

# XtendLan<sup>®</sup>

## Video Server

## User's Guide

### IVS400A



### IVS400B



**Caution:** Any changes or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for FCC and CE. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in commercial environment.

#### **Important Notice**

1. Video Server IVS400 is for indoor use only.
2. Video Server IVS400 is not waterproof. Therefore we will not hold any damage responsibility if IP Video is used under raining condition.
3. Be sure to use the DC adapter that is provided by your dealer. We will not hold any responsibility if wrong DC adapter is in use.
4. Be caution in handling Video Server IVS400 for physical shocks may occur serious damage.
5. If Video Server IVS400 does not operate properly, please contact your local dealer for after sale service. In all cases, you are prohibited to disassemble the product. If so, we do not hold any responsibility for mal-function nor service warranty.

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## 1. Product Overview

Video Server IVS400 has an IP digital web server inside. With this great gadget you can put up **4 different sources** with only one set of IP, for example (live security observing, online education, TV shows, video games and etc) make remote locations immediately accessible through standard web browsers. Video server is equipped with cutting edge technology, includes 4 video in and 1 audio in, a web server, and physical Ethernet connection. Therefore it does not need to plug in front of computer, you can simply just plug into an internet line and start observing or broadcasting from any where in the world.

### 1.1 Video Server IVS400B features

1. Embedded Web Server
2. Support 1 audio in
3. With 4 video input for multi-video source from different area. IVS400A with RCA connectors. IVS400B with BNC connectors
4. Round Robin: display 4 video at same screen – update in turns and can record all four channel in different file
5. Resolution - True 640x480, 352x288, 320x240, 176x144, 160x120
6. Performance: up 25fps @ 640x480 (6fps for each channel when four channels active)  
up 30fps @ 352x288 (7fps for each channel when four channels active)
7. Video Quality - Low, High
8. Video type: MJPEG
9. Color adjustment: Brightness, Contrast, Hue, and Saturation
10. Motion Detection
  - a. Three-sensitivity levels.
  - b. E-mail the Detected Images to preset e-mail address.
  - c. FTP the Detected Images to preset FTP server.
11. LAN 10/100Base-TX
12. Networking support - fixed IP, DHCP or PPPoE, support DDNS
13. Supported browsers - Internet Explorer, Netscape, Mozilla, Firefox
14. Support Active X control.
15. A Linux based server
  - a. Built in JPEG Decoder
  - b. Motion detection
  - c. User may setup his email in the system, let the system notice the user when an event occur
  - d. User may setup FTP server to save motion detection video on server
16. Support GlobalSign – no need to lower security level.
17. Works with MSN& Yahoo Messenger, AMCAP and WMCAP & VIDCAP program
18. Works with Netcam Watcher Basic/Professional, Active WebCam, VisionGS PE/BE, LinuxDVR, LuxRiot DVR, ViewCommander-NVR/Mobile, EvoCam
19. Dimension 56x30x100mm, weight 105g
20. Power supply external, 5V DC

### 1.2 Minimum requirement

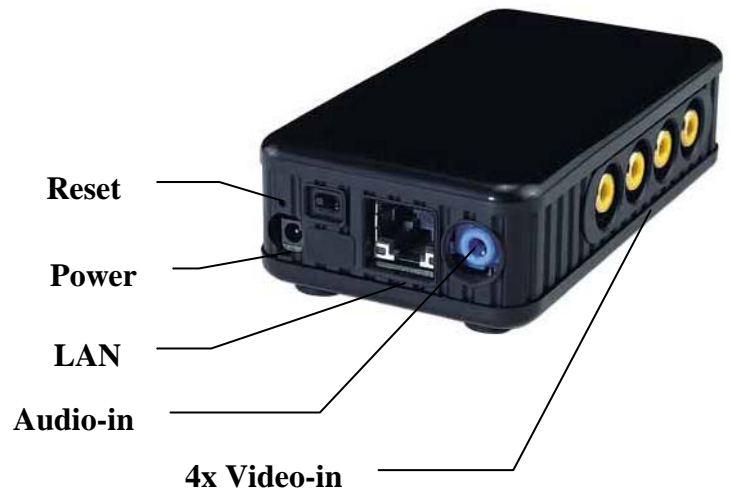
- Intel Pentium II 300MHz and above
- Windows 98 / SE / 2000 / ME / XP, or LINUX, MAC system
- 64MB memory

- VGA Card support Hi - Colors and above and Direct Draw
- LAN interface – RJ-45 (CAT 5)
- Hub/Router

### 1.3 Panel description IVS400A

Back Panel: from left to right:

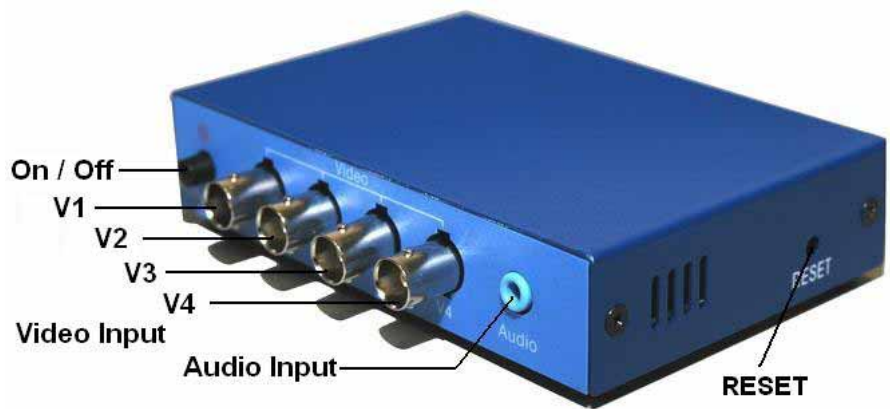
1. DC Power
2. 4x Video Input
3. Audio input
4. Reset Button
5. LAN port



### 1.4 Panel description IVS400B

Back Panel: from left to right:

6. Power On / Off
7. V1-V4 4x Video Input
8. Audio input
9. Reset Button



Front Panel:

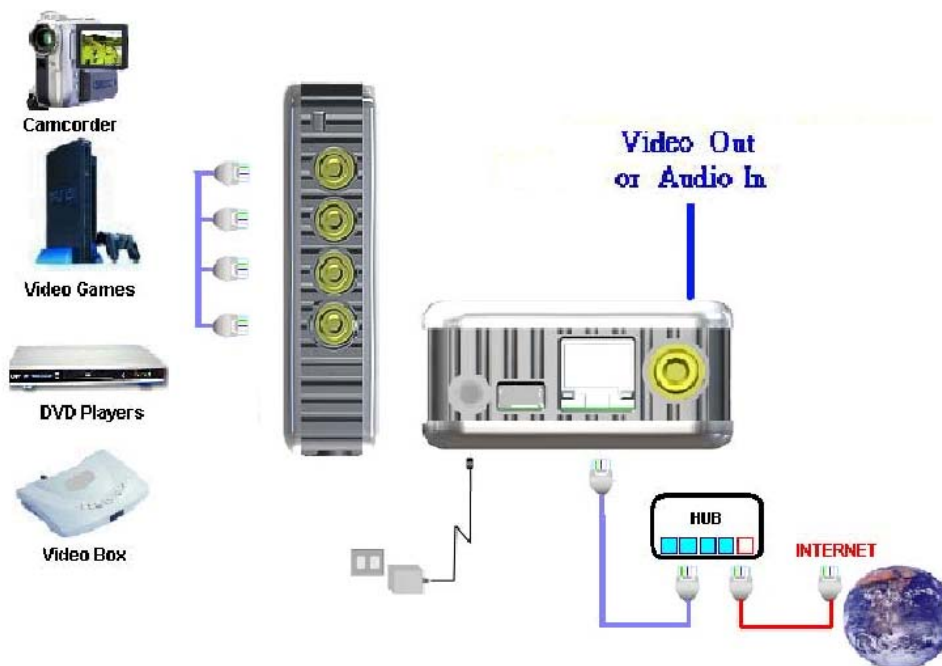
1. DC Power - 5V, 110 ~ 240.
2. Network - RJ 45



## 2 Installation

### 2.1 Hardware installation

1. Plug in Video Server IVS400B Power
2. Plug in RJ-45 line to a HUB
3. Connect the HUB to Internet modem (ADSL/XDSL modem)
4. Connect Video source for IP Video box
5. Turn you computer on



## 2.2 Software installation

Please note default password:

**Default username: Administrator**  
**Default password: 1234**

### Setup initial IP address:

After connecting the power and RJ 45 line, following the steps below to install the software which allow you to search for IVS400 in your network and allow you to give initial IP address into device.

**Step 1:** Install IP\_KAM (exact name IP\_KAM VID\_ 1070) by executes Setup.exe in the CD; choose setup language and the install shield Wizard will help finish the program.

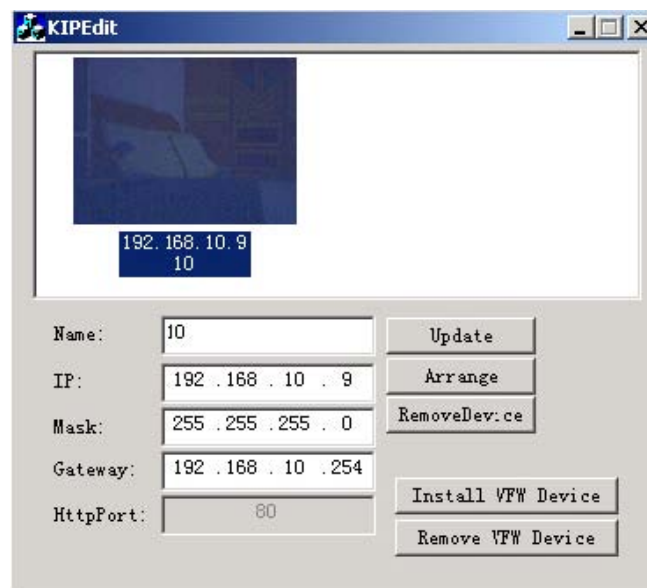
**Step 2:** Then you can see shortcut icon



Double click on "IP KamVid 1070 "on desktop.

**Note:** Be sure that the power is turn on and the RJ45 line is properly connected.

**Step 3:** The program will detect all the active IVS400 in the same local Ethernet, and display the findings in the window.



**Step 4:** Click on the IVS400 you want to set, IP will be displayed below. You can change its name (please use numbers or letter) or IP (please set in the same subnet as your PC) in the text windows. Then click **Update**. After



about 20 seconds, the new setting will work.

**Default username : Administrator**

**Default password : 1234**

\* Only Administrator setup the setting in configuration.

**Step 5:** Double click the picture in the window of **KIPEdit** or type the IP address in the IE browser, you can open the web page of IVS400. If you can not open the web page of IVS400, be sure that you have installed IE 6.0 with SP1 or later version.



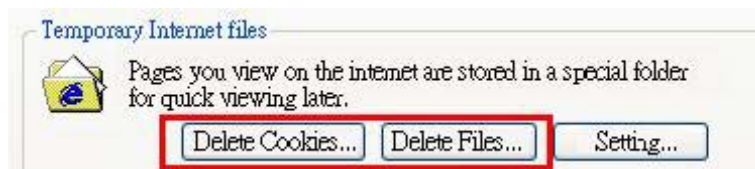
**NOTE:**

1. After you have installed IVS400 on your PC, the IVS400 was registered in DirectX. IVS400 can be used as local camera by any software that supported DirectX, such as MSN, Amcap, Media encoder, Yahoo Messenger as long as you not change the directory path of ipcam's driver.

2. For those software that only supported old VFM driver, such as Vidcap and Netmeeting, please click **install VFM device**, then you can get the captured images from IP IVS400 (you should be the administrator at the first install process).

3. For those not totally compatible with VFM, such as QQ and POPO, you should click **remove device** button first, then click **install VFM device**, then you can get the captured images from IVS400.

4. Note: if stay for long time as in webpage , you would be unable setting and see message “ **Cookie time out** “ , please go to IE to change setting: “ Tools “ “ Internet operations ” , please click “ Delete Cookies “ and “Delete files “ in “ Temporary Internet file “.



## 3 Functions

Please refer to all the function on the left side of Video Server IVS400B; most of its configuration can only be used by Administrator.



### 3.1 System setting

#### 3.1.1 Camera name

Enter user's video server description.

**System Setting** (<http://192.168.100.166>) [Back to camera window](#)

Server Version: Sep 25 2003 14:08:16

Camera name:

---

Camera's time: 1/1/2003 21:20:28 Time Zone: GMT+08:00

Time zone:

NTP:  
NTP Server:

Input new time:  Synchronize with PC's time

Date:

Time:

### 3.1.2 Camera's time

Allow change name of video server and setup time. Time could be automatically synchronized with NTP servers or setup manually.

### 3.1.3 Http Port setup

For customer with IP Sharer device can setup the share port Please check the setup in the IP Share device and type the port number in this area.

Http port 1:

Http port 2:

Reboot immediately.

You have to reboot device to be setting activated.

### 3.1.4 Reset to factory configuration

### 3.1.5 Restart device

### 3.1.6 Firmware update

Note: Please note the update procedure can not be interrupt or the device could be damaged.

User can update the firmware. First, click **Firmware update** and it will pop up Firmware Update window. Then, click **Browser** to select the new firmware. At last, click **Upload** to update the firmware.

## 3.2 User

### 3.2.1 User authorization required

Choose if viewers need a password or not.

Yes - Visitors needs a password

No - Open to all, no password needed

### 3.2.2 Add user

Add user by adding a username and a password and you can add a current users list.



Add a user or change password

Username:

Password:

Confirm:

### 3.2.3 Delete User

You can also delete a user by selecting its name and press delete.

### 3.3 Motion detection

When motion detection is triggered, it will automatically send video or image to user E-mail or FTP site.

Enable  Disable  
 Sensitivity

---

**Mail Setting** (for sending images detected)

Mail server

Username

Password

Sender email

Receiver email

CC email

Bcc email

Subject

Interval(ms)

Send mail when motion detected.

#### 3.3.1 Motion detection setup

**Disable** – no detection. **Enable**: choose **Sensitivity** – Low / Mid / High

#### 3.3.2 Email setup

Fill sender mail and receiver mail:

**Mail server**: SMTP server. If not DNS setup please fill IP address.

**Username**: if SMTP server needs authorization, please fill username

**Password**: if SMTP server needs authorization, please fill password

**Sender email**: address on which you want to get eventual reply

**Receiver email, CC email, Bcc email**: recipient email address, CC – carbon copy, Bcc – blind copy

**The Interval (ms)**: interval range for IVS400 to send picture. 0 means once.

*Note: We recommend to setup time long enough not to overload your email server!*

#### 3.3.3 FTP setup

When send to FTP, please fill in its FTP server address, user name, password, account and upload path, and click on Upload images when motion detected.

**FTP Setting** (for uploading images detected)

Ftp server	www.12345678.com
Username	water
Password	●●●●●●
Account	
Upload path	abcd
Interval(ms)	0

Upload images when motion detected.

**FTP server:** FTP server. If not DNS setup, please fill IP address.

**Username:** FTP account name

**Password:** FTP password

**Account:** used on some FTP implementations, leave blank if not needed

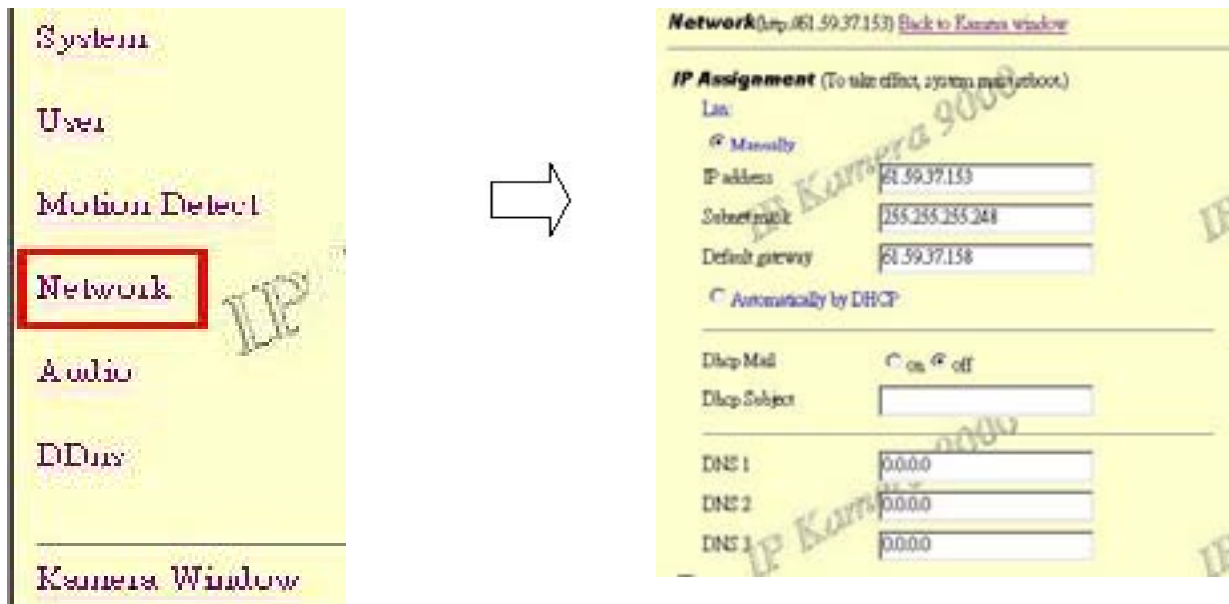
**Upload path:** file name under which is video saved on FTP server

**The Interval (ms):** interval range for IVS400 to save video

### 3.4 Network Setup

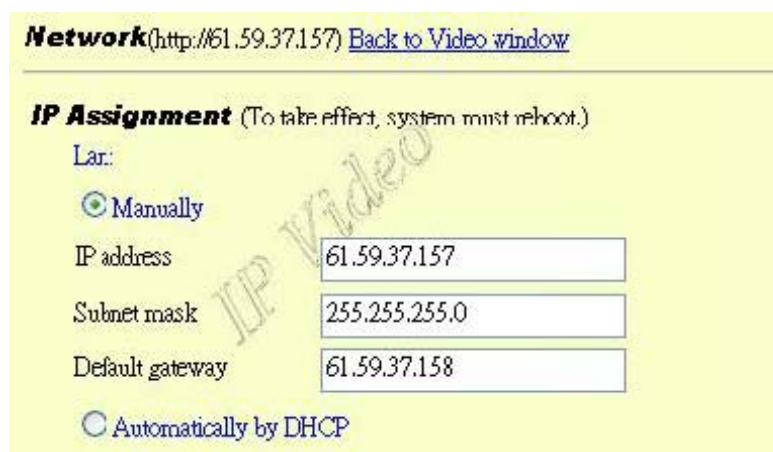
In Network set up menu can user setup IP address of device.

*Note: To access to this you will be asked for administrator password.*



You have to choose method of IP address setting. IP address could be entered **Manually** or **Automatically by DHCP**.

When choose **Manually** you have to enter static IP address. IP address could be a public IP address, usually provided by ISP.



Or it could be private IP address. Private IP address should be from ranges  
 10.0.0.1 - 10.255.255.254, maximal mask 255.0.0.0  
 172.16.0.1 - 172.31.255.254, maximal mask 255.240.0.0  
 192.168.0.1 - 192.168.255.254, maximal mask 255.255.0.0

In case you do not understand previous explanation please enter as IP address 192.168.0.1 with mask 255.255.255.0

Default gateway is IP address of your nearest router. Default gateway IP address must be in same range as IP address of device.

When choose ***Automatically by DHCP*** then in your LAN must be active DHCP server, which will automatically provide IP address to IVS400.

After filling IP address setup please choose ***Reboot immediately***.

*Note: You do not have to fill now DNS or other parameters necessary in this step. You can fill it later.*

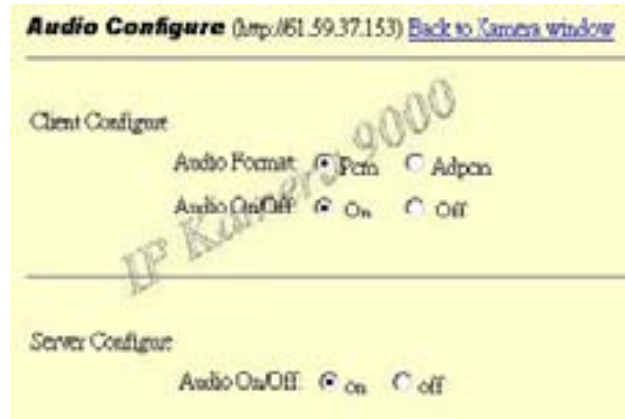
After IVS400 reboots it will have new IP address. You can access device on new IP address.

*Note: In case you choose ***Automatically by DHCP*** you can use ***IPEDITOR*** program which is able to find exact IP address. Program is on your CD.*



### 3.5 Audio

Only Administrator can enable and disable the audio. If audio is on, both administrator and guest user can hear the audio, if the audio is off, both administrator and guest can not hear the audio.



### 3.6 Dynamic DNS

In many installation is IP address provided by ISP dynamic. It means changing during time. The user may have problem to find his video server because the IP address is changing often.

The Dynamic DNS service is provided by [www.DynDNS.org](http://www.DynDNS.org) is for free and IVS400 has built-in support for it. First, user must logon the [www.DynDNS.org](http://www.DynDNS.org) to register and apply a host name for each video server. Then, every time the IVS400 connect to internet network, it will send a data package including its IP to the [www.DynDNS.org](http://www.DynDNS.org), so [www.DynDNS.org](http://www.DynDNS.org) will set the host name you have applied before during registration. User then can access his video server using host name without knowing its current exact IP.

**Dynamic DNS** (<http://192.168.10.9>) [Back To Kamera Window](#)

(DDns Server <http://www.DynDNS.org>)

Enable  Disable

User Name

Password

Domain Name

Interval (day)

HTTP Proxy

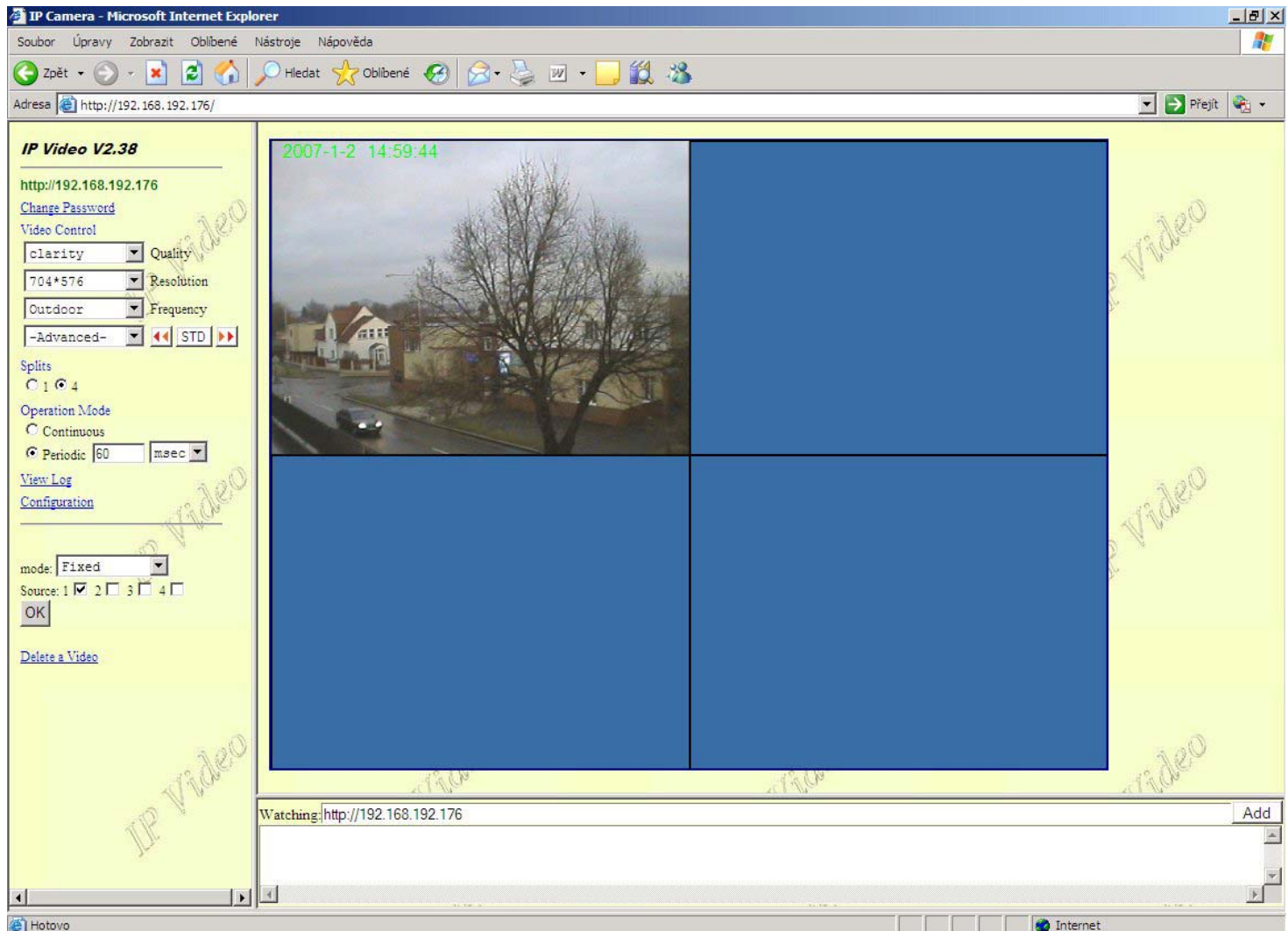
Proxy Username

Proxy Password

State

### 3.7 Video Window

When click on Video Window then camera window is open.



#### 3.7.1 Quality

Picture Quality - Low, High, Medium  
Clarity & Motion

#### 3.7.2 Resolution

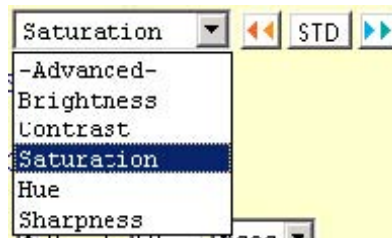
640\*480, 352\*288, 320\*240, 176\*144

### 3.7.3 Frequency

Indoor 50, Indoor 60 & Outdoor

### 3.7.4 Color adjust

Color adjust pull down menu:



STD = default colors

### 3.7.5 Split

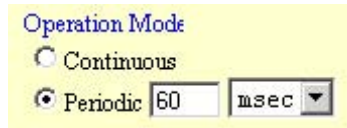
Split to 1, 4, 9, 16 continuous screens. Selections are 1x1, 2x2, 3x3, 4x4



### 3.7.6 Operation mode

Continuous: Video will display continues

Period: Video will refresh in defined period. Period is 1-60 milliseconds or seconds.



### 3.7.7 View Log

Shows list of visitors IP address.

*Note: When user is in View Log the video is not show on screen. To get the back to video screen please click Camera Window.*

**IP Video Logs** (<http://192.168.100.188>) [Back to Video window](#)

Main Info	Appended Info	Operator IP	Operator MAC	Time
System Boot				5/6/2005 16:50
New client		192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 16:51
New client		127.0.0.1		5/6/2005 16:52
Set Channel	0	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 16:53
Set Channel	3	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 16:53
Set Channel	267	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:5
Set Channel	269	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:5
Set Channel	271	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:5
Set Channel	257	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:7
Set Channel	0	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:7
Set Channel	3	192.168.100.31	00:05:5D:8C:AC:3E	5/6/2005 18:7

### 3.7.8 Mode and source select

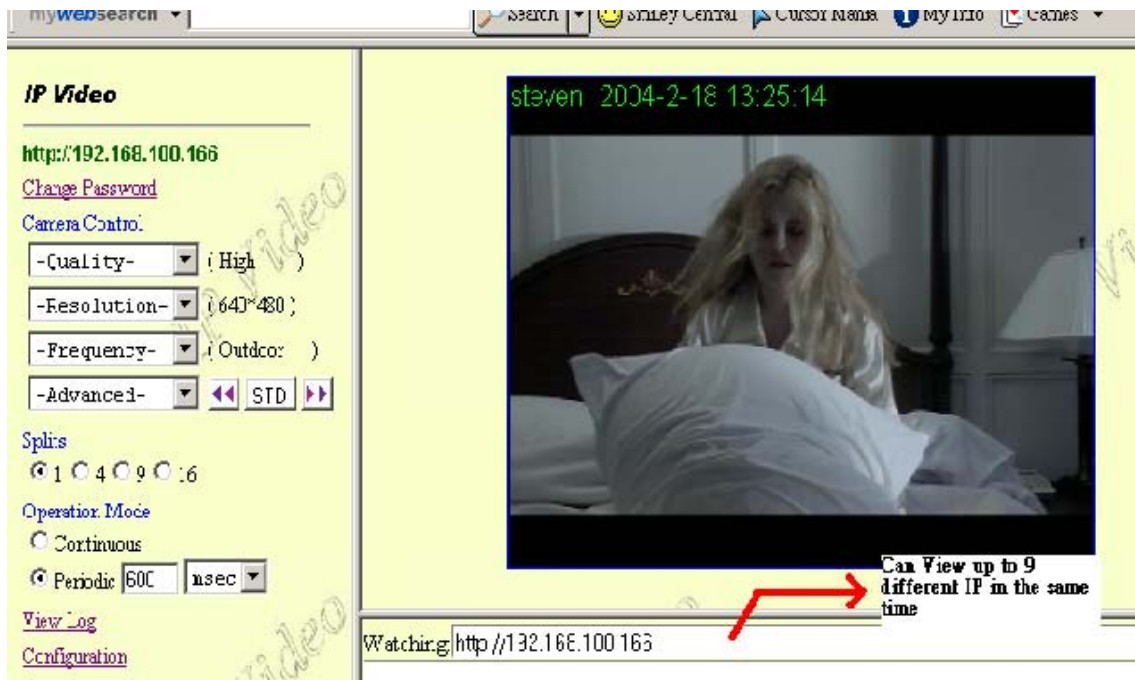
**Fixed:** select 1~ 4 for changing every different channel. (Only one channel will display each time).

**Round Robin:** Displays select channel by turns. If select 4 channel, in split 1 , the video show three video by turns. If in split 4, all the 4 channels can display in one IP by turns. When select Round Robin , if record the channel, IP Video will record all 4 channel Video ( record update video in turns)



### 3.7.9 Multiple servers view

IVS400 can view up to 9 different IVS400s at the same time.



#### Adding IP Address

Please add in a different IP in "Watching and press enter"

*Note1: please type in http:// before your IP.*

*Note2: when selecting different views, it will show different IP addresses in Watching.*

#### Delete IP address

When do not want to see other IVS400, please select the camera you want to delete and select "**Delete a Video**".

### 3.7.10 Video Window

After click, the left screen will back to Monitor video

### 3.7.11 Right click menu

When right click mouse in view, then other menu appears. It can be used for

1. View
2. Splits
3. Rotate
4. Resolution
5. Image Recording
6. Save picture



#### View

Resizable: adjust screen size.

Actual size: default to original size.

Status Bar: show IP address, and screen size

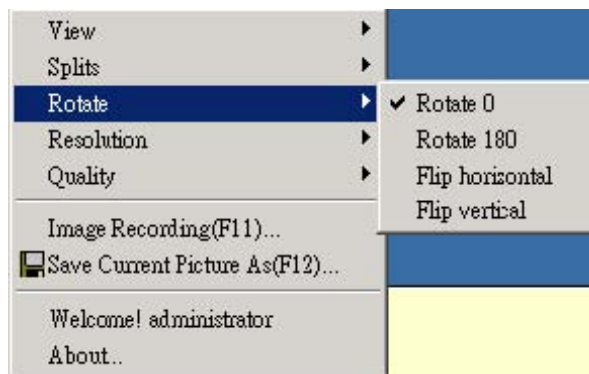
#### Split

Split to 1, 4, 9, 16 continuous screens. Selections are 1x1, 2x2, 3x3, 4x4



#### Rotate

Flip view horizontal/vertical, rotate 0/180 deg.



#### Quality

Allow select quality of picture. Levels are from Lowest to Highest

## Resolution

Allow select resolution. Resolutions are 640\*480, 352\*288, 320\*240, 176\*144, 160\*120

## Image Recording

Record image to JPEG and AVI file. Both format can be recorded in the same time.

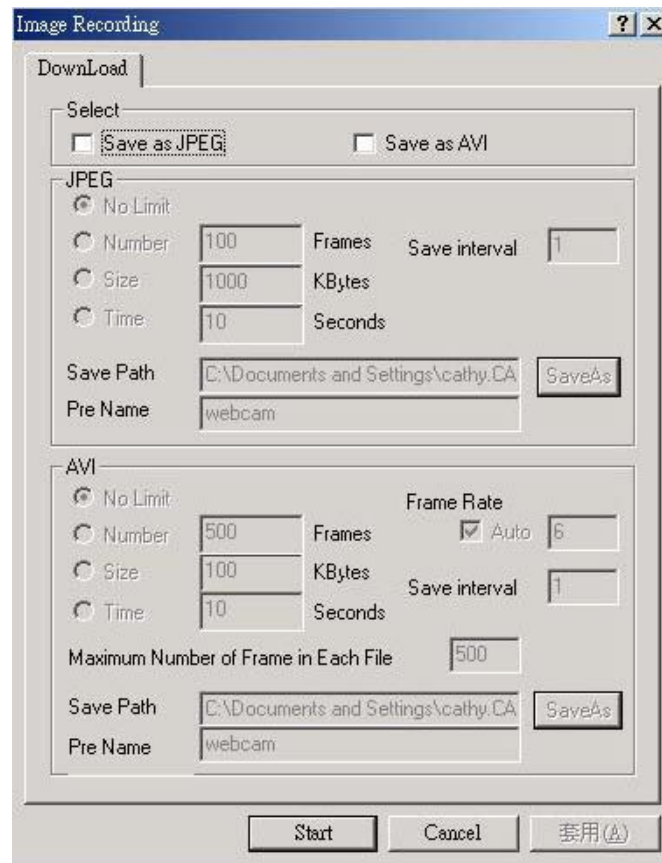
**JPEG:** saving sequence of screenshots. User can select how many pictures taken in each file and time frame.

**AVI:** Select save as AVI, and then select the maximum number of frame in each file. Device will save continuous video in AVI video format.

*Note: If select No limit, it will continue recording until it used up all memory space.*

## Save current picture as

Take a snap shot on current images showed on video server.





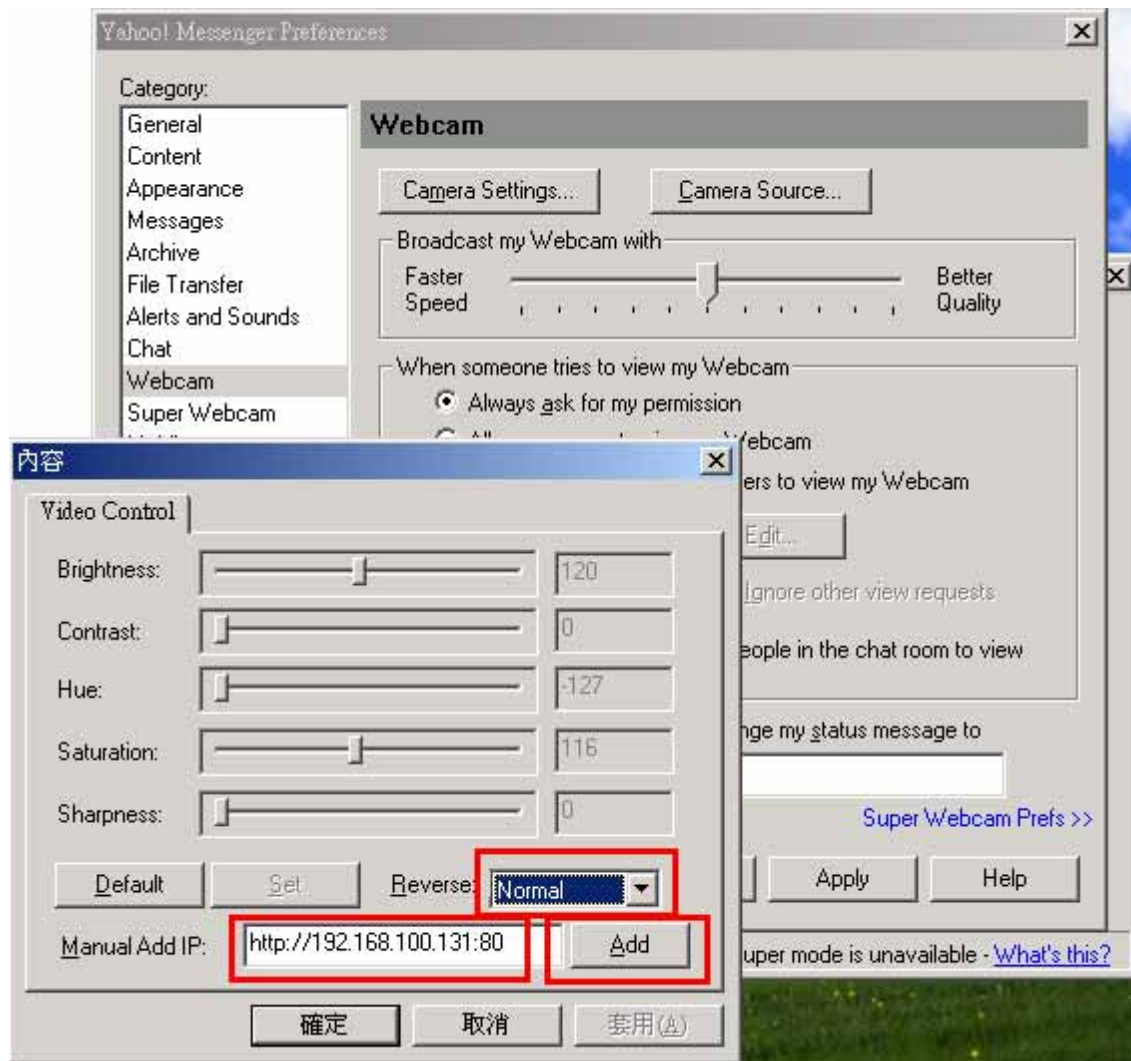
## 4 Work with Yahoo/MSN Messenger

Work with Yahoo /MSN Messenger: We use Yahoo for instance. Select the friend you would like to send your video. For instance, we pick up YahooHelper.



Click Webcam. Then system will ask your Internet connecting speed.





You can type in appointed IP address (No matter Real IP or Dynamic IP) and confirm by click “Add” and choose if reverse the out streaming video.

IVS400 support Normal, Flip Vertical, Flip Horizontal, Rotate 180. the video is upside down, you can choose Rotate 180 to get rotate video. Also adjust the video color: Brightness, Contrast, Hue, Saturation, Sharpness.

**Note:**

- For safety issue, as transfer video by Yahoo/MSN, only Administrator can do the video streaming. You have to type the username and password.
- Work with Yahoo/MSN , the streaming speed is depend on Yahoo/MSN server.

## 5 Frequently asked questions

**Q 1:** I forgot the ID and password for the administrator account, so I cannot log into the Administration Page.

**A:** Make sure IVS400 is powered on and press the “reset” button for at least 10 seconds to reset camera setting to factory setting.

\*Note: Factory Administrator ID and Password

ID: administrator

Password: 1234

**Q 2:** The Web Camera does not launch?

**A:** Upgrade Internet Explorer or Netscape to 5.0 or higher version. Sometimes the web camera base cannot bring 'index.html' from the web Camera when the Internet Explorer version is at 4.0. And remember to adjust Internet default level to low when launching IVS400 for the first time.

**Q 3:** The Image recording cannot stop immediately?

**A:** When your IP address is public that might happen. You need to wait for a second and it will be return to normal.

## 6 Specification

Embedded Video Web Server

CPU 80MHz, RISC 32b, 2MB Flash, 8MB RAM

LAN 10/100Base-TX, RJ-45

Video input:

IVS400A 4 channels, RCA connectors

IVS400B 4 channels, BNC connectors

Audio in: mini jack, PCM or ADPCM

Resolution - True 640x480, 352x288, 320x240, 176x144, 160x120

Performance: up 25fps @ 640x480 (6fps for each channel when four channels active)

up 30fps @ 352x288 (7fps for each channel when four channels active)

Video type: MJPEG

Motion Detection - three-sensitivity levels, Email alerts, FTP alerts

Networking support - fixed IP, DHCP or PPPoE, support DDNS

Supported browsers - Internet Explorer, Netscape, Mozilla, Firefox

Support ActiveX control.

Dimension 56x30x100mm, weight 105g

Power supply external, 5V DC