

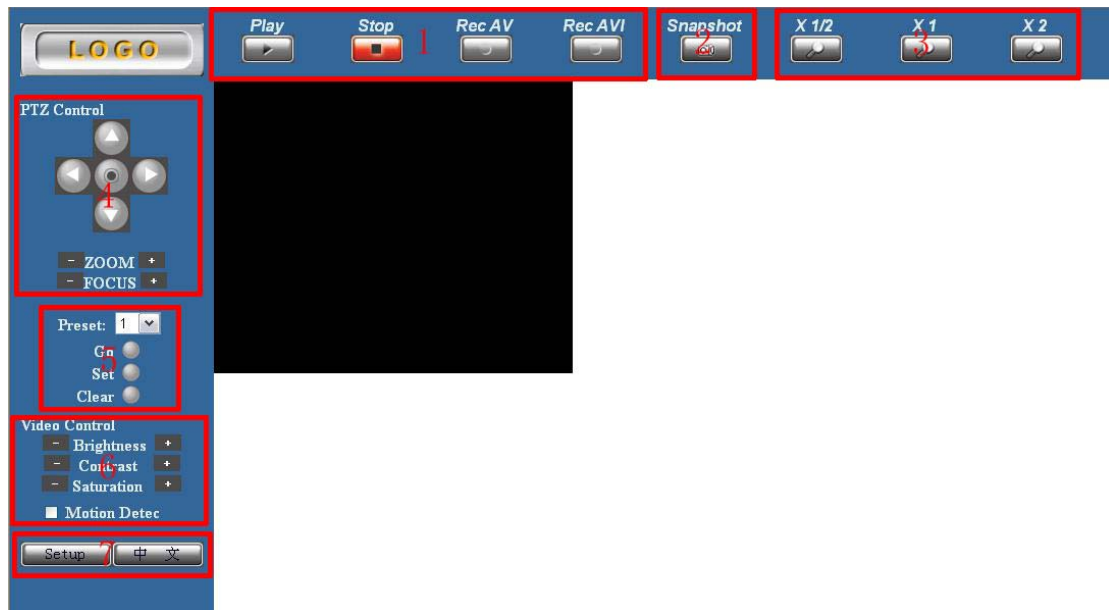
# NVS/ IP Camera Manual

(IE Version)

Type IP address of IP Camera in the IE address bar, and then it will display a dialog box, which requires username and password, if the administrator uses as first time, the username is 'admin', no password. Shows as follows:



The operation main surface will show after you click 'ok':



Main Interface functions:

- (1) Play、 Stop、 Record
- (2) Snapshot
- (3) Image Size Zoom function
- (4) PTZ Control
- (5) Preset point set
- (6) Video Control: Brightness, Contrast, Saturation
- (7) Language shift button (Chinese/ English ) , Detail Set button---‘Setup’

Click Setup button to enter into the set interface:

## 1) Basic Configuration

### 1 . Status

You could find Information as: System Information、 Network Status、 Camera Information、

Wireless Status、 OCX Information

1. Display the current IP Products’ Firmware Current Version and time, MAC, LAN IP Information etc.

2. Camera Type: PAL or NTSC

3. Show the Total Live-View Users of the current IP Products

**PS: Point1 and 2 are factory default set, point 3 is settled by user. (It could set in advanced configuration---administrator)**

Shows as follows:

System Information	
Firmware Current Version	3.04.00.04.M (Aug 24 2007 15:17:56)
Network Status	
Ethernet MAC Address	00-60-6E-4F-46-2F
LAN IP Address	192.168.1.30
LAN Netmask Address	255.255.255.0
LAN Gateway Address	192.168.1.1
DHCP State	Disabled
Camera Information	
Camera Type	PAL
Total Live-View Users	0
Wireless Status	
Wireless Connection	DOWN
Channel	0
Signal Level	0%
TX Rate	Auto
OCX Information	
OCX Current Version	1.18.4.32
OCX Path	C:\WINDOWS\Downloaded Program Files\CONFLICT.1\I

## 2. Video & Audio

**1> Video Stream**

**CBR:** You could limit bit stream here, when bit stream is excess than the set number, the frame rate will down to avoid bit stream too big.

**Resolution:** You could modify image resolution here; we supply 4 levels as D1, Field, CIF, QCIF, shows as follows:

	D1	Half D1	CIF	QCIF
PAL	720*576	720*288	352*288	176*144
NTSC	720*480	720*288	352*240	176*144

Frame rate: Set the number of the frame rate

**2>\_Snap Shot**

Set Save Path & File Name

Add Time Label for recording image

**3>OSD**

OSD Text                      Enter the words content of OSD display

OSD Font Size                Choose the font size of OSD

OSD Enabled                 Choose whether open OSD

**4> REC**

REC File                      Set the save path of file in the HDD.

REC Duration Time            Set the record time for single record file.

REC Time Label	Open the time label in record image
REC File Time Label	Record file name displays as time label

**5>\_Audio Setting**

Audio Volume	Set the audio volume of IP Camera
IPcam Audio Enabled	Open the audio on IP Camera
PC Audio Enabled	Open the audio input on PC

**3 . Networking**

Modify IP address, Obtain IP Address via DHCP, DNS set and HTTP port etc., shows as follows:

**<1> IP Address Configuration**

There are two ways to set IP, an IP Address through DHCP to obtain another directly set its IP. When you click 'View' to use DHCP, you could know your current IP via DHCP Server.

**<2> DNS Configuration**

Our board allow store two DNS Server. When you use DHCP, you could choose DNS Server which is supplied by DHCP Server.

<3>HTTP

Here you can set the output signal available. Note: Http 80 port is the port transmission format, the default values 80. If you change to 1000, when you want to browse this page to be added in: 1000 for the position, for example IP 192.168.1.100 When Port1000 after this change to be connected to the location of 192.168.1.100:1000.

Port Number : scope 1-65535 network as audio products available (default values are 80), if in the same local area network installed within two or more network products, and through routers and other network domain or Internet connections, is likely to meet with the router and the need for networking products for each different port of.

4 . Wireless LAN

**Wireless Settings**

**Basic Configuration**

Operation Mode: Infra

Wireless Type: 802.11b/g mixed mode

Country Region: FCC

Channel: 10

TX Rate: Auto

SSID: ipcam\_wlan

Ad-Hoc Mode: 802.11b 11Mbps Only

B/G Protect: Always Off

TX Preamble: Auto

TX Burst: Yes  No

Turbo Rate: Yes  No

Short Slot: Yes  No

**Security Settings**

Authorization Type: Open System

Encryption Type: None

Default Key ID: 1

WEP Key ID 1: Hex-10 or 26 characters

WEP Key ID 2: Hex-10 or 26 characters

WEP Key ID 3: Hex-10 or 26 characters

WEP Key ID 4: Hex-10 or 26 characters

Save & Reboot    Reset

Set parameters for wireless transmit.

## 5 . PPPoE

Open SETUP, inset the user's name and password, and let the "PPPoE" work choose "YES" then the camera DIAL-UP.

E-MAIL: When the address changed, it will email the new IP address to the appointed email box.

Status: show the current connect information

## 6 . DDNS

Many web use dynamic IP address, the IP address is dynamic allocation along with the connection. This mean that the other internet user don't know this IP address, can't connecting and visiting DDNS just solve this problem, and promise the user using the same Domain Name to connect, like using the same IP address.

### How to use DDNS:

1. Logging in DDNS, IP address will be assigned.
2. Input and save the correct DDNS .As the following:

Please register from the 2 free DDNS Server which we support, if you need touse DDNS or maybe you could not use normally. You could get correlative information on their website.

1> Choose Server

You could choose DDNS Server; we supply DYN DNS and Peanut Hull recently.

2> DNS Account

Enter the domain name which you apply, EG: netcamera.vicp.net.

3> User Name

Enter the username which you apply on DDNS. EG: Enter passport which you apply on Peanut hull website when you choose use Peanut hull.

3> Password

Please enter the password.

4> Manual Update

Click this button to connect with DDNS Server.

**7. Date & Time**

You could set and modify date and time here, shows as follows:



**LOGO**

- Basic Configuration
- STATUS
- VIDEO&AUDIO
- NETWORKING
- WIRELESS LAN
- PPPoE
- DDNS
- DATE & TIME
- Advance Configuration
- REC View

**Date & Time Settings**

**Current Server Time**  
Date: 2007-09-27 Time: 12:14:19

**Time Zone**  
GMT+08 (Beijing, Hong Kong, Shanghai, Taipei, Taiwan)

**Time Mode**  
NTP server 1: pool.ntp.org  
NTP server 2: pool.ntp.org

**Update Server Time**  
Synchronize with computer time   
Date: 2007-09-27 Time: 12:14:39  
Set manually   
Date: 2007-09-27 Time: 12:14:17

**<1> Current Server Time**

It displays the current time of IP Camera

**<2> Time Zone**

You could choose the located time zone.

**<3> Time Mode**

Update Server Time: It could update the time automatically to the same as PC's time, also client could update time manually.

**2 ) Advance Configuration**

**1 . Maintenance**

**LOGO**

- Basic Configuration
- Advance Configuration
- MAINTENANCE
- ADMINISTRATOR
- CHANGE PASSWOD
- SMTP
- FTP
- PTZ
- ALARM EVENT
- SPECIAL SETTING
- REC View

**Maintenance**

**Maintain Server**  
 Restart the Network Camera.  
 Resets all parameters, except the IP parameters, to the original factory settings.  
 Resets all parameters to the original factory settings.

**Upgrade Server**  
 Upgrade the Network Camera with the latest firmware.current version 3.04.00.04.M (Aug 24 2007 15:17:56)  
 Specify the firmware to upgrade to:   and click

**Note:** Do not disconnect power to the unit during the flash upgrade. The unit restarts automatically after the upgrade has completed. (1-10 minutes.)

**1> Maintain Server**

**<a>Restart**

Reset for hardware.

**<b>Restore**

Except IP address, all the settings come to default information.

**<c>Default**

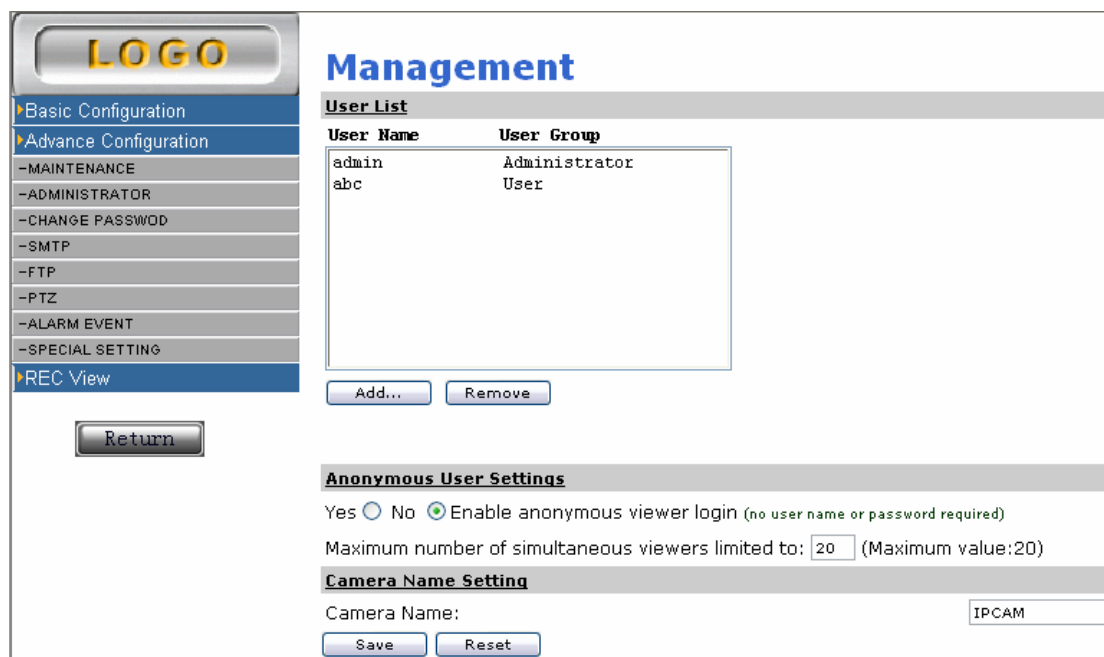
All the settings come to default information.

**2>\_Upgrade Server**

Current version number: It shows current firmware version.

**2 . Management**

You could realize functions as set and modify the username and camera name etc.:



**<1> User List**

You could add or delete user accounts here.

**<2> Add**

Only admin user could add new user. Click 'add' to add a new user and set the user's right( normal user or admin), it shows as follows:

**Add New User**

User name:

Password:

Confirm password:

User group:  User  
 Administrator

**<3> Remove**

Only administrator could do this operation, admin is the system user whom could not be removed, while others user could be removed.

**<4> Anonymous User Settings**

You could open the IP Camera without username and password when use Anonymous Use. It login as normal user. When try to modify parameters, the system will notice client enter username and password.

**<5> Camera Name Setting**

Modify the camera name.

**3 . Change Password**

You could change the password for the current username. It shows as follows:

## Management

**Change Password**

User Name:

Password:

Confirm Password:

Basic Configuration

Advance Configuration

-MAINTENANCE

-ADMINISTRATOR

-CHANGE PASSWORD

-SMTP

-FTP

-PTZ

-ALARM EVENT

-SPECIAL SETTING

REC View

### 3. Email

You could set email function here.

**SMTP (E-Mail)**

**SMTP Server1 Settings**

Mail Server<sup>1</sup>:

From E-Mail address<sup>1</sup>:

To E-Mail address<sup>1</sup>:

Authentication<sup>1</sup>: Yes  No

User Name<sup>1</sup>:

Password<sup>1</sup>:

Send a test e-mail with SMTP server1

<sup>1</sup> Mandatory fields. If these are not set, no mail can be sent.  
<sup>2</sup> If a host name is used, a valid DNS server must be specified in the TCP/IP network settings.

When you set email Server, please set the mail server that offering by ISP. Whether you user which type email box, when you set mail server, then you can use it. For example, if you use HINET , but you want email to the mail belong to So-net , then at this time your mail server need use the HINET's mail server.

1> set SMTP

<a>Mail server

Set the mail server。

<b>sending E-mail address

Set sending email address

<c>receiving E-mail address

Set receiving E-mail address

<d>formal email address

Set using which mail sending email

<e> user authentication

If you need the authentication when you send the Email, please click “YES”, and put in your USER NAME and PASSWORD.

2> TEST

Click'test', the system will send one testing email to the receiving email.

## 5 . FTP

The screenshot shows a web interface for configuring FTP settings. On the left is a navigation menu with a 'LOGO' at the top and several menu items: 'Basic Configuration', 'Advance Configuration', '-MAINTENANCE', '-ADMINISTRATOR', '-CHANGE PASSWOD', '-SMTP', '-FTP', '-PTZ', '-ALARM EVENT', '-SPECIAL SETTING', and 'REC View'. Below the menu is a 'Return' button. The main content area is titled 'FTP' and contains a sub-section 'FTP Settings'. This section has five input fields: 'FTP Server', 'User Name', 'Password', 'FTP Command Port' (with the value '21'), and 'Path & File Name' (with the value './'). Below the input fields are two buttons: 'Save' and 'Reset'.

Set up and upload the FTP server which using for alarming and recording file.

## 6 . PTZ

PTZ agreement: PELCO-P and PELCO-D

Baud rate:9600、4800、2400、1200

Set up PTZ address: 0~255

## 7 . Alarm

GPIO(Input)	Alarm Level	Alarm Event
GPIO0	No alarm	No alarm
GPIO3	No alarm	No alarm
GPIO5	No alarm	No alarm

GPIO(Output)	GPIO Status
GPIO1	High <input type="radio"/> Low <input checked="" type="radio"/>
GPIO2	High <input type="radio"/> Low <input checked="" type="radio"/>
GPIO4	High <input type="radio"/> Low <input checked="" type="radio"/>
GPIO6	High <input type="radio"/> Low <input checked="" type="radio"/>

<1> Embed motion detecting

Motion detecting area: directly choose the motion detecting area.16 detecting area can be setup

Choose the no (0~15 ),click “start”, click “edit ”after you choose the area then “Save”. If you click

“delete”, it will delete the setting of editing NO. At last click” finish”.

<2> Motion detecting

Choose the way of motion detecting, you can choose sending picture to email, or upload the record to FTP server.

<3>GPIO Alarm

Set up input and output alarm. This IP CAMERA has 3 channel input and 1 channel output.

GPIO input : 3 channel input is corresponding 3 different color input line of the IP CAMERA

Set up input High level, Low level, or don't alarm

When the system receives the alarm signal, you can set up sending the picture to email or upload the alarm record to FTP Server.

GPIO output : High level or Low level

8.Special Setup



<1>video senior setup

Compression Rate: Picture quality-this depend on the compression ratio. (The quality more high needs more broadband).You can change the Compress Ratio under this interface. The following table is the transfer speed under the CIF format, P/I=29.

Compression	8	14	20	26	31
Frame rate	170~850	120~500	110~360	110~330	110~270
	kbps	kbps	kbps	kbps	kbps

P/I ratio: you can change the P/I ratio (When it is higher, the picture clearer but the file transmission quantity is bigger.)

COMS : When use CMOS lens , set refresh times

### <2>RGB

Choose using RGB algorithm

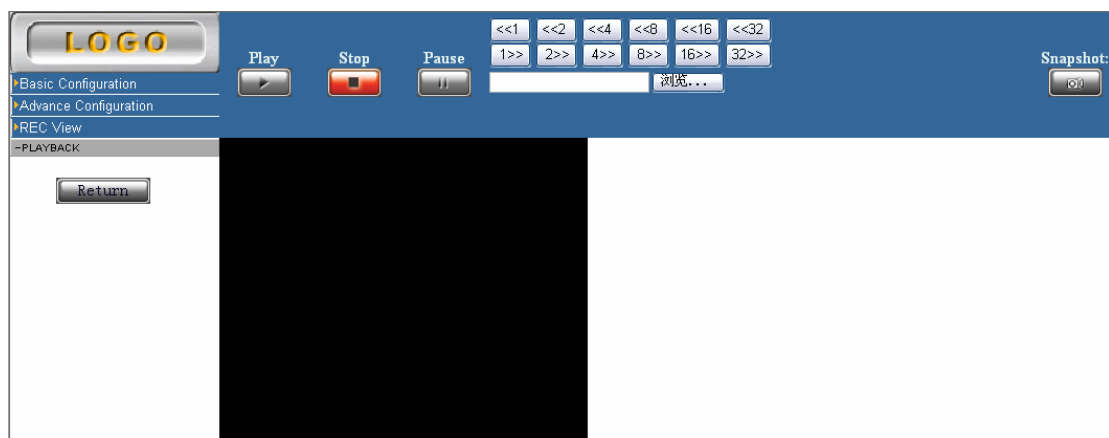
### <3>cut the black line

Set the size of the cutting black lines around the picture.

### <4>Change to AVI

If you change AV to AVI, it can support to more Media Player.

## 9 . Record Playback



Playback interface(just can playback the AV recording )

Choose recording file and click "PLAY"



When playing, you can choose expressed, back, or snapshot.

## 5 ) Example

### 1> Adjust the Audio /Video

If you need, you can adjust the image:

1. Resolution: D1、 Half D1、 CIF、 QCIF(The image more big need more broadband)
2. Picture quality-this depend on the compression ratio. (The quality more high needs more broadband)
3. Set the routing of the Snapshot
4. Sound switch and the volume setup

How to adjust the picture:

1. Open the IP Camera's WEB interface.
2. Click the Audio/Video, as the following:



## Video & Audio Settings

- Basic Configuration
- STATUS
- VIDEO&AUDIO
- NETWORKING
- WIRELESS LAN
- PPPoE
- DDNS
- DATE & TIME
- Advance Configuration
- REC View

**Video Stream**

CBR

Resolution:

Limit Frame Rate to:  (if CBR does not set as Disable, this item is invalidation)

**Snap Shot**

Path & File Name:

Time Label Yes  No

**OSD**

OSD Text

OSD FontSize

OSD Enabled Yes  No

**REC**

REC File

REC Duration Time  seconds (0 - infinity)

REC Time Label Yes  No

REC File Time Label Yes  No

**Audio Setting**

Audio Volume

IPcam Audio Enabled

PC Audio Enabled

**Note:** Please click "SAVE" after you change any function setup.

## 2> Control user authority

You can grant the authority to your user according to the customer request. And tell them input the correct user's name and password.

1. Open the Web interface
2. Choose the user in the Admin
3. Choose the option as the following

4 . Add user to the database. Click “Add”, input name and password, choose user’s type (user or admin), then save.

When user use the image and recording, the name and password save auto

### 3> Long-distance visiting

If you have connected the IE, used the broadband gateway and router, then you can view our IP camera by the IE. Our IP Camera doesn’t need change the setting. Unless:

1. you want change the port (default port is 80)
2. You want use the camera DDNS function

This IE page is a part of the Admin Pages.

**DDNS**

Many web use dynamic IP address, the IP address is dynamic allocation along with the connection. This means that the other internet users don't know this IP address can't connect and visiting. DDNS just solve this problem. And promise the user using the same Domain Name to connect, like using the same IP address.

**How to use DDNS:**

1. Logging in DDNS, IP address will be assigned.
2. Input and save the correct DDNS .As the following:

When detect the internet IP address changed, camera will connect DDNS automatically and search new IP.

Internet user will use the Domain Name which offering by DDNS server to connect the LAN.

**Router/Gateway installation**

Your Router/Gateway must be set that allow the TCP calling can connect the camera. The Router/Gateway use port for allowing accepting which request camera.

This is called Port forward or Virtual Service. The explain detail please see the following picture. Port forward/Virtual Service's function is tell the Router/Gateway that the calling port is 80.

For example: the TP-LINK Router's Port mapped setup ( TP-LINK Router's setup page 192.168.1.1, The default User's name and Password are both "Admin ".

Input <http://192.168.1.1> in the IE field, then input name and password "admin", Click "forward"-> Virtual Server.

Click "ADD" input the IP and port choose "ALL", Save

Setup the router's forwarding rules, and then use web blowsier to view the DEMO. Input the camera's IP or domino name, port in the web Address field. (If don't input the port, the system default port is 80).

For example- IP Address :

<http://210.220.212.52:801>

This 210.220.212.52 is the camera IP , 801 is the changed port.

For example-Domino name :

<http://mycamera.dyndns.tv:801>

In this case , **mycamera . dyndns. tv** is the camera's Domino name.

#### 4> Dynamic monitoring/ Email Alarm

**SMTP (E-Mail)**

**SMTP Server1 Settings**

Mail Server<sup>1</sup>:

From E-Mail address<sup>1</sup>:

To E-Mail address<sup>1</sup>:

Authentication<sup>1</sup>: Yes  No

User Name<sup>1</sup>:

Password<sup>1</sup>:

Send a test e-mail with SMTP server1

<sup>1</sup> Mandatory fields. If these are not set, no mail can be sent.  
<sup>2</sup> If a host name is used, a valid DNS server must be specified in the TCP/IP network settings.

The above is the picture of alarming part

1. Fill in the address of Primary mail server 1 2
2. Input the receiving email in the mail blank
3. When SMTP server sending email need ID verification. Please tick "my mail server requires authentication"
4. Test the email address is correct or not
5. Save your change

Attachment

Answer

Missing to visit through browsers?

Maybe three reasons

- a. Internet connectivity problems.

Please confirm network cameras or video servers, hubs, switches and distributing the work of the light show, please check if no unusual network connectivity

- b. IP addresses occupied by other equipment

c.

Break apart the network camera or video server network connecting the mouth with PING order , if PING pass, on IP address conflicts, this should be reallocated video server IP addresses.

chip addresses are located in different sub-networks, the gateway installation problems

Check whether the IP address of the camera and your workstations in the same size net. (hit start, "a" control panels "network, the choice TCP/IP interface clicking attributes, clicking IP addresses, IP addresses and Ziwanngyanma inspection. ) If cameras and workstations in different sub-nets, Please scrutiny workstations and cameras IP, Ziwanngyanma, gateway and DNS set up.

No picture images?

This is the persistent problem. When using IE browse, to download ActiveX procedures. Please install IE security level to low security level. (Hit tools "option" security "since the definition of level, opening ActiveX related option. ActiveX, computer retrieval procedures will be kept to a computer. When you see the images can be restored to its previous level of security the security level setting, or when choosing a presentation box "installation of the procedure", and then choose "Y" can be seen as bright picture images.

Image delay

Network bandwidth and other factors

Image updated frame frequency depends on the following

- A. Watch model image resolution, image quality, and network bandwidth
- B. The performance of personal computers, network environment.
- C. Updated images have been slowed by too many users visit.
- D. For many network cameras, when updating images slow, please do not use switches with hubs.

Forget the IP address or network camera management website passwords?

“PING” with ARP and re-allocation of IP addresses of network cameras, to leave the factory default values after the re-establishment of manager’s names and passwords.

Resumption of identification, re-activated when the light turn, Ping less than?

This is a normal phenomenon in the restoration of identification of the time, the network camera systems remove the need for paper and approved, which would require considerable time, please wait patiently.

Why install network cameras, are still unable to connect with browser access network camera?

Because the IP address of your computer and network cameras with the IP addresses from a network, if the network IP addresses for camera

192.168.1.255,Ziwangyanma to 255.255.255.0. Then your computer IP addresses must 192.168.1.0-192.168.1.254 between Ziwangyanma is 255.255.255.0

IP network cameras have sensors import / export functions?

IP network camera can use them through the security sensors or alternative sensors to trigger it by the time of its automatically sent to your mailbox, email images or send pictures to FTP way to ftp services devices, can store around 40 pictures.

In only one fixed IP of how to use multi-network camera? ,

If you have fixed IP address 211.96.33.25 and four network cameras. Such circumstances you can then use to share one IP port shine upon Nat through at the cost of machinery for positioning, can achieve IP sharing. First distribution to the four network cameras an internal virtual IP addresses, such as 192.168.1.90 respectively, 192.168.1.91、 192.168.1.92、 192.168.1.93.To port 1080 and then converted to the internal IP address of 192.168.1.90 to port 1081 switch to the internal IP address of 192.168.1.91 to port 1082 switch to the internal IP address of 192.168.1.92. to port 1083 to the internal IP address of 192.168.1.93 such conversion when you need to look at these

conferencing network cameras, may import : [http:// 211.96.33.25:1080](http://211.96.33.25:1080),[http:// 211.96.33.25:1081](http://211.96.33.25:1081).  
[http:// 211.96.33.25:1082](http://211.96.33.25:1082),[http:// 211.96.33.25:1083](http://211.96.33.25:1083)Check up to the corresponding video server

What are video servers, network cameras?

Video servers includes one or more simulation video input, video conversion and compression chip and an embedded operating system, Internet modem interface. Video server functions are the digitization of analog video signals to digital signals for transmission on the network model, which has successfully transformed a network camera to simulate camera. Network camera is a combination of traditional cameras and the new generation of network technology by cameras, it can be transmitted images through the network of another - Earth and the distant surfers without any professional software as a standard Internet browser (such as Microsoft IE or Netscape) can monitor their images.

Network cameras, video servers in the network where?

Indeed, it can be placed on arbitrary places, it self-integration of an embedded operating system, the same as other workstations or peripherals connected to your router or hub.

I will be able to stop illegal visitors watched my network cameras and video servers?

Competence can create: unlimited, limited to a page limit for all screens.

Can manual snapshot images?

Convenient image capture functions, as long as the picture could capture more pictures.

Have characters reading function?

System can be time, date, the name of the show superimposed on the picture and repeat images.

Customer - whether video?

Yes, as long as the visit would be a video screen Youji path and begin video.

How to change the IP address of the network cameras?

ARP can be used in order to know the original IP address of the system configuration parameters of a network directly to IP addresses.

How remote access network cameras if no the fixed IP addresses?



Nat can be used in ways that will use a different interface to resolve IP addresses; In the Internet, it could be used in building the network DDNS server solutions to dynamic IP address, that is each network camera or video server has a network of secondary domain names, This secondary domain name corresponding network camera or video server Mac address, as long as the network camera or video server in the network use will be automatically connected to DDNS, whether it's IP address changes, as long as customers in the domain name IE URL address column can be adopted DDNS server. network camera or video server IP address and remote clients connecting to reach domain name analytic purposes. We can also landing in the network camera management servers to achieve online access.

How can I connect my network cameras (video servers)?

- A, directly connected to the personal computer (through cross-lines)
- B. LAN connectivity through HUB/Switch
- C. Internet connectivity through HUB/Switch/Router