

Network Video Server User's Manual

Applies to EC series only

Table of Contents

1	Product Features and Specifications	6
1.1	Product Specifications	6
1.2	Main Features	8
2	Front and Rear Panel	10
2.1	Front Panel.....	10
2.2	Rear Panel.....	10
3	Network Web Client-end Operation.....	11
3.1	Network Connection.....	12
3.2	Login and Logout.....	12
4	Pro Enterprise Surveillance System.....	16
4.1	Log in.....	16
4.2	Enable Monitor.....	17
4.3	Add New Device	19

5	Other Functions	21
5.1	Restore Factory Default Setup	21
5.2	Program running completes after connecting the network video server to the power.....	21

Welcome

Thank you for purchasing our network video server!

This user's manual is designed to be a reference tool for operation of your system.

Here you can find information about this network video server.

Before your operation please read the following instructions carefully.

- **Installation Environment**

- ◇ Keep away from extreme hot places and sources;
- ◇ Avoid direct sunlight;
- ◇ Keep away from extreme humid places;
- ◇ Be horizontally installed or wall hanging;
- ◇ Avoid violent vibration;
- ◇ Do not put other devices on the top of the NVS;
- ◇ Be installed in well ventilated place; do not block the vent.

- **Accessories**

Check the following accessories after opening the box:

*** Please refer to the packing list in the box ***

- ◇ One user's manual
- ◇ One installation CD
- ◇ One product certification.

Note: Please earth the NVS.

Please pay attention to the following items

- **Insulating Resistance**

Insulating resistance, between leading-in terminal of power supply (ac) and metal component of NVS' shell, is more than 100MΩ in normal environment. In humid and hot environment it is more than 10MΩ.

- **Dielectric Strength**

Voltage of plug and voltage between leading-in terminal of power supply (ac) and metal component of NVS' shell, can withstand AC 50Hz 1500V(experimented), arcing and over flash don't happen during 1minute.

- **Leakage Current**

The current is less than 5mA (AC peak) .

- **Prevent Overheating**

NVS works normally, in normal condition. No fire! There is no danger for operator to touch components.

- **Elevated Temperature**

In normal condition, shell temperature is less than 65°C. After inside components which generate heat working 4 hours continuously, the elevated temperature is less than its prescribed value.

- **Inflaming Retarding**

It is of non-metallic shell. After fired 5 times and each time lasts for 5 seconds, there is no combustion-supporting or self-ignite.

Important:

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

1 Product Features and Specifications

1.1 Product Specifications

Parameter	Specifications
Resolution	Real-time PAL/NTSC: Support D1/HD1/CIF/QCIF.
Video Compression	H.264/MPEG-4 (VBR/CBR)
Operation System	Embedded Linux real-time operation system
Operation Interface	WEB or Client-End
System Resources	Support max 4-channel record and 4-channel network operation at the same time.
Video Input	1-4 channel composite video (NTSC/PAL) , BNC (1.0V P-P ,75 Ω)
Video Display	1/2/4 window display (According to product channel amount)
Audio Input	1-4 channel LINE mode. Input value peak <2.5Vpp. Input resistance>10K Ω ; 1-channel audio talk
Audio Output	1-channel audio output Output value peak<4Vpp, Power<1W, Load >8 Ω one-channel plug.
Video Standard	PAL (625 line, 50f/s) , NTSC (525 line, 60f/s)
Motion Detection	Zone setup: PAL: 396(22*18). NTSC: 330(22*15) Zone sensitivity: 6 levels for each zone.
Audio Compression	ADPCM/G711
Video Recording	Real-time mode: NTSC 1f/s-30f/s for each channel (Adjustable).

Speed	PAL 1f/s-25f/s for each channel (Adjustable)
Image Quality	6 levels selectable
Alarm Input	4-ch alarm input(earthed means there is alarm)
Alarm Output	2-ch relay output
Alarm Relay	30V DC 1A, 125V AC 0.5A(Activation output)
Control Platform Port	For ordinary serial port(debug),keyboard port and transparent port(network to transfer port input and output)
RS485 port	Supports connect RS485 bus to the alarm decoder, PTZ control port. Support various protocols.
Network Connection	RJ45 10M/100M self- adaptable Ethernet
USB Interface	One 1.1 USB port
IDE port	Built-in one IDE port
Power Consumption	5W
Working Temperature	5°C — 50°C
Working Humidity	20% — 90%
Air pressure	86kpa — 106kpa
Dimension	310*210*55(Unit: mm)
Weight	2.0 KG(Excluding HDD)
Installation	Desk installation/Rack installation/Hanging installation

1.2 Main Features

User Management	<ul style="list-style-type: none"> • Each group has different management powers that can be edited freely. Every user belongs to an exclusive group. • When no user login, monitor power can be set up freely.
Storage	<ul style="list-style-type: none"> • Support storage video to the hard disk. • Via corresponding setup (such as alarm setup and schedule setup), you can backup related video data in central server. • Record local video and storage the file in the client end.
Alarm	<ul style="list-style-type: none"> • Respond to external alarm simultaneously (within 200MS), based on user's pre-defined relay setup, system can process the alarm input correctly and prompt user by screen and voice (support pre-recorded audio). • Support central alarm server setup, so that alarm information can remotely notify user initiatively. Alarm input can be derived from various connected peripheral devices. • Based on user's pre-setup, prompt or alarm you when image loss occurs. • Alert you via EMAIL.
Network Monitor	<ul style="list-style-type: none"> • Through network , sending audio/video data compressed by NVS to client-ends, then the data will be decompressed and display • If bandwidth is big enough, latency is less than 500ms • Support max 10 connections • Transmit audio/video data by HTTP、TCP、UDP、MULTICAST、RTP/RTCP and etc. • Transmit some alarm data or alarm info by SMTP. • Support WEB access in WAN.
Network Management	<ul style="list-style-type: none"> • Supervise NVS's configuration and control power via Ethernet. • Support WEB and client-end access.
Peripheral Equipment Management	<ul style="list-style-type: none"> • Support peripheral equipment management such as protocol setup and port connection. • Support transparent data transmission through RS232、RS485.
Auxiliary	<ul style="list-style-type: none"> • Support switch between NTSC and PAL. • Support real-time system resources information and running statistics display.

- | | |
|--|---|
| | <ul style="list-style-type: none">• Support log file. |
|--|---|

2 Front and Rear Panel

2.1 Front Panel

This series network video server is shown as in Figure 2-1.

1. REC-record indication light
2. Link- network connection indication light
3. Run- system running status light
4. Power—power indication light
5. Default--restore factory default setup port



Figure 2-1

2.2 Rear Panel

This series rear panel is shown as in Figure 2-2.

1. USB 1.1 port (function expansible)
2. RS232 port
3. Main operation zone:
NO1/C1/NC1: output control port 1--Normal open/public port/Normal close
NO2/C2/NC2: Output control port 2-- Normal open/public port/Normal close

A~B: RS485 port

AIINI 1~AINI4: Alarm input port

G : Earth

4. Audio/video input zone: Video input port: VIDEO IN. Audio input port: AUDIO IN

5. LINE SPK MIC:

LINE(Blue): Line input: Level: 2Vrms. Input resistance: 10k ohms

SPK(Green): Line output: Level: 2Vrms. Output resistance: 10k ohms

MIC (Pink): Microphone input. Level: 10mV-200mVp-p. Input resistance: 600k ohms-20k ohms;

6. Network interface: 10M/100M self-adaptive Ethernet port

7. Fan

8. Power button and port. (AC100~240V/47~63HZ)

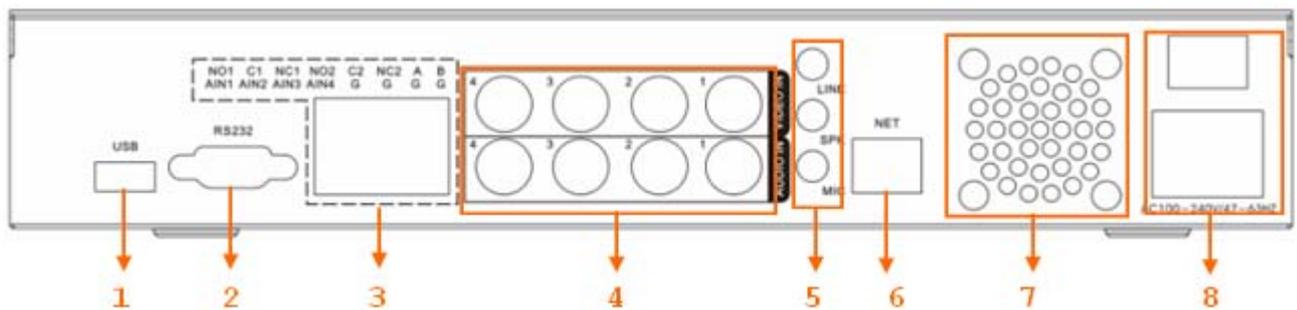


Figure 2-2

Ethernet Connection

Please use crossover cable when you connect NVS directly to PC.

Please use straight-through cable when you connect NVS to hub or switcher.

3 Network Web Client-end Operation

3.1 Network Connection

Before web client operation, please check the following items:

- Network connection is right
- NVS and PC network setup is right. NVS default IP address is: 192.168.1.108.
- Use order ping `***.***.***.***`(* NVS IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.
- System is compatible with WIN VISTA web control right now. But you need to disable user account control function. Double click user account and then disable user account control. After completing setup, please reboot the PC.
- System can automatically download latest web control and the new version can overwrite the previous one.
- If you want to un-install the web control, please go to start and then click run button, input `regsvr32 -u WebRec.ocx` in the pop up dialogue box or run `uninstall web.bat` to un-install. Please note, before you un-install, please close all web page, otherwise the un-installation might result in error.

3.2 Login and Logout

Open IE and input NVS address in the address column. For example, if your NVS IP is 192.168.1.108, then please input `http:// 192.168.1.108` in IE address column.

System pops up warning information to ask you whether install `webrec.cab` control or not. Please click yes button.

If you can't download the ActiveX file, please modify your setup as below. See Figure 3-1.

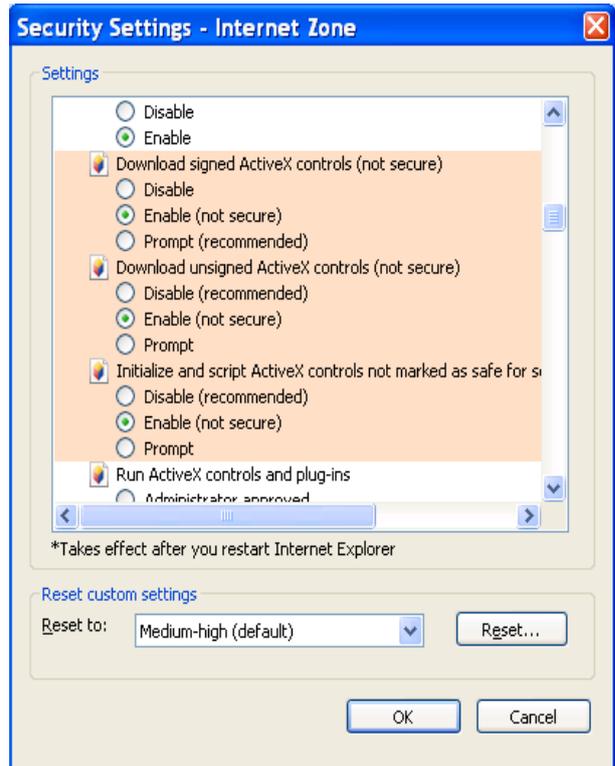
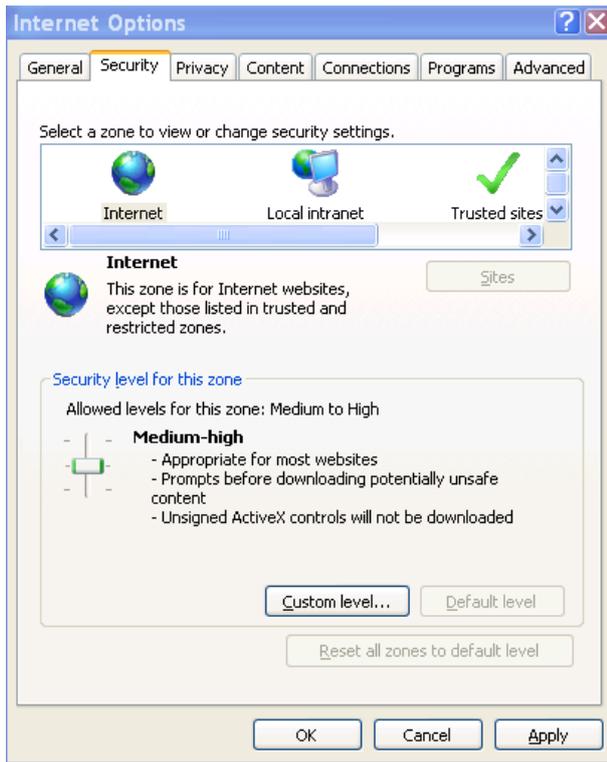


Figure 3-1

After installation, the interface is shown as below. See Figure 3-2.

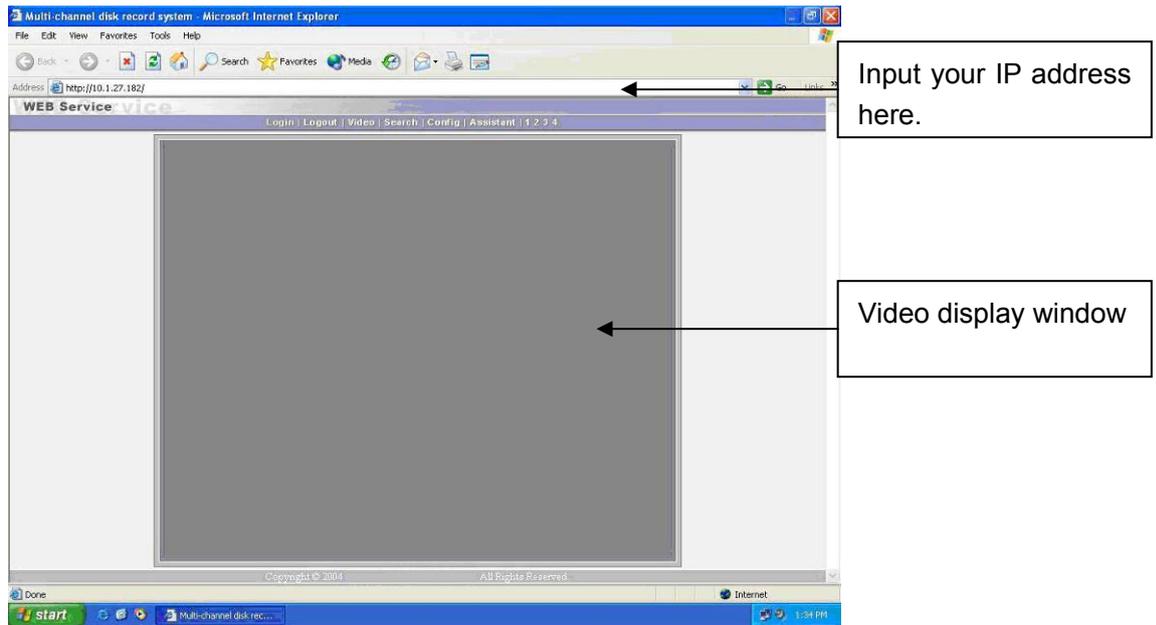


Figure 3-2

There are six function keys: login, logout, video, search, configuration and assistant. See Figure 3-3.

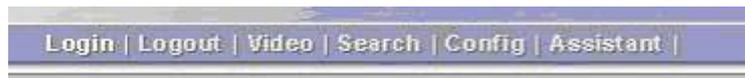


Figure 3-3

Click login button, the following interface will pop up. See Figure 3-4. Please input your user name and password.

Default factory name is admin and password is admin.

Note: For security reasons, please modify your password after you first login.

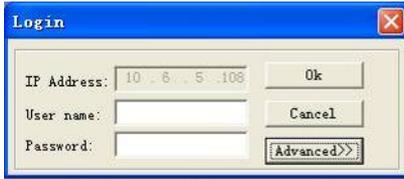


Figure 3-4

For detailed operation instruction, please refer to our NVS Web Client Operation Manual included in your CD.

4 Pro Enterprise Surveillance System

In this chapter, we introduce how to add devices and how to enable monitor function. For detailed operation, please refer to pro enterprise surveillance system user's manual.

4.1 Log in

Double click enterprise profession surveillance platform icon ().If it is your first time to use the system, you can see the following interface. See Figure 4-1.



Figure 4-1

After selecting a language, you can see the following interface. Here you can input user name and password to log in you selected server. The log in interface is shown as in Figure 4-2.

If it is your first time to use the system, you need to click add button to add a device first. Default central control server name is Local.

System default username and password both are admin.

Note:

For security reasons please modify your password after you first logged in.



Figure 4-2

4.2 Enable Monitor

After successfully logged in, please select the device and then click connect/disconnect button () .

Select the channel you wan to view, click connect/disconnect button () again.

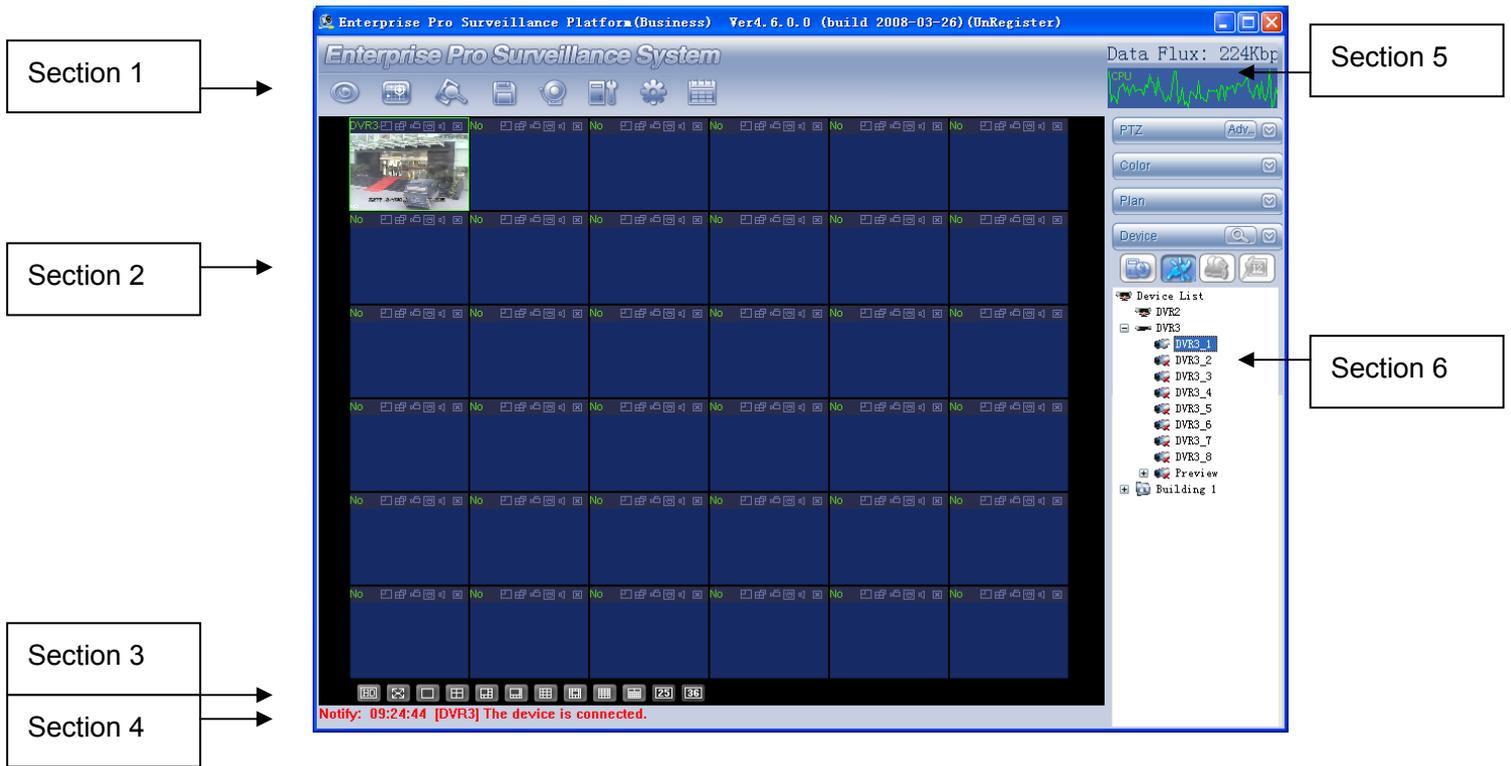


Figure 4-3

There are totally six sections:

- Section 1: There are eight function keys: monitor, E-map, record, save, alarm, configuration, log and system.
- Section 2: Here is for you to view channel video.
- Section 3: Here is for you to select display mode. System supports various display modes. HD item is for you to select priority between real-time and video fluency.
- Section 4: Here is for you to view current help information.
- Section 5: Here is to display data flux and CPU status.

- Section 6: There are four function buttons: PTZ, color, device and plan. Please note system only supports one window in full-screen. Here we recommend resolution 1024*768.
Select a device name and then click connect/disconnect button, you can connect current device to network. You can see a little red -cross below the name disappeared.
Click one window on you left side and then double click channel name on you right hand, you can see the corresponding video in current window.
Please refer to Figure 4-4 for connection/disconnection information.

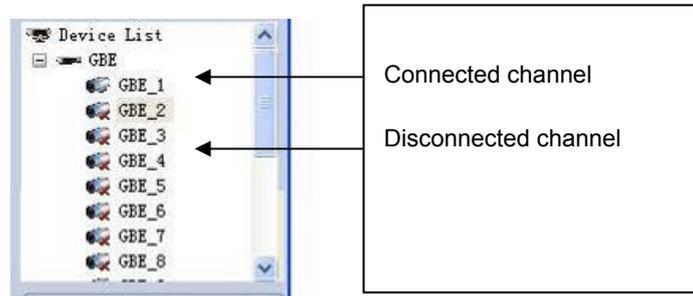


Figure 4-4

4.3 Add New Device

Click configuration button, you can see a network management unit shown as in Figure 4-5. There are five function buttons, from left to right: device management, user manager, E-map, device configuration and upgrade.

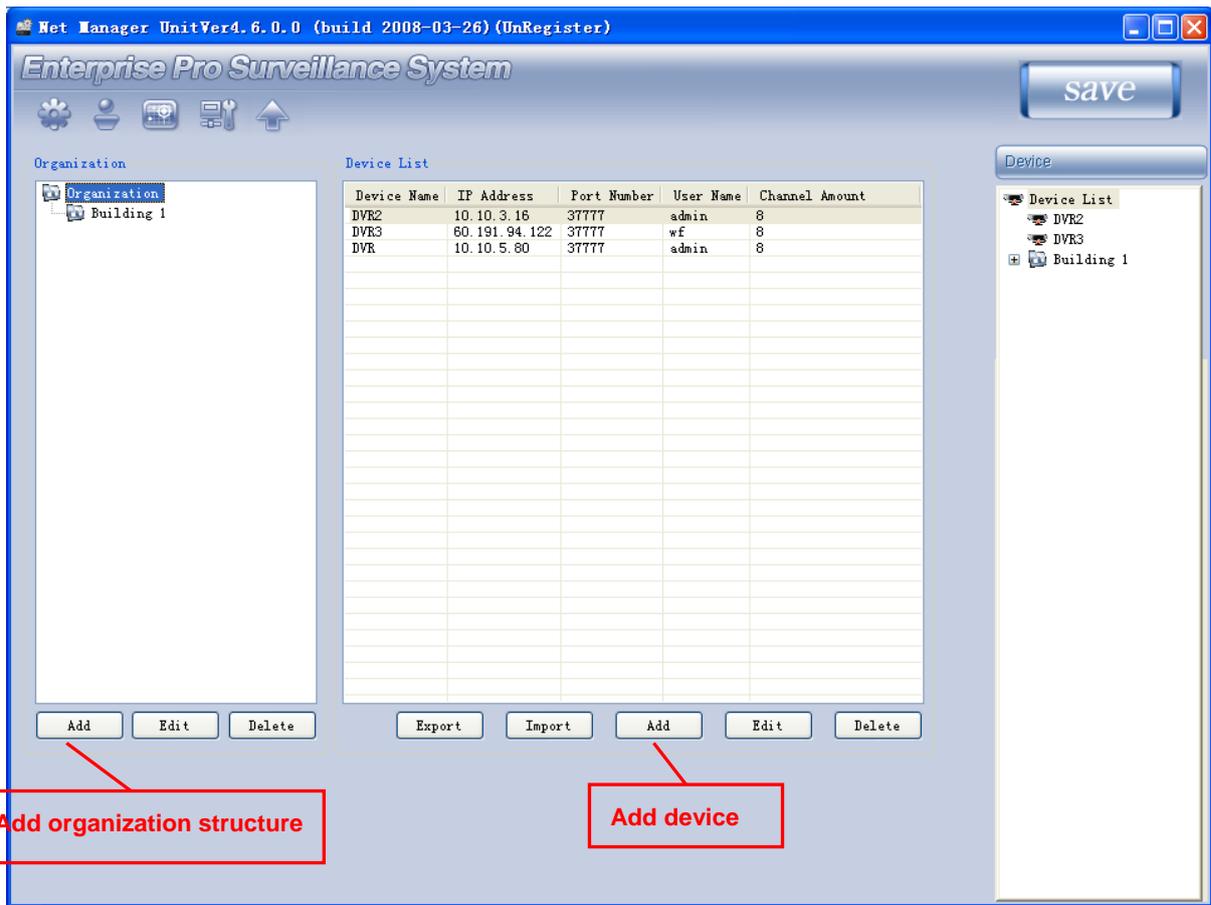


Figure 4-5

5 Other Functions

5.1 Restore Factory Default Setup

In Figure 4-1, you can see button 5 is a port to restore factory default setup. Please follow the steps listed below:

Connecting the NVS to the power and you can see the program begins running automatically.

Press the button 5 for at least 50 seconds until you see the indication light 3 becomes flashing.

Release the button 5.

Press the button 5 for another two seconds (the above two operations shall be done within 10 seconds.)

System begins reboot and after it boots up again you can see the system resumes factory default setup.



Figure 5-1

5.2 Program running completes after connecting the network video server to the power

After connecting the NVS to the power, system automatically begins running. After system completed running, the green light in the front panel (button 3 in figure 5-1) flashes twice or you can hear beep. Now system is booting up. You can use client-end or web to access the device.

Note

- **This manual is for reference only**
- **All the designs here are subject to change without prior written notice.**
- **Please visit our website or contact your local service engineer for more information.**

