Network Video Server and IP Camera

Quick User Guide

(Version 3.0.4)

Note: This manual may have not described the technical details correctly and even have some printing mistakes. If you have some problems when using this user guider, please contact our customer service department. And relevant operations in this manual will update regularly without prior notice.
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1. Video encoder Technical parameters

- **Video standard**: PAL, NTSC
- **Image compression**: H.264
- **Encode rate**: 16 kbps - 16Mbps
- **Local functions**: Video recording and picture capture
- **Mobile function**: Support 3G, and real-time surveillance
- **Network functions**: IE Brower, configuration, update
- **Network methods**: Support DNS, LAN, WAN
- **Equipment interfaces**: Series transmission and alarm interface
- **Encode mode**: Support double encode stream

2. Product appearance & structure

2.1 Network Video Server Connection Panel Details (take 4ch DVS as example):

Connection explained: (from left to right):
1. 『VIN1, VIN2, VIN3, VIN4』 4 channels video input, standard BNC socket;
2. 「ANT」 port of wireless antenna;
3. 「AIN1, AIN2, AIN3, AIN4」 4 channels audio input, standard BNC socket;
4. 「DC12V」 Power supply socket, connected with 12V DC power supply via voltage stabilizer;
   Please use the matching power supply with voltage stabilizer;
5. 「Alarm Out」 Alarm output, 4 channels switch volume: A1, B1 in one group; A2, B2 in one group; A3, B3 in one group and A4, B4 in one group;
6. 「Alarm In」 Switch volume alarm input: S1, S2, S3 and S4 (S1, G in one group, S2, G in one group, S3, G in one group, S4, G in one group);
7. 「+」 RS485 wire connecting terminals +, -;
8. 「G」 GDN public ground wire;
9. 「R,T」 RS232 wire connecting terminals, T: Transmitting wire terminal; R: receiving wire terminal;
10. 「+12V」 Output power supply (12V, 800mA), shares with public wire G;
11. 「LINE IN」 Audio talk-back input, connected with active equipment;
12. 「LINE OUT」 Audio talk-back output, connected with active equipment;
13. 「NET」 Standard network RJ45 socket;
14. 「RST」 Reset button;

2.2 IP Camera Connection Panel Details

Connection explained: (from up to down)
1. 「+」, 「-」 RS485 ALARM,
   「A,B」 A, B: 1 channel alarm output port,
   「S,G」 1 channel alarm input port;
2. 「RUN」 system running indicating light;
3. 「PWR」 power indicating light;
4. 「LINE IN」 audio input (active input);
5. 「ANT」 port of wireless antenna;
6. 「LINE OUT」 audio output;
7. 「VIDEO OUT」 port of analogue video output;
8. 「LAN (POE)」 network port (POE port);
9. 「DC12V」 power input plug (DC 12V);
10. 「SD CARD」 SD card port;
11. 「RESET」 Reset button;

**Wiring diagram:**

A. Network port
B. Audio input
C. Audio output
D. Reset button (Not supported)
E. RS485 port
F. Power Input port
G. 1 channel alarm IN
H. 1 channel alarm OUT

**3. Hardware Installation**

**3.1 external equipment connections**

- **Step 1:** Connect the 12V power supply to the video server
- **Step 2:** Connect the LAN line to the server’s NET socket
- **Step 3:** Connect the other end of the LAN line to a router or network hub, see
Please note that at this moment, the video server is running with its default setting with IP address: **192.168.1.100** Sub mask: **255.255.255.0** Gateway: **192.168.1.1**

**Note:** If users have forgotten the password and net parameters accidentally, press the ‘RST’ button under the left for 5 seconds after start the equipment, the indicator light of RUN will disappear and all the parameters restore to default immediately.

### 3.2 Alarm equipment connections

1. Alarm input connection:
Note: after alarm input device is connected well, it is required to select correct alarm type in the alarm input configuration menu of DVS/IP Camera and set well the time interval of arrangement!

2. Alarm output connection:
Circuit Breaker
Alarm output device power supply

Alarm power supply (Maximum AC: 110V, 1A, 110W)

Its maximum working voltage should not exceed 110V

High Voltage (exceed 110V), High Current

Circuit Breaker
Power Supply
Alarm output device power supply
Note: after alarm output device is connected well, it is firstly required to set well linkage alarm input of alarm input, or manually control alarm output switch in alarm output configuration menu!

Its maximum working volt should not exceed **110V**

High Voltage (exceed 110V), High Current

Warning: Be cautious with high voltage and current!
3.3 Equipment configuration

3.3.1 Prerequisite of the computer

The system has installed Internet Explorer 6.0 or above
DirectX 9.0 or above is installed

3.3.2 Client setting

**Note:** Your computer must be in the same network address range with the video server to communicate, therefore you may need to change the IP address of the video server before you can login the server. The procedure is as follows:

◆ **Step 1:** Install the Network Video Client Software

Insert the software disk to the CD-ROM, you will see the NVClient Client Software installation file, run the program. After the installation is finished, click “**Start**” – “**Programs**” – “**Digital Video Management Center**” – then run “**Server Tools V2**” as follows

◆ **Step 2:** Click search to search the video servers, choose the server and click “Modify Net”, a dialog will show up as below:
◆ **Step 3:** Modify the IP address (example: modify the address to 192.168.168.72), see the example bellows:
4. Video encoder login and Interface function description

4.1 Login the video encoder via the NVClient software

4.1.1 Steps of login

- **Step 1**: add an IP address to computer so as to access DVS/IP Camera, for example: 192.168.1.99.
- **Step 2**: Login client side, in Windows operating system, click “Start” → “Program” → “Digital Video Management Center” menu, click “NVClient” to pop up user login interface, then type user name, password (an administrator user must be established when NVClient is used for the first time), press “OK” to enter the main interface.
Click 『Local Settings』 on menu bar to pop up local setting diagram.

The method of adding DVS/IP Camera in local LAN is as follows:
Click 『Search』 button to pop up the setting box as follow

**Step 1:** select the device to be added in the search list

**Step 2:** click 『Add』 button on the Search dialog box to pop up the setting box as follow
◆ **Step 3:** type Local Name defined by user

Tick 「Enable auto login server」, when you login the server next time, you need not to type user name and password and can login the device automatically.

◆ **Step 4:** after the setting is finished, return to the main interface of software, double click the added device in the device list, and then double click the channel below the device to preview the video.

4.2 Login the video encoder via Internet Explorer

**Note:** When Internet Explorer visits the video server for the first time, the active x plug-in needs to be installed.

◆ **Step 1:** run IE, key in the IP address of the server in the address line e.g. http://192.168.168.72 as shown bellows, the system will ask for permission to install the plug-in
◆ **Step 2:** If this your first time to login, please click download link:

Click here to download and install the ActiveX packet manually. a dialog will pop up as bellows:

◆ **Step 3:** Click **Run** button, a dialog will pop up as bellows:
Step 4: Click Next > button and Install button to finish install.

Step 5: Input “username” and “password” and then click Login button.

Note: the default login is “admin”, password is “admin”
◆ **Step 6:** Click 🎥 button to open video channel.

### 4.3 Web client Interface function description

- Click this button to open or close channel picture.
- Click this button to carry out snapshot to front end video.
- Click this button to enable talkback function with front end DVS/IP Camera.
- Click this button to enable talkback function with front end DVS/IP Camera.
- Click this button to switch between audio enable and disable.
- Click this button to enable rain strip function.
- Click this button to enable lighting function.
Control Up, Down, Left and Right of camera PTZ automatically

Control Zoom, Focus, and aperture of camera

Set and call the preset position of PTZ

Click this menu to switch to real time preview interface

Click this button to switch to record playback interface

Click this button to pop up parameters setting diagram

Click this button to exit login

5. Video Decoder login and configuration

Decoder default network parameter:

IP Address: 192.168.1.98
Subnet mask: 255.255.255.0
Default gateway: 192.168.1.1
DNS server: 202.96.134.133

5.1. Decoder login

5.1.1. Login steps:

◆ Step 1: Increases one IP address which visits mutually with the decoder.
◆ **Step 2:** Run “NVClient” in the “Start”→“Program”→“Digital Video Management Center” menu, input username and password to login the system.

◆ **Step 3:** Select “Login Server”, input username and password.

◆ **Step 4:** Input the username and password (default value are admin), click “Ok”, the decoder will become to the login successful status.

5.2. Decoder configuration

Enters the parameter Setting three methods:

**Method 1:** Select the decoder after login, select “Setting Configuration” with right key

**Method 2:** Select the decoder after login; click the button on the main menu to pop up the remote configuration window

**Method 3:** Select the decoder after login, press F5 key

5.2.1. Channel setting

Enters the parameter setting and select the Camera Setup, which encoder can connect the decoder in here you to have to connect.

Step in the Setting Configuration and select the Camera Setup, then you can set which encoder the decoder could connect.
**Alone**

**Alone:** Only connects an encoder the image. If is the multi-channel video frequency encoder may choose the random channel decoding output also to be possible to choose an encoder all channels simultaneously to decode the output;

**Enable Auto Connect:** Auto connect to encoder;

**Address:** input encoder domain address for the domain or the encoder IP address for the IP Add.

**Port:** input the decoder port

**Username, Password:** input the username and password for decoder login

**Channel:** Which channel connects the encoder. If is the multi-channel network video frequency encoder may choose “all channels”, realization multi-channel video frequencies by picture division way output;
After above parameter establishment correct, then clicks on [connection] the button to connect the corresponding encoder, if wants to separate the connection click [separation] then

Cycle

**Cycle:** May connect the multi-Taiwan encoder, according to establishment time-gap circulation cut decoding output; This company's decoder are most may support 16 group circulation decoding output. Steps:

- **Step 1:** Select 「Cycle」;
- **Step 2:** Double click 「Info」 (1—16), and clicked;
- **Step 3:** Choice Address in 「Connect Info」: 「Domain or IP Add」;
- **Step 4:** Input the message 「Server Add, Port, User Name, Password, Channel」 of the DVS which needs to connect;
- **Step 5:** 「Switch Times」. Input the time of the circulation show. The minimum value is 10S;
- **Step 6:** After the above establishment completes, clicks 「Modify」;
- **Step 7:** Continues to increase other circulation server address;
- **Step 8:** Click 「Cycle Connect」. Ok, save to FLASH.
6. Access camera on the WAN (INTERNET)

◆ **Step 1:** Make sure the DVS IP address is LAN IP address; make sure the IP address and the DNS server is correct.
Step 2: Setting Virtual Server on the router
(Setting Virtual Server, Web Port: 80, add DVS IP address: 192.168.168.72)

(Setting Virtual Server, Data Port: 8200, add DVS IP address: 192.168.168.72)
◆ **Step 3:** Get WAN IP address (116.24.36.109) then enter this address to browser.

**Example:**

![WebClient - Microsoft Internet Explorer](image_url)
7. FQA

1) **Question: unable through the IP address connection network video encoder**
   Inspection network video encoder whether online, may through the PING order examination;
   Inspects information and so on IP address, port number, user name, password in the network video decoder connection information whether with network video encoder correspondence

2) **Question: unable through the domain name connection network video encoder**
   Inspection network video encoder dynamic domain name analysis serves whether begins using normally;
   Inspects information and so on domain name, port number, user name, password in the network video decoder connection information whether with network video frequency encoder correspondence

3) **Question: The decoder outputs on monitoring device non-picture output**
   Inspects above two kinds of situations;
   Inspection connection monitoring device and decoder video output electric cable whether damages, or the contact is not good;
   The decoder outputs on monitoring device non-picture output.

4) **Question: can not visit video server via browser**
   Possible reason: network disconnected
   Solution: Connect network with PC to check if the network is connected well.
   Firstly check cable failure and network problems caused by virus, until the network is connected successfully by checking with ping command
   Possible reason: IP address conflict
   Solution: Disconnect the server’s network and connect server with PC to reset IP address according recommended operations
Possible reason: IP address in different subnets
Solution: Check the IP address and subnet mask of server and gateway
Possible reason: web port is changed
Solution: Contact network administrator to obtain corresponding port information
Possible reason: unknown
Solution: Reset server to the factory settings and re-connect network. The default IP address of system is 192.168.1.100 (Default IP address of decoder system is 192.168.1.98).

5) Question: can not control dome

Possible reason: signal cable is not connected or not connected properly
Solution: Re-connect control cable with dome and server

7 Default parameters

1. Network parameters

1) Network Video Server and IP Camera default parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP address</td>
<td>192.168.1.100</td>
</tr>
<tr>
<td>Subnet address</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.1.1</td>
</tr>
<tr>
<td>Data port</td>
<td>8200</td>
</tr>
<tr>
<td>Web port</td>
<td>80</td>
</tr>
<tr>
<td>Mobile port</td>
<td>15961</td>
</tr>
<tr>
<td>UPNP</td>
<td>Off</td>
</tr>
</tbody>
</table>

2) Network Video Decoder default parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP address</td>
<td>192.168.1.98</td>
</tr>
</tbody>
</table>
### 1. Network configuration

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet address</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.1.1</td>
</tr>
<tr>
<td>Data port</td>
<td>8200</td>
</tr>
</tbody>
</table>

### 2. Username and password

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>admin</td>
</tr>
<tr>
<td>Password</td>
<td>admin</td>
</tr>
</tbody>
</table>