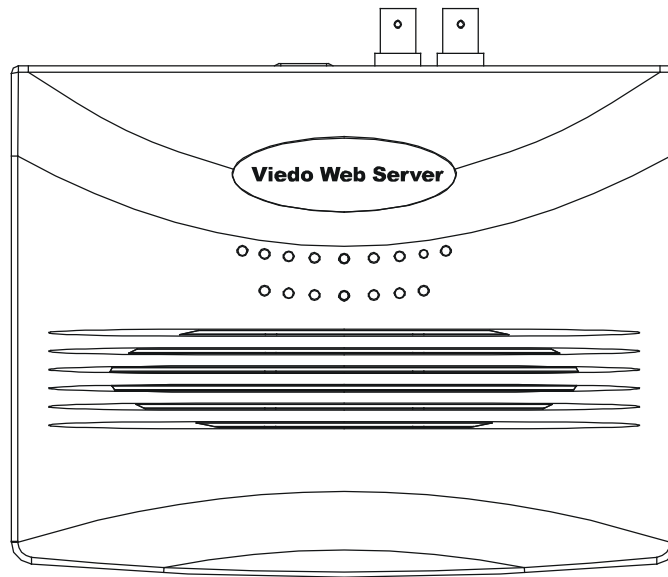


VIDEO WEB SERVER

PATENT



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.

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Dynamic IP setting

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What do you get ?

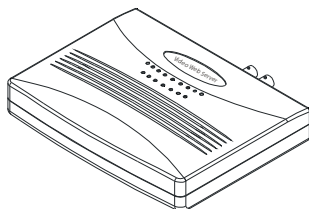
FEATURES

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

English

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.

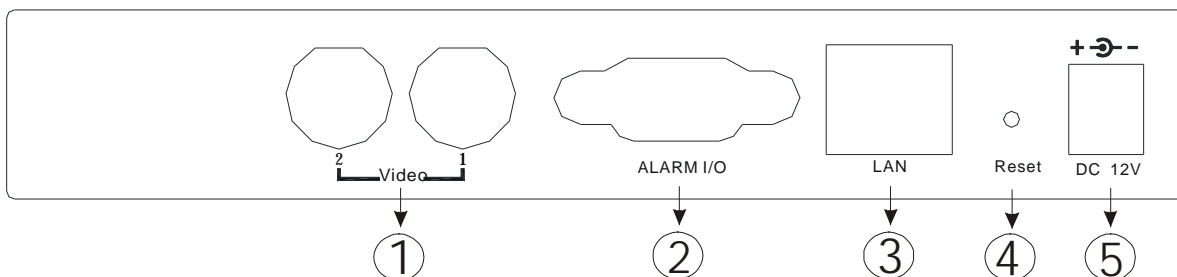
Before Operation

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**

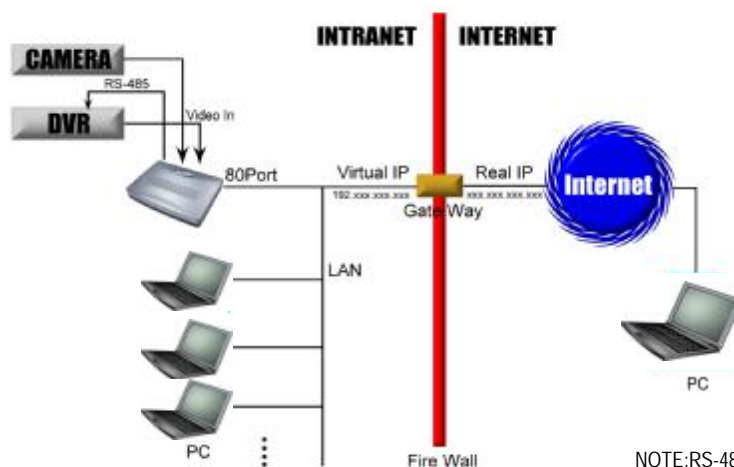
1)When it lights, that means the network is normal.

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



HARDWARE CONNECTION AT SERVER SITE

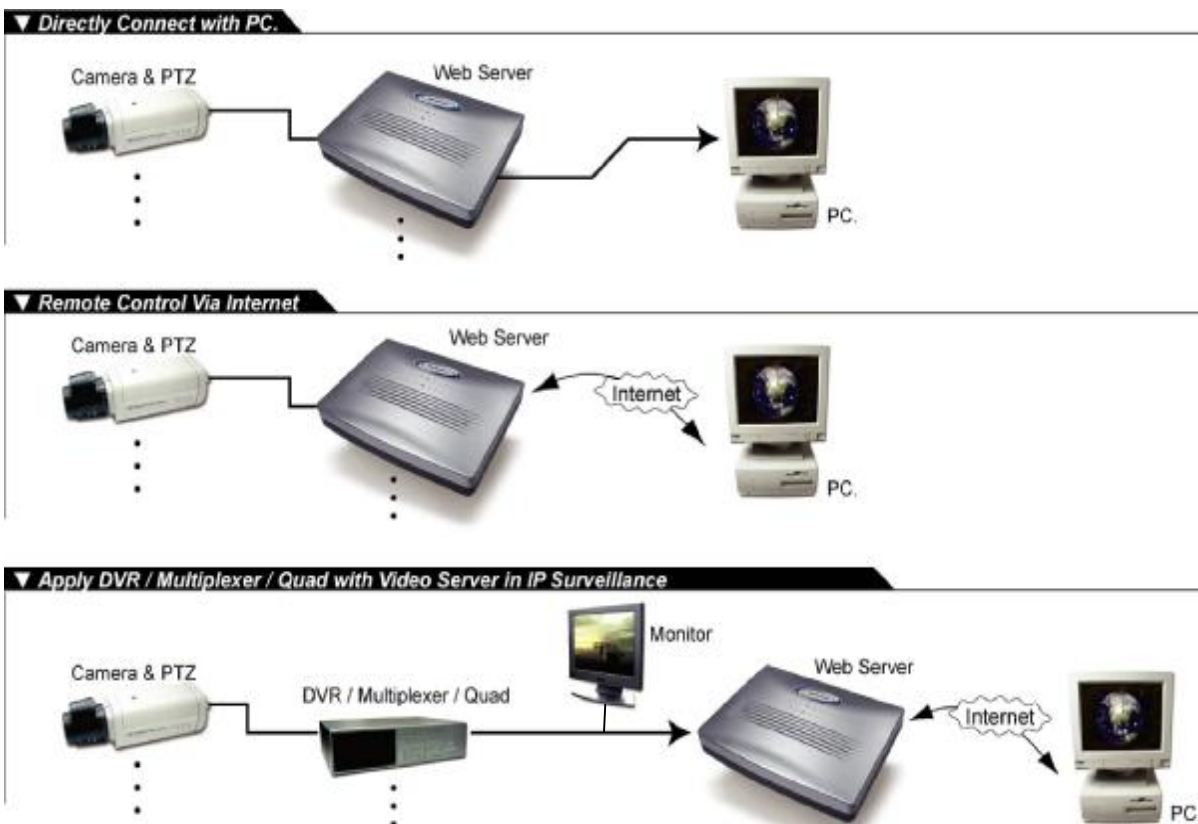
A.Connection Structure



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

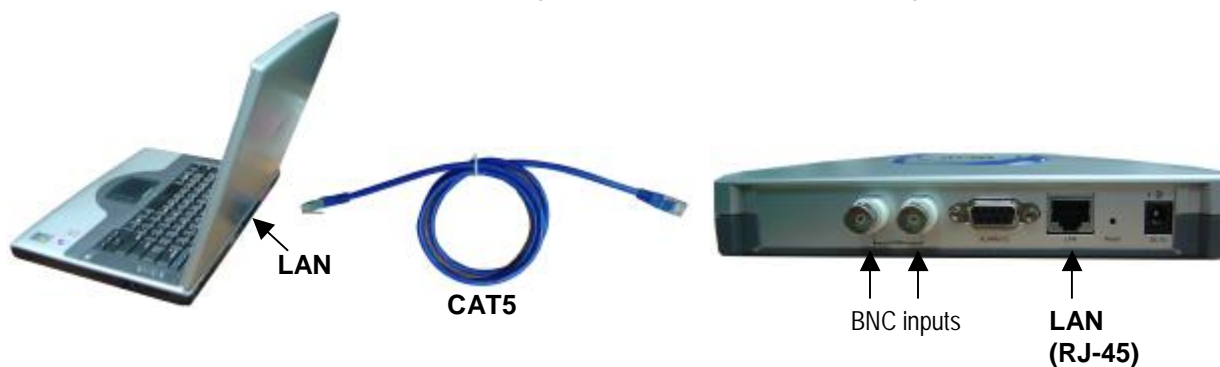


SOFTWARE INSTALLATION AT CLIENT SITE

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

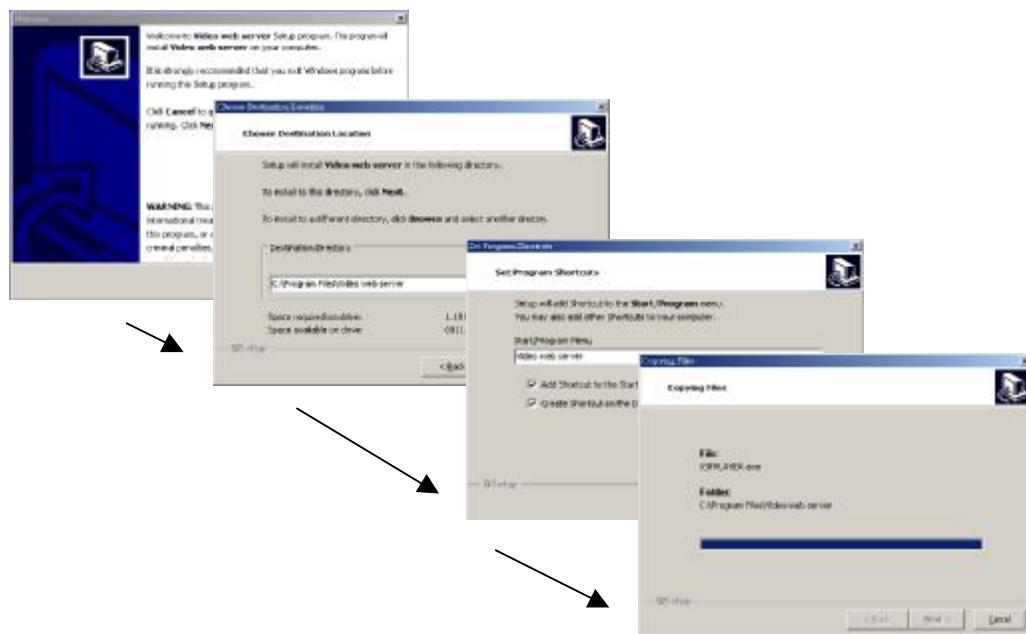
Use the **standard pass through (CAT5) cable to connect the PC and Video Web Server**; then **set up these two devices** in the same Domain (e.g.:192.168.1.XXX). Please refer to Page.5 STEP2.



Step 2: 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.



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



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



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).

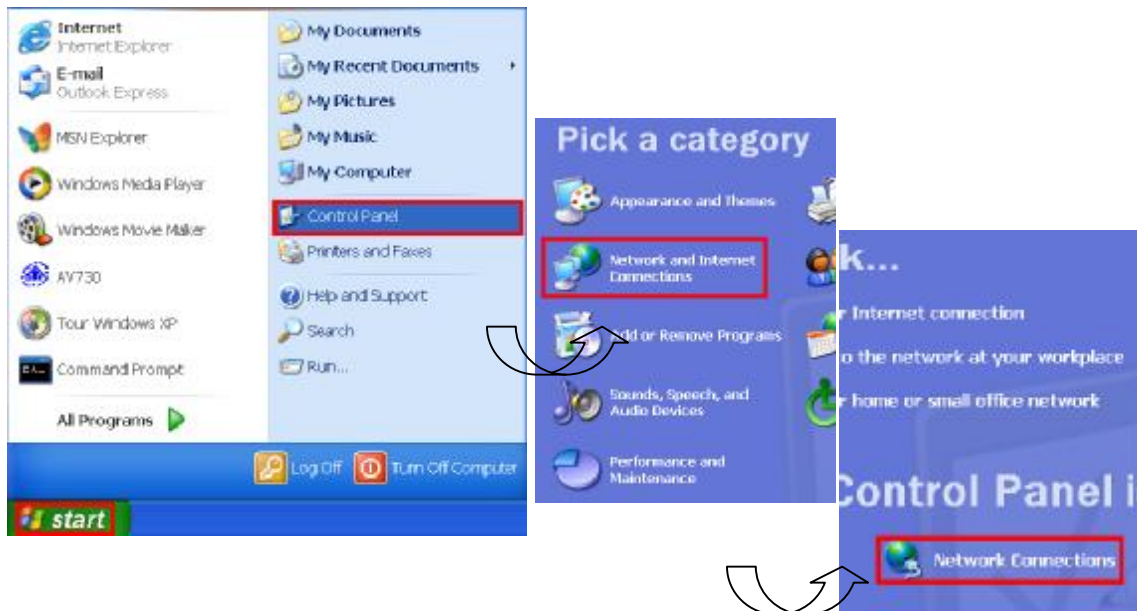
Step 1 : Connect PC/Notebook with Video Web Server

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).



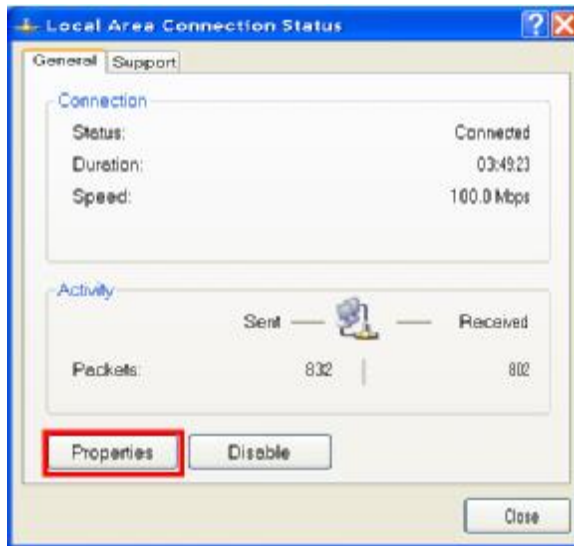
Step 2 : Network setting for PC. (The instruction is based on Win XP O/S. If your O/S is Win 2000 or Win 2003, the setup procedure is similar.)

1.Click : start→ Control Panel→ network and internet connections→ network connections



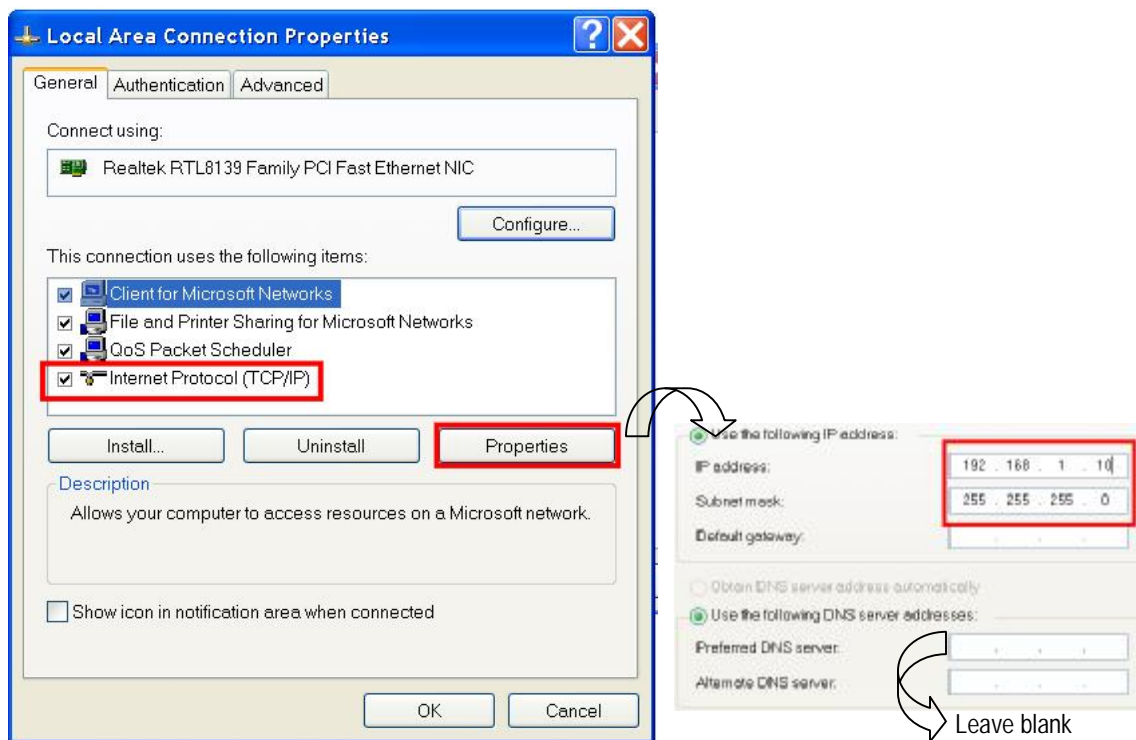
2.Click  Local Area Connection
Enabled
Realtek RTL8139 Family twice

3. Click "Properties" for TCP/IP setup




4. Click "INTERNET PROTOCOL (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.



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.



LOGIN V1.0.0.4

UserName : admin

Password : *****

Server_IP : 192.168.1.1

Web Port : 80

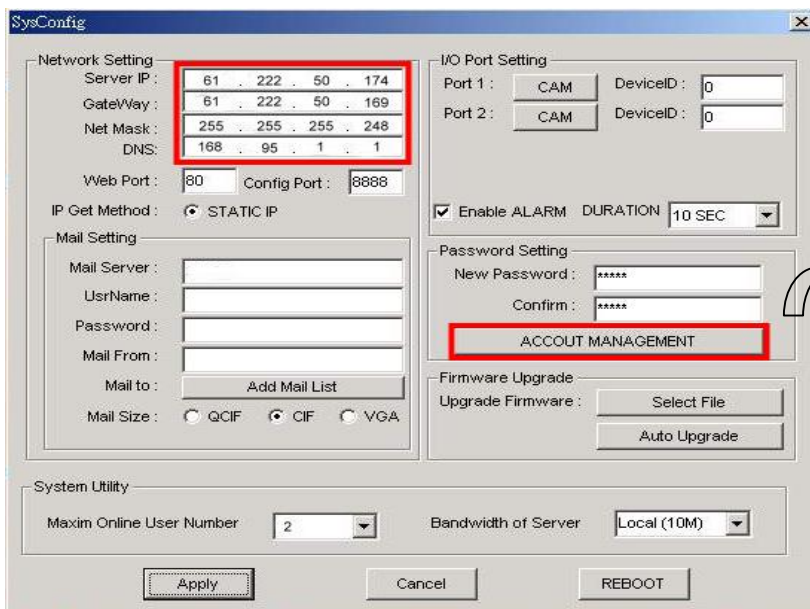
Address Book

OK Cancel

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



SysConfig

Network Setting

Server IP: 61 . 222 . 50 . 174

GateWay: 61 . 222 . 50 . 169

Net Mask: 255 . 255 . 255 . 248

DNS: 168 . 95 . 1 . 1

Web Port: 80 Config Port: 8888

IP Get Method: ☒ STATIC IP

Mail Setting

Mail Server:

UserName:

Password:

Mail From:

Mail to: Add Mail List

Mail Size: ☐ QCIF ☒ CIF ☐ VGA

I/O Port Setting

Port 1: CAM DeviceID: 0

Port 2: CAM DeviceID: 0

☒ Enable ALARM DURATION 10 SEC

Password Setting

New Password: *****

Confirm: *****

ACCOUNT MANAGEMENT

Firmware Upgrade

Upgrade Firmware: Select File

Auto Upgrade

System Utility

Maxim Online User Number 2

Bandwidth of Server Local (10M)

Apply Cancel REBOOT

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.



Account Management

USERNAME	PASSWORD	LEVEL
admin	admin	S
andy	andy	S

TOTAL USER: 1

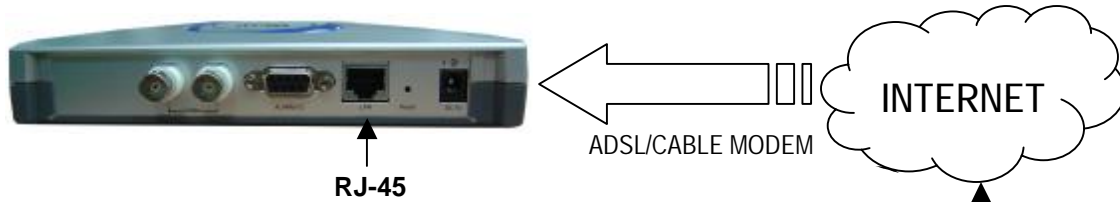
User Name: Password: Level: S

ADD DEL MODIFY OK

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.


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



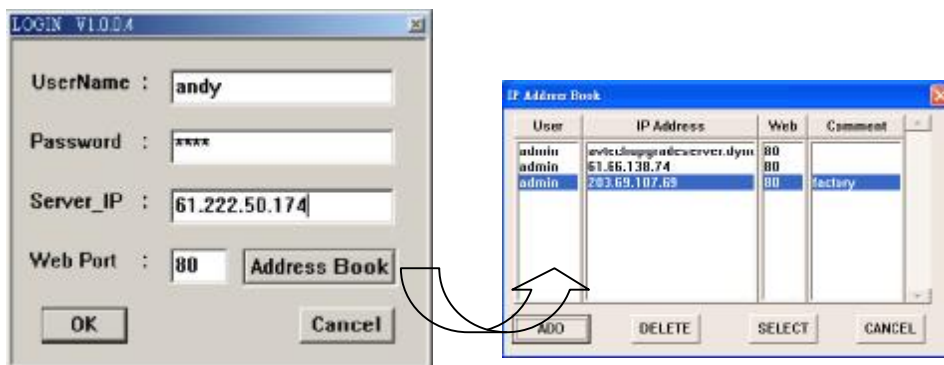
NOTE : The attached LAN cable is standard CAT5 cable. In some operation environment, the user might need the crossover cable. If your operation environment requires crossover cable, please purchase it from your local computer stores.

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:

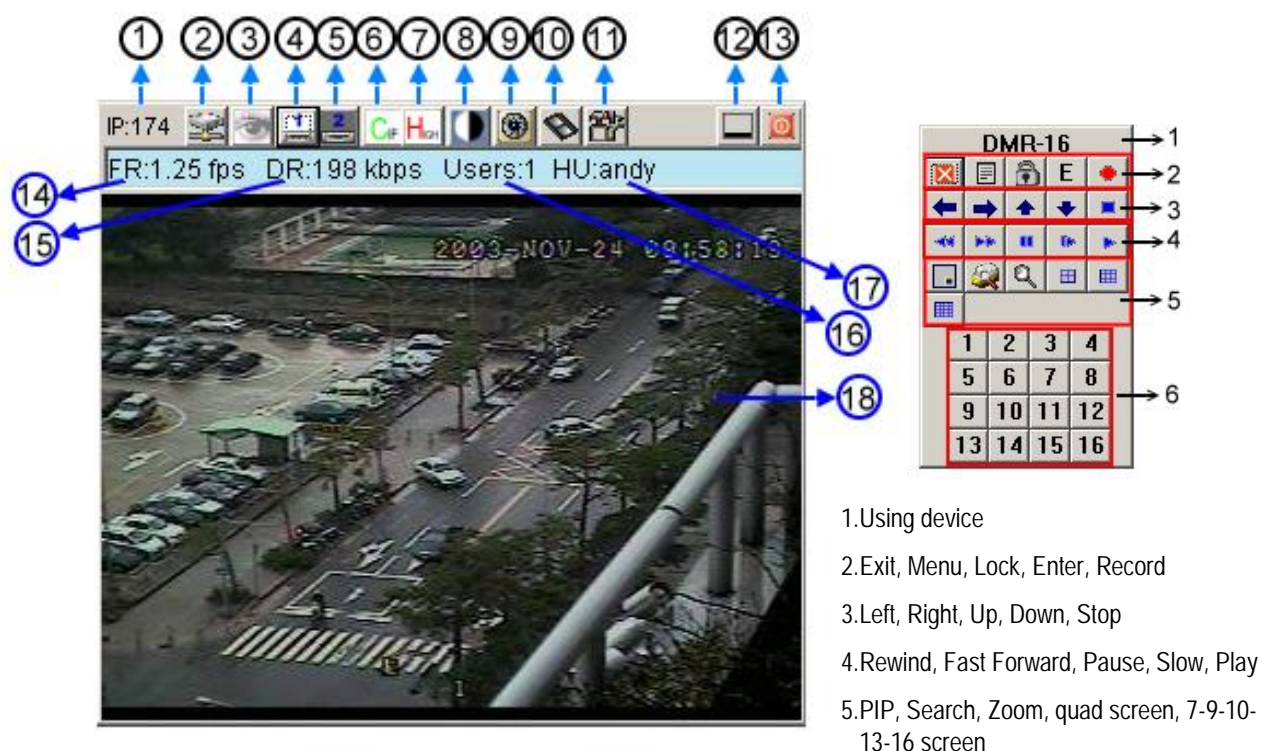
You can press “Address Book” button then add a new IP into this table or choose any logged IP address to access the Video Web Server.

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. 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)

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

NOTE :

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

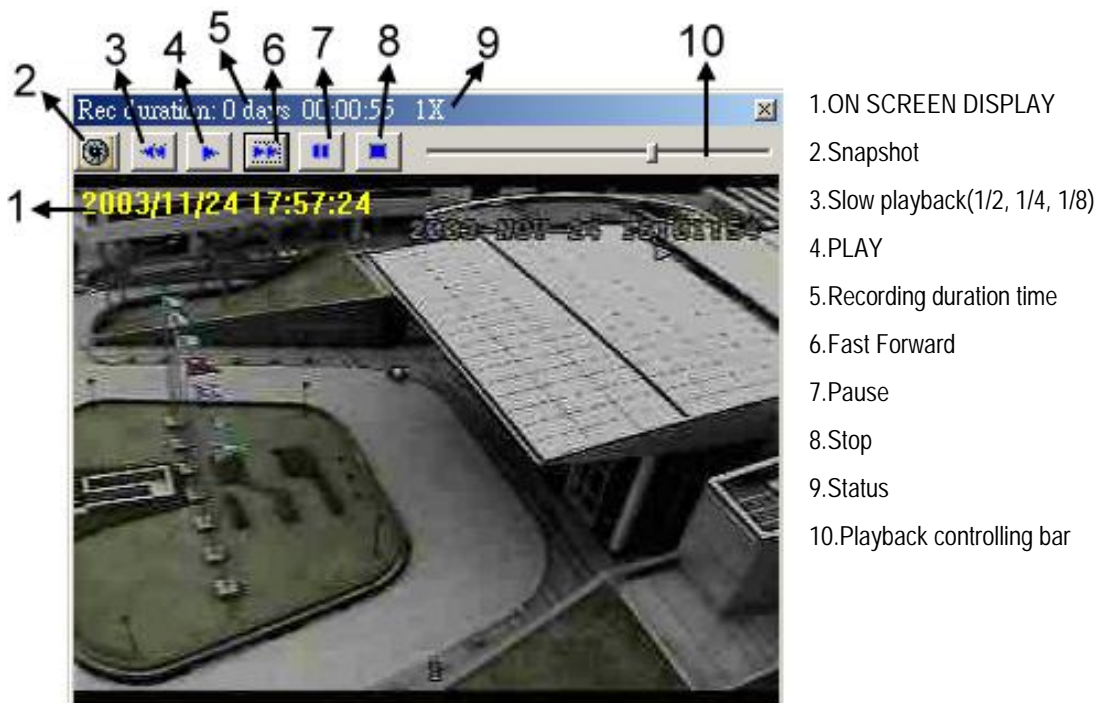
2. Take 16 CH DVR as an example to explain the operation (please refer to DVR user manual & APPENDIX#1 for details)

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.



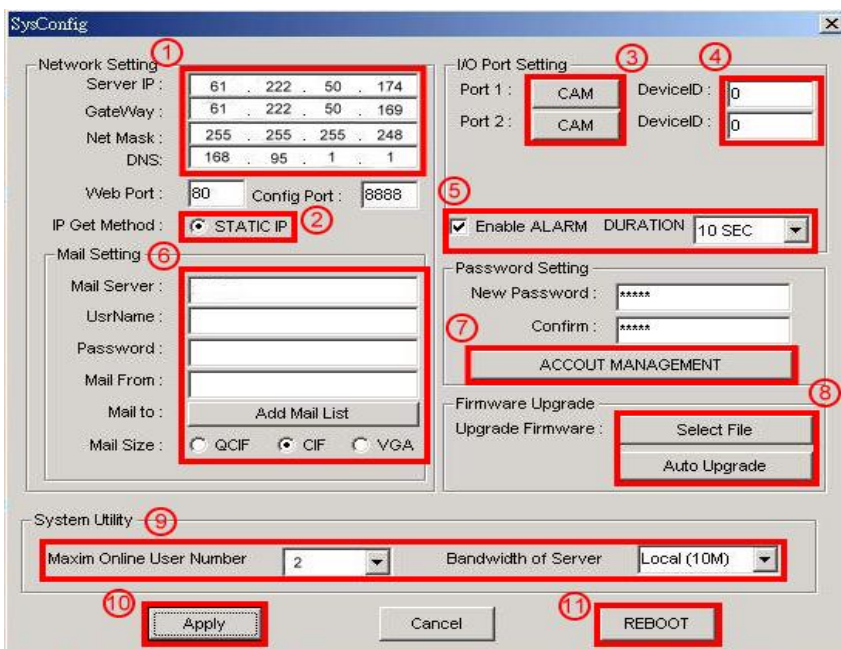
- 1.ON SCREEN DISPLAY
- 2.Snapshot
- 3.Slow playback(1/2, 1/4, 1/8)
- 4.PLAY
- 5.Recording duration time
- 6.Fast Forward
- 7.Pause
- 8.Stop
- 9.Status
- 10.Playback controlling bar

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

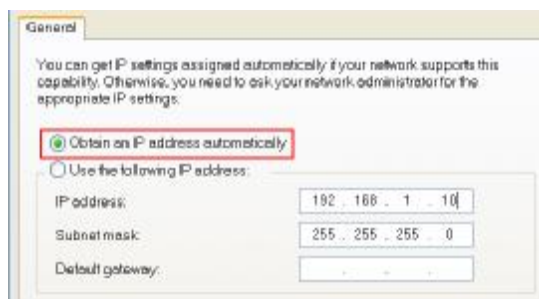
ROUTER SETTING

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 PROTOCOL (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”.

Multi-Functional Broadband NAT Router (R1.96h3)

User's Main Menu

- Status
- System Password (default: admin)
- Login

System Status

Item	WAN Status	Side note
IP Address	192.168.1.163	Static IP
Subnet Mask	255.255.255.0	
Gateway	192.168.1.65	Unreachable
Domain Name Server	0.0.0.0	

Statistics of WAN

	Inbound	Outbound
Octets	937600	6572243

Multi-Functional Broadband NAT Router (R1.96h3)

Administrator's Main Menu

- Status
- Wizard
- Basic Setting
- Forwarding Rules
- Security Setting
- Advanced Setting
- Toolbox
- Log out

System Status

Item	WAN Status	Side note
IP Address	192.168.1.163	Static IP
Subnet Mask	255.255.255.0	
Gateway	192.168.1.65	Unreachable
Domain Name Server	0.0.0.0	

Statistics of WAN

	Inbound	Outbound
Octets	937600	6573167
Unicast Packets	3255	6134
Non-unicast Packets	6752	61

View Log Clients List Help Refresh

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

Multi-Functional Broadband NAT Router (R1.96h3)

Administrator's Main Menu

- Status
- Wizard
- Basic Setting
 - Primary Setup
 - DHCP Server
 - Change Password
- Forwarding Rules
- Security Setting
- Advanced Setting
- Toolbox
- Log out

Primary Setup

Item	Setting
LAN IP Address	192.168.123.254
WAN Type	PPP over Ethernet Change...
PPPoE Account	
PPPoE Password	
Primary DNS	168.96.1.1
Secondary DNS	0.0.0.0
Maximum Idle Time	300 seconds <input type="checkbox"/> Auto-reconnect

Save Undo More>> Help Reboot

Saved! The change doesn't take effective until rebooting!

Choose WAN Type

Type	Usage
<input type="radio"/> Static IP Address	ISP assigns you a static IP address.
<input type="radio"/> Dynamic IP Address	Obtain an IP address from ISP automatically.
<input type="radio"/> Dynamic IP Address with Road Runner Session Management (e.g. Telstra BigPond)	
<input checked="" type="radio"/> PPP over Ethernet	Some ISPs require the use of PPPoE to connect to their services.
<input type="radio"/> PPTP	Some ISPs require the use of PPTP to connect to their services.

Save Cancel

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

The screenshot shows the 'DHCP Server' configuration page. On the left is the 'Administrator's Main Menu' with options like Status, Wizard, Basic Setting, Primary Setup, DHCP Server, Change Password, Forwarding Rules, Security Setting, Advanced Setting, and Toolbox. The main area has a table with 'Item' and 'Setting' columns. The 'DHCP Server' item is set to 'Enable'. Below it, 'IP Pool Starting Address' is 100 and 'IP Pool Ending Address' is 223. There are buttons for Save, Undo, More>>, Clients List, Fixed Mapping, Help, and Reboot. A red message at the bottom says 'Saved! Items marked with ▶ don't take effective until rebooting!'.

Item	Setting
DHCP Server	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
IP Pool Starting Address	100
IP Pool Ending Address	223
Domain Name	

Buttons: Save, Undo, More>>, Clients List, Fixed Mapping, Help, Reboot

Message: Saved! Items marked with ▶ don't take effective until rebooting!

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

The screenshot shows the 'Virtual Server' configuration page. It features a table with columns for ID, Service Ports, Server IP, and Enable. The first two rows are highlighted with red boxes, showing '80' and '8888' in the 'Service Ports' column. The 'Server IP' column shows '192.168.123.99' for the first two rows. The 'Enable' column has checkboxes, with the first two checked.

ID	Service Ports	Server IP	Enable
1	80	192.168.123.99	<input checked="" type="checkbox"/>
2	8888	192.168.123.99	<input checked="" type="checkbox"/>
3		192.168.123.	<input type="checkbox"/>
4		192.168.123.	<input type="checkbox"/>
5		192.168.123.	<input type="checkbox"/>
6		192.168.123.	<input type="checkbox"/>
7		192.168.123.	<input type="checkbox"/>
8		192.168.123.	<input type="checkbox"/>
9		192.168.123.	<input type="checkbox"/>
10		192.168.123.	<input type="checkbox"/>
11		192.168.123.	<input type="checkbox"/>
12		192.168.123.	<input type="checkbox"/>
13		192.168.123.	<input type="checkbox"/>
14		192.168.123.	<input type="checkbox"/>
15		192.168.123.	<input type="checkbox"/>
16		192.168.123.	<input type="checkbox"/>

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

The screenshot shows the 'Dynamic DNS' configuration page. It has a table with 'Item' and 'Setting' columns. The 'DDNS' item is set to 'Enable'. Below it, 'Provider' is 'DynDNS.org(Dynamic)', 'Host Name' is 'itechtestde.dnshas.org', 'Username / E-mail' is 'depiaro', and 'Password / Key' is masked with asterisks. There are buttons for Save, Undo, and Help.

Item	Setting
DDNS	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Provider	DynDNS.org(Dynamic)
Host Name	itechtestde.dnshas.org
Username / E-mail	depiaro
Password / Key	*****

Buttons: Save, Undo, Help

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

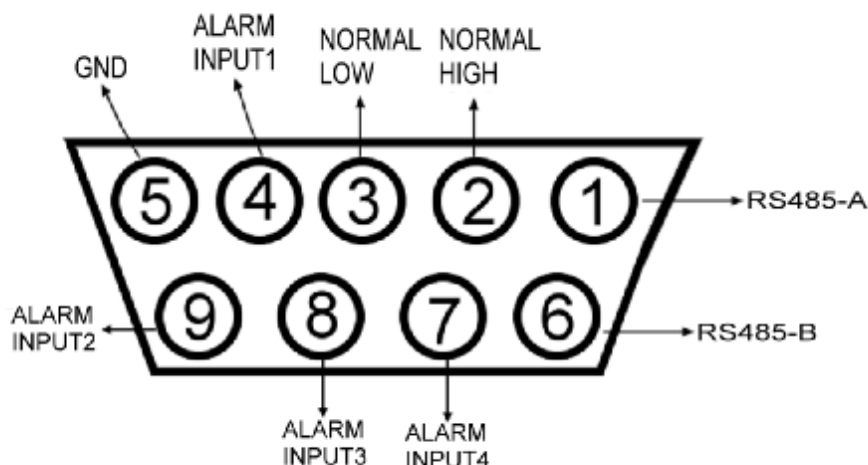
DDNS APPLY

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.

RS-485 PIN DEFINE



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).

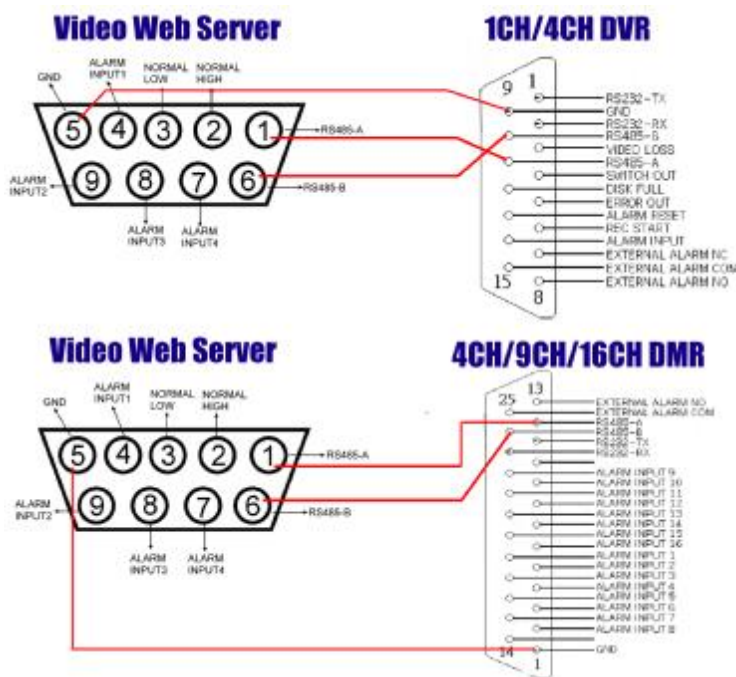
SPECIFICATIONS

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, Netw ork 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	Passw ord Protection
Power	12V / 1.25A sw itching pow er

*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

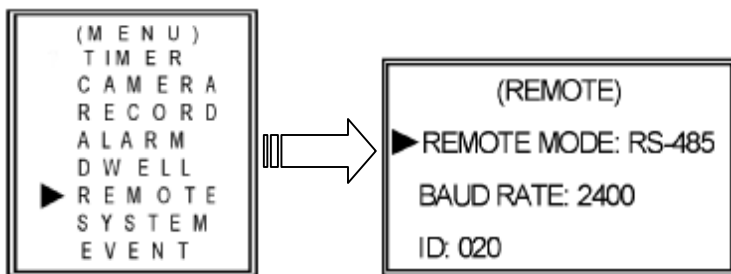
1) Connect the Sub-D plug of Video Web Server with our own brand DVR products.



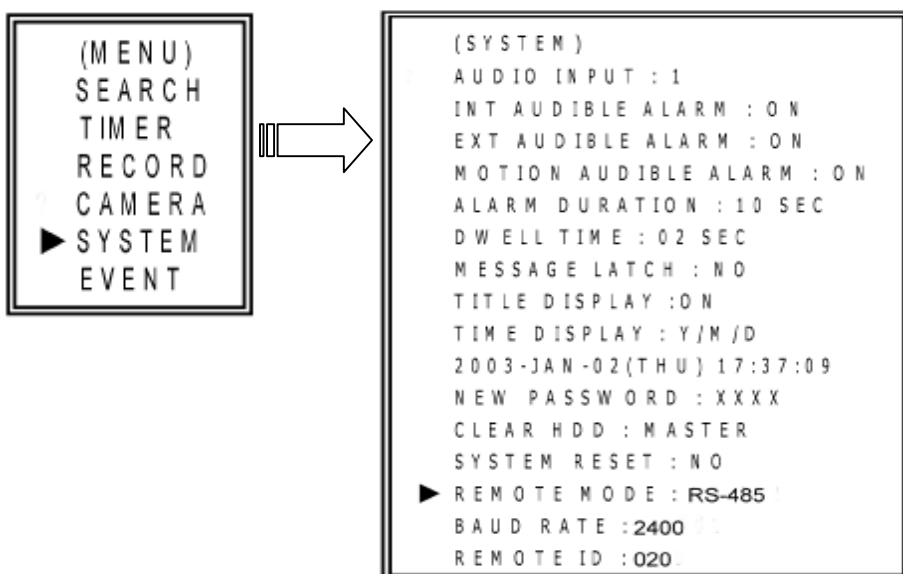
2) Set the “Remote” function in the DVR products.

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.

SysConfig

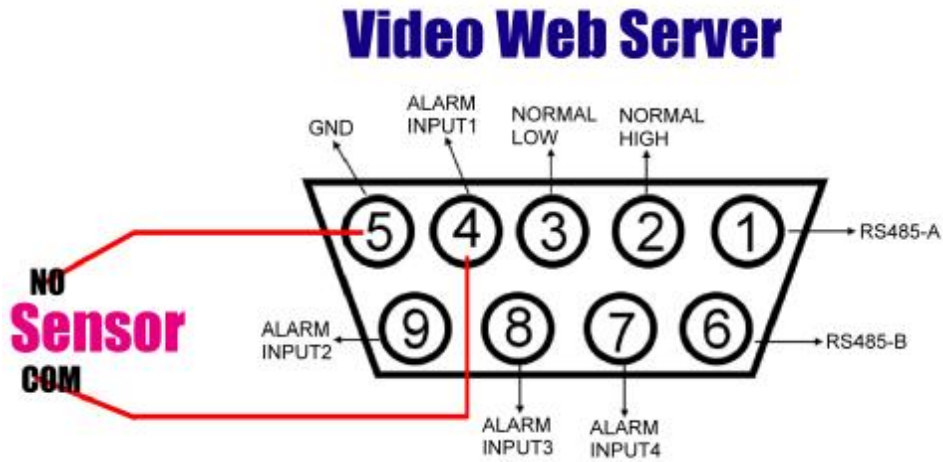
Network Setting
Server IP : 61 . 222 . 50 . 174
GateWay : 61 . 66 . 138 . 73
Net Mask : 255 . 255 . 255 . 248
DNS : 168 . 95 . 1 . 1
Web Port : 80 Config Port : 8888
IP Get Method : ☒ STATIC IP

Mail Setting
Mail Server : 0.0.0.0
UserName :
Password :
Mail From :

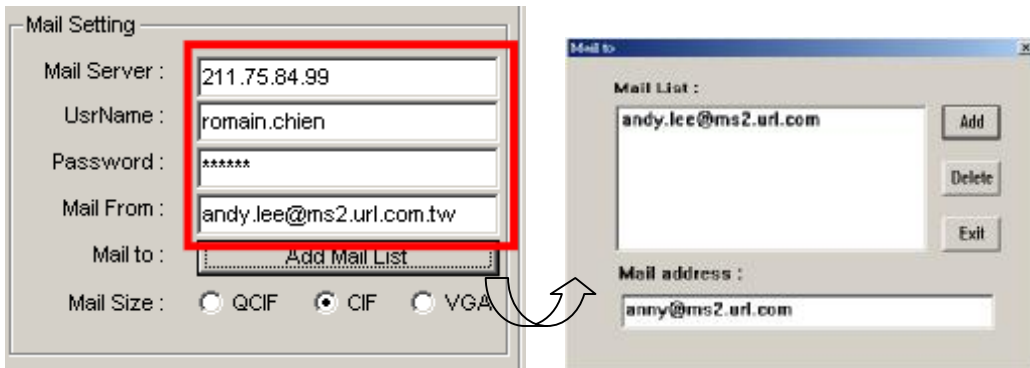
I/O Port Setting
Port 1 : DVR DeviceID : 20
Port 2 : DMR-16 DeviceID : 21
☒ Enable ALARM DURATION 10 SEC
Password Setting
New Password : *****
Confirm : *****
ACCOUNT MANAGEMENT
Firmware Upgrade

APPENDIX#2 EMAIL SENDING

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.

