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1.0 INTRODUCTION

System Overview

Thanks for buying this product! This manual can help you in using this product more quickly and smoothly. There are proper suggestions show you how to solve most problems. In order for this reference material to be used perfectly , please refer to the "expanded table of contents" to find relevant topics.

The Amain Protector Monitor System (APMS) is operated on PC with user-friendly interface and familiar Windows 98/2000/XP operating system. This software is able to monitor up to 16 cameras simultaneously and independently. Application to window , warehouse and entrance ,and the APMS will inform you via a modem by telephone , mobile phone and e-mail immediately whenever there is intrusion into the area you set. With advanced features , APMS provides comprehensive solutions to meet your needs for surveillance applications.

1.1 Important Features

16 Independent video windows

- Each camera view can be set and configured individually , such as motion detection , time scheduler , alarm and recording.

High Resolution: 640*480

- High compression ratio, high resolution and high-speed recording

Remote video monitor and control

- APMS allows not only real time monitoring but also the configuration of camera controlling remotely through Modem or TCP/IP network.

Local/Remote digital video recording

- APMS supports host and remote video recording.

Built-in Http server

- IE Web link host monitor to view cameras is available.

Watch dog and auto reboot function

- Watch dog will do reboot when the O/S shut down.

Snapshot by each camera immediately

- Take live video snapshot and save in BMP or JPG format

Automatically delete old data recorded

- The way to record file in cycle so that system will delete the oldest date when H.D.D space is full. (FIFO=First in first out)

Intelligent warning function

- Each camera window has its own alarm function that sends a alarm signal to designated cell phone and/or beeper through modem.

Quick search

- The system allows users access into the particular segment so that you don't have to watch entire video.

Multiple passwords to choice

- Multiple password authorization for high security

Smart image motion detection

- Each camera view has its own function to detect motion occurring in the masked area with adjustable sensitivity level.

Time scheduler

- Automatically detect motion on specific time/date/hour. User can set up specific times in Amain Protector Monitor System to perform motion detection.

Convenient Hot keys function

- Easy to change the view size with one keystroke.

Support Pan/Tilt/Zoom (PTZ) cameras

- Click to move the cameras up/down, left/right, zoom-in/out, to focus

Support PDA Remote Control cameras

- Use IE Web link Host monitor to view cameras 、 motion trigger alarm 、 remote control PTZ cameras and playback image files.

1.2 System Requirements (Recommended)

The following describes the system requirements for the APMS software.

- * **Operating System** / MS Windows 98/2000/XP
- * **CPU** / P3-800MHZ (16L) / P4-1.8GB (16M)/ P4-2.8GB (16H) or faster
- * **Memory** / At least 256MB
- * **VGA Card** / 24 bit or higher VGA card , support 800*600 resolution
- * **Sound Card** / 16 bit or higher PCI sound card
- * **Modem** / 56K bps or faster voice modem
- * **Hard disk** / 40GB or more
- * **CD-Rom** / 52X or faster
- * **CCD Camera** / NTSC/ PAL compatible camera

1.3 Package Item Checklist

The Amain Protector Monitor System (APMS) is available in one package as below. If you find any items damaged or missed , please contact your retailer.

Package : 4 Ports Video Capture Card + APMS software.

(*Upgrade to 16 ports need to 4-piece video capture cards)

- (1) 4 Ports Video Capture Card
- (2) CD with APMS software and drivers
- (3) APMS user's manual

1.4 Video Image

- * **Size of video** / 640*480 pixels per video window
- * **Colors** / True Color (32 bit)
- * **Video compression type** / M-JPEG
- **Frame rate of displaying video image** /
7.5 fps (L), 15fps(M), 30(H)
- * **Frame rate of saving video image** / 4fps(L), 8fps(M), 15fps(H)
- * **Frame rate of transmitting video image** / 0.5fps(L), 1~2fps(M),
2~3pfs(H) for 56K bps Modem/4(L),8(M), 15(H) fps for Network

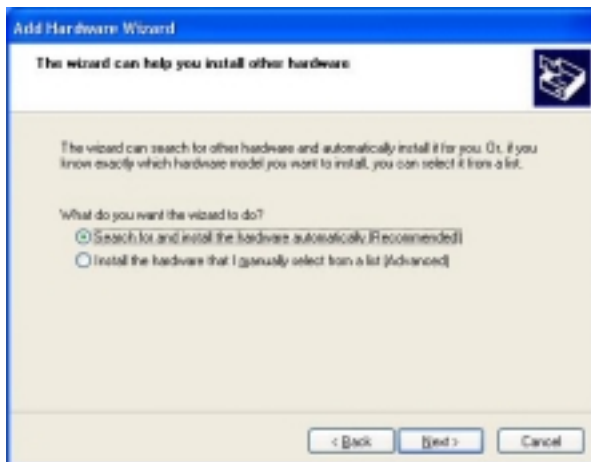
2.0 Driver Installations

◆Your operating system should be **Windows 98/2000/XP** , insert the APMS CD-R into CD-ROM . This program is DRV(Select your O/S version) , simply follow the steps as below:

Step 1 : The first time install this driver , You will see Add Hardware Wizard view window . insert the CD-R in your CD-ROM , and click "**Next**" button .



Step 2 : Please select Search for and install the hardware automatically(Recommended) , and click "**Next**" button .



Step 3 : Click " **Continue Anyway** " button to continue installation steps as below ◦



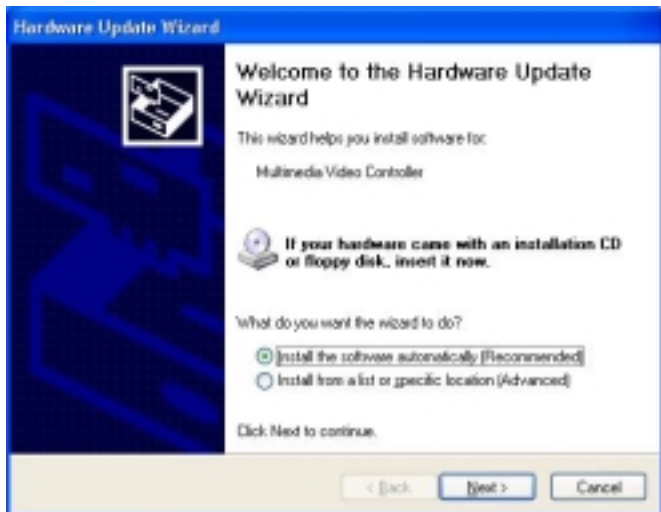
Step 4 : Click " **Finish** " to close the Wizard ◦ The Hardware Update Wizard will show driver name ◦



Step 5 : The Add Hardware Wizard will automatically detect continuously , and click " **Next** " button .



Step 6 : Please select Install the software automatically (Recommended) , and click " **Next** " button .



Step 7 : Click " **Continue Anyway** " button to continue installation steps as below ◦



Step 8 : Click " **Finish** " to close the Wizard ◦ The Hardware Update Wizard will show driver name ◦



Step 9 : If you insert 4 pieces PCI Video Capture Card in your computer , You need to repeat the steps as shown above for 4 times. To complete the driver installation after the last restarts your system.

Step10 : The Amain Protector Monitor System (APMS) also needs to install Directx8.1 , The Directx8.1 driver in APMS CD-R . Please select your O/S version , and following steps to complete setup.

● 2.1 PDA Setup

1. Have PDA connect with PC and make sure the connecting status.
2. Install PDA file (INSTALL POCKET APMS) into PC.
3. Install the APMS in PDA. (The serial number is shown on the APMS CD-R)
4. Complete installation, you can connect to host PC for monitoring with PDA.
5. About the setting of PDA connection, please contact with the PDA dealer.

※ Note:

PDA Remote Control Required:

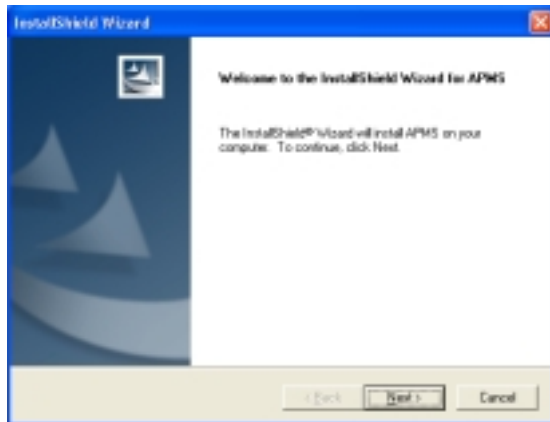
- * **CPU** / Intel 400MHz or higher
- * **OS** / Microsoft Pocket PC2002 or higher
- * **ARP** / PHS or IEEE802.11B recommended
- * **Internet (TCP/IP)** / The Stander LAN card for PDA

3.0 Setup APMS Software

Your operating system should be **Windows 98/2000/XP**, insert the CD-R in your CD-ROM. The program name is APMS, follow the steps as below :

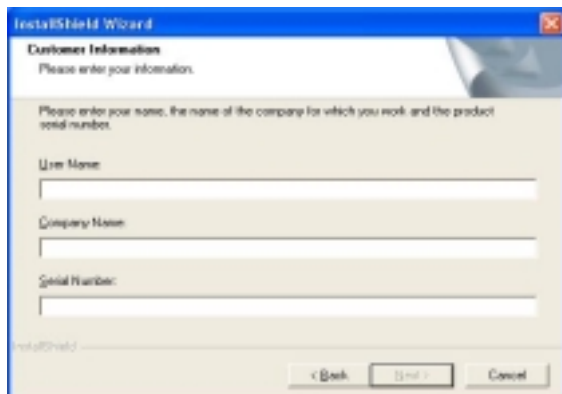
◆3.1 Select installation language

Check **Browser** to look for the executive file "**Setup.exe**" , Please select the language from the scroll and click "**Next**" to continue the installation .



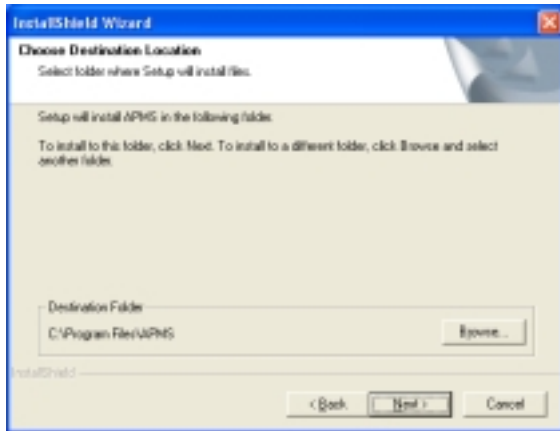
◆3.2 Enter user company name and serial number

Enter user and company name information and serial number (see CD-R) and click "**Next**" button .



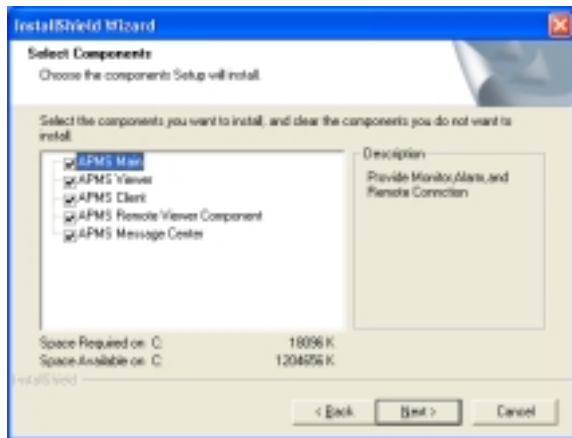
◆3.3 Select the allocation for APMS software

Browse to select the allocation for the software modules



◆3.4 Install application modules

APMS software is consisted of three application modules , included **APMS Main** , **APMS Client** and **APMS Viewer**.

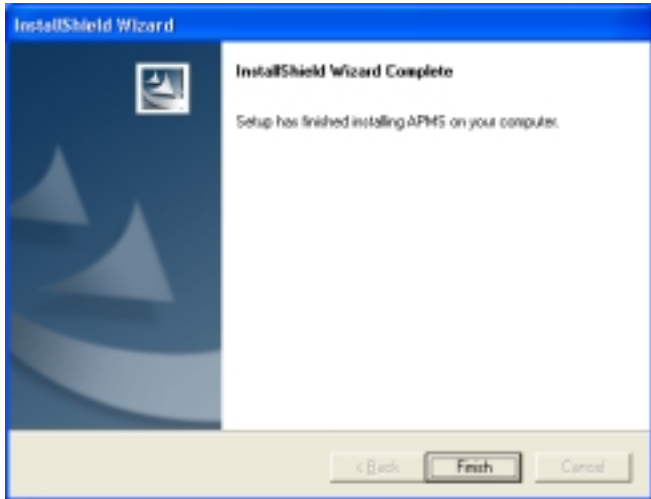


You need to install these three program into the **Host PC** , but the **APMS Main** is not necessary with the **remote PC**.

- ※ **Note:** Host PC is the pc that is equipped with CCD camera(s) , and the Remote PC is which you monitor at remote site.

◆3.5 Remove CD-R

Click " **Finished** " to complete the installation · Now this digital surveillance system is ready for configuration and operation ◦



:

4.0 Software Reference

● APMS Software Overview

This complete APMS software is consisted of three program modules – APMS Main, APMS Client and APMS Viewer. The main functions of each module are outlined as below.

APMS Main /

The main program is a switch of the cameras you conducted and function setting.

APMS Viewer /

This Viewer program have to be installed in both the host PC and remote PC for watching recorded video date.

APMS Client /

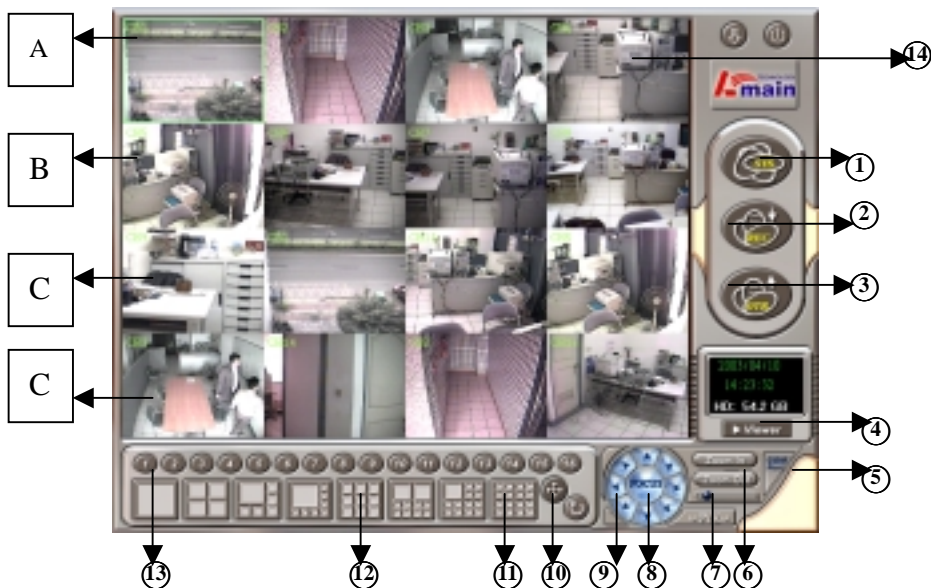
The Client program can remotely control the host PC system through remote PC. (Telephone line and/or network)

4.1 『APMS Main』 :

4.1.1 Run APMS Main application

Go to **Start > Programs > APMS >** and click on the **APMS Main application**.

The following picture shows up.

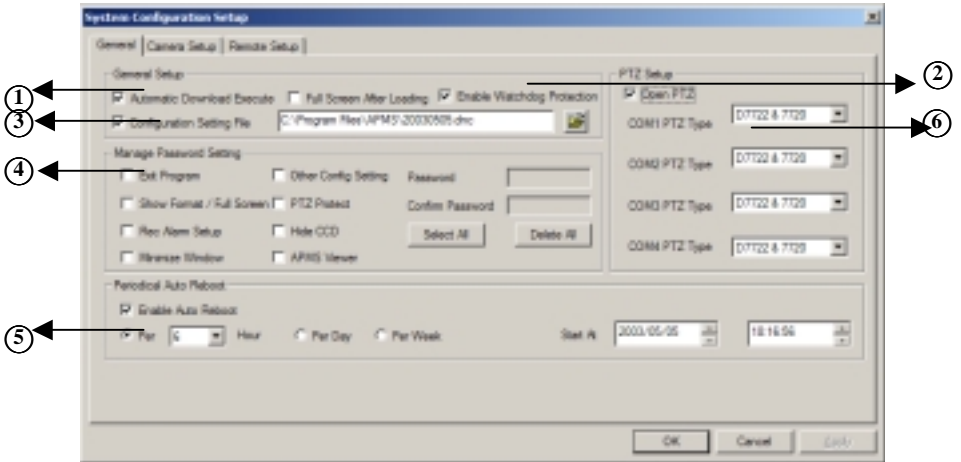


Main menu of APMS Main :

No.	Functional Description	No.	Functional Description
1	System configuration setting	12	9 split-screens display
2	Recording and alarm configuration setting.	13	Single split-screens display F2
3	Other configuration setting.	14	Using the right mouse button returns to original display mode F1
4	The shortcut of APMS Viewer	A	Use the middle mouse button to take a snapshot
5	Select PTZ com port setup	B	Use the left mouse button to enlarge picture and one more click will return to original split mode
6	PTZ camera Zoom-in 、Zoom-out	C	Use the right mouse button to hide camera
7	PTZ camera turning speed	D	Hold on the middle mouse button to exchange another camera
8	PTZ camera focus setup		
9	PTZ camera turning direction		
10	Full screen display F3		
11	16 split-screens display		

4.1.2 System Configuration Setup

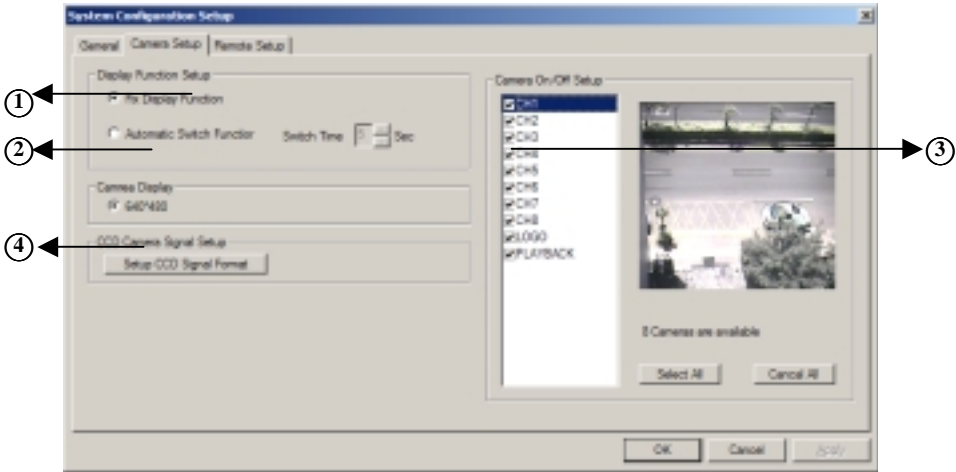
Click 『APMS Main』 No① to open System Configuration Setup window and you will see the picture as follows:



『General Setup』 :

No.	Functional Description
1	Enable Automatic Download Execute . APMS will be started automatically When you start the Windows
2	Enable Watch Dog protection. (Be allowed to connect with IE Web only)
3	Select configuration setting file when APMS Main running
4	When you select the password protection , you will be asked to enter password twice for verification. And the system would not setup with wrong password.
5	APMS automatically restart setup (By daily, hourly, weekly)
6	Select the type of PTZ setup (PTZ hardware input first) (*Note: PTZ type only support D7722&7720 for Dynacolor; support PIH7000&7600 for Li-Lin)

Click 『 APMS Main 』 No① to open System Configuration Setup window and Click 『 Camera Setup 』 . You will see the picture as follows:

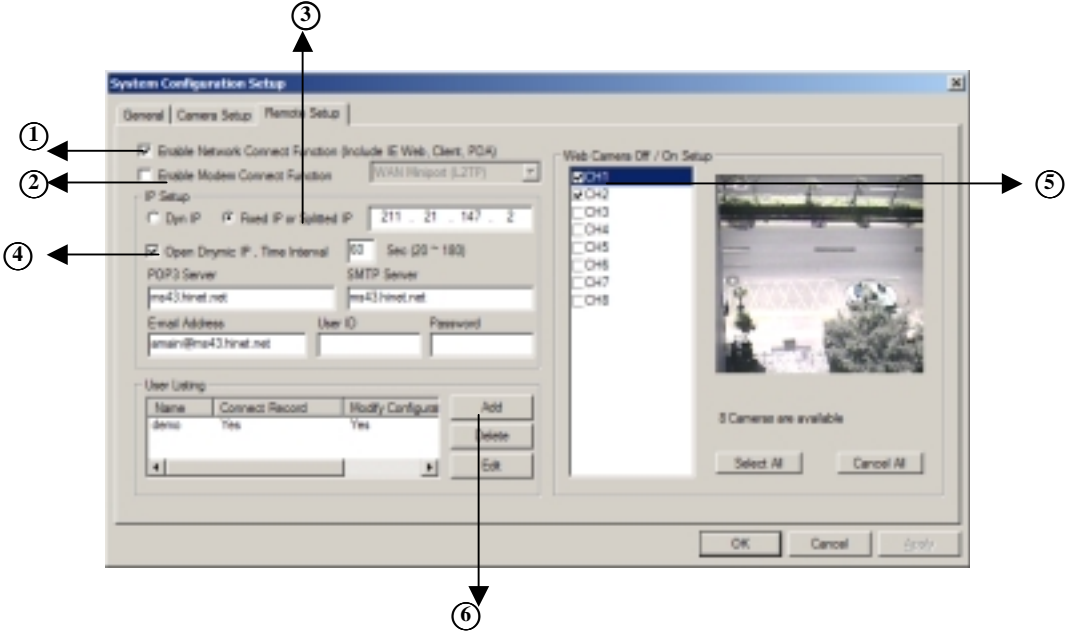


『 Camera Setup 』 :

No.	Functional Description
1	Select to fix display
2	Select to alternate display automatically
3	Turn on/off camera
4	Select CCD video signal. Click CCD Signal icon to set CCD Signal (※ Note: All CCD cameras which connected to your PC must be the same video signal format.)

Click 『 APMS Main 』 No① to open System Configuration Setup window.

Click 『 Remote Setup 』 and you will see the picture as follows:



『 Remote Setup 』 :

No.	Functional Description
1	Enable remote connect with Network (included IE Web 、 Client &PDA)
2	Enable remote connect with modem
3	Enter Static IP or Static IP of IP share (The IP should to constant)
4	Enable Dynamic IP to remote connect POP3 Server: Ex. ms43.hinet.net SMTP Server: Ex. ms43.hinet.net E-Mail Address: EX. amain@ms43.hinet.net
5	Select which cameras enable from remote site
6	Add Username and password for remote connect

Click 『 Remote Setup 』 No⑥ to open User Authority Rework window and you will see the picture as follows:



『 User Authority Rework 』 :

No.	Functional Description
1	Enter Username for remote connect
2	Enter Password for remote connect
3	Authority setting allowed from remote site



Note: 1. Remote connect allowed after User Authority setting ◦

2. Remote connect allowed after Username and password setting ◦

3. Register must be same with Host site when connecting between remote site and main site ◦

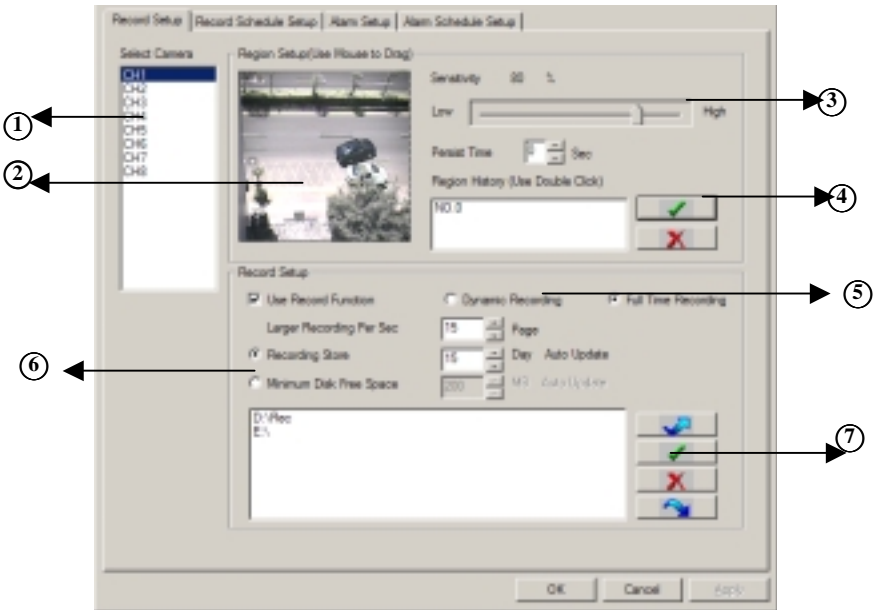
4. IE Web viewer is available with the same username and password ◦

4.2.1 Record Setup

Click 『APMS Main』No② to open Record Setup configuration window and you will see the picture as follows:

The Recording Setup is set under the 『Record and Alarm Setup』

The Recording Setup of APMS allows you to set up (mask) a particularly zone that you would like to be informed as whatever invades into masked area on each camera view.



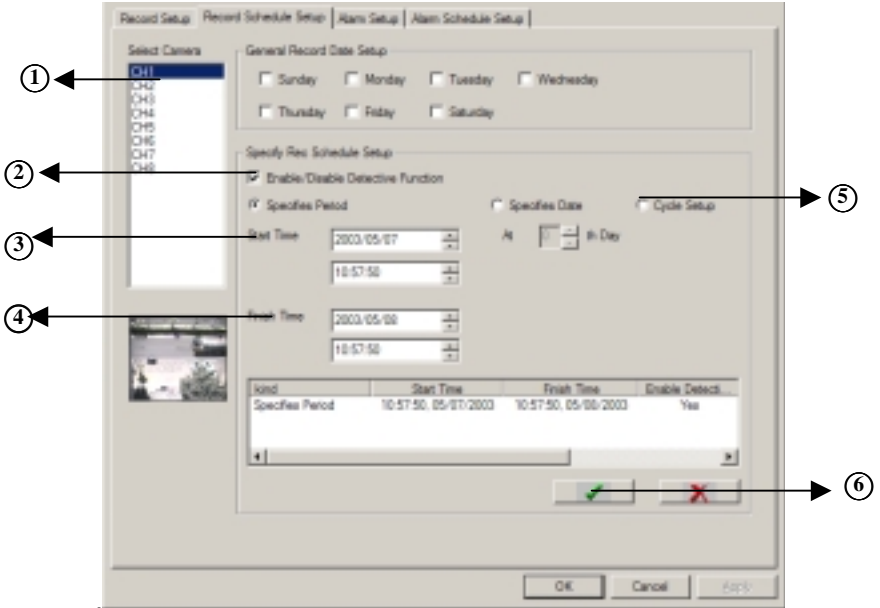
『Record Setup』:

No.	Functional Description
1	Select which cameras to setup recording
2	Select masked zone. Hold the left mouse button and drag it to the area you would like to detect then the area will be masked.
3	Sensitivity adjusting
4	Setup Detection Rules
5	Select Dynamic or Full time recording function
6	Select either the days you want to keep or the disk space.
7	Select the allocation to save recorded date

4.2.2 Recording Schedule Setup

Click 『APMS Main』 No② to open Recording Schedule Setup window and you will see the picture as follows:

The Record Schedule Setup Configuration is set under the 『Recording and Alarm Setup』



『Record Schedule Setup』 :

No.	Functional Description
1	Select which cameras to setup recording schedule
2	Enable/disable specific time detection
3	When the APMS motion detection start setting
4	When the APMS motion detection stop setting
5	Select Cycle Setup
6	Click on check button to add your setting to the Schedule list.

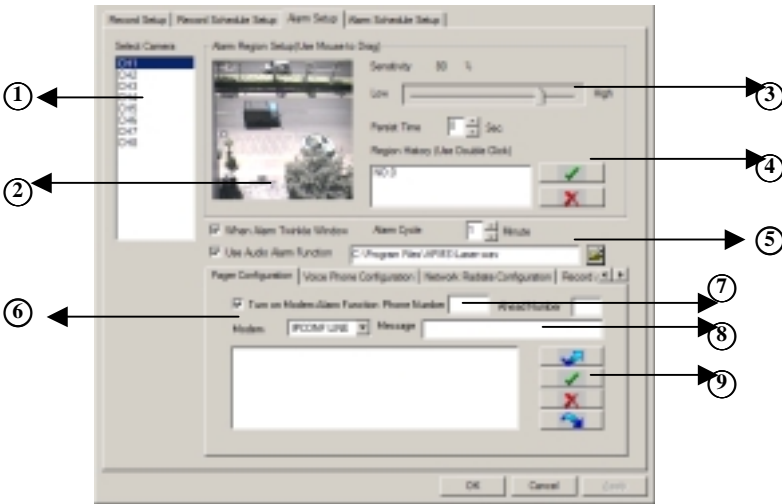
4.2.3 Alarm Setup

Click 『APMS Main』 No② to open Alarm Setup window the picture as follows:

The Pager Configuration is set under the 『Alarm Setup』

*** Important:** At first , make sure your PC is equipped with telephone line and modem and they are working .If they don't work, then the APMS will not be able to make a pager call either. Check your PC user manual for setting modem and telephone.

Note: Only Voice fax modem is available to enable 『Pager Configuration』



『Alarm Setup』 :

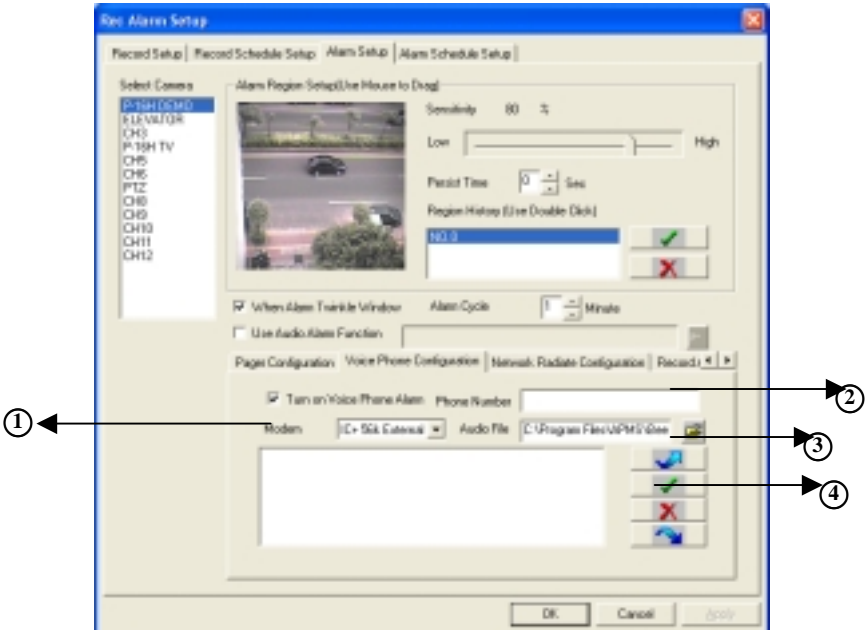
No.	Functional Description
1	Select which cameras to setup recording schedule
2	Hold the left mouse button and drag it to the area you would like to mask
3	Set motion detection sensitivity
4	Setup Alarm Detection Rule
5	Choose audio alarm sound file: Select the sound file to be played for motion detection. (※ Note. The type of sound file must be PCM, 8000Hz, 16Bit, Mono or you will not be allowed to choose this setting)
6	Choose Modem Device: Select a modem device to make a pager call from the scroll. All the modem devices that are required with your computer will automatically show on the scroll of Modem Device.

7	Enter your pager number
8	Enter the message you would like to receive
9	Add pager number to dialup

Click 『APMS Main 』 No② to open Alarm Setup window and you will see the picture as follows:

The Voice Phone Configuration is set under the 『Alarm Setup 』 .

*** Important :** Enable to send a alarm notification, your PC must be equipped with **voice modem** and telephone line.



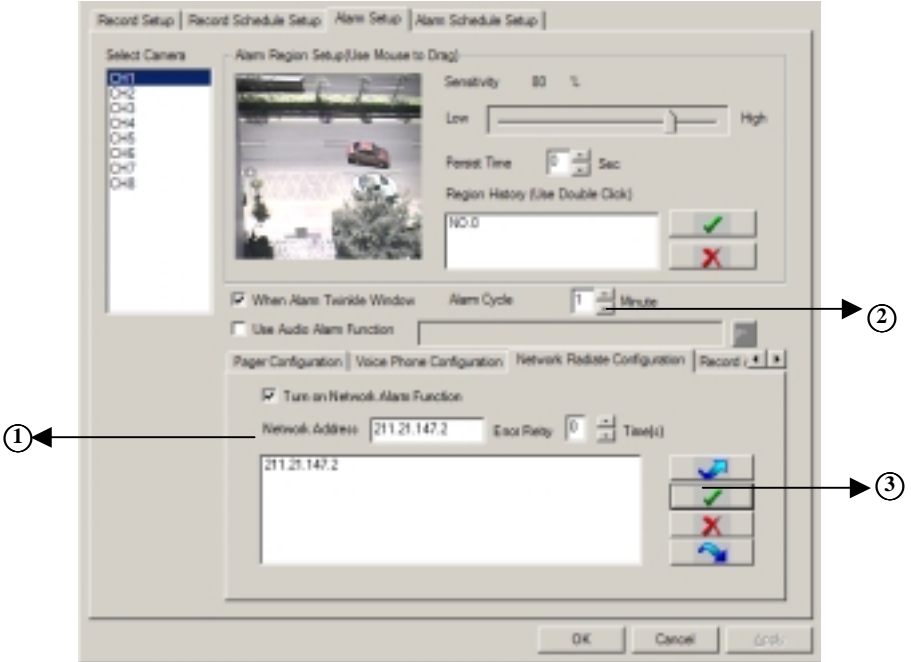
『Voice Phone Configuration 』 :

No.	Functional Description
1	Select Modem Device from the scroll to make a phone call
2	Enter telephone or mobile phone number
3	Select sound file to be played for motion detection. (※ Note. The type of sound file must be PCM, 8KHz, 16Bit, Mono or you will not be allowed to add this telephone setting to dialup)
4	Add phone number and sound to dialup

Click 『APMS Main』 No② to open Alarm Setup window and you will see the picture as follows:

The Network Radiate Configuration is set under the 『Alarm Setup』.

- ◆ Check APMS Message Center : Go to **Start > Programs > APMS >** and click on the **APMS Message Center**.



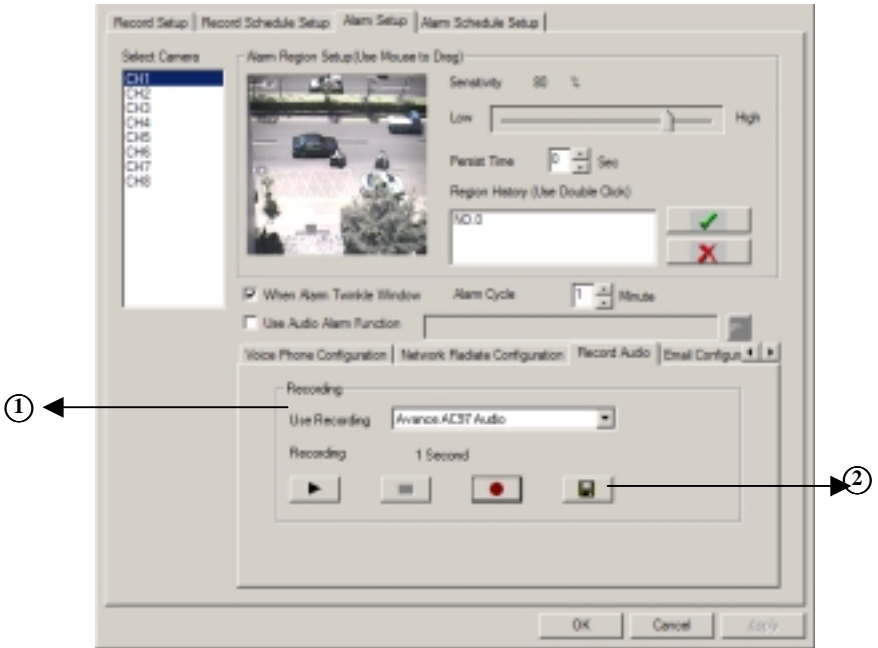
『Network Radiate Configuration』 :

No.	Functional Description
1	Enter IP address of Remote site
2	Set Error Retry times
3	Add alarm Message to dialup

Click 『 APMS Main 』 No② to open Alarm Setup window and you will see the picture as follows:

The Audio Recording is set under the 『 Alarm Setup 』.

At First, please make sure your PC is equipped with sound card , speakers and microphone. If you would like to check whether the devices is connected or not , go to **Start > All Programs > Accessories >Entertainment >Windows Media Player**. Play the sound file with Media Player. If it doesn't work, APMS will not be able to play your sound file either.



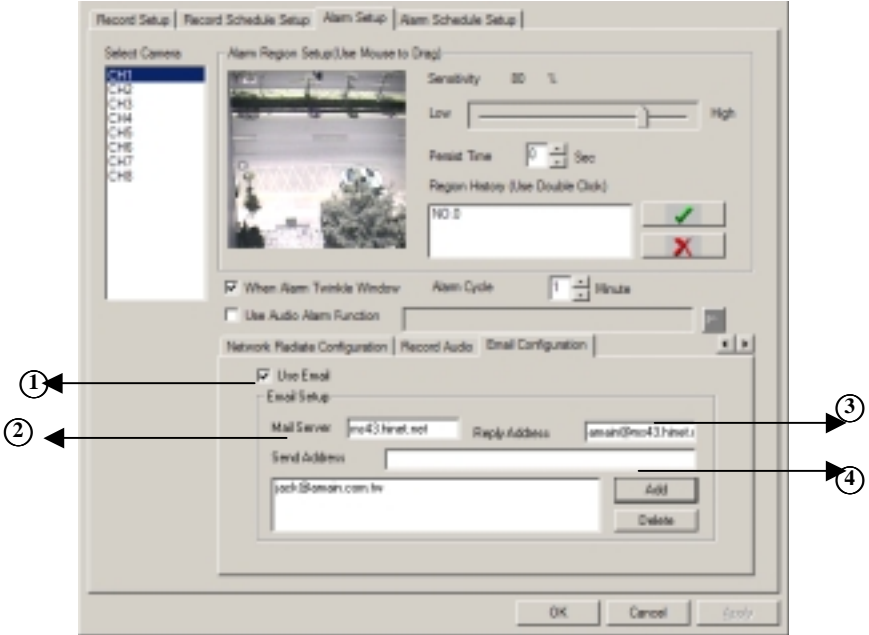
『 Record Audio 』 :

No.	Functional Description
1	Check the audio device
2	Click save button to save your sound file. DEVICE:\WINDOWS\MEDIA*.WAV

Click 『 APMS Main 』 No② to open Alarm Setup window and you will see the picture as follows:

The Email Configuration is set under the 『 Alarm Setup 』 °

APMS will transmit present image to remote computer through E-mail automatically by E-mail sever and receiver setting.



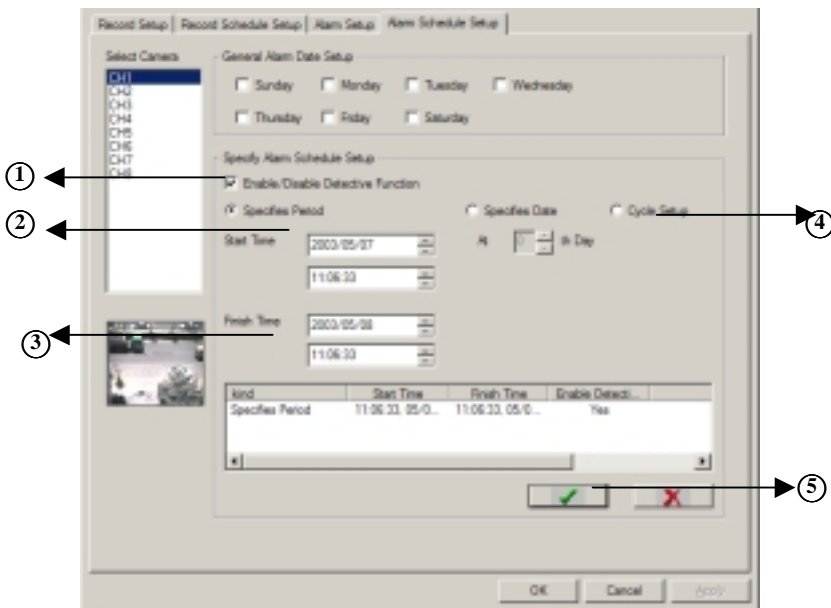
『 Email Configuration 』 :

No.	Functional Description
1	Enable E-mail alarm
2	Enter mail server address Ex. ms43.hinet.net
3	Enter mail reply server box full address Ex. amaid@ms43.hinet.net
4	Enter mail address of receiver

4.2.4 Alarm Schedule Setup

Click 『APMS Main』 No② to open Alarm Schedule Setup window and you will see the picture as follows:

The Alarm Schedule Setup Configuration is set under the 『Record and Alarm Setup』



『Alarm Schedule Setup』 :

No.	Functional Description
1	Enable/disable the timeframe detection
2	When the APMS motion detection start setting
3	When the APMS motion detection stop setting
4	Select Cycle Setup
5	Click Check button to add your setting to the Schedule list.

Select 『 Record Date Configuration Setup 』 No④ to open Cycle Mode Setting window and you will see the picture as follows:



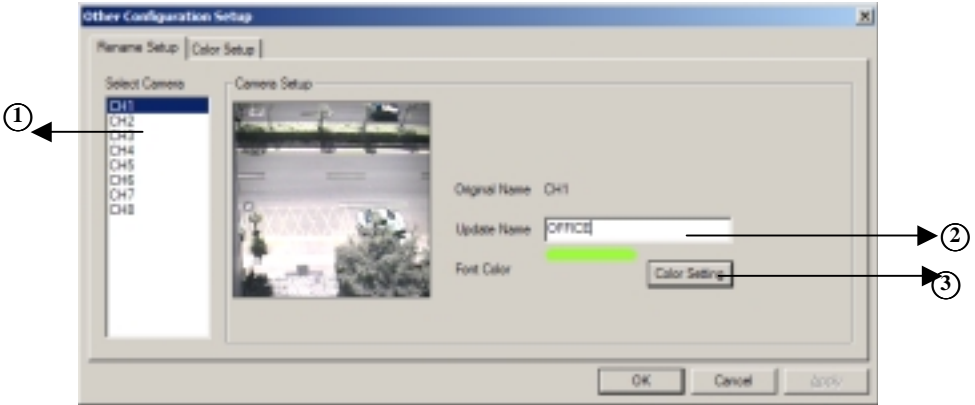
『 Cycle Mode Setting 』 :

No.	Functional Description
1	Select APMS motion detection in Daily mode
2	Select APMS motion detection in Weekly mode
3	Select APMS motion detection in Monthly mode
4	Select APMS motion detection in Yearly mode

4.3.1 Other Configuration Setup

Click 『 APMS Main 』 No③ to open Other Configuration Setup window and you will see the picture as follows:

The Rename Setup is set under the 『 Other Configuration Setup 』

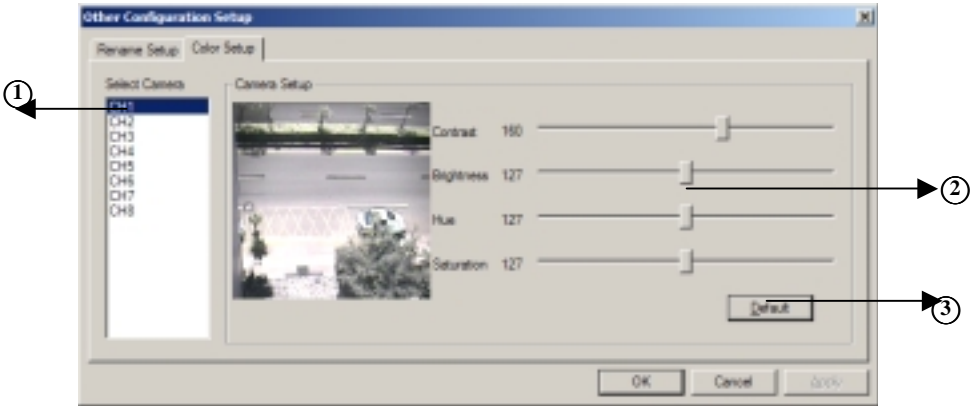


『 Rename Setup 』 :

No.	Functional Description
1	Select which cameras to rename
2	Update new name whatever you like it (Don't use: -*^&...especial punctuation)
3	Color display setting

Click 『 APMS Main 』 No③ to open Other Configuration Setup window and you will see the picture as follows:

The Color Setup is set under the 『 Other Configuration Setup 』



『 Color Setup 』 :

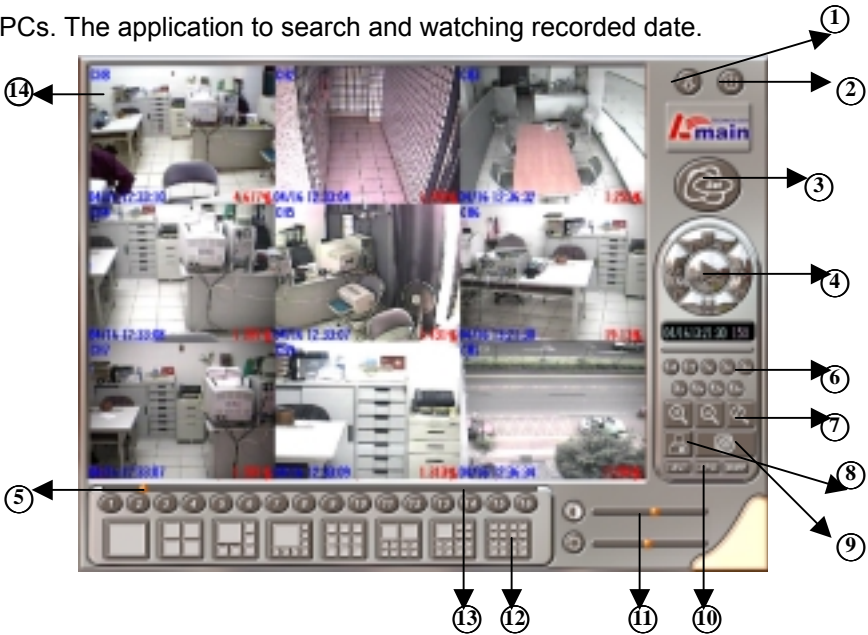
No.	Functional Description
1	Select which cameras to adjust screen display
2	Screen Adjust: Brightness/ Contrast/ Hue/ Saturation
3	Default setting

5.1 『APMS Viewer』 :

5.1.1 Run APMS Viewer application

Go to **Start > Programs > APMS >** and click on the **APMS Viewer**. The following picture shows up ◦

This is an accessory module that you can install in both local and remote PCs. The application to search and watching recorded date.



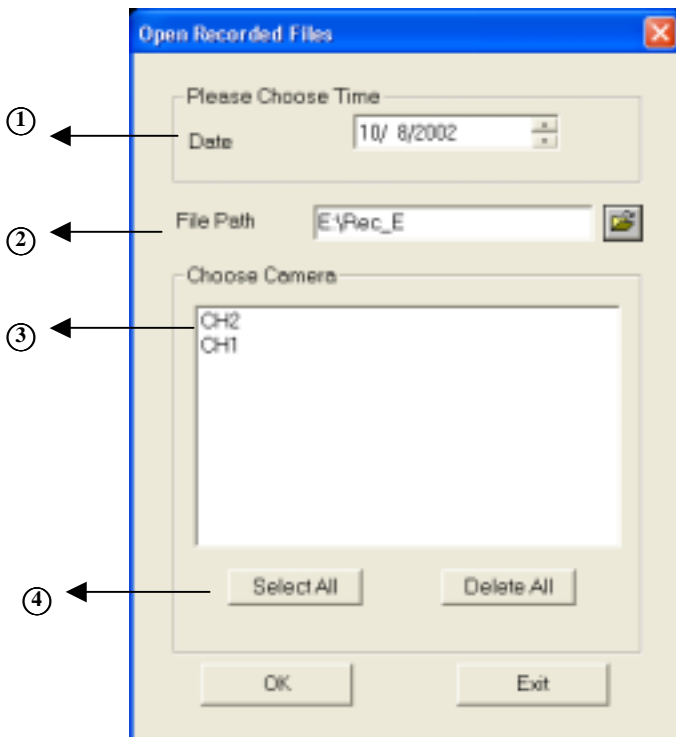
Main menu of APMS Viewer :

No.	Functional Description
1	Minimize the APMS Viewer
2	Exit the APMS Viewer
3	Open the recorded date
4	Video playback control map ◦ Start/ Stop/ Pause/ Rewind/ fast-forward
5	The time slider for random access
6	Search speed button
7	Zoom out, Zoom in and Return to original Picture

No.	Functional Description
8	Print the current image with time stamp.
9	Open Search Setting dialog box
10	Convert Picture to AVI、JPG or BMP format
11	Video Sharpness adjusting
12	Display in various split-screen
13	Single screen display
14	Use the left mouse button to enlarge picture and one more click will return to original picture

5.1.2 Open Recorded files

Click 『 APMS Viewer 』 No③ to open Recorded files window and you will see the picture as follows:



『 Open Recorded files 』 :

No.	Functional Description
1	Select recorded video date
2	Select the allocation to saved recorded date
3	Select to open which camera video log file
4	Select all camera to playback video date

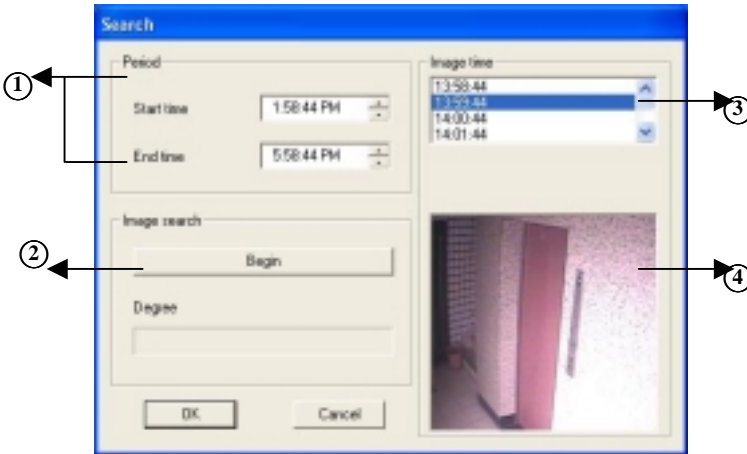
5.1.3 Search Recorded file

Click 『APMS Viewer』 No⑨ to open Search Recorded file window and you will see the picture as follows:

APMS allows you to find the video frame at certain time. Simply follow below steps to search specific video frame.

- 1.Click No⑨ to open Search Setting dialog box as below.
- 2.Enter the desired time and search range. (※Note: The search range can be given in the unit of Second · Minute or Hour. If you set 30 minutes as Search range, the APMS will start searching and show all video frames recorded within set timeframe ± 30 minutes.)
- 3.Click Begin button to start searching.

Note: There is no video frame in image screen if there is no motion within the time you set for searching.



『 Search Recorded file 』 :

No.	Functional Description
1	Enter the desired time and search range
2	Search the recorded video date
3	Search video date at intervals of timeframe
4	Search the picture of video date

6.1 『 APMS Client 』 :

Before connecting, please make sure the host and remote PC both equipped with telephone line · modem and network.

6.1.1 Run APMS Client application

Go the **Start > Programs > APMS >** and click on the **APMS Client**. The following picture shows up ◦



Main menu of APMS Client :

No.	Functional Description
1	Minimize the APMS Client application
2	Exit the APMS Client application
3	Start the connection. As connected, you can view cameras from remote PC
4	Cut off connection between host & Remote PC
5	Open the APMS Client configuration dialog box
6	Select Split-Screen Display (Double click to return to original display)
7	Use the left mouse button to take a snapshot
8	Hold on the left mouse button to exchange another camera

6.1.2 Remote Connection Setup

Click 『APMS Client』 No.⑤ to open Remote Connection Setup window and you will see the picture as follows:



『Remote Connection Setup』 :

No.	Functional Description
1	Enter the IP address of the host PC (the one connected to cameras)
2	Select your modem model from scroll and enter the phone number of host PC
3	Select the allocation for saving video date from remote PC
4	Enter your username and password for the authority setup of host PC. ※Note: Access will be denied if the username and the password is not exactly the same with the host PC.

7.1 『IE Web Browser』：

Before connecting , please make sure the host PC equipped with static IP address and network.

7.1.1 Run IE Web Browser application

Click Internet Explorer >Key in host IP Address > Input User name & Password.

The following picture shows up.

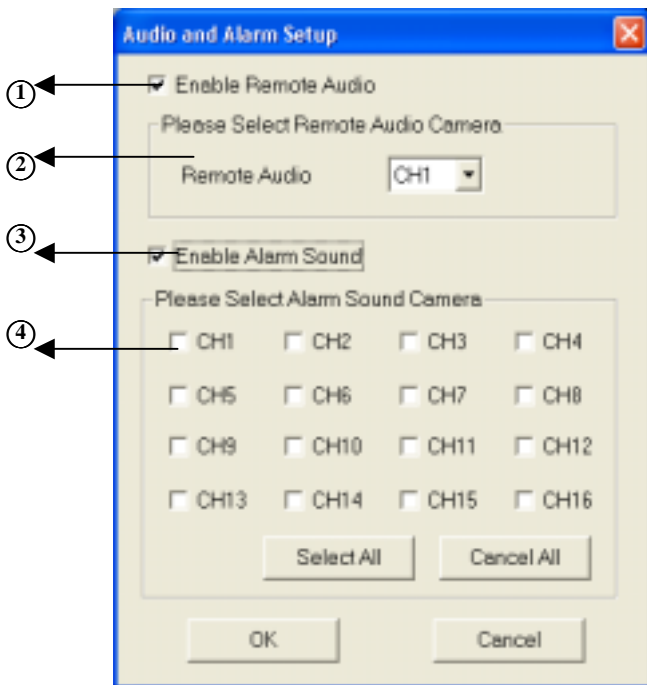


Main menu of IE Web Browser :

No.	Functional Description
1	One to one audio and alarm setup
2	Multi-place monitoring setup
3	AVI recording setup
4	Snapshot setup
5	Playback recorded setup
6	IP server switch
7	PTZ Remote control

7.1.2 Audio and Alarm Setup

Click 『IE Web Browser』 No.① to open Audio and Alarm Setup window and you will see the picture as below:

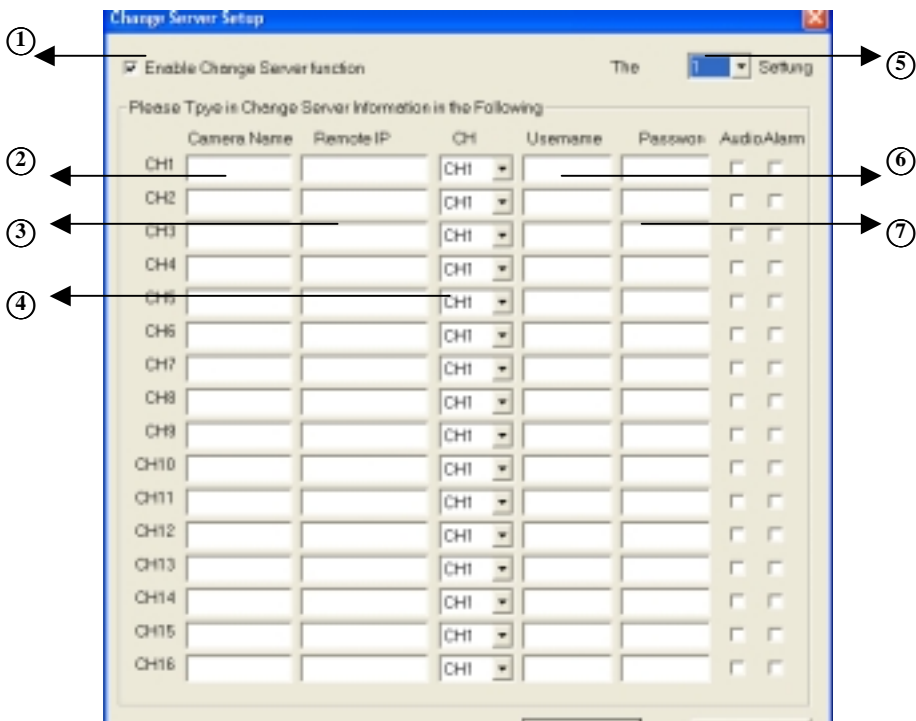


『Audio and Alarm Setup』 :

No.	Functional Description
1	Enable remote audio
2	Select remote audio camera
3	Enable alarm
4	Select desired camera for alarm

7.1.3 Change Server Setup

Click 『 IE Web Browser 』 No. ② to open Change Server Setup window and you will see the picture as below:

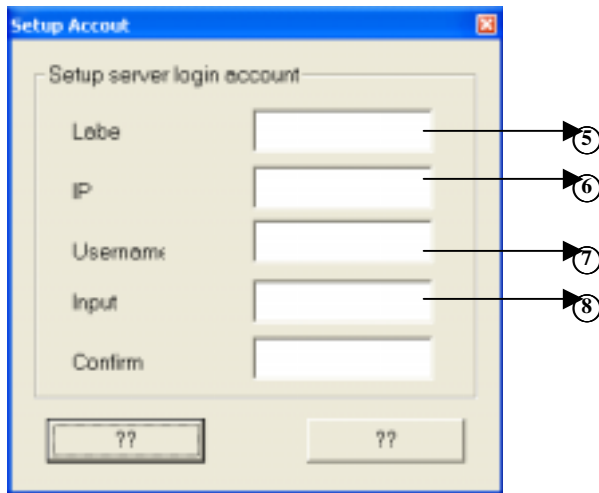
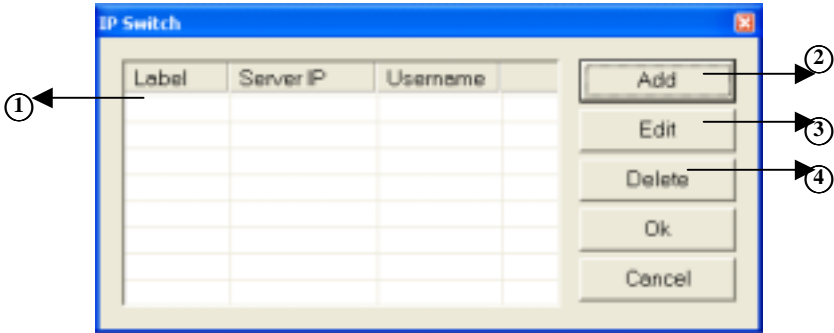


『 Change Server Setup 』 :

No.	Functional Description
1	Enable change server function
2	Key in the certain name of the desired camera
3	Key in remote IP address of desired camera
4	Select remote camera channel
5	Select remote IP address groups setting
6	Input remote user name
7	Input remote password

7.1.4 IP Switch

Click 『IE Web Browser』 No⑥ to open IP Server Switch window and you will see the picture as below:



『IP Switch Setup』:

No	Functional Description
1	Select remote IP address that you want to watch
2	Add new IP address
3	Edit IP address
4	Delete IP address
5	Input remote IP address name you desired
6	Input remote IP address
7	Input the user name of remote IP address
8	Input the password of remote IP address

◆ Excursus :

The IP Share PORT MAPPING Setting:

Ex: Giving Static IP with IPAQ connection Point CP-2W to Sever

Because your LAN card catches the IP automatically , different IP will be given each time you boot. We have to give the static virtual IP for PC by CP-2W.

The PC Port Mapping setting with IP Share:

1. Install the LAN line for IP Share and then set a virtual IP Address on LAN Card.
2. Access the operating interface of your IP Share Port Mapping.
3. Renew Internet IP Address to objective IP for sever.
4. Input this static virtual IP Address on DHCP.
5. Virtual Server Setup.
6. Enable 80, 7741,912,913,914 and 4444 Port, and distribute them to each fixed virtual IP Address.
7. Save the setting as above , you can connect Internet with virtual IP.

Notice:

1. **There are different setting models in different IP Share; the IPAQ CP-2W setting shown as above is the sample for reference.**
2. **Please contact with the dealer of your IP Share if you have no idea about IP Share setting.**