/IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP

IP Camera:
- Allows setting LAN/ WAN IP address

Security

Operation System:
- Linux-embedded, free from PC crash and virus attack

On-line Users List:
- Record of users currently logged on and previously logged on to the NVR

Host Access Control:
- Specify the connections to be allowed and denied to access NVR

Authority management:
- Configure different authority of specified cameras for max 32 users

Alert Notification:
- Buzzer, e-mail alert, event notification on monitoring

UPS:
- Supports APC (USB type UPS)

Event Logs:
- Detailed record of all events

Storage

Disk Mode:
- Single, RAID 0, RAID 1, JBOD/ Linear

Client PC Requirement
(Suggested system requirement for better video performance)

CPU:
- Pentium® 4 CPU 2 GHz or above

Memory:
- 512 MB or above

Operation System:
- Windows XP/ Vista® (32-bit)

Browser:
- Internet Explorer® 6.0 or later

Network Interface:
- 10/100 Mbps or above

Display Resolution:
- 1024 x 768 pixels or above

Language Support
English/ French/ German/ Italian/ Japanese/ Spanish/ Simplified Chinese/ Traditional Chinese/ Danish/ Dutch/ Finnish/ Korean/ Norwegian/ Polish/ Portuguese/ Russian/ Swedish

Utility Software

QNAP Finder:
- QNAP Finder is provided for quick server setup and NVR discovery in LAN
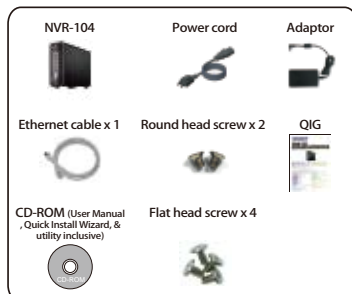
VioStor Player:
- VioStor Player allows you to play the recording files on your Windows computer easily

Certification
- CE, FCC, VCCI, BSMI

Package Contents

NVR-104

Power cord

Adaptor

Ethernet cable x 1

Round head screw x 2

QIG

CD-ROM (User Manual, Quick Install Wizard, & utility inclusive)

Flat head screw x 4

Optional Accessories

QBack-35S

QBack-25S

Hardware Illustration

One Touch Auto Video Backup Button
USB 2.0
USB
Status
HDD 1
eSATA
LAN
Power
LED Indicators
Power Button
USB 2.0 x 2
eSATA
Giga LAN
K-Lock Security Slot
Reset Button
Power Connector
Power Cord Hook

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