

# NVS202 VIDEO SERVER

## QUICK INSTALLATION GUIDE



### ◆ Special features

- Supports image resolutions up to 960H
- Dual Streaming of H.264 and M-JPEG
- Up to 30/25 frames per second in all image resolutions
- Integrated motion detection with pre- and post-alarm image/video buffering
- Full Duplex Two-Way Audio Support
- Support PTZ control (with Pelco-D/P protocol)
- SD Local storage, Event triggered, scheduled and continuous recording supported
- 1 Port analog video loop-out port (Concurrent use of IP video & CCTV)
- Terminal block for external sensors or external alarm devices
- Supports IEEE 802.3af Power over Ethernet injectors, mid- and end-spans

### Dear Customers!

By selecting this product, you have decided to use a professional device that guarantees highest quality and reliability. We would like to thank you very much for your confidence and kindly ask you to read the following instructions carefully before installation and operation in order to take full advantage of all quality features regarding this product.



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of non-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### INFORMATION

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at its own expense.

### WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

### CAUTION – To prevent electric shock and risk of the fire hazards

- Do NOT use power source other than that specified.
- Do NOT expose this appliance to rain or moisture.

### Trademarks

All names used in this manual for hardware and software are probably registered trademarks of respective companies.

This installation should be made by a qualified service person and should conform to all local codes.

## 1. Precautions

- Please read the manual carefully before the installation in order to set up the camera or video server correctly and to obtain the best picture quality.
- Please keep the manual in good condition for your future reference and service application.
- Installation and services should be only carried out by an authorized personnel according to local safety regulations.
- If any liquid or solid matter gets into the housing, immediately disconnect the camera or video server from power supply and have it checked by your authorized dealer before reusing.
- Avoid installing the camera or video server at extremely hot or cold places.
- If you are not a certified person, never try to dismantle the camera or video server. To avoid electric shock, never remove the screws or covers. There are no parts inside that need maintenance by the user. All maintenance should be carried out by qualified personnel.
- Avoid installing the camera or video server at a place of high humidity.
- Avoid installing the camera or video server at the place exposed to gas or oil.
- Keep the top glass of the lens always clean in order to obtain the best picture quality all the time. Be careful not to be stained by fingerprint.
- Don't face the camera or video server directly toward sunlight or sunlight reflecting area. Image Sensor may go defective at this condition.
- Please give a special attention to keep the unit from dangerous drop or external shock during the process of transportation or handling.
- Never try to touch the camera or video server in wet hand. It may cause an electric shock.
- Do not expose the camera or video server to radioactivity. It causes a serious damage on the Image Sensor.

## 2. Limitation of liability

This publication is provided "AS IS" without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or non-infringement of the third party's right. This publication could include technical inaccuracies or typographical errors. Changes are added to the information herein, at any time, for the improvements of this publication and / or the corresponding product(s).

## 3. Disclaimer of warranty

In no event shall seller be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to below:

- (1) Any damage and loss, including without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the product;
- (2) Personal injury or any damage caused by inappropriate use or negligent operation of the user;
- (3) Unauthorized disassemble, repair or modification of the product by the user;
- (4) Inconvenience or any loss arising when images are not displayed, due to any reason or cause including any failure or problem of the product;
- (5) Any problem, consequential inconvenience, or loss or damage, arising out of the system combined by the devices of third party.
- (6) Any claim or action for damages, brought by any person or organization being photogenic subject, due to violation of privacy with the result of that surveillance-camera or video server's picture, including saved data, for some reason, becomes public or is used for the purpose other than surveillance.

## 4. Package



Camera x 1



Installation guide x 1



Plastic anchor x 4



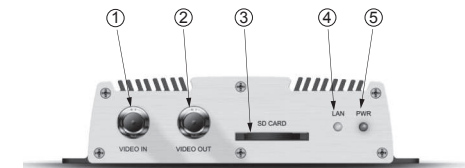
- Hardware Installation Guide (PDF)
- IP Camera Manual (PDF)
- NVR Program
- IPScan Utility Program (IP Installer)



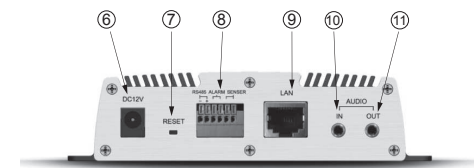
Tapping screws x 4 (Ø4x30L)

## 5. Name and function of each part

### - Front view



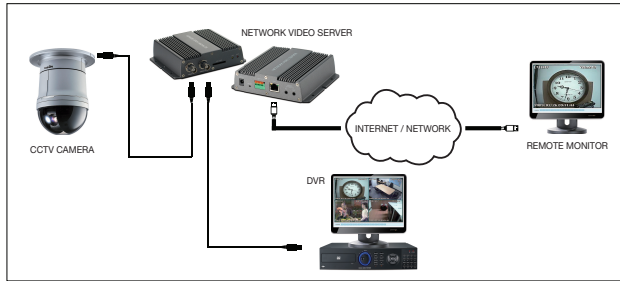
### - Rear view



No.	Item	Description
①	VIDEO IN	Connect the BNC video input signal.
②	VIDEO OUT	Monitor the Video input signal.
③	SD CARD	Compartment for the SD memory card.
④	LAN LED	Network connection status LED.
⑤	PWD LED	Power indicator LED.
⑥	DC12V	Connect the Power source.
⑦	RESET	Factory Reset Button
⑧	I/O PORT	Alarm / Sensor / RS485 Connector
⑨	LAN PORT	Connect POE or LAN cable
⑩	AUDIO IN	Audio in
⑪	AUDIO OUT	Audio out

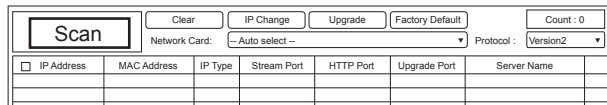
## 6. Installation & connection

### 6-1 Installation Example

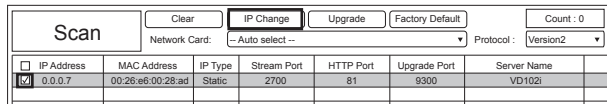


### 6-2 Connecting Network

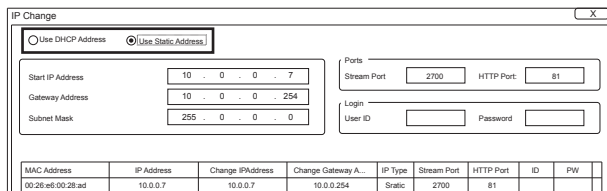
- 1) Run IPScan Utility program in the packaged CD.
- 2) Click "Scan" button. Once IPScan Utility program scanned, the panel shows every camera or video server connected on the local network.



- 3) The MAC address can be found on the label of the camera or video server.
- 4) From the cameras or video servers listed, select one and click "IP Change to assign a new IP address.



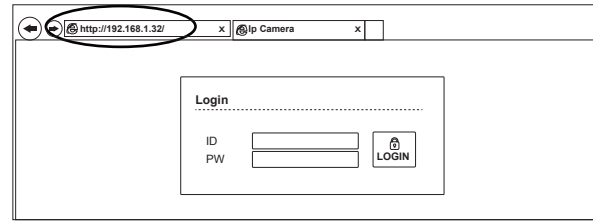
- 5) Select DHCP or STATIC, then change IP address.  
Default ID and password are "admin" and "1234" respectively.



## 6. Installation & connection

### 6-3 Accessing the Camera or video server's Homepage

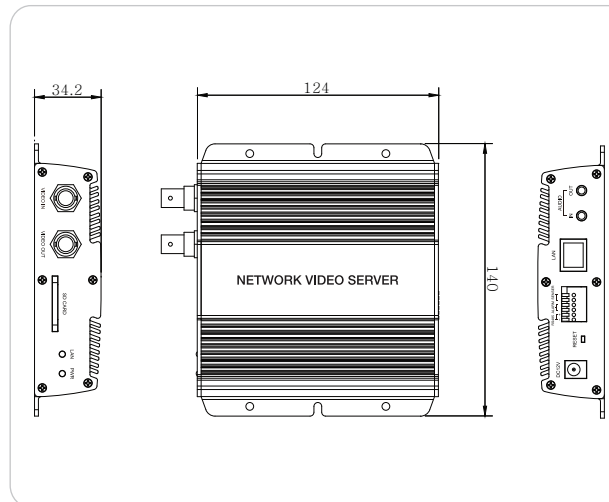
- 1) After you assign IP address to your IP camera or video server and enter that camera or video server address on the Web Browser, you will be connected to the login page of the camera or video server as shown below.



- 2) Enter a ID (username) and password to access the camera or video server.  
The default ID and password are "admin" and "1234".
- 3) The first time you login to the camera or video server using ActiveX, you are notified that a required ActiveX control is required. You need to allow the installation of ActiveX by clicking "Yes". It is normal for this process to take up to 30 seconds.

※ For more information, see the manual of IP camera or video server in the packaged CD.

## 7. Dimension (mm)



## 8. Specification

Classification		Model
		NVS202 (960H Video Encoder)
General	CPU	32-bit ARM9 RISC CPU up to 432MHz
	Flash	128Mbyte
	SDRAM	128Mbyte
Video	Video compression	H.264 High profile @ Level 4.0, Motion JPEG
	Resolution	Up to 960H (NTSC 960 x 480, PAL 960 x 576)
	Frame rate	H.264 Up to 30fps with 960H MJPEG Up to 30fps with 960H resolution
	Bit rate Control	Dual Stream: H.264, MJPEG H.264: CBR / CVBR
	Image setting	Brightness, Contrast, Sharpness control
	Audio streaming	Two-way, full duplex
Audio	Audio compression	G.711
	Sample Rate	8KHZ
	Data Rate	64Kbps
	Audio input	Microphone input / 1 x Line-In (Single Mono)
	Audio output	Line output / 1 x Line-Out (Single Mono)
Serial	Port	RS-485
	Data Rate	600bps ~ 115200bps
Network	Security	Password protection User access log HTTPS encryption
	Protocol	HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, ICMP
System integration	Intelligent video	Motion detection with 4 x 3 blocks
	Alarm trigger	Motion detection External input / Normal Open / Close Type
	Alarm events	File upload via ftp, e-mail Notification via email, FTP and TCP
		External output activation / Normal Open / Close Type
	Video buffer	5MB pre-alarm and post-alarm 180sec
Recording	Save to SD card with event mode and continuous mode	
Physical	Power source	DC 12V / 1.5A, PoE(Power over Ethernet) : 802.3af
	Power Consumption	Max. 2.5W
	Net Weight	450g Appr. (Encoder Only) 810g
	Status LED	Power On / Network Connection
	Reset Button	Factory Reset
Environment	Dimension	140mm(W) X 347mm(H) X 124mm(D)
	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C

\* Specifications are subject to change without prior notice for improvement.