# Video Web Server



733\_V0.94

### **MPEG-4** VIDEO WEB SERVER

### **User's Manual**

Please read instructions thoroughly before operation and retain it for future reference.

# Thank-You Note Before You Get Start

First of all, we would like to express our gratitude to you for purchasing this product. This product is designed to meet your personal needs with our great industry-designing ability and our everlasting perseverance to the quality of all our products.

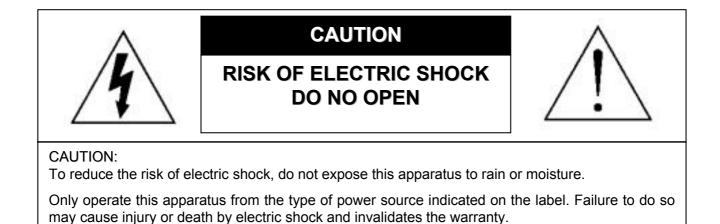
This manual will introduce to you how to install this apparatus. Please keep it well for your future reference.

Now, we would like to invite you to personally experience all of the powerful functions this product offers.

Firmware: BootLoader: 0.1.0.0 Kernel: 0.1.2.0 HtmlFile: 0.1.1.6 Mpeg4: 0.1.0.4

Application: 0.1.2.0

### **IMPORTANT SAFEGUARD**



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.

This 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.

#### **CE Mark**

This apparatus is manufactured to comply with the radio interference requirements of EN55022, CISPR 22, and AS/NZS CISPR 22.





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# PARTS AND FEATURES

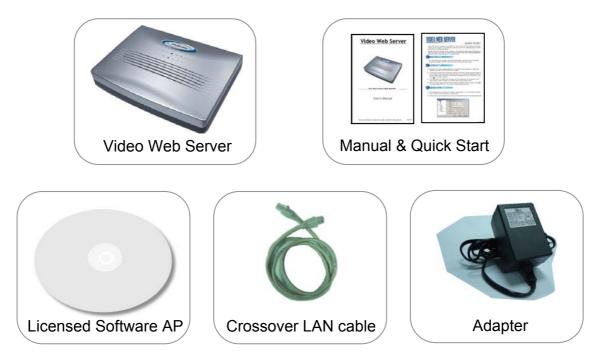
### **1.1 FEATURES**

- 1) Support MPEG4 compression format for real-time video stream
- 2) Compression format (MPEG4 / JPEG) is selectable for different network bandwidth and applications
- 3) Support video / audio recording
- 4) Support alarm / motion trigger recording
- 5) Adjustable motion detect sensitivity
- 6) Whenever alarm system triggered, video streaming or pictures will be uploaded over FTP,

email as an instant notification.

- 7) Support 3G & GPRS system for remote surveillance with mobile phone
- 8) Support TCP/IP, PPPoE, DDNS and DHCP for network connection
- 9) Support DDNS and function as a router
- 10) Support NTSC system / PAL system / AUTO detect video input signals
- 11) Support video access by APs (software) or HTML pages (IE explorer)
- 12) Full event record list for easy search and quick playback
- 13) Support schedule recording
- 14) Support multiple user access levels with security protection
- 15) Support multiple on-line users (up to 10 users)
- 16) Support watermark function
- 17) Support de-blocking and de-interlace function
- 18) Support watch dog function for automatic network reconnection.
- 19) ANR will reactivate recording function automatically when network is reconnected
- 20) Easy to upgrade firmware

### **1.2 PACKAGE CONTENTS**



NOTE :

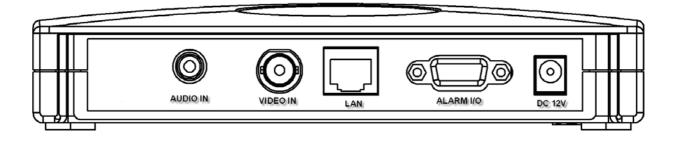
Please check the package contents to make sure that all accessories are included.

### **1.3 SPECIFICATION**

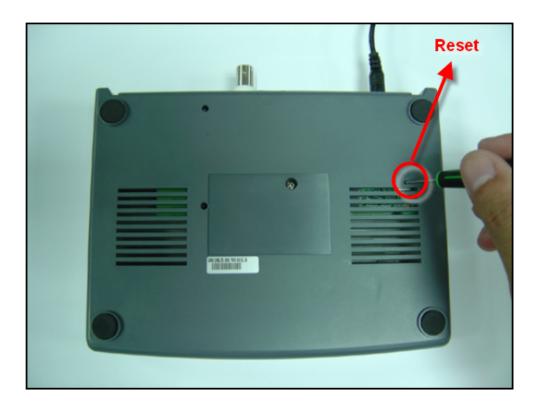
SPECIFICATION	733
Video Input	1 channel for analog & digital products, 1.0 Vp-p 75 composite, BNC
Audio Input	1 channel audio input
Alarm Input	2 inputs / 1 output
Watch dog	Yes
RS-485 Port	Yes
Network Interface	Ethernet (10/100 Base-T)
Image Compression	MPEG4 / JPEG
Video Adjustment	Brightness, Contrast, Saturation and Hue
Network Connection	Support TCP/IP, PPPoE, DDNS and DHCP for network connection
Protocols	TCP/IP, ICMP, SMTP, FTP, HTTP, DHCP, DDNS, PPPoE, SNTP
Resolution	704x480, 352x240 (NTSC) / 704x576, 352x288 (PAL)
Performance	Video through put : Up to <b>30</b> (NTSC), <b>25</b> (PAL) frames/ second
Motion Trigger Recording	Yes
Motion Detection	3 adjustable factors
Trigger & Action	Triggered by GPIO Input, Action: E-mail video/images or video/images upload to FTP site's specific accounts
Watermark	Yes
De-blocking	Yes
De-interlace	Yes
Security	Password protection
Power Source	DC 12V
Current consumption	500 mA

Design and specification are subject to change without notice.

### **1.4 PANEL**



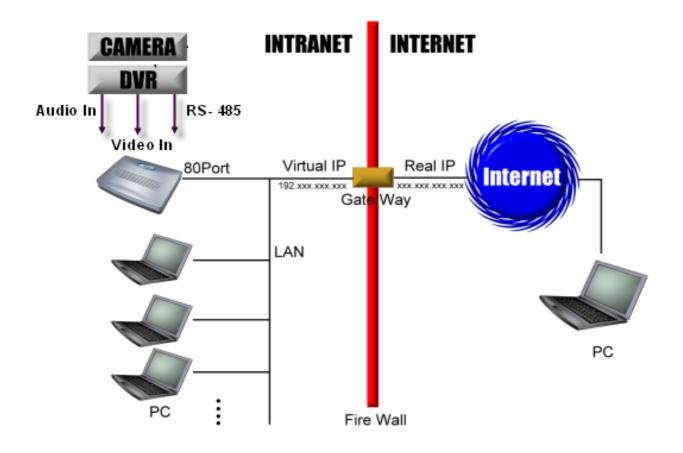
- <u>LAN:</u> Connect Video Web Server to the Internet or LAN with cable or connect directly to PC with standard pass through cable.
- 2) <u>VIDEO INPUT (1 channel)</u>: Connect to video source, such as camera or DVR video output.
- 3) <u>AUDIO INPUT (1 channel):</u> Connect to audio source, such as camera audio output.
- 4) <u>ALARM I/O</u> (optional for advanced applications): Connect control devices, such as PTZ, DVR and external alarm signal input.
- 5) <u>POWER:</u> Plug in the supplied power adaptor (12V / 500mA).
- 6) <u>RESET (at the bottom of Video Web Server)</u>: Press this button to default setting.



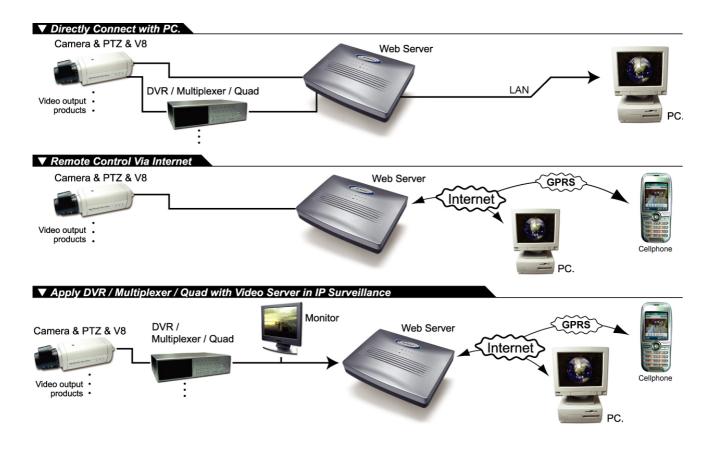
# INSTALLATION AND CONNECTION 2.1 PHYSICAL CONNECTION

#### <u>Connection Structure:</u>

- 1) Connect video and audio outputs of camera or DVR with the video and audio inputs of Video Web Server.
- 2) Connect PC with Video Web Server for IP setting.
- 3) Connect Video Web Server with ADSL or CABLE MODEM.
- 4) Connect PC with Internet and remote control Video Web Server.



#### **Connection Application:**



### **2.2 SOFTWARE INSTALLATION**

- 1) Put the attached CD into a CD-ROM and it will start to install application program into PC.
- 2) Click " 🝚 " twice.
- 3) Click "Finish" button to complete the setup.

And users will see the icon "MPEG4 Video Web Server" " on the desktop.

#### Note:

After physical connection, please go to the next two sections for IP address settings.

# STATIC IP SETTING

### **3.1 PC IP SETTING**

Network setting for PC. (This following instruction is based on Win XP O/S. If the O/S is Win 2000, the setup procedure is similar to that on Win XP O/S.)

#### Steps:

Start  $\rightarrow$  Control Panel  $\rightarrow$  Network and Internet Connections  $\rightarrow$  Network Connections  $\rightarrow$  Local Area Connection Status  $\rightarrow$  Properties  $\rightarrow$  Internet Protocol (TCP/IP).

🕂 Local Area Connection Properties 🛛 🔹 🔀
General Authentication Advanced
Connect using:
Realtek RTL8139 Family PCI Fast Ethernet NIC
Configure
This connection uses the following items:
Install Uninstall Properties Description Allows your computer to access resources on a Microsoft network.
Show icon in notification area when connected
OK Cancel

- Before changing this properties setting, please write down the original network setting in order to recover the original setting after "<u>Section 3.2 VIDEO WEB</u> <u>SERVER SETTING</u>".
- Click on "Use the following IP address", set IP address and subnet mask. The IP address should be like 192.168.1.XXX. The setting of "XXX" could be set from 1 to 254 except 10 (Because 192.168.1.10 is the video web server default IP); the subnet mask is always

255.255.255.0.

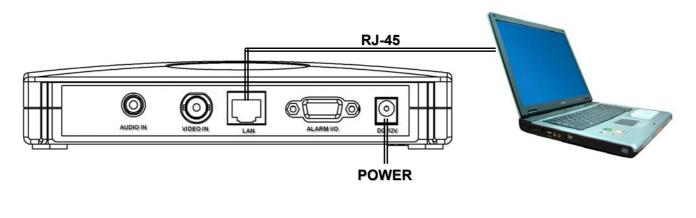
○ Use the following IP address:	
IP address:	192.168.1.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	· · ·
Obtain DNS server address automat	ically
Ose the following DNS server addresses:	
Preferred DNS server:	
Alternate DNS server:	

### **3.2 VIDEO WEB SERVER SETTING**

1) After PC IP SETTING, connect PC or Notebook with Video Web Server by crossover LAN cable.

#### Note:

In some operation environments, users might need the standard CAT5 cable.



- 2) To configure the Server IP, please click MFEG4 Video twice to enter the setup.
- 3) Key in User Name, Password, and Server IP (The default setting of User Name and Password are admin; Server IP 192.168.1.10, Port : 80). Then click the green button to connect.



4) When users see the following screen, means successfully logged in the program of the Video Web Server. Click "System Config" to set up.

🚍 Video Web Server	IP:192.168.1.10		
2005/05/30 09:01:56	A/V 🚔 🛈 🔯	<b>II</b> (3)	SYSTEM CONFIG
FR:19.20 fps DR:1800 kbps		2	
FR:19.20 fps DR:1800 kbps 2005-May-30 [MON] 09 :01 :56 Camera 01 Camera 01		O GB	

5) In the Peripheral setting, set baud rate, ID and model which users want to remote control later.

Press "APPLY" to enable the change after the setting.

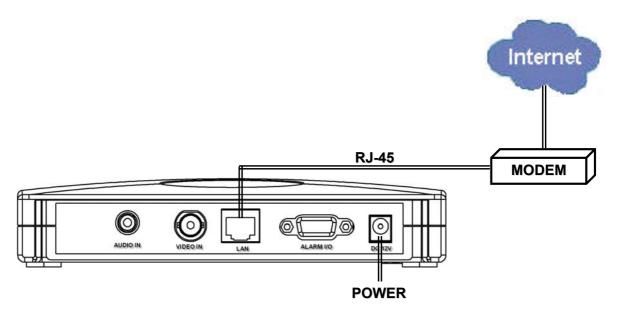
□ The setting of "Baud rate", "ID" should be the same as the setting of the external device users want to remote control.

System Config	
<ul> <li>Network</li> <li>DDNS</li> <li>SN TP</li> <li>FTP</li> <li>Mail</li> <li>General</li> <li>Feripheral</li> <li>Account</li> <li>File Path</li> <li>Schedule Record</li> <li>Trigger</li> <li>Information</li> <li>Log File</li> <li>Event Record List</li> </ul>	Channel Baud Rate : 2400 V ID : 001 Model : 4CH DVR (FULL) V Turbo Step : 5 V
	EXIT APPLY REBOOT

6) Click on the Network setting, set server IP, gateway, and net mask which are provided from local ISP (internet service provider). Press "APPLY" to enable the change after the setting

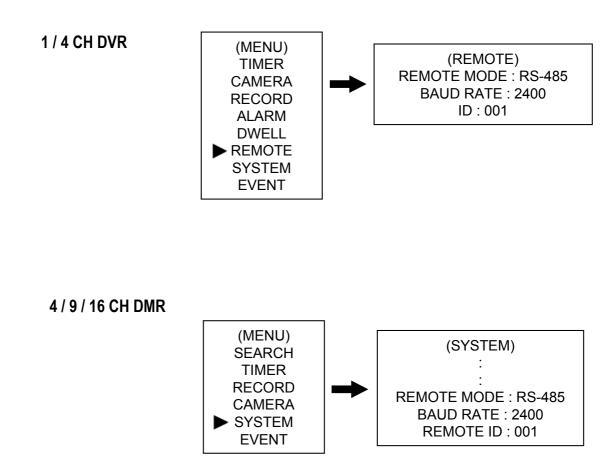
System Config	
<ul> <li>Network</li> <li>DDNS</li> <li>SN TP</li> <li>FTP</li> <li>Mail</li> <li>General</li> <li>Peripheral</li> <li>Account</li> <li>File Path</li> <li>Schedule Record</li> <li>Trigger</li> <li>Information</li> <li>Log File</li> <li>Event Record List</li> </ul>	Network           Server IP :         192 . 168 . 1 . 10           Gateway :         192 . 168 . 1 . 65           Net Mask :         255 . 255 . 255 . 0           MAC :         00 : 00 : 00 : 00 : 00 : 0e           Web Port :         80           Stream Port :         9000           Password :         Password :           IP TYPE :         • Static IP • PPPOE • DHCP
	EXIT APPLY REBOOT

7) Disconnect PC and Video Web Server, and then connect Video Web Server to the Internet with RJ-45.



### **3.3 DVR REMOTE SETTING**

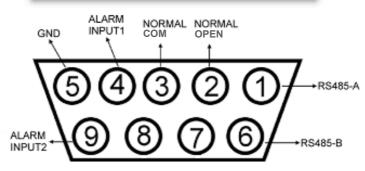
- Connect the DVR and monitor.
- In the "Remote" setting, set the baud rate and ID that are the same as "Peripheral" setting in the Video Web Server. And set remote mode to RS-485 (see example below).



### **3.4 CONNECT DVR TO VIDEO WEB SERVER**

1) After the DVR remote setting, users have to connect video web server and DVR with the pins. The communication between web server and DVR is by RS-485

# Video Web Server



#### 2) PIN 1, 6: RS485-A, RS485-B

Use RS485-A & RS485-B serial communication signals to control digital units just like that to control DVR.

#### PIN 4, 9: ALARM INPUT

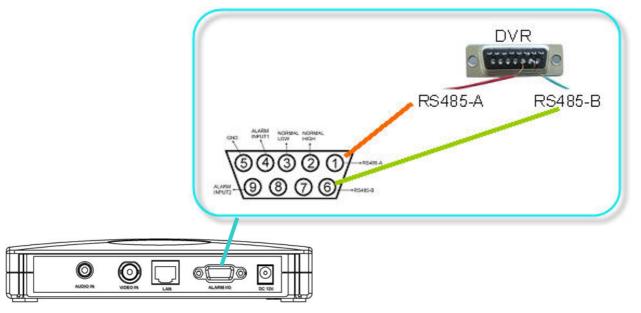
Use PIN 4,,9 to receive the alarm input and then trigger Video Server to send mail to users for auto e-mail warning system.

PIN 5: GND Ground

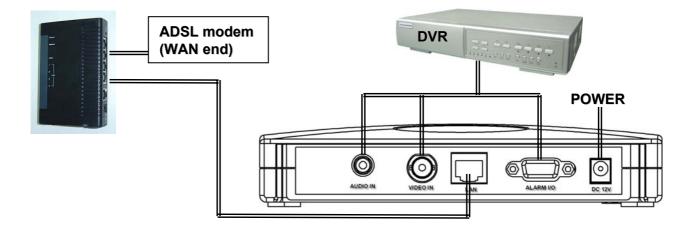
**PIN 2, 3:** NORMAL OPEN, NORMAL COM Use PIN 2 or 3 to trigger external device to act.

#### Please see the example picture below for 1CH/4CH DVR.

#### It's recommended to solder these joints



### **3.5 CONNECT ALL DEVICE**



### **3.6 CONNECT TO PC VIA INTERNET**

- Change PC network setting to the original setting and link PC to the internet.
   (Since in "Section 3.1 PC IP SETTING", the PC IP setting has been changed, now it must recover to the original setting for connecting to internet ).
- Click MEEG4 Video Web Server twice and enter "User Name", "Password", "Static IP", and "Port" which users set in "Section 3.2 VIDEO WEB SERVER SETTING". Then click the green button to connect.

(Note : The default username and password are both "admin")

🚍 LOGIN 0.1.2.0	
III 🚫 💽 💽 💽	
admin admin	USER NAME AND PASSWORD OF
*****	VIDEO WEB SERVER
61.66.138.53	Static IP address
Port 80	

Please refer to "OPERATION GUIDE" for remote operation guide.

# DYNAMIC IP SETTING

### 4.1 DDNS APPLY

Go to a website which provide free DDNS services. For example, "http://www.dyndns.org". Create an account in DynDNS.

1) Click on "Account", then users could see the following page.

DynDNS My Account - Micr 檔案(F) 編輯(E) 檢視(V)		說明(出)				<u>_</u>
⊨上一頁 • → - ② ②	③ ② 搜尋 函 我的最	愛 ⑨媒體 🎯 🖏	- 4 🗹 - 🖻			
址 (D) 🕘 http://www.dyndns.	org/account/				. ⊘稽	⊊ 連結 ≫ 🥌 SnagIt 📷
🎯 Dyn	DNS			User:	P ass:	Login
	About	Services	Account day	Support	Lost Password? - Sign U News	Jp.Now
My Account Create Account	Account	Login				
Login	Account Login					
Lost Password?		User:	Pass Lost Passwor	word:	Login	
	Copyright @ 199	9-2005 Dynamic Network St	envices, Inc Privacy Policy - A	cceptable Use Policy - Tra	idemaik Notices	

2) Click on "Create Account", then users could see the following page. Register the information and then click on "Create Account".

g Dyni	DNS			User:	Pass:   Lost Password? - Sign Up	Login
	About	Services	Account	Support	News	1000
Account	Create A	ccount				
n Password?			e your account. You wil ours, you will need to re		aining instructions to activat	e your account. If y
		It is strongly recomm	ended that you visit this pag	e <u>securely</u> . You are not curre	ntly visiting this page securely.	
	Acceptable	Use Policy				
	Policy Last M	odified: May 8,	2005			-
	1. ACKNOWLEDG	MENT AND ACCEPTA	NCE OF TERMS OF S	ERVICE		
	are p set f	rovided to you ( orth in this Acc	the "Member") und eptable Use Polic	rk Services, Inc. er the Terms and y ("AUP") and any by DynDNS. The	Conditions 7 other	
		ree to the Acceptable I	Jse Policy above: 🗖			
	Username					
	Username					
	Your username wil	Il be used to login to yo	our account and make o	hanges.		
	E-mail Addr	ess				
	E-mail Address		Confirm E-mail Addr	ess:		
	keep this address		with invalid e-mail addr		e sent to the e-mail address moval without warning. We c	
	Password					
	Password	Co	nfirm Password			
	The password you	enter will be used to a	ccess your account. It	must be more than 5 ch	naracters and cannot be you	r username.

3) After created account, users will receive an confirmation e-mail within a few minutes. To complete registration, please follow the directions that users will receive. Users must complete these steps within 48 hours to complete the registration. If users do not the confirmation e-mail within an hour or so, request a <u>"password reset"</u> (http://www.dyndns.org/account/resetpass/)

#### 4) Enter Username and Password to login.



#### 5) Create Host Name.

Login  $\rightarrow$  "Account"  $\rightarrow$  "My Service"  $\rightarrow$  "Add Host Services"  $\rightarrow$  "Add Dynamic DNS Host"  $\rightarrow$  Enter and choose the hostname  $\rightarrow$  Click on "Add Host".

壯①) 🕘 https://www.dyndns.or;	y/account/services/hosts/add.	html		<u>•</u>	」 ∂移至 連結 » 🤤 SnagIt 🖻	
🎯 Dyn E	DNS		1		Logged In User: YourHostName My Services - Settings - Log Out	
	About	Services	Account Supp	ort News		
My Account		Camilaas				
My Services	Add Host	Services		4		
Account Upgrades	r					
Account opgrades			Dynamic DNS (2) Add Du	marnic DNS-Hact		
MailHop Outbound			Dynamic DNS (?) Add Dy			
MailHop Outbound Recursive DNS		New	Statio DNE (7) And CE	Star THUC Last		
MailHop Outbound Recursive DNS SLA		New		Star THUC Last		
MailHop Outbound Recursive DNS SLA My Zones		New	Dynamic DNS <sup>SM</sup> H	lost	- Insteam	
MailHop Outbound Recursive DNS SLA		New	Dynamic DNS <sup>SM</sup> H	Iost YourHostName	dyndns.org	
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services		New	Dynamic DNS <sup>SM</sup> H	lost	dyndns.org	
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services My Hosts Add Host Services Dynamic DNS	,	New	Dynamic DNS <sup>SM</sup> H	Iost YourHostName	dyndns.org	5
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services My Hosts Add Host Services Dynamic DNS Static DNS		New	Hostname: IP Address:	VourHostName 211.75.84.96	dyndns.org	5
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services My Hosts Add Host Services Dynamic DNS Static DNS WebHop	,	New	Hostname: IP Address: Enable Wildcard:	VourHostName 211.75.84.96	dyndns.org dyndns.tv dyndns.ws game-host.org game-server.cc getmyip.com	
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services My Hosts Add Host Services Dynamic DNS Static DNS		New	Hostname: IP Address: Enable Wildcard:	VourHostName 211.75.84.96	dyndns.org dyndns.tv dyndns.ws game-host.org game-server.cc getmyip.com gotdins.com	
MailHop Outbound Recursive DNS SLA My Zones Add Zone Services My Hosts Add Host Services Dynamic DNS Static DNS VebHop MyWebHop		New	Hostname: IP Address: Enable Wildcard:	VourHostName 211.75.84.96	dyndns.org dyndns.tv dyndns.ws game-host.org game-server.cc getmyip.com	

#### 6) DDNS Host Name Created.

DynDNS Dynamic DNS Add 客定 編輯 (E) 檢視 (V)	Host - Microsoft Internet 我的最愛( <u>A</u> ) 工具( <u>T</u> )						<u>-   -</u>
■上一頁 - ⇒ - 🙆 🙆 🛛	3 🔍 搜尋 🗟 我的	最爱 ③ 媒體 🎯 🕓	- 🧿 🗹 - 🗐				
址D) 🙋 https://www.dyndns.o:	rg/account/services/hosts/d	yndns/add.html			-	@移至	連結 » 🤤 SnagIt 🖻
🎯 Dyn I	DNS						d In User: YourHostName rices - <u>Settings - Log Out</u>
	About	Services	Account	Support	News		
My Account My Services	Hostnam	ne Created	A a a a a a a a a a a a a a a a a a a a				Dynamic DNS Home
Account Upgrades MailHop Outbound	The hostname yo	u have requested has be	en created. The informa	tion now in the databa	ase and DNS systen	n is:	
Recursive DNS SLA		Hostname:	YourHo	stName.dyndns.org	L		
My Zones		IP Address:	211.75.8	4.96			
Add Zone Services		Wildcard:	Y				
My Hosts		Mail Exchanger:	None				
Add Host Services Dynamic DNS Static DNS WebHop MyWebHop Network Monitoring		Backup MX:	Ν				
Account Settings							
Billing							
	ے Copyright © 1	999-2005 <u>Dynamic Network S</u>	envices, Inc Privacy Policy -	Acceptable Use Policy - Ti	rademark Notices		

### 4.2 PC IP SETTING

Network setting for PC. (This following instruction is based on Win XP O/S. If the O/S is Win 2000, the setup procedure is similar to that on Win XP O/S.)

#### Steps:

Start  $\rightarrow$  Control Panel  $\rightarrow$  Network and Internet Connections  $\rightarrow$  Network Connections  $\rightarrow$  Local Area Connection Status  $\rightarrow$  Properties  $\rightarrow$  Internet Protocol (TCP/IP).

neral Authentication	in riavancea		
Connect using: Bealtek RTL81	139 Family PCI Fa	ast Ethernet	NIC
his connection uses	the following item	15:	Configure
Elient for Micro     File and Printe     EQOS Packet S     Finernet Protoc	er Sharing for Mic Scheduler	rosoft Netwo	orks
Install Description Allows your compu	Uninsta		Properties Microsoft network
Show icon in notific			

- Before changing this properties setting, please write down the original network setting in order to recover the original setting after "<u>Section 3.2 VIDEO WEB</u> <u>SERVER SETTING</u>".
- Click on "Use the following IP address", set IP address and subnet mask. The IP address should be like 192.168.1.XXX. The setting of "XXX" could be set from 1 to 254 except 10 (Because 192.168.1.10 is the video web server default IP); the subnet mask is always

255.255.255.0	)
---------------	---

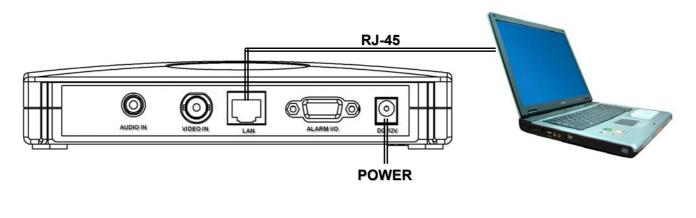
○ Use the following IP address:	
IP address:	192.168.1.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Obtain DNS server address automat	ically
<ul> <li>Ose the following DNS server addres</li> </ul>	sses:
Preferred DNS server:	
Alternate DNS server:	

### **4.3 VIDEO WEB SERVER SETTING**

1) After PC IP SETTING, connect PC or Notebook with Video Web Server by crossover LAN cable.

#### Note:

In some operation environments, users might need the standard CAT5 cable.



- 2) To configure the Server IP, please click MFEG4 Video twice to enter the setup.
- 3) Key in User Name, Password, and Server IP (The default setting of User Name and Password are admin; Server IP 192.168.1.10, Port : 80). Then click the green button to connect.



4) When users see the following screen, means successfully logged in the program of the Video Web Server. Click "System Config" to set up.



5) In the Peripheral setting, set baud rate, ID and model which users want to remote control later.

Press "APPLY" to enable the change after the setting.

□ The setting of "Baud rate", "ID" should be the same as the setting of the external device users want to remote control.

System Config	
<ul> <li>Network</li> <li>DDNS</li> <li>SN TP</li> <li>FTP</li> <li>Mail</li> <li>General</li> <li>Iconpluteral</li> <li>Account</li> <li>File Path</li> <li>Schedule Record</li> <li>Trigger</li> <li>Information</li> <li>Log File</li> <li>Event Record List</li> </ul>	Channel Baud Rate : 2400 V ID : 001 Model : 4CH DVR (FULL) V Turbo Step : 5 V
	EXIT APPLY REBOOT

#### 6) **PPPoE**:

Click on Network setting, choose "PPPoE" and key in Username/Password of PPPoE for connecting to internet. Press "APPLY" to enable the change after the setting.

System Config	
Network     DDNS	Network
SNTP FTP	Server IP : 192 . 168 . 1 . 10
Mail — General	Gateway: 192 . 168 . 1 . 65
Peripheral Account	Net Mask : 255 . 255 . 255 . 0
File Path Schedule Record Trigger	MAC: 00:00:00:00:00:0e
⊡ Information Log File	Web Port : 80 User Name : catherine
Event Record List	Stream Port : 9000 Password : ********
	IP TYPE : O Static IP      PPPOE O DHCP
1	EXIT APPLY REBOOT

#### DHCP:

Click on Network setting, choose "DHCP". Press "APPLY" to enable the change after the setting.

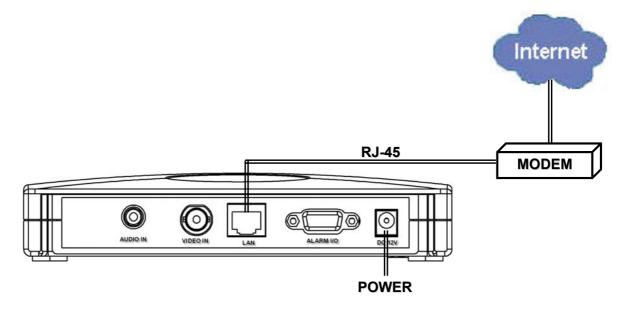
System Config					
P-Network	Network				
SN TP FTP	Server IP :	192 .	168 . 1 . 10	1	
Mail General	Gateway :	192 .	168 . 1 . 65		
Peripheral Account	Net Mask :	255 .	255 . 255 . 0	1	
File Path Schedule Record	MAC :	00:00	0:00:00:00:00	]	
Information	Web Port :	80	User Name : cather	ine	
Event Record List	Stream Port :	9000	Password : 🗱	okołojek	
	IP TYPE :	C Static II	P O PPPOE 💿	DHCP	
1		EXIT	APPLY	REBOO	т

7) Click DDNS, and enable DDNS and key in information below (Type "DDNS User Name" and "DDNS Password". And type the "DDNS Hostname" into "Domain"), then Press "APPLY" to confirm.

System Config		
<ul> <li>Network</li> <li>SN TP</li> <li>FTP</li> <li>Mail</li> <li>General</li> <li>Peripheral</li> <li>Account</li> <li>File Path</li> <li>Schedule Record</li> <li>Trigger</li> <li>Information</li> <li>Log File</li> <li>Event Record List</li> </ul>	DDNS:      DDNS:      DISable     User Name:      hostname     Password:      ****     Domain:      hostname.dyndns.org     System Name:      dyndns     JNS:      168 - 95 - 1 - 1	
	EXIT APPLY REBOOT	

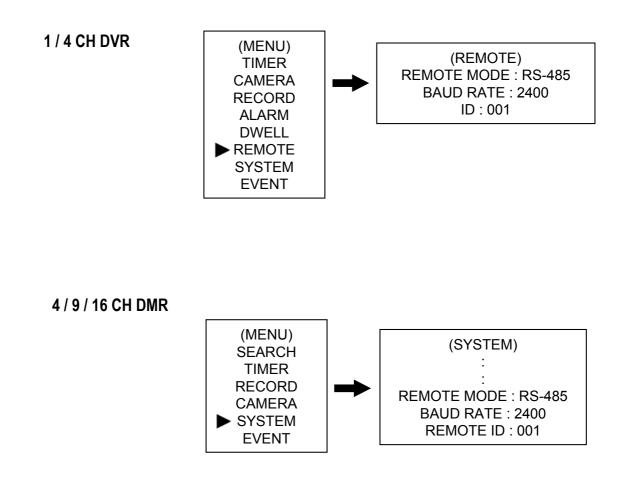
Note: Please refer to "DDNS APPLY".

8) Disconnect PC and Video Web Server, and then connect Video Web Server to the Internet with RJ-45.



### **4.4 DVR REMOTE SETTING**

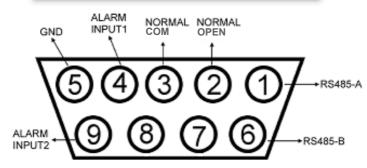
- 1) Connect the DVR and monitor.
- 2) In the "Remote" setting, set the baud rate and ID that are the same as "Peripheral" setting in the Video Web Server. And set remote mode to RS-485 (see example below).



### **4.5 CONNECT DVR TO VIDEO WEB SERVER**

1) After the DVR remote setting, users have to connect video web server and DVR with the pins. The communication between web server and DVR is by RS-485

# Video Web Server



#### 2) PIN 1, 6: RS485-A, RS485-B

Use RS485-A & RS485-B serial communication signals to control digital units just like that to control DVR.

#### PIN 4, 9: ALARM INPUT

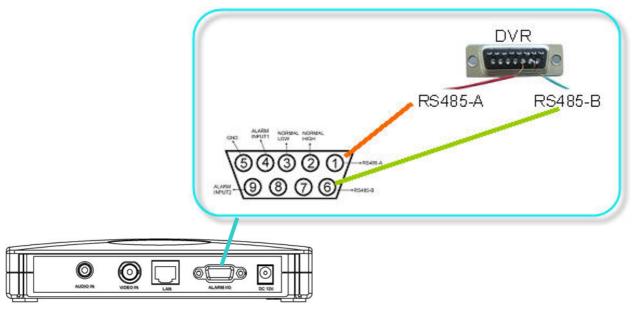
Use PIN 4,,9 to receive the alarm input and then trigger Video Server to send mail to users for auto e-mail warning system.

PIN 5: GND Ground

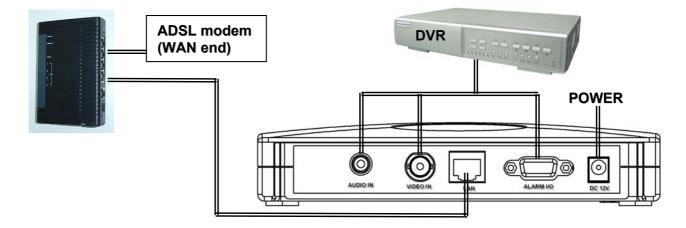
**PIN 2, 3:** NORMAL HIGH, NORMAL LOW Use PIN 2 or 3 to trigger external device to act.

#### Please see the example picture below for 1CH/4CH DVR.

#### It's recommended to solder these joints



### **4.6 CONNECT ALL DEVICES**



### **4.7 CONNECT PC VIA INTERNET**

- Change PC network setting to the original setting and link PC to the internet.
   (Since in <u>"Section 4.2 PC IP SETTING"</u>, the PC IP setting has been changed, now it must recover to the original setting for internet connection ).
- 2) Click MEEGA Video twice and enter "Username", "Password" and "Port" which users set in <u>"Section 4.3 VIDEO WEB SERVER SETTING"</u>, and enter "DDNS Host Name" which users have applied in <u>"Section 4.1 DDNS APPLY"</u> in the IP Address. Then click the green button to connect.

(Note : The default username and password are both "admin").

LOGIN 0.1.2.0	
= 🔬 🗿 💽 💽	USER NAME
admin	AND PASSWORD OF VIDEO WEB
hostname.dyndns.org	
Port 80	DDNS HOST
Connect	

Please refer to "OPERATION GUIDE" for remote operation guide.

## **OPERATION GUIDE 5.1 SOFTWARE OPERATION**

After physical connection and network setting of the video web server. Please following the illustrations in this section for software operation.



Click MPEG4 Video twice to enter Login page.

Key in "User Name", "Password", and "Server IP" (Static IP) or "Host 2) name" (Dynamic IP). Click the green button to connect.

🚍 LOGIN 0.1.2.0
= 🔇 🎯 📭 💽
😭 admin
A 10 10 10 10 10 10 10 10 10 10 10 10 10
<b>61.66.138.53</b>
Port 80
ک ک

- 3) LOGIN AP Icon Explanation:
  - Address Book: Users could press this button to add frequently-used IP address or choose any preset IP address to access the Video Server.

_		
-	0	
2	10	
1	24	
-		x.

Search: Search available IP address of the external device in local area. And modify the network settings of the external device.



Player: Users could press this button to access and play the recorded files saved in the PC. NOTE:

TCP: Suitable for stable network with higher bandwidth.

UDP: Suitable for unstable network with lower bandwidth.

Upgrade Firmware: Users could press this button to get the provided firmware and then press the "Upgrade" button.

	2	6	Ŀ,	а
	12	57		1
	18	11	2	
12.			2	

Copy: Users could press this button to copy all the software installation files, so users could keep all the settings of video web server for next software installation on other PC.

10.00	r	6.0	
10.00	- 1	-	
11 C			

Login Setting: Users could press this button to set the transmission type (UDP or TCP) and decode type (MPEG4 or JPEG).

4) Introduction of Basic Operation:

#### Video Web Server Control Panel

- a. Image transfer rate per second
- b. Data transfer rate
- c. Video only / Audio only / Both Video and Audio
- d. Connect / Disconnect
- e. Image adjusting : Brightness / Contrast / Saturation / Hue
- f. Snapshot : press this button to have a snapshot of the image which will be saved in the designated destination.
- g. Record : press this button, the video web server will start to record, and recording files will be saved to PC. Each recording file can up to 18,000 frames, when the recording file capacity is full, the new recorded file will be saved to the second file.
  Besides, if the HDD space is less than 200MB, the program will stop recording.
- h. System config: press this button to enter the setting page of the video web server.
- i. Number of online users

#### Digital Device Control Panel ~ DVR

(For example, 4 channel DVR)

- j. CH1-4
- k. PIP/+, QUAD/-
- I. Zoom, Lock, Record ( in DVR HD ), Search
- m. Stop, Rewind, Fast Forward , Pause, Slow, Play
- n. Menu / up / down / left / right
- o. Enter
- p. TURBO:

To speed up menu selecting or the control of the PTZ camera under video web server, users could activate "Turbo" function by clicking this button. Users are allowed to change the turbo steps from 1 to 10.

Ex. If users activate the TURBO function, and set "3" for turbo step, then when users press one of the button up/down/left/right, one mouse click will as if click 3 times.



#### **Digital Device Control Panel ~ PTZ** (For example, PTZ) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Preset 1 ~ 16 j. AUTO 🕀 🔾 🛨 🛨 🗕 **S**.( T k. AUTO k. l. m. n. o. p. q. 酉 I. **E** Zoom Tele 🔍 Zoom Wide m. E Focus Near n. 🔚 Focus Far 0. Max Zoom In р. r. Max Zoom Out q. Menu / up / down / left / right r. s. Enter t. TURBO: To speed up menu selecting or the control of the PTZ camera under video web server, users could activate "Turbo" function by clicking this button. Users are allowed to change the turbo steps from 1 to 10. .

Ex. If users activate the TURBO function, then when users press one of the button up/down/left/right, one mouse click will function as if click 3 times.

□ Hot Point : Users could control our own brand PTZ camera screen to a specific point by using cursor.

### **5.2 PLAYBACK OPERATION**

Please find a recording file in the PC and double click on it to playback.



- a. Snapshot
- b. Stop
- c. Pause
- d. Fast Rewind (1X, 2X, 4X, 8X, 16X)
- e. Slow Rewind (1X, 1/2X, 1/4X, 1/8X, 1/16X)
- f. PLAY (1X)
- g. Slow Playback (1X, 1/2X, 1/4X, 1/8X, 1/16X)
- h. Fast Forward (1X, 2X, 4X, 8X, 16X)
- i. OSD ( show / hide )
- j. Config. Setting (File path for snapshot, text color, progress cointerlace, De-block, Record Style, Size, Resolution, Date)

**O**I

- k. Open Previous File
- I. Open Next File
- m. Watermark:

Press " W " button to proof the authenticity of the backup video. If the recorded video had been altered, the video image will turn to **light red** and the playback will be paused.

#### Note:

When users pause the playback picture, users could press "d" button to go to the previous image, or press "h" button to go to the next image.



k.

i.

🗉 💶 ┥ < 🕨 ≫ 🍽 osd 🍪 📣 🍉

a. b. c. d. e. f. g. h. i.

### **5.3 ADVANCED SETTING**

🚍 Video Web Server	IP: 61.66.138.53 🗕 🗔 🛛
2005/05/20 11:27:52	av 💂 0 🗃 🎞 🎸
FR:10.00 fps DR:1535 kbps	🏂 🎽 1 🖥 1

- 1) Press "System Config ||" button to enter the "System Config" page.
- 2) In this "System Config" page, users could select the different functions to set up.
- 3) After setting, please press "APPLY" button to save the settings.
- <u>System setting includes:</u> Network, DDNS, SNTP, FTP, Mail, General, Peripheral, Account, File Path, Schedule Record, Trigger, Information, Log File, Event Record List.

#### Network

- 1) Click on "Network", and choose the IP TYPE (Static IP, PPPoE, DHCP).
- 2) Static IP: Please refer to <u>"Section</u> 3.2 VIDEO WEB SERVER <u>SETTING"</u>.
- 3) PPPoE and DHCP: Please refer to "<u>Section 4.3 VIDEO WEB SERVER</u> <u>SETTING</u>"

System Config	
-Network	Network
SNTP FTP	Server IP : 192 . 168 . 1 . 10
Mail	Gateway: 192 . 168 . 1 . 65
- General Peripheral Account	Net Mask : 255 . 255 . 0
	MAC: 00:00:00:00:00
Trigger	PPPOE
E Information	Web Port : 80 User Name :
Event Record List	Stream Port : 9000 Password :
	IP TYPE :      Static IP O PPPOE O DHCP
1	EXIT   APPLY   REBOOT

System Config		
Network     DDNS     DTP     FTP     Mail     General     Peripheral		. 65
- Account - File Path - Schedule Record - Trigger	Net Mask : 255 . 255 . 255 MAC : 00 : 00 : 00 : 00 : 00 : 00	: Oe
Log File	Web Port : 80 User Name Stream Port : 9000 IP TYPE : C Static IP C PPPOI	,
,	EXIT APP	LY REBOOT

- Network	Network
SN TP FTP	Server IP : 192 . 168 . 1 . 10
Mail	Gateway : 192 . 168 . 1 . 65
Peripheral	Net Mask : 255 . 255 . 0
File Path Schedule Record	MAC: 00:00:00:00:00:0e
Trigger	
Log File	Web Port :         80         User Name :         catherine           Stream Port :         0000         Password :         *********
Event Kecolu Bist	
	IP TYPE : 🔿 Static IP 💿 PPPOE 🔿 DHCP
,	EXIT APPLY REBOOT

\* Web Port: DVR port.

\* Stream Port: Transmitting video and audio.

### DDNS

- DDNS is a service for transforming dynamic IP to corresponding to a specific "Hostname".
- 2) Enable the DDNS function. Key in the "DDNS username" into "User Name". Key in the "DDNS password" into "Password". Key in the "Hostname" into "Domain". Choose the "DDNS System Name".

System Config	DDNS: C Enable C Disable User Name: hostname Password: **** Domain: hostname.dyndns.org System Name: dyndns DNS: 168 . 95 . 1 . 1
	EXIT APPLY REBOOT

**<u>Note</u>:** DHCP and PPPoE network types need to apply DDNS service to get "Hostname" to correspond to dynamic IP address. For detailed DDNS setting, please refer to "Section 4.1 DDNS APPLY".

#### SNTP

- SNTP (Simple Network Time Protocol)" is for time setting. So it also concerns to "Schedule Record.
- 2) GMT (Greenwich Mean Time): Once users choose the time zone, the video web server will adjust the local area time of system automatically.
   Server Name: Users could simply use the automatically SNTP server, or could set up another SNTP server.
- Sync Server Time: The video web server will synchronize the time in the video web server and the network time.

Network     DDNS     SNTP    FTP     Mail    General    Peripheral    Account    File Path    Schedule Record     Trigger     Information     Log File     Event Record List	SNTP GMT: (GMT+08:00) Irkutsk, Ulann Battar C Automatic C Manual Server Name: Sync Server Time
	EXIT APPLY REBOOT

**Note:** This product does not have RTC, it need to get time on the Internet and use software to calculate time.

### FTP

- When alarm is triggered, the video server will capture the instant picture and upload the captured image to the assigned FTP site.
- **Note:** To get alarm notification at FTP site when there is a alarm trigger, users must enable the function of FTP notification in the "Trigger" setting.

⊡- Network 	FTP		
SN TP <b>FTP</b> Mail	UserName :	catherine	
🖃 General Peripheral	Password :	****	
Account File Path Schedule Record	Port :	21	
Trigger	Server :	211.76.82.102	
Log File	Directory :	/catherine/alarm notification	
		EXIT AF	PLY REBOOT

#### Mail 🗖

- When alarm is triggered, the Video Web Server will capture the instant picture (10 JPEG pictures max) or MPEG-4 film (3 sec max), and email it to the assigned recipients.
- **Note**: To get alarm mail when there is a motion trigger, users must enable the function of e-mail notification in the "Trigger" setting.
- Users could get information (SMTP server) from their own e-mail system supplier.
- Users could add the email addresses in "Modify alarm email address".
- If the mail server require verify password, please key in user name and password.
- **Note:** Please key in the entire mail address in the "Mail from" box to ensure mails will not block by some SMTP server.

System Config	
Network     DDNS     SNTP     Fr     General     Account     File Path     Schedule Record     Information     Log File     Event Record List	Mail         SMTP Server :       211.76.85.99         Wail from :       catherine@tech.com         Modify alarm email address       User :         ADD       DELETE         Mail Account       catherine@ya.com.tw
	EXIT APPLY REBOOT

### General

- Users could set "Video System", "Video Type", "Resolution" and "Quality".
- 2) <u>Video System:</u>
  - \* NTSC
  - \* PAL
  - \* AUTO
- 3) <u>Video Type:</u>
  - \* JPEG
  - \* MPEG4
- 4) <u>Resolution:</u>
  - \* MPEG 4 (D1), JPEG (D1), Frame
  - \* MPEG4 (D1), JPEG (CIF), Frame
  - \* MPEG 4 (CIF), JPEG (CIF), Frame
  - \* MPEG 4 (CIF), JPEG (CIF), Field
- 5) Quality:
  - \* Basic
  - \* Normal
  - \* High
  - \* Best
- 6) <u>De-blocking:</u>

When users choose to activate the deblocking function, the appearance of the images will better, but it will spend more CPU resource.

#### Peripheral

- Users could set up all the peripheral setting in this Windows. (Refer to "<u>APPENDIX#1 & 2</u>" for more detailed instructions).
- Set up video input device. Users could select the devices then set up "Baud Rate" and "ID No." to control the equipments via video web server.
- This video web server supports different AP panel to control the following peripherals: Camera, 1CH DVR, 4CH DVR (Full), 4CH DVR (Basic), 4CH DMR, 9 CH DMR, 16 CH DMR, 4 CH DQR, PTZ, 4 CH MPEG 2 DVR.

System Config	General Video Video System : NTSC Video Type : MPEG4 Resolution : MPEG4(CIF), JPEG(CIF), Field Quality : Normal Deblocking
	EXIT APPLY REBOOT

Note1 : D1 represents 704 x 480 (NTSC) CIF represents 352 x 240 (NTSC)

Note2 : D1 represents 704 x 576 (PAL) CIF represents 352 x 288 (PAL)

Network     DDNS     SNTP     FIP     Mail     General     Account     Account     File Path     Schedule Record     Trigger     Information     Log File     Event Record List	Channel Baud Rate : 2400 ID : 001 Model : 4CH DVR (FULL)	
	EXIT APPLY REBOO	

### Account

2)

 Set up the user's account (Max 10 accounts), password, life time, and authority level (Max 10 accounts on line at the same time).

> <u>User's level:</u> SUPERVISOR — Control all the functions ("a", "b", "c", "d", "e" and "f" ). HIGH — Control only "a", "b", "c", "d" and "e" functions, but cannot control "f" function. NORMAL — Control only "a", "d", and "e" functione but compute control "b", "c"

functions, but cannot control "b", "c" and "f" functions.

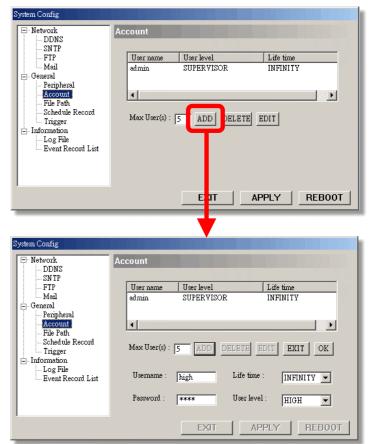
GUEST -

Watch the image only. Can only use the "a" function.

3) Life time :

According to different authority level, different accounts can stay online for different time period (1min, 5min, 10min, 1hour, 1day, infinity).

🚍 Video Web Server	IF:192.168 1.10 📃 🗔 🛛
2005/05/20 11:27:52	AV 🗐 🛈 🎞 🎸
FR:10.00 fps DR:1535 kbps	🌟 🛎 1 🛔 1



### File Path

- 1) <u>Record Path:</u> Assign the route for recording file.
- 2) <u>Snapshot Path:</u> Assign the route for snapshot image.

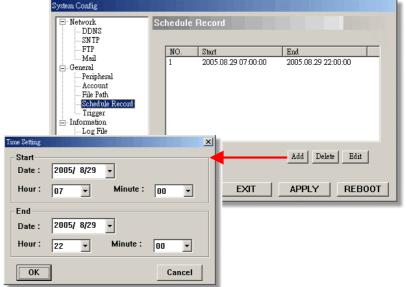
System Config	File Path         Record Path :         Modify       C.Documents and Settings/catherine.lee/desktop         Snapshot Path :         Modify       C.Documents and Settings/catherine.lee/desktop	
	EXIT APPLY REBOOT	

#### **Schedule Record**

- 1) Users could preset timer schedule for recording.
- 2) Click on "Add" button, and add time setting preference.

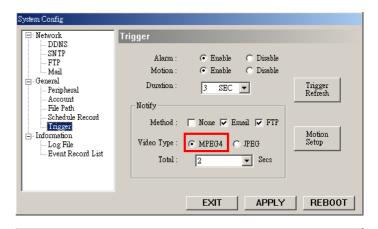
#### Note:

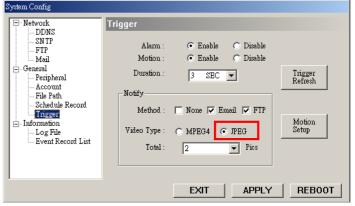
The time of schedule record is depend on the time in the PC, not the time in the video web server.



#### Trigger \_\_\_\_\_

- <u>Alarm</u>: Enable or disable Email and FTP notification function.
- 2) <u>Motion :</u> Enable or disable Email and FTP notification function.
- <u>Duration :</u> Users could set the alarm or motion duration time for 3 sec., 15 sec., 30 sec., 1 min., or 30 min..
- 4) <u>Notify Methods :</u> Email or FTP or None.
- 5) <u>Video Type :</u> Users could select which type of notification file is prefer to receive (MPEG4 or JPEG).





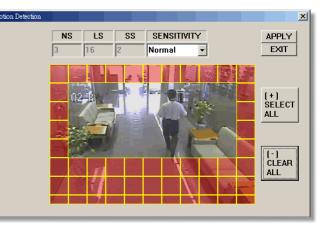
 <u>Total:</u> When video type is MPEG4 ~ Uses could select the notification file to be 1-3 seconds.

> When video type is JPEG ~ Uses could select the notification file to be 1-10 pictures.

- 7) Motion Setup:
  - Motion Area:

Users could set motion detection areas here. Pink area means the area which is not under detecting.

 Motion Sensitivity: Users could set detection sensitivity factors here (Manual) or by choosing different level (Lower, Low, Normal, High, Higher).



NS:

Motion detection sensitivity (using motion estimation algorithm). The smaller the value is, the more sensitive the detection will become.

LS:

It checks the pixel difference of frame to frame within one macro block. If the number of pixel, exceeding "PT", is bigger than "DT", the macro block is regarded as motion block.

The smaller the value is, the more sensitive the detection will become.

- SS: If the number of motion macro block is bigger than "SS", the macro block is regarded as motion block. The smaller the value is, the more sensitive the detection will become.
- SENSITIVITY: Users could choose different sensitivity levels of motion detection, or choose manual to set the value of sensitivity factors.

#### 8) <u>Trigger Refresh</u> :

Clean the alarm message "

🎽 (Red)

Means alarm is happening.

🞽 (Blue)

After alarm duration, the red alarm message will turn to blue.

📩 (Red)

Means motion is happening.

📩 (Blue)

After motion duration, the red motion message will turn to blue.

#### Information

- Users could get all the online users' information here (Name, IP Address, Authority Level, Media Type).
- Media Type: show the information including video type (JPEG / MPEG4) and medium type (Audio / Video / Audio and Video)

System Config	Information Online User Online user information : Info Refresh
Peripheral     Account     File Path     Schedule Record     Trigger     Log File     Event Record List	Name         IP Address         Level         Media Type           admin         192.168.1.1         SUPERVISOR         MPEG4 / AUDIO           admin         192.168.1.43         SUPERVISOR         MPEG4 / AUDIO
	APPLY REBOOT

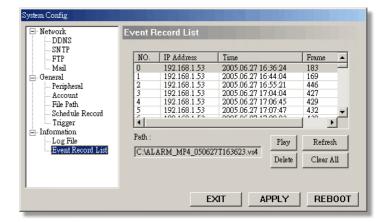
### Log File

1) Users could get all the information of log file.

- Network DDNS SN TP	Log File			SYSTEM
FTP     Mail     General     Peripheral     Account     File Path     Schedule Record     Trigger     Information     Information	NO. EVENT 1 USER 2 USER 3 USER 4 USER 5 USER 6 USER 7 USER 8 USER	TIME           2005-05-20 10:18           2005-05-20 10:18           2005-05-20 10:05           2005-05-20 10:05           2005-05-20 10:05           2005-05-20 10:05           2005-05-20 10:05           2005-05-20 09:38           2005-05-20 09:38           2005-05-20 09:38	ADMIN LC	V STSTEM
Event Record List	Server Log	Erase		AX LOG LIST

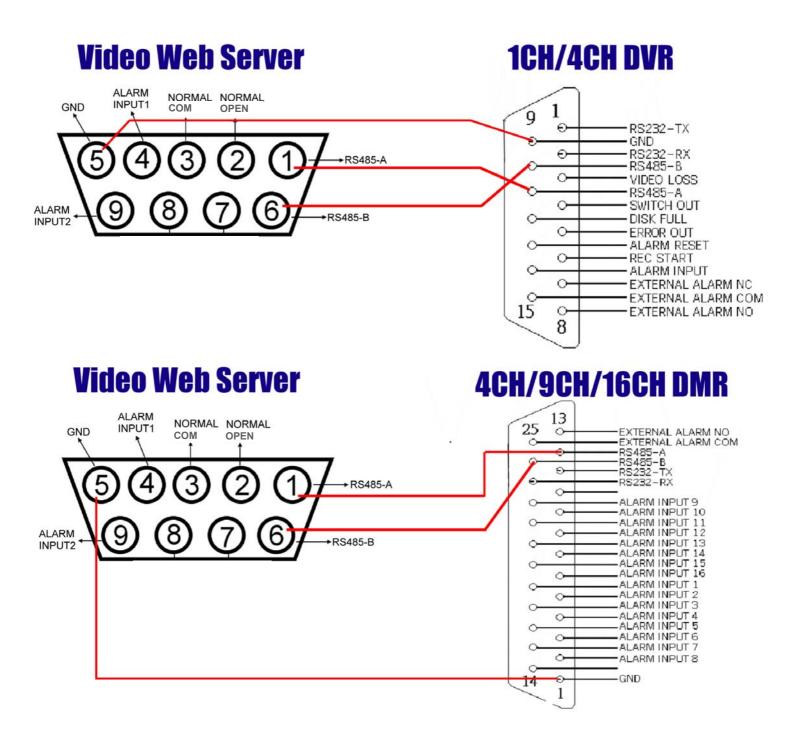
#### **Event Record List**

- It's a database, which precisely lists all alarm triggered events, with IP address of Video Web Server, alarm triggered time, and number of frames.
- Users could directly play, delete, or clear all alarm recording events with ease.
- 3) Click on the "Refresh" button to update the record list.
- All the alarm triggered files will be listed systematically for easily search.



## APPENDIX #1 APPENDIX #1 – DVR CONTROL

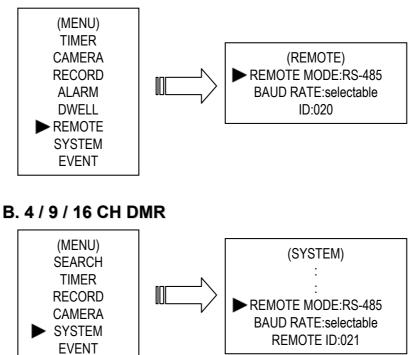
1) Connect the Sub-D plug of Video Web Server with DVR products.



2) Set the "Remote" function in the DVR products.

#### NOTE :

Remote mode : RS-485, Baud rate : selectable, ID : same as "Peripheral Control" in the Video Web Server.



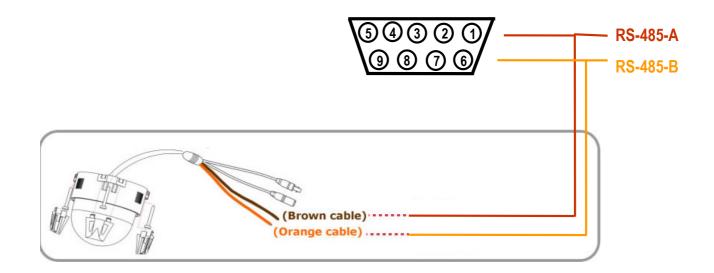
#### A. 1 / 4 CH DVR

3) Set the "Peripheral Control" in the system config of Video Web Server.

System Config	
Network     DNS     SNTP     SNTP     Mail     General     Forpheral     Account     File Path     Schedule Record     Trigger     Information     Log File     Event Record List	Channel Baud Rate : 2400 V ID : 001 Model : 4CH DVR (FULL) V Turbo Step : 5 V
	EXIT APPLY REBOOT

# APPENDIX #2 APPENDIX #2 – PTZ CONTROL

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



2) Set the "Peripheral Control" in the system config of Video Web Server.

System Config	Channel Baud Rate : 2400 V ID : 001 Model : PTZ V Turbo Step : 5 V
	EXIT APPLY REBOOT

#### NOTE:

Set the ID as the PTZ ID value. The default value is "0".

# APPENDIX #3

### **APPENDIX #3 – IE BROWSER**

Users could go access Video Web Server through the web page. Just type the IP address of video web server into the URL address box and press Enter. Then users will see the following pages. Key in user name and password, and then press "Submit" button to log in.

	ny time & Any where
IP St	rvillance New GenerationVideo Web Server
6	<ul> <li>D Username <u>admin</u></li> <li>Password *****</li> </ul>
	UDP   TCP  Reset Submit Download AP

