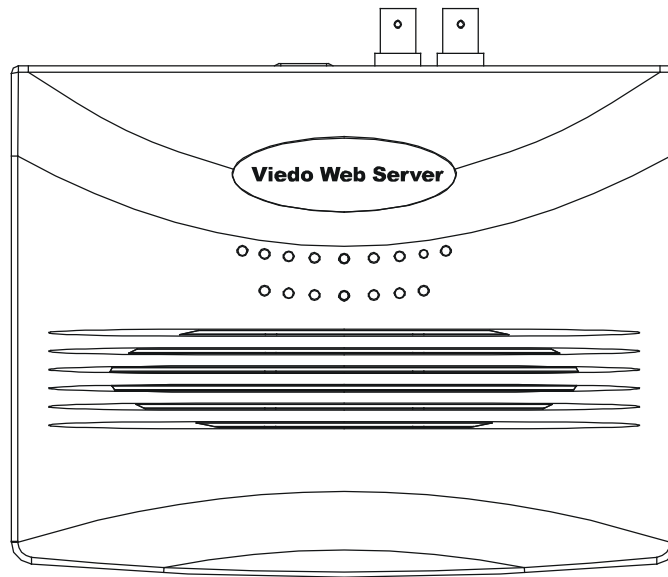# VIDEO WEB SERVER

Viedo Web Server

User's Manual

Please read instructions thoroughly before operation and retain it

for future reference.

WARNING

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "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.

TABLE OF CONTENTS

FEATURES

Video Web Server Features

- Compatible with most of CCTV Products; empower any video output device watching and controlling on the Internet or LAN
- Auto Network Reconnection (ANR)
- Upgrade firmware & AP from FTP site via Video Web Server
- Watch dog function supported
- Support Dynamic IP address
- 4 alarm inputs supported
- Duplex function, record and playback simultaneously at client site
- Auto e-mail warning system which will remind you if external alarm happened
- Intelligent non-stoppable recording function after ANR
- Multi AP screens supported
- Unique video player

PACKAGE CONTENTS
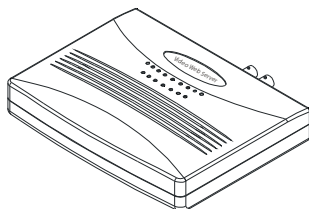
Video Web Server

Manual & Quick Start

Accessories pack

Standard Pass through (CAT5) cable

Adaptor

NOTE : Please check the package to make sure that you receive the complete accessories shown above.

STATIC IP ADDRESS APPLY

Before installation, contact your network administrator for a static IP address.

Note : The bundled software is compatible only with Windows operation systems : WIN2000, WIN2003 and WINXP. It is not suggested to use WIN98 & WIN ME which may cause system conflictions with the software.

REAR PANEL
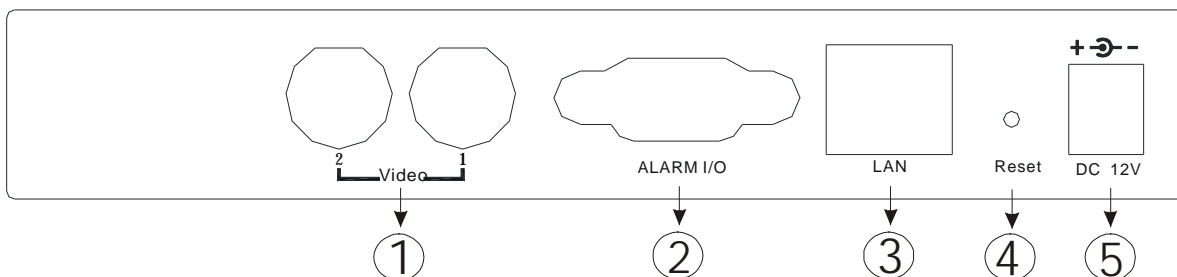
1. VIDEO INPUT (2 channels)

Connect to video source, such as camera or DVR video output.

2. ALARM I/O (optional for advanced applications)

Connect control devices, such as PTZ, DVR and external alarm signal input.

3. LAN

Connect Video Web Server to the Internet or LAN with cable or connect directly to PC with standard pass through cable.

4. RESET

Press this button to default setting.

5. POWER

Plug in the supplied power adaptor (12V / 1.25A).
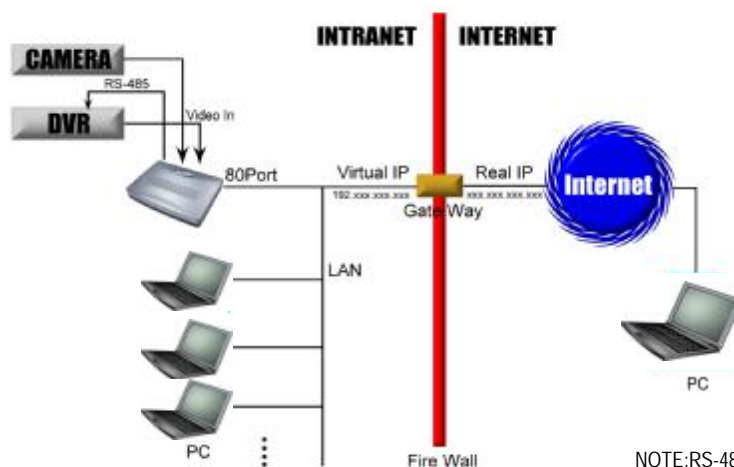
**LED light

1)When it lights, that means the network is normal.

2)When it glitters, that means the system is normal.

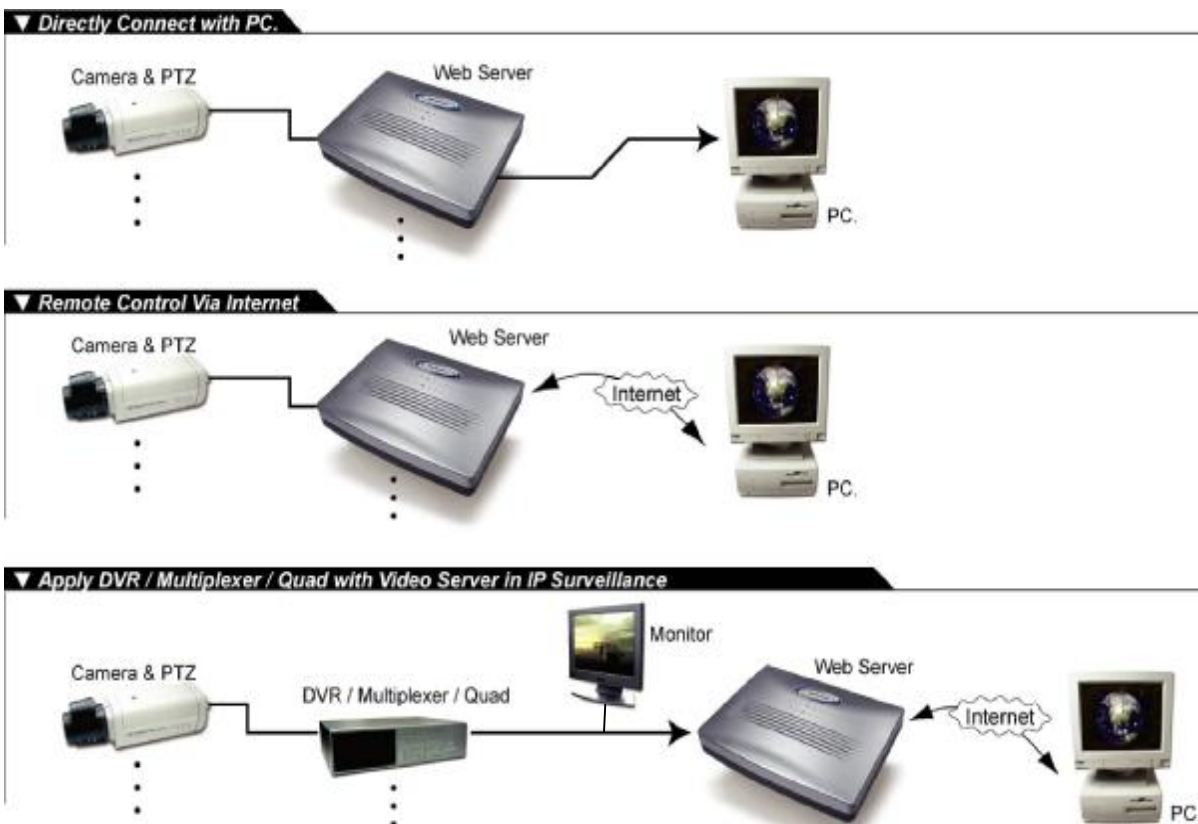## HARDWARE CONNECTION AT SERVER SITE

A.Connection Structure

NOTE:RS-485 for DVR controlling is optional.

1. Connect video output of camera or DVR with the video input of Video Web Server.

2. Connect PC with Video Web Server for IP setting. (Please refer to page 4)

3. Connect Video Server with ADSL or CABLE MODEM with Static IP address.

4. Connect PC with Internet and remote control Video Server.

B. Connection Application

▼ Directly Connect with PC.

Camera & PTZ — Web Server — PC.

▼ Remote Control Via Internet

Camera & PTZ — Web Server — Internet — PC.

▼ Apply DVR / Multiplexer / Quad with Video Server in IP Surveillance

Camera & PTZ — DVR / Multiplexer / Quad — Monitor — Web Server — Internet — PC.

SOFTWARE INSTALLATION AT CLIENT SITE

Before first using this video web server, please download the application program and set up the device.
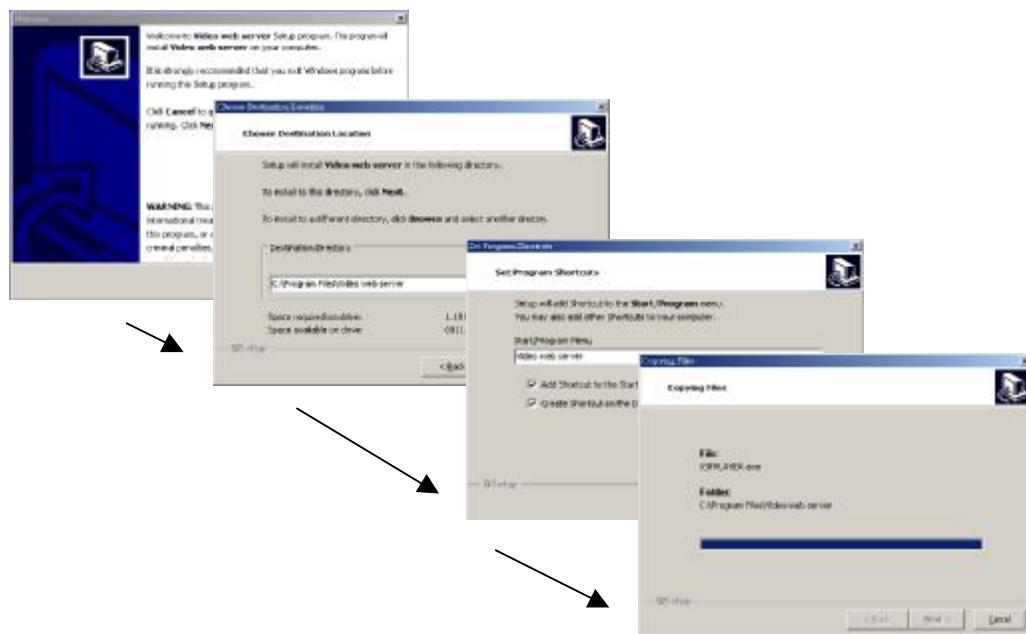
Step 1 : Connect PC/ NOTEBOOK with Video Web Server

Use the **standard pass through (CAT5) cable to connect the PC and Video Web Server; then set up these two devices** in the same Domain (e.g.:192.168.1.XXX). Please refer to Page.5 STEP2.

LAN

CAT5

BNC inputs

LAN (RJ-45)

3
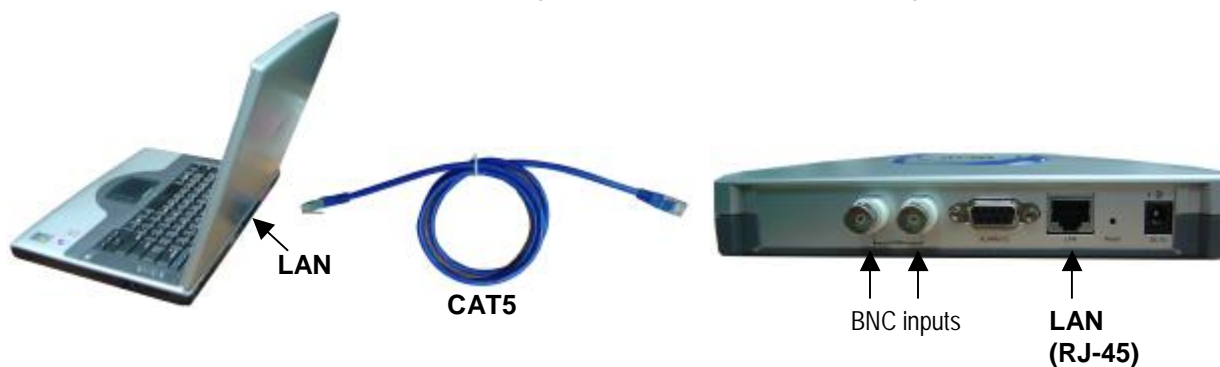
<u>Step 2:</u> Please enter the default IP address (192.168.1.1) in the browser. Then press ENTER.
Click **"Download Windows AP"** to download the application program and save **"Video web server.exe"** in the HDD.

<u>Step 3</u>：Click twice on the <u>Video web server.exe</u> and it will install the program into the PC.

After the installation, there are 5 files in your assigned path (file folder) as below.

IJL15.DLL   UnInstall_3...   UnInstall_327 85   Video web server   VSFPLAYER

STATIC IP SETTING

Please set up the server IP before first execution of the program. Follow every step as instructed. If you have finished the setup, please jump to next section—software operation-- to operate the program (User need to apply one static IP address first).

Step 1：Connect PC/Notebook with Video Web Server

Connect the PC and Video Web Server with standard pass through (CAT5) cable. Then connect the video devices, such as CCTV camera, camcorder, VCR, D8, DV, etc. Then plug in the power cord to video server and start the PC (please wait 15 seconds to start the Video Web Server).

LAN

Pass through (CAT5) cable

Video input   **LAN**

Step 2：Network setting for PC. (The instruction is based on Win XP O/S. If your O/S is Win 2000 or Win 2003, the setup procedure is similar.)

1.Click ：start à Control Panel à network and internet connections à network connections
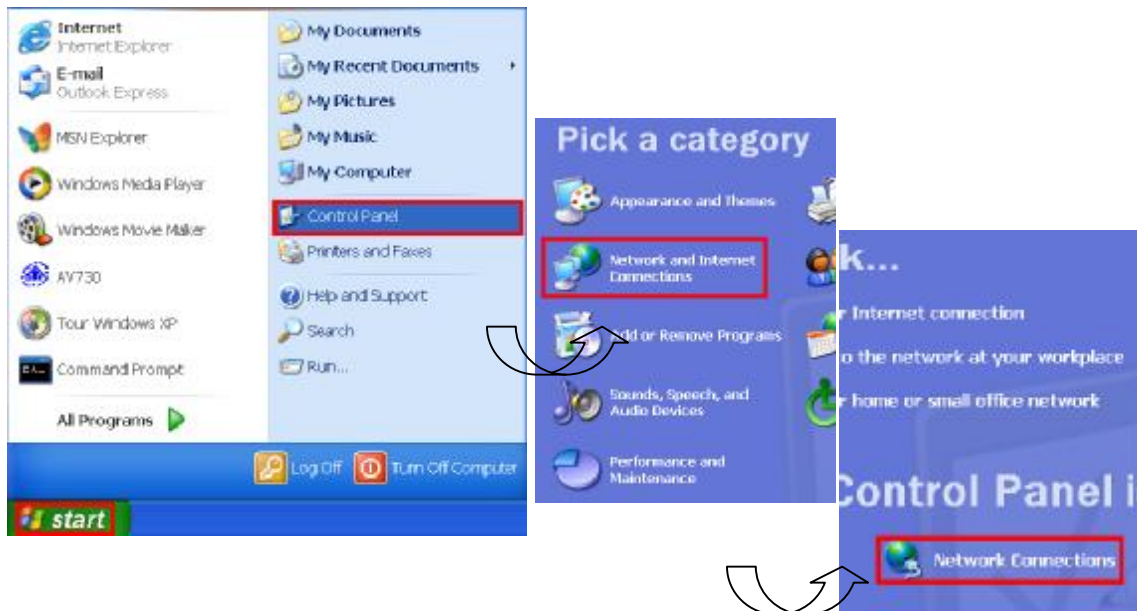
2.Click [Local Area Connection Enabled Realtek RTL8139 Family] twice

3.Click "Properties" for TCP/IP setup
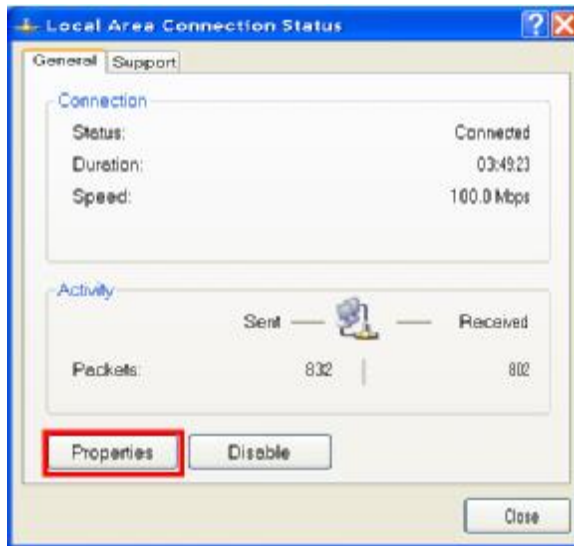
4.Click "INTERNET PROTOCAL (TCP/IP)" and then select "Properties" to setup

Before changing the PC network setting, please write down the original network setting in order to recover the original setting after the setup.

Leave blank
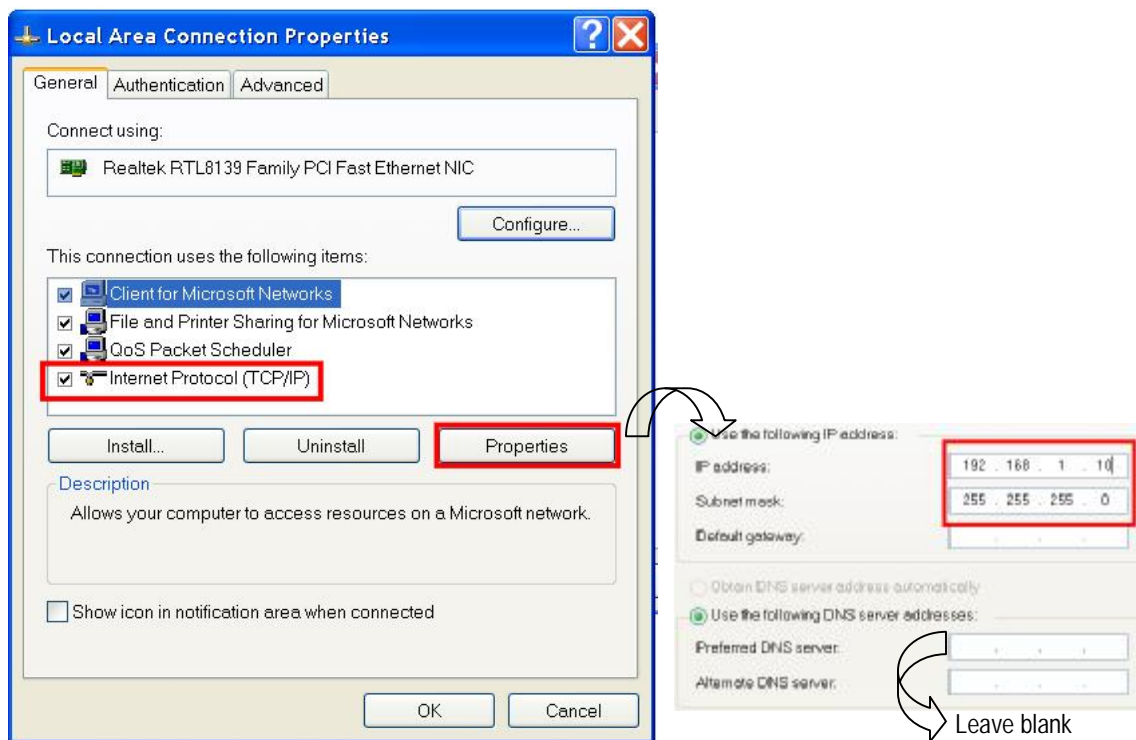
NOTE：

The above steps are to connect PC and Video Server in one Domain (e.g.:192.168.1.XXX). The setting

of **"XXX"** could be set from 2 to 254; the subnet mask is 255.255.255.0.

Step 3：To configure the Server IP, please click twice to enter the setup.

Step 4：Key in User Name, Password, and IP address (User Name and Password are both

default at **"admin"**; IP address is 192.168.1.1, Port:80). Then click OK to connect.
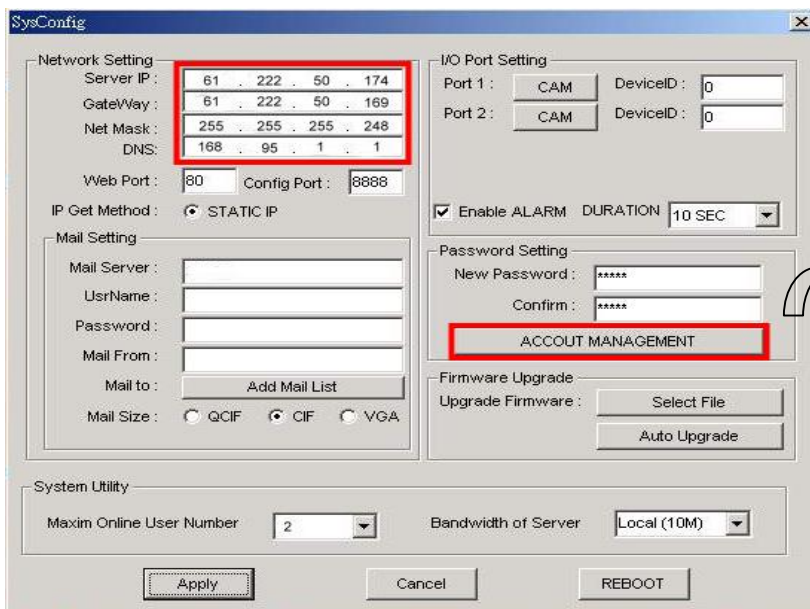
Step 5：When you see the control bar, you have successfully logged in the program of the Video

Web Server. Click **"System Config"** to set up **"Network Setting"** and **"Account**

Management". (e.g. IP address is 61.222.50.174)

SYSTEM CONFIG

To add a new User & user's level

S-control all the functions

A-control advanced functions

B-control only basic functions

The maximum length of user name
and password is 8 characters.

NOTE：

1.Please get the IP address with your Internet Service Provider. For example,
we assume it is 61.222.50.174 and the user name and password is **"andy"**.

2.After the setup, please click **"APPLY"** to renew the information.

7

Step 6：Connect the Video Web Server with ADSL or Cable modem through RJ-45 then you can operate it from the internet.


RJ-45
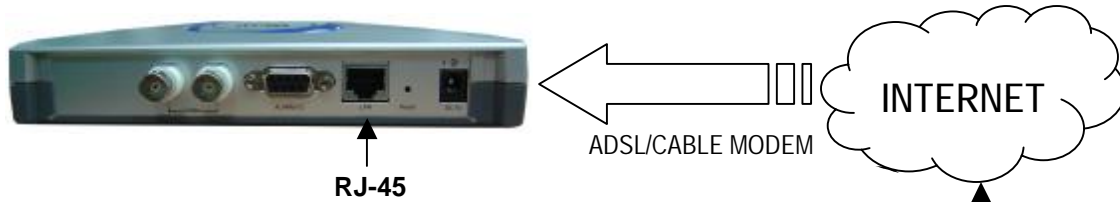
NOTE：The attached LAN cable is standard CAT5 cable. In some operation environment, the user might need the crossover cable. If your operation environment requires crossover cable, please purchase it from your local computer stores.

SOFTWARE OPERATION AT CLIENT SITE

Follow the steps for connection at your client site (remote site). (e.g. If you set up the server at your office with one static ADSL, you can remote watch the video anywhere with a networked computer.)

Step 1：Click twice to enter Login setup (please refer to **"software installation")**

Step 2：Key in **"User Name"** and **" Password".** (e.g. **"User Name"** and **"Password"** are **"andy"** and the IP address is 61.222.50.174). Click OK to establish the connection.
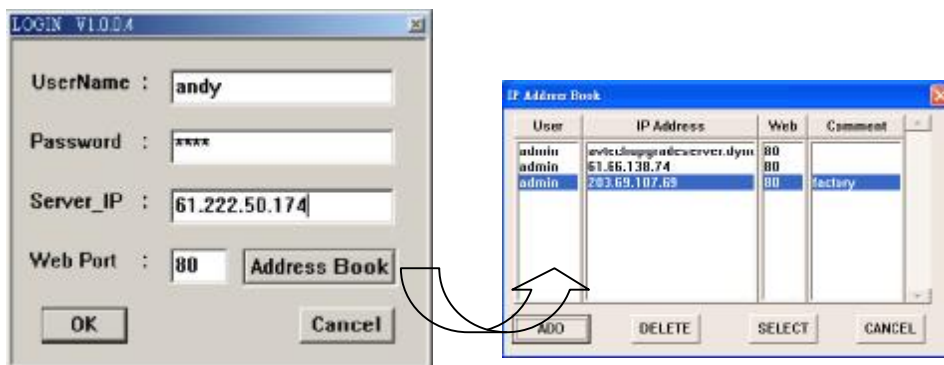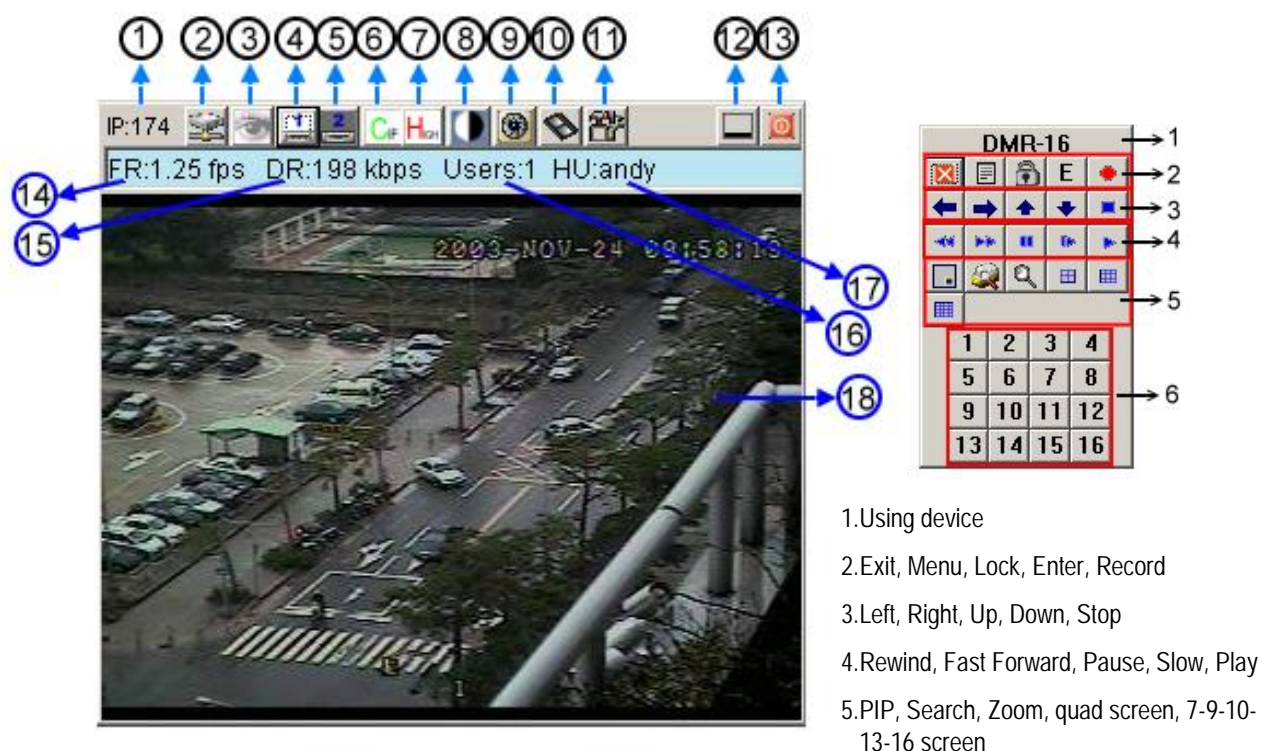

NOTE:

You can press "Address Book" button then add a new IP into this table or choose any logined IP address to access the Video Web Server.

This function is designed to store the list of IP addresses which you can control and manage.

Step 3：If you could see the video screen as following, you have been successfully connecting to the server.

[Introduction of Basic Operation]

1.Using device

2.Exit, Menu, Lock, Enter, Record

3.Left, Right, Up, Down, Stop

4.Rewind, Fast Forward, Pause, Slow, Play

5.PIP, Search, Zoom, quad screen, 7-9-10-13-16 screen

6.Camera video input

1.IP address, assume the setting is 61.222.50.**174** (last part)

2.Connection/Disconnection

3.Conceal/Resume video screen

4.Video CH1

5.Video CH2

6.Resolution: CIF、VGA

7.Image quality：High、Middle、Low

8.Image adjusting: Brightness/ Contrast/ Saturation

9.Snapshot : press this button, the image will be automatically saved on the desktop.

10.Record

11.System setting

12.Minimize

13.Exit

14.Image transmission rate per second

15.Data transmission rate

16.Number of online users

17.Host User

18.Window adjust (right click for 100%, 150%, 200%, Full Screen)

NOTE：

1.When you setup the video input from DVR, the screen will show above operation interface.

2.Take 16 CH DVR as an example to explain the operation (please refer to DVR user manual & APPENDIX#1 for details)

3.After you press the record icon, there will be a "record" file on the desktop. The video images will be saved in this file. Each recording file can be saved up to 650 MB in the file. The recording file will be assigned to the second file if it is more than 650MB. Besides, if the HDD space is less than 200MB, the program will stop the recording.

PLAYBACK OPERATION

Please find a "record" folder on the desktop and click twice on the recording file to playback.
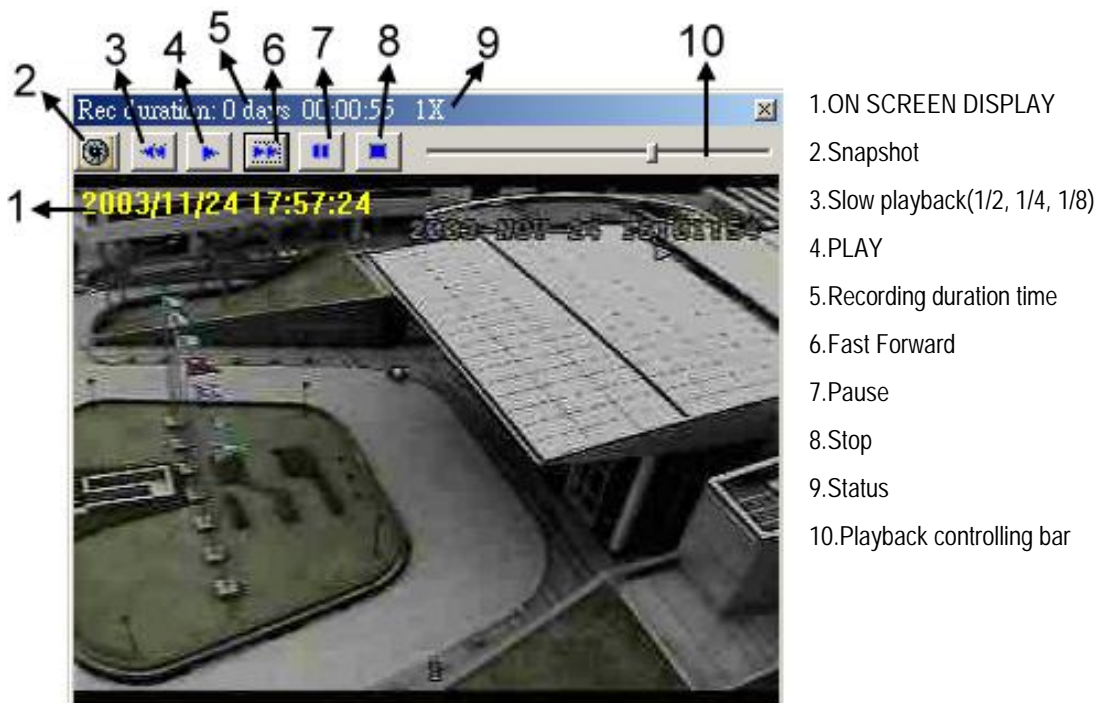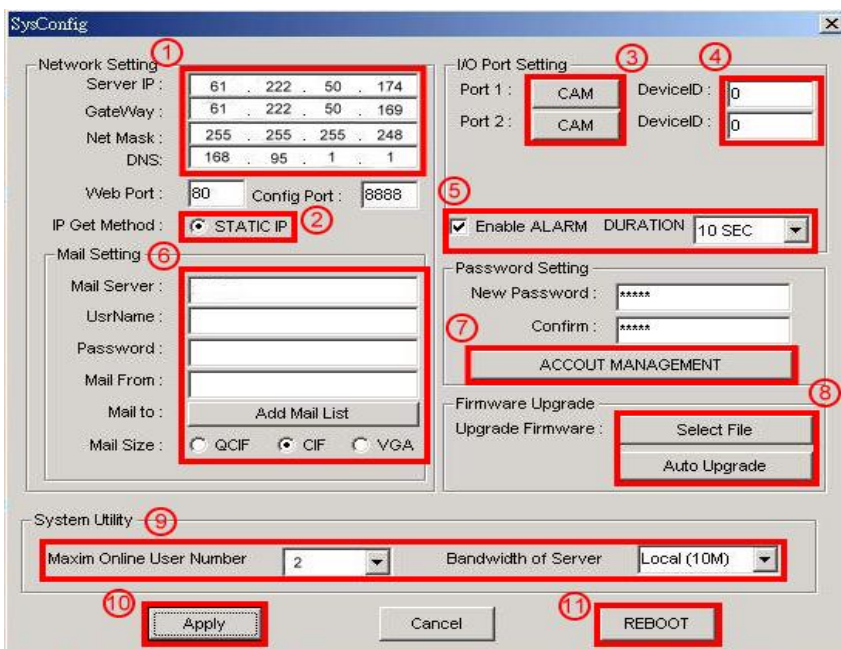

1.ON SCREEN DISPLAY

2.Snapshot

3.Slow playback(1/2, 1/4, 1/8)

4.PLAY

5.Recording duration time

6.Fast Forward

7.Pause

8.Stop

9.Status

10.Playback controlling bar

ADVANCED SETTING

Click "System Config" for advanced setting.

SYSTEM CONFIG

NOTE :
Please refer to APPENDIX#1 &
APPENDIX#2 for I/O Port setting
& mail setting.

1.Network Setting

To set up the network setting of the Video Web Server. Check with your network administrator or Internet Service Provider.

2.IP Get Method

The default setting is Static IP.

3.I/O Port Setting—refer to APPENDIX#1

Set up video input device. It supports our brand 1CH DVR, 4CH DQR, 4CH, 9CH, 16CH DMR, Multiplexer, and camera.

4.Device ID—refer to APPENDIX#1

Set up the device ID number for remote controlling (It should be the same as the device setting).

5.Enable ALARM/DURATION

To set up the alarm function and the alarm duration time.   There are 9 different time settings: 10 second, 20 second, 30 second, 1 minute, 2 minutes, 3 minutes, 5 minutes, 10 minutes, 15 minutes.

6.Mail Setting—refer to APPENDIX#2

When the alarm is triggered, the video server will capture the instant picture and e-mail the captured image to the assigned recipients. The image quality can be selected as QCIF(112*112 pixels), CIF and VGA.

7.Account Management

To set up the user's account and password (Max 100 accounts) and authority.

8.Firmware Upgrade

To upgrade the firmware. Click the "Select File" and select "upgrade program" from PC；Click "Auto Upgrade" to download firmware from FTP site and save it in the Flash memory of Video Web Server.

9.System Utility

To set up the maximum number of on-line users and the bandwidth.

10.Apply

After any change of setting, press "apply" to refresh the data in the Video Web Server.

11.Reboot

Press this button to restart Video Web Server.

Dynamic IP setting

ROUTER SETTING

The following settings vary from different routers. Please read the instruction of your router thoroughly.

Step 1: Connect PC and Router

Step 2: Set up IP address

Please refer to page 6. Click "INTERNET PROTOCAL (TCP/IP)" and choose "content" to set up the IP address. Then please choose "Obtain an IP address automatically"
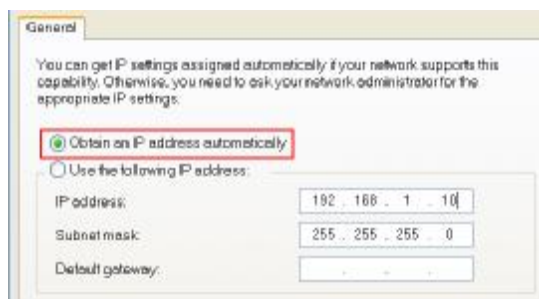
Step 3: Enter the default IP address (IP：192.168.123.254/ Default router gateway) to log in the router from the browser. And then enter the login web page and key in the default password **"admin"**.

Step 4：Click [Basic Setting] -> [Primary Setup] -> [Change] and change the Router internet setting. Please choose **"PPP over Ethernet"** and click **"Save" à "Reboot"**

Step 5：Select [Basic Setting] -> [DHCP Server] and activate DHCP SERVER. Set up
"STARTING" and "ENDING ADDRESS" and click "Save"à"Reboot"

Step 6：Select [Forwarding Rules] -> [Virtual Server] and set up "80" and "8888" port for Video
Web Server. Then click "Save"à"Reboot"

Step 7：Select [Advanced Setting] -> [Dynamic DNS] and set up "DDNS". Then please click
"Save"à"Reboot"à LOG OUT.

NOTE: please refer to the next instruction for
the application for DDNS.

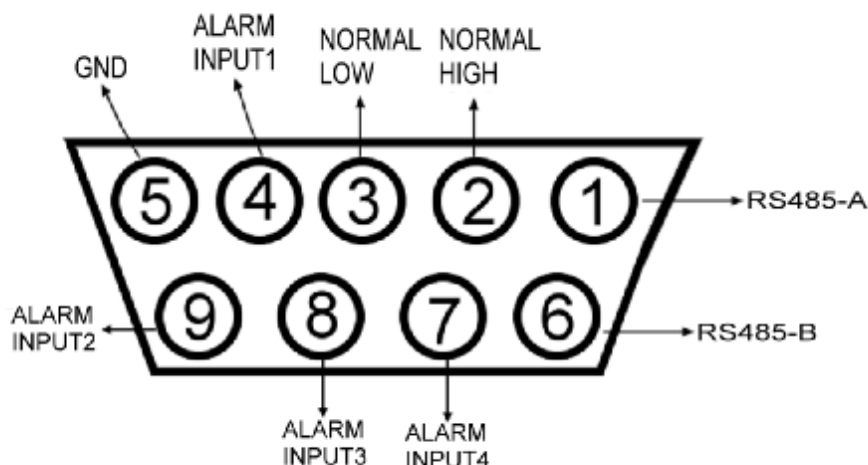## DDNS APPLY

Step 1：Connect to "http://www.dyndns.org" Web page (the below is only for example) and click "ACCOUNT"à"CREATE ACCOUNT"

Step 2：Register the information and click "Dynamic DNS"(add host)

Step 3：User can set up their own DDNS HOST. For example, the user's applied Host name is "avtechtestdvr.dynalias.org". Then click [Add Host] to finish the setting.

English

PIN 1, 6. RS485-A, RS485-B

Using RS485-A & RS485-B serial communications signals to control digital units just like DVR.

PIN 4, 7, 8, 9. ALARM INPUT

Using PIN 4,7,8,9 to receive the alarm input then trigger Video Server to send mail to users for auto e-mail warning system.

PIN 5. GND

GROUND

PIN 2, 3. NORMAL HIGH, NORMAL LOW

Using PIN 2 or 3 to trigger external device to act.

NOTE :

If you want to remote control DVR products, please set the remote mode as RS-485 and Baud Rate as 2400.

FAQ

1.Regarding directly connect with PC, could I connect the video server with remote PC without connection to the internet ?

ANS:Yes, you can connect Video sever with remote PC using standard pass through (CAT5) cable directly.

2.If I do not have any network in my office or house, could I use this system?

ANS:Yes, you could use this unit, too. You can connect Video Server with PC or notebook directly and think
PC as a storage device then save all the video from cameras and display the Video record on the PC.

3.Can I use ISDN to connect with Video Server?

ANS:Our Video Server could be connected via ADSL and CABLE modem only.It does not support ISDN connection.
However, if you have a router which supports ISDN, RJ-45 and port forwarding function, it can be used with our
Video Server.

4.What kind of frame rate are we expecting?

ANS:The frame rate = band width(Kbps) / 8 / image size(Kbytes)-->Daytime
CIF(Low-6 Kbytes, Middle-9 Kbytes, High-12 Kbytes),
VGA(Low-24 Kbytes, Middle-36 Kbytes, High-48 Kbytes).

SPECIFICATIONS

Video Input	2 Channels for analog & digital products, 1.0 Vp-p, 75, Composite, BNC
Alarm Input	4 Inputs
Watch dog	Yes*
RS-485 Port	Yes
Network Interface	Ethernet (10/100 Base-T)
Image Compression	JPEG
Video Adjustment	Brightness, Contrast, Saturation, Quality Level adjust
Protocols	TCP/IP, ICMP, SMTP
Hardware	CPU: 32 Bits RISC Processor, ROM: 4M Bytes Flash, RAM:16M Bytes SDRAM, One RJ-45 for 10/100 Mbps Ethernet, LED to indicate Link / Act status, GPIO with trigger E-mail
Resolution	VGA: 640x480, CIF: 320x240
Performance	Video through put : Up to 15(NTSC), 12.5(PAL) frames/ second, Network through put : Max. up to 3000 K Bits per Second
Trigger & Action	Triggered by GPIO Input, Action: E-mail image to specific account
Installation	Assign Static & Dynamic IP address
Software Upgrade	Local or Remote
Security	Password Protection
Power	12V / 1.25A switching power

*This function can help Video web Server working normally and avoid this unit to be down.   Design and specifications are subject to change without notice.
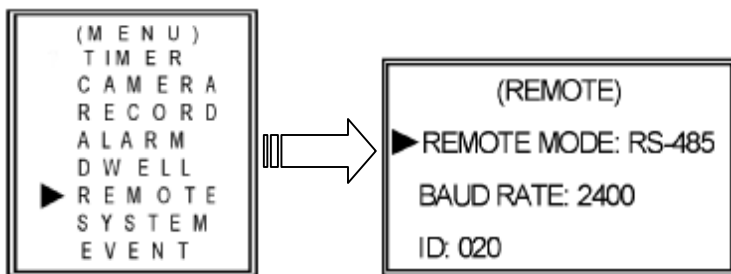
APPENDIX#1 DVR CONTROL

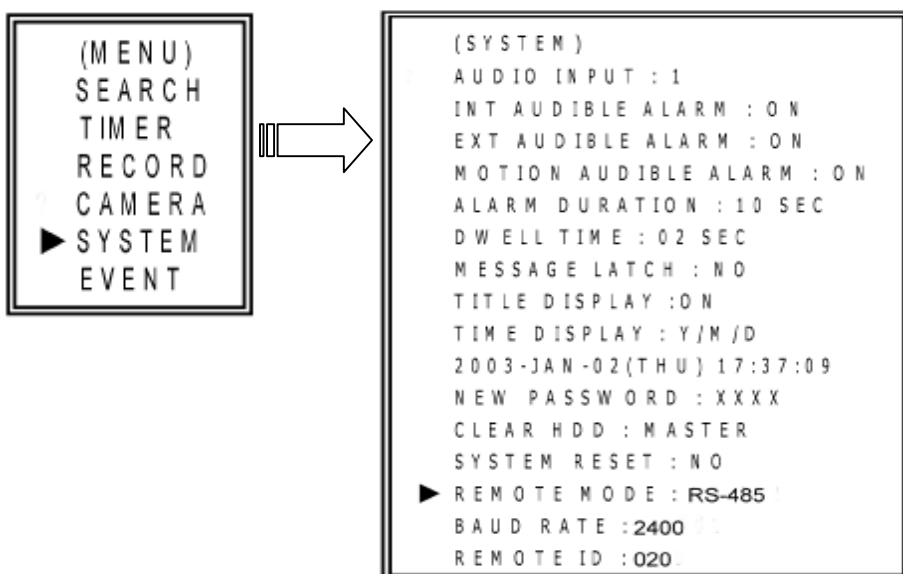1) Connect the Sub-D plug of Video Web Server with our own brand DVR products.
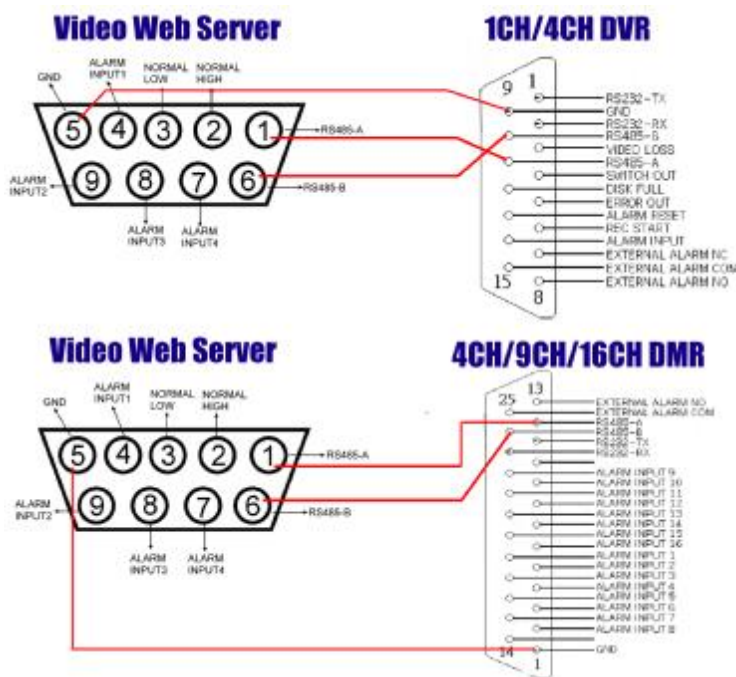
2) Set the "Remote" function in the DVR products.

NOTE : Remote mode : RS-485, Baud rate : 2400, ID : same as "I/O port setting" in the Video Web Server.

A. 1/4 CH DVR

B. 4/9/16 CH DMR

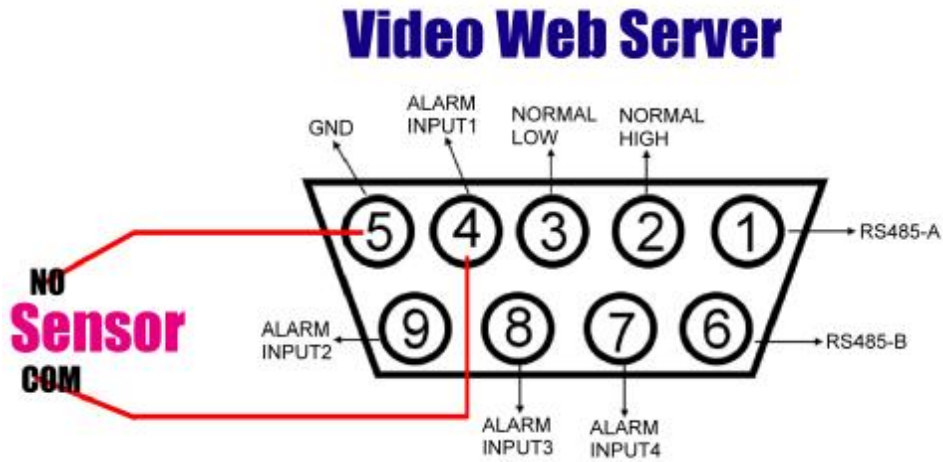3) Set the "I/O Port Setting" in the system config of Video Web Server.

1) Connect the Sub-D plug of Video Web Server with the COM/NO ports of Sensor.

2) Set the **"mail setting"** & **"Mail to : " item** in the system configure.
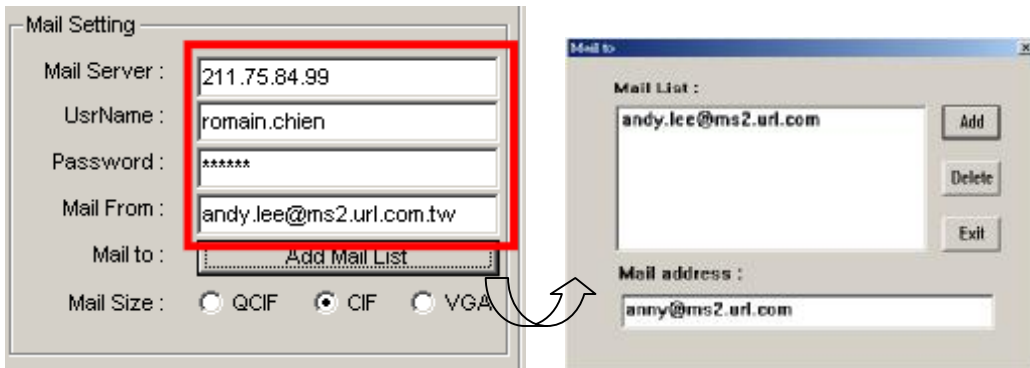
NOTE1 : You can get all the data from the ISP company or mail server supplier **(POP3/SMTP server)**.

NOTE2 : You should set the mail list which you want to send to when the alarm is triggered.

NOTE3 : When the alarm is triggered, you can find "!!alarm1!!" message showed on the screen.
Then you can get the email in your mailbox.