

# DVR SYSTEM

version 4.1.1.0



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# CHAPTER 1

## Hardware Specification

### 1.1 Product Specification

#### DVR Models

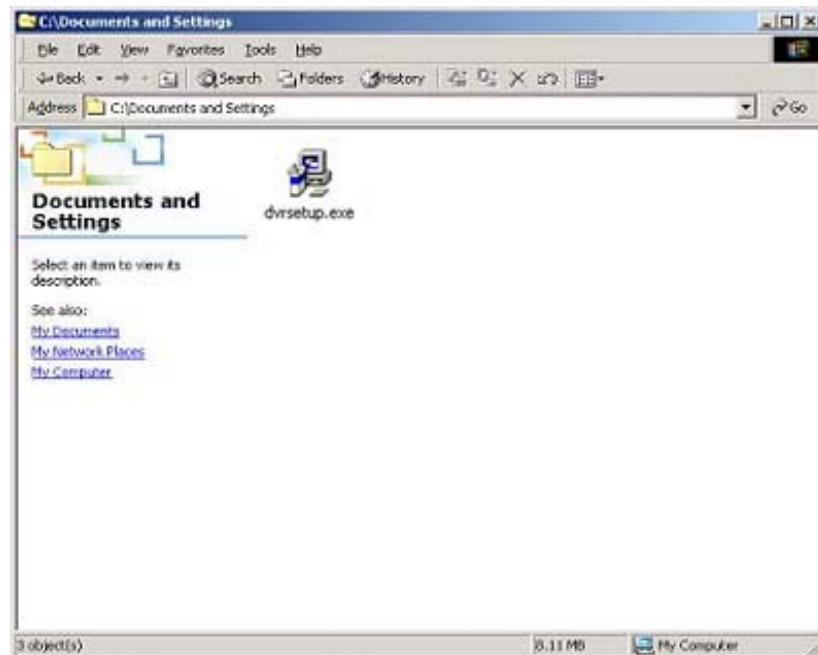
Models		0403	0406	0412	0812	0824D	1612	1624D	1648	1648D
Displaying Speed	NTSC	30 fps	60 fps	120 fps	120 fps	240 fps	120 fps	240 fps	480 fps	480 fps
	PAL	25/60 fps	50/120	100/120	100/240	200/120	100/240	200/480	400/480	400
Recording Speed	NTSC	30fps	60 fps	120 fps	120 fps	240 fps	120 fps	240 fps	120 fps	240 fps
	PAL	25fps / 60	50/120	100/120	100/240	200/120	100/240	200/120	100/240	200
Video Inputs		4	4	4	8	8	16	16	16	16
Audio Inputs		1	2	4	4	8	4	8	4	8
Sensor Inputs		4	4	4	16	16	16	16	16	16
Alarm Outputs		2	2	4	8	8	8	8	8	8
Video Resolution		640 X 480, 640 X 240, 320 X 240 (NTSC) / <b>768 X 576</b> , 768 X 288, 384 X 288 (PAL)								
Compression Type		MPEG-4								
Supported Signal Types		NTSC, PAL								
Supported Network		TCP/IP, PSTN								
Supported Backup Devices		HDD, DVD/R, CD/RW, Network Driver, etc.								
Supported PTZ Protocols		C&B Tech-CND100200&SMART, Changzhou Minking-Minking, CTNCom-HD0670, Dong Yang Unitech-DSC230, DRAGON-DRAGON, Dynacolor-TPD7720, Geosan-GRX1000, PELCO D&P, GOLDENEYE-GOLDENEYE, InterM-VRX2201, KALATEL-KTD312, KJK-KJK, LG-LPTA100L, SAMSUNG-SCC641&SDZ160R&SPD1600&SPX1000&SPT1000, SONY-EVID3031, Vicon-Survey&2000, ZITEC-ZITECH, etc.								
Operating Systems		Windows XP, Windows 2000, Linux								
Supported Languages		English, Spanish, Japanese, French, Traditional Chinese, Simplified Chinese, Portuguese, Hebrew, Polish, German, Finnish, Greek, Hungarian, Korean, etc.								



## CHAPTER 2

# Software Installation

Steps: 1. Insert DVR S/W. 2. Double-click "dvrsetup.exe".



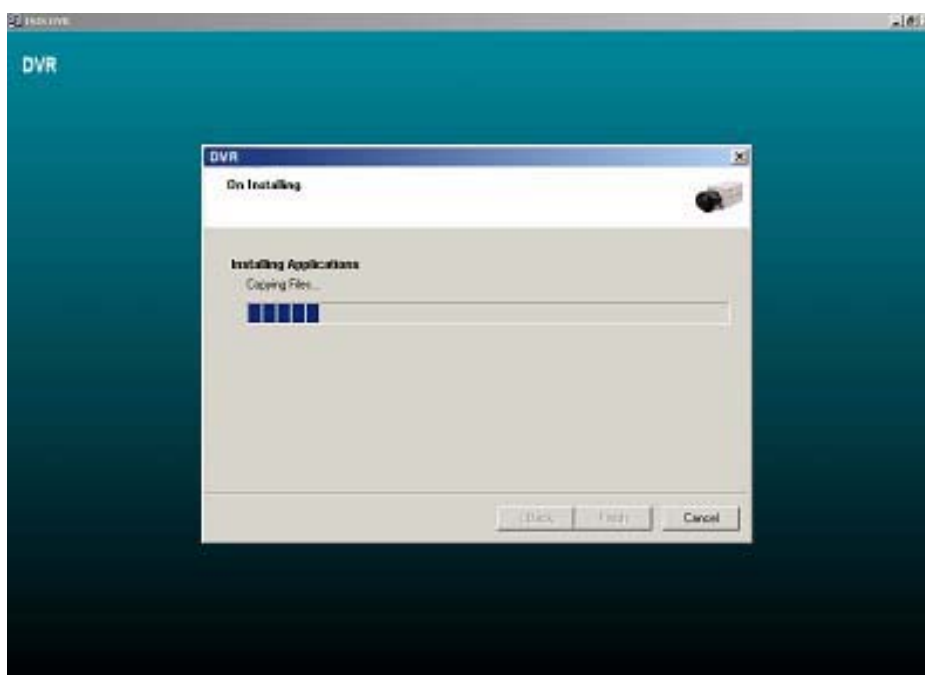
## 2.1 Automatic Installation

**2.1.1 Definition:** It is a method to install all the relevant software automatically.  
Select "Automatic Installation" at all times **unless only "DVR Client" is to be installed.**

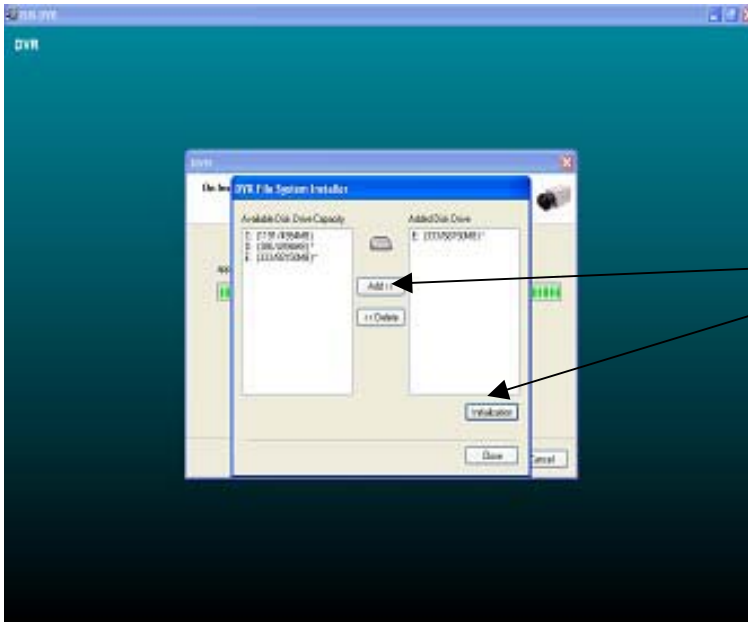
### 2.1.2 Installation Method Selection



### 2.1.3 Installing Drivers



### 2.1.4 DVR File System Installation



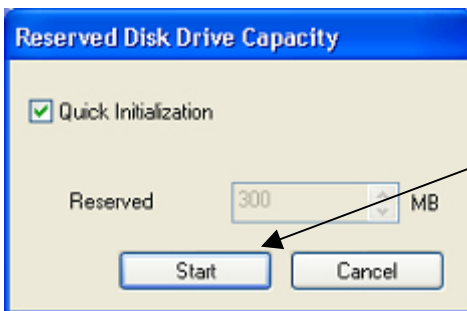
Definition: Occupying disk capacity to record data

#### Steps

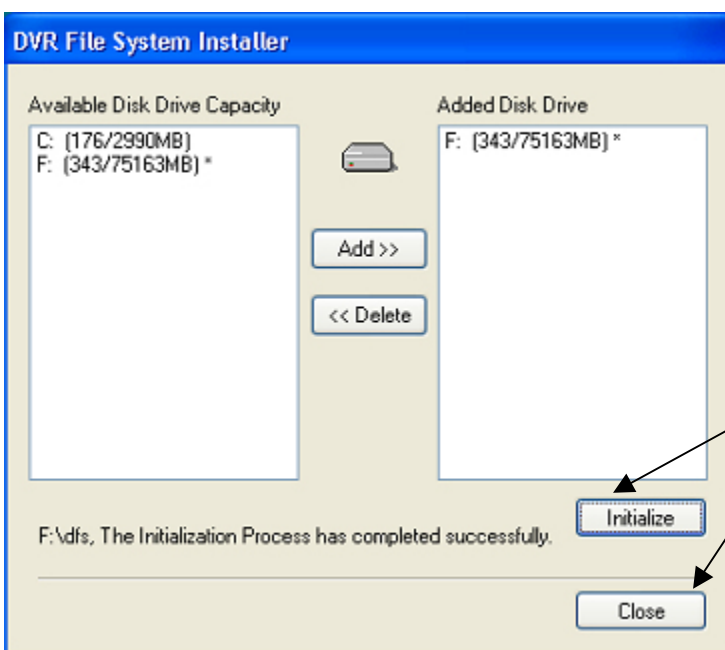
1. Select drives from "Available Disk Drive Capacity"
2. Click "Add".
3. Click "Initialization".

#### Caution

1. Be very careful not to add "C Drive", for it is used for O/S and DVR software.
2. HDD has to be initialized to record data.



Selecting "Quick Initialization" will lead to the initialization of entire disk capacity added. Otherwise, put in desirable number to initialize. Note that the number cannot exceed total capacity added.



Initialization process will be performed automatically. Click "Close" upon completion.

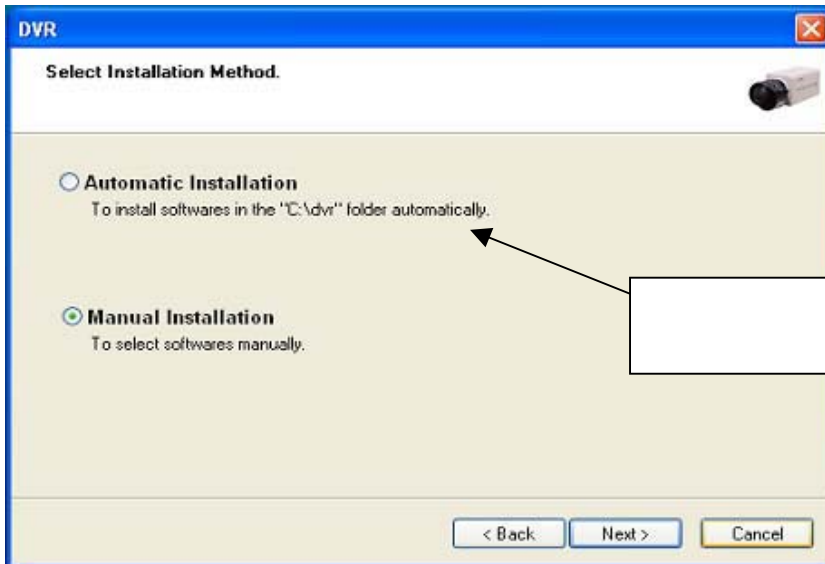
### 2.1.5 Completion & Retry



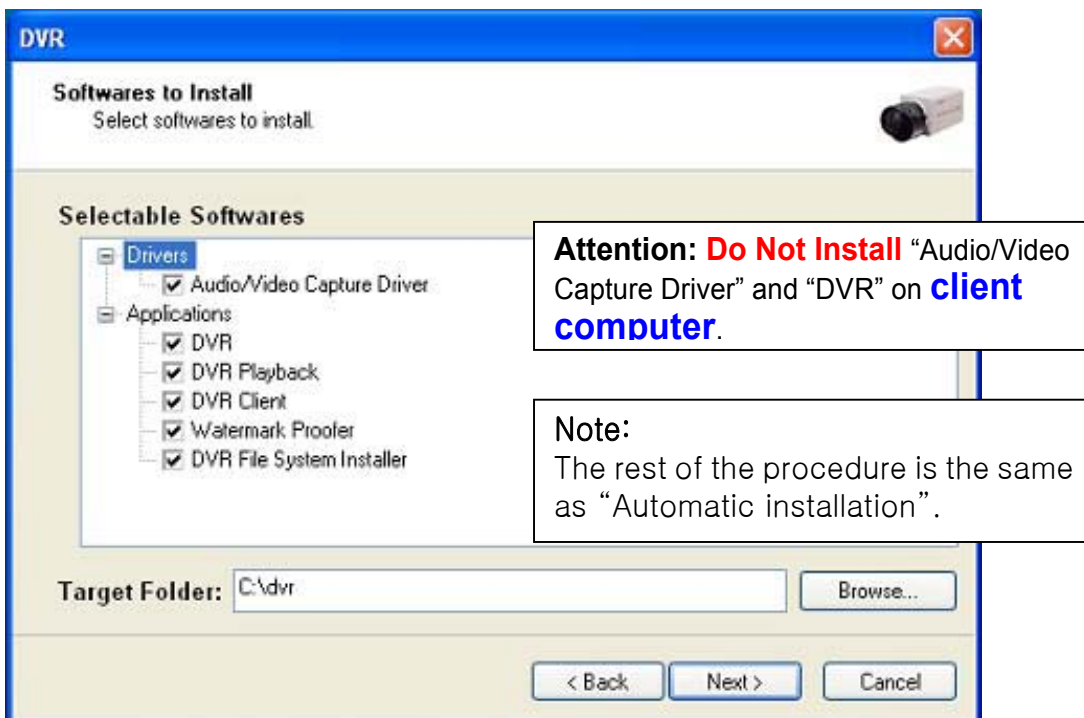
Retry the entire procedure if an error message is displayed.

## 2.2 Manual Installation

**2.2.1 Definition:** It is a method to install selected software manually. Select “Manual Installation” only in the case of “DVR Client” installation.

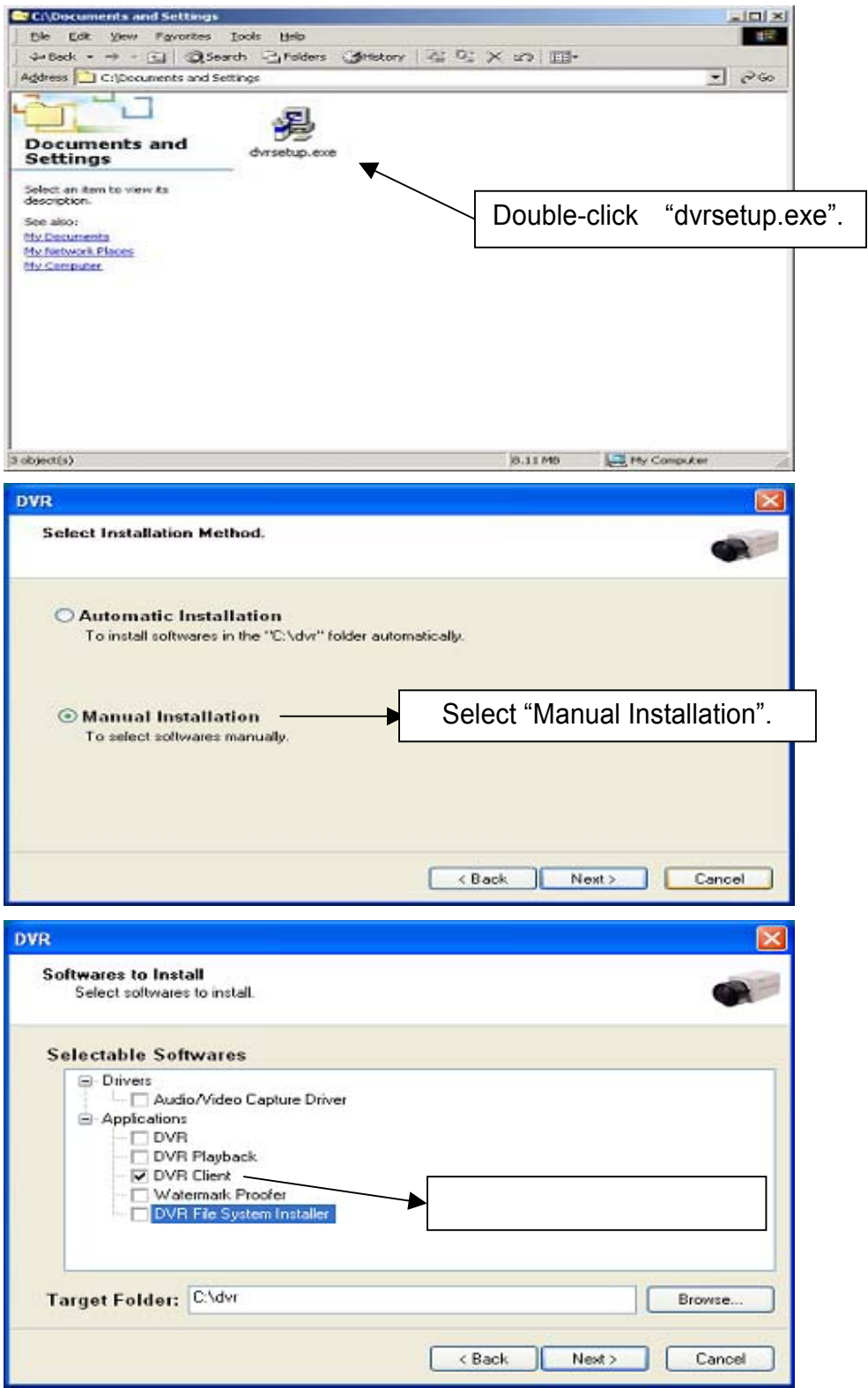


### 2.2.2 Software Selection

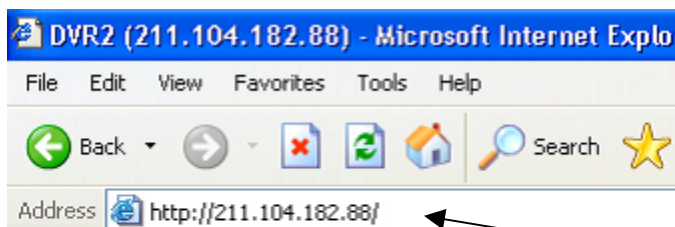


## 2.3 Remote Client Installation

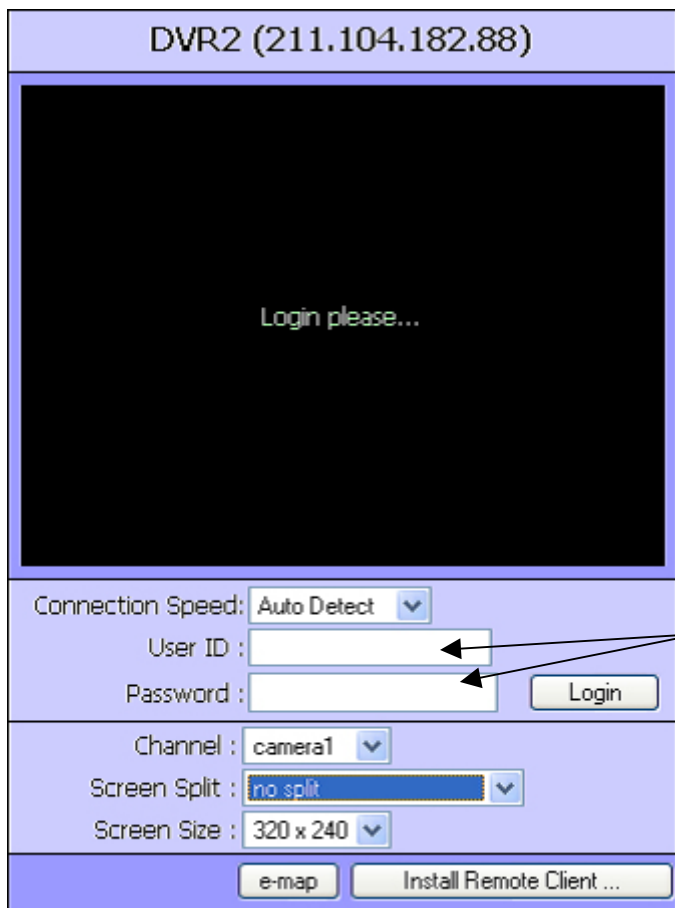
### 2.3.1 Using DVR S/W



2.3.2 Using Web Browser




1. Type in the IP address of DVR server.



2. Log in first before downloading Remote Client Program.



DVR2 (211.104.182.88)



Connection Speed:

User ID :

Password :

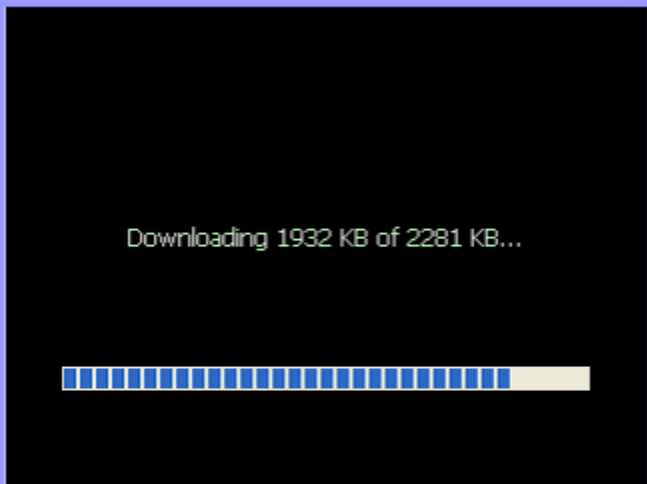
Channel :

Screen Split :

Screen Size :

3. Click the "Install Remote Client" button for downloading.

DVR2 (211.104.182.88)



Downloading 1932 KB of 2281 KB...

Connection Speed:

User ID :

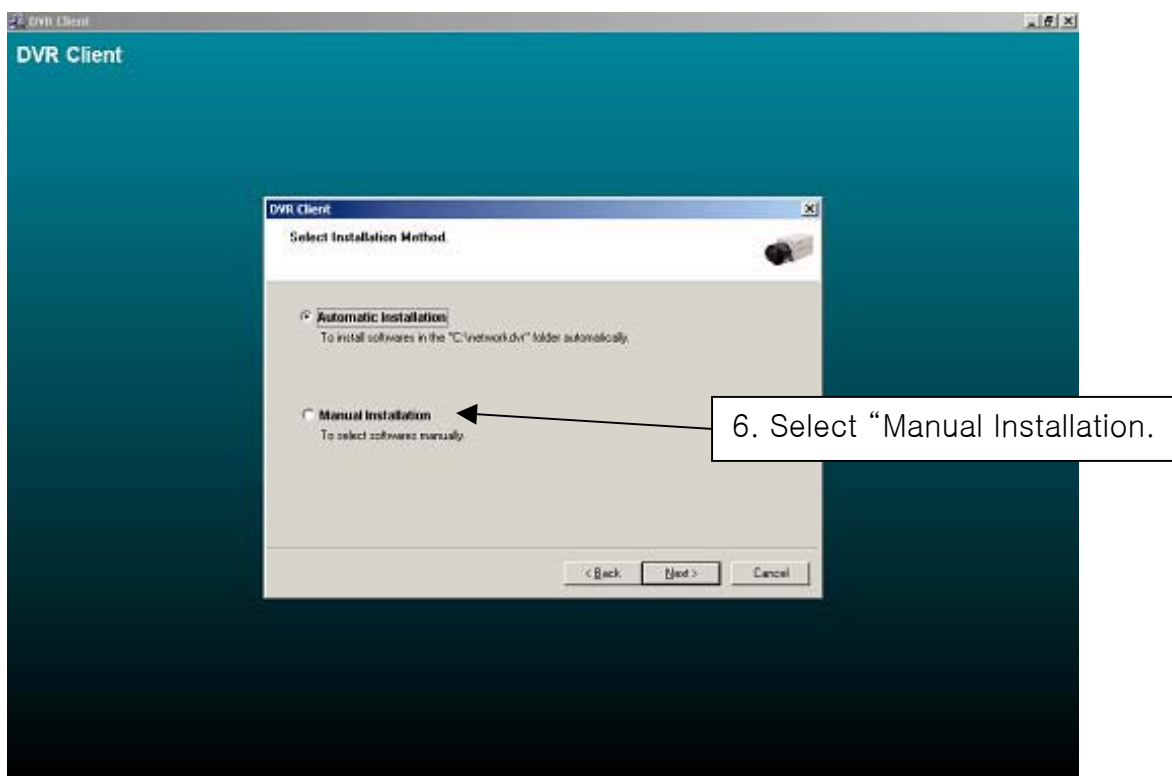
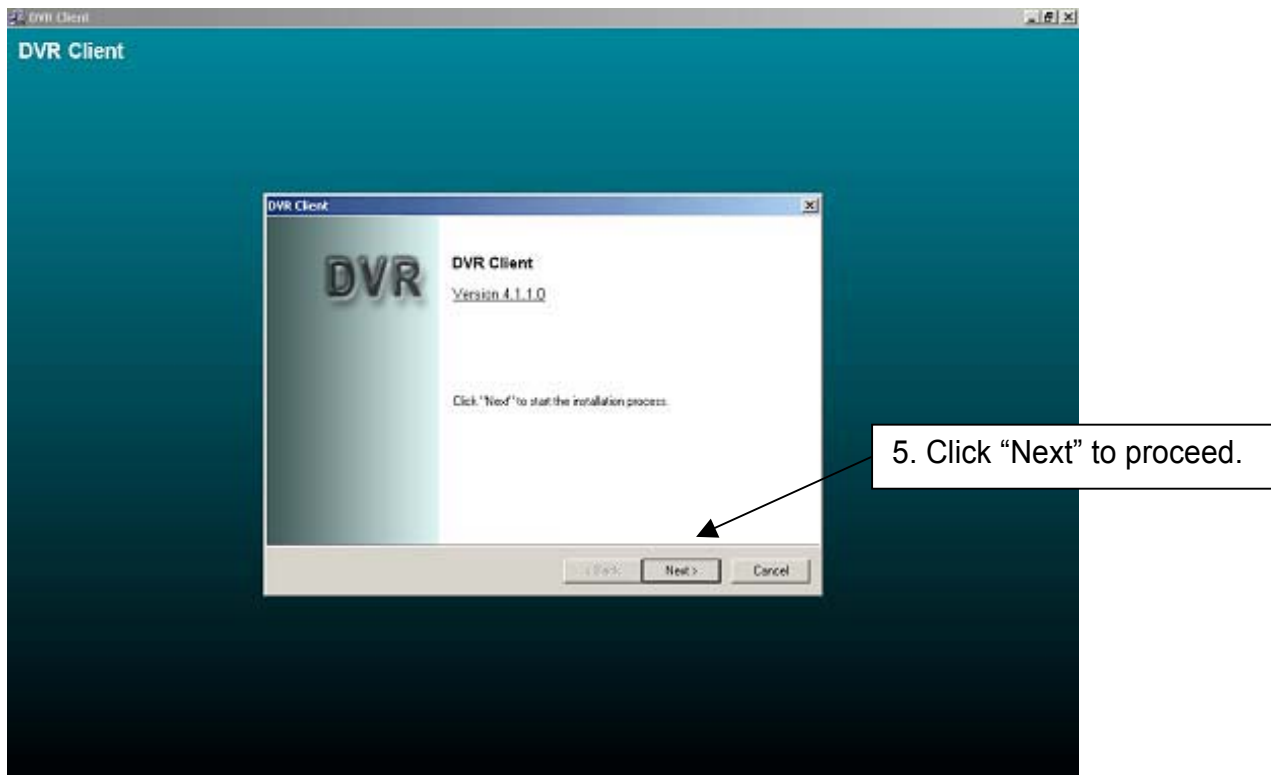
Password :

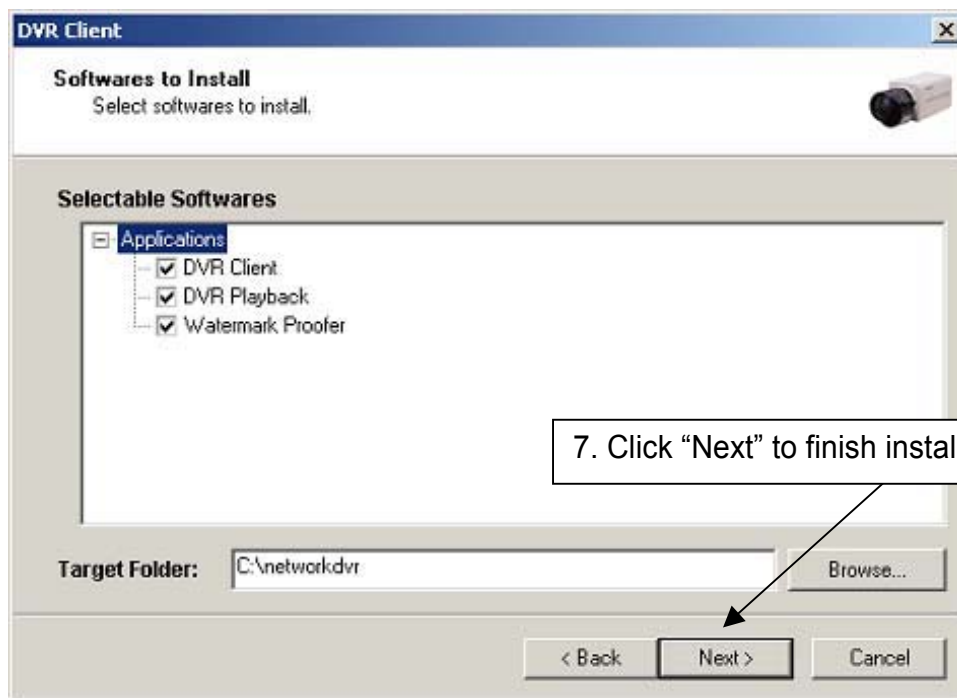
Channel :

Screen Split :

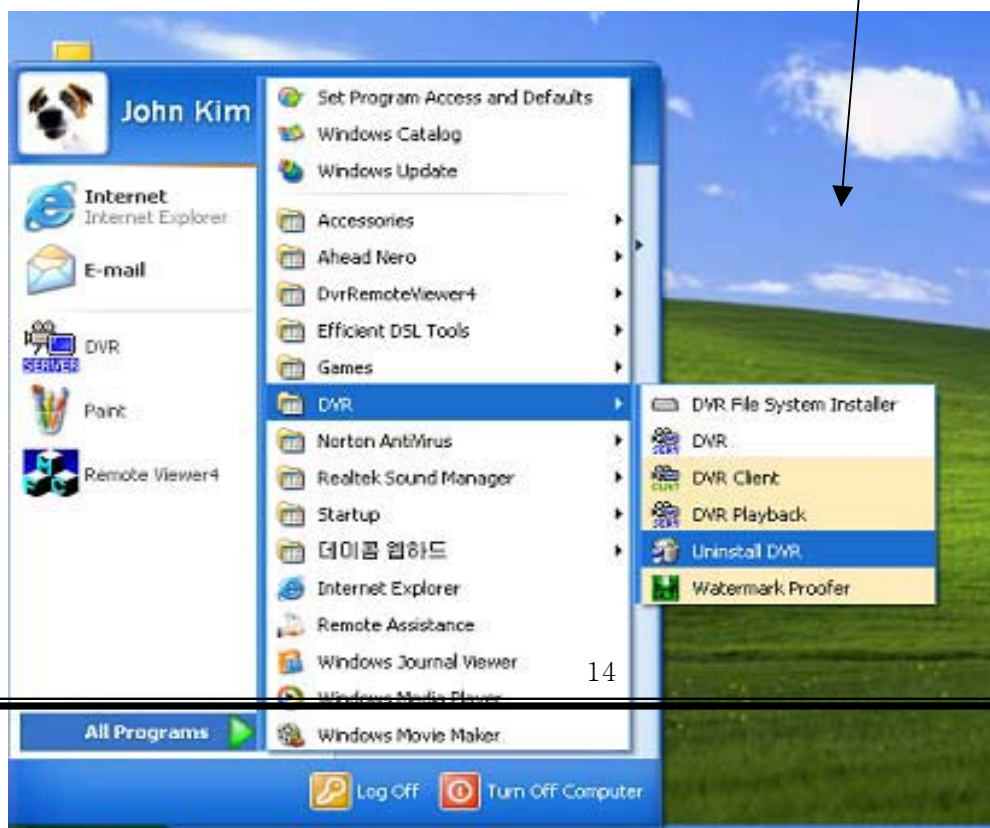
Screen Size :

4. Downloading in progress

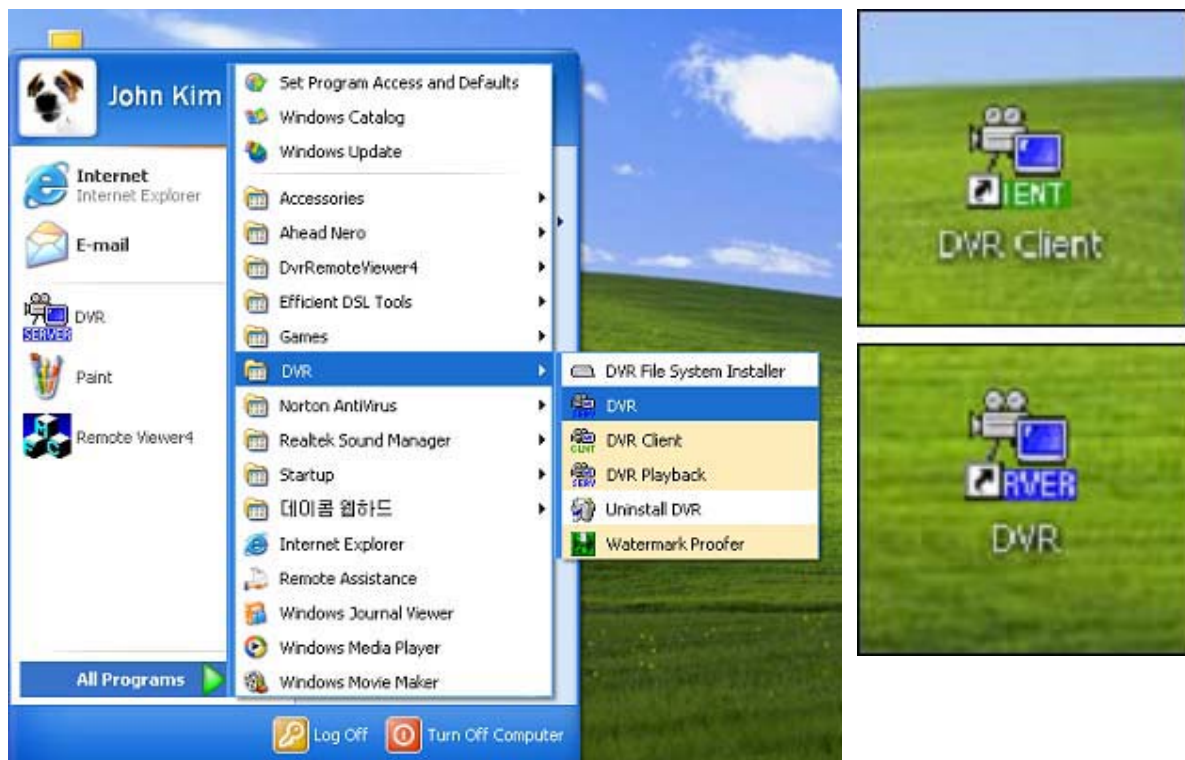




## 2.4 Uninstallation



## 2.5 Program Execution

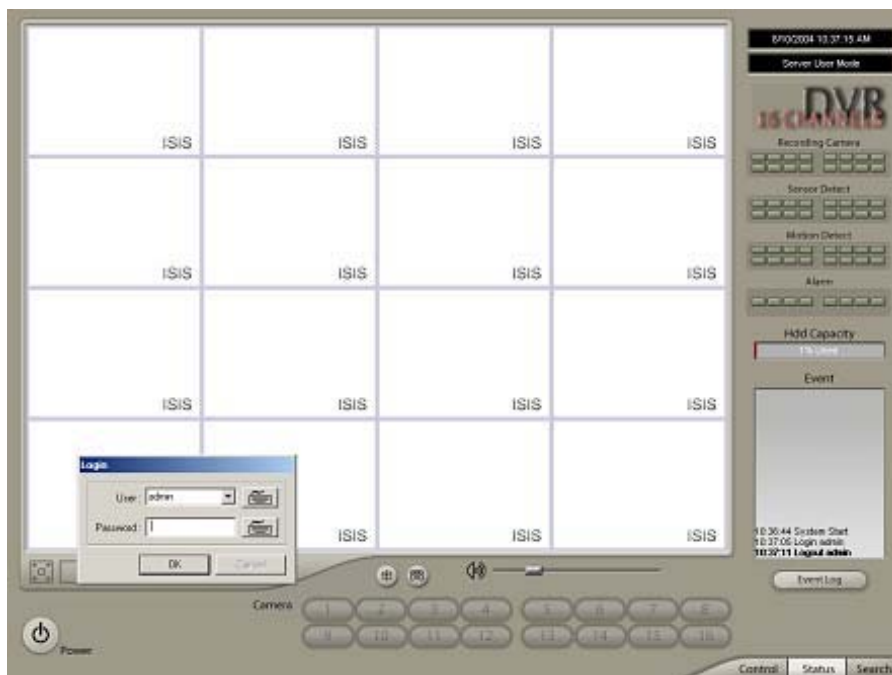


Find the icons on the desktop to execute “DVR” and “DVR Client”.  
OR  
Find “DVR” under “All Programs”.

## CHAPTER 3

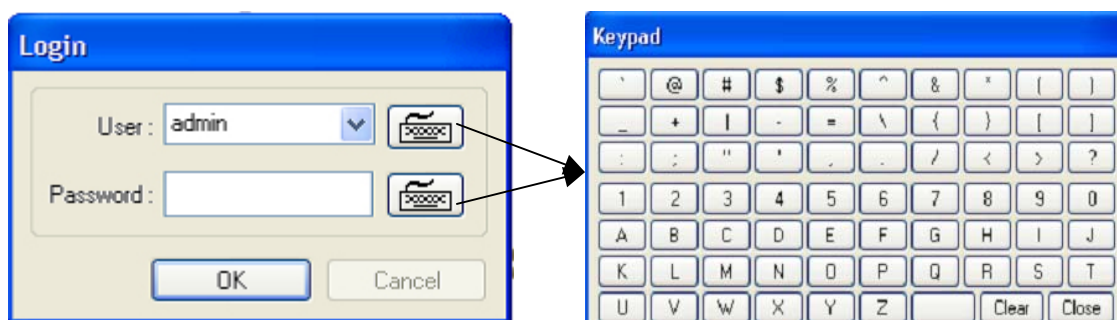
### Main System Application (Control)

#### 3.1 Startup Screen



The above screen will appear as DVR system starts.

#### 3.2 Login



The default values for User and Password are “admin” and “no password”. Click “OK” to execute DVR system. To give “admin” a password and to create new users, certain configurations are required (Setup/User). Only “admin” and users with appropriate authorization have access to the Setup menu.

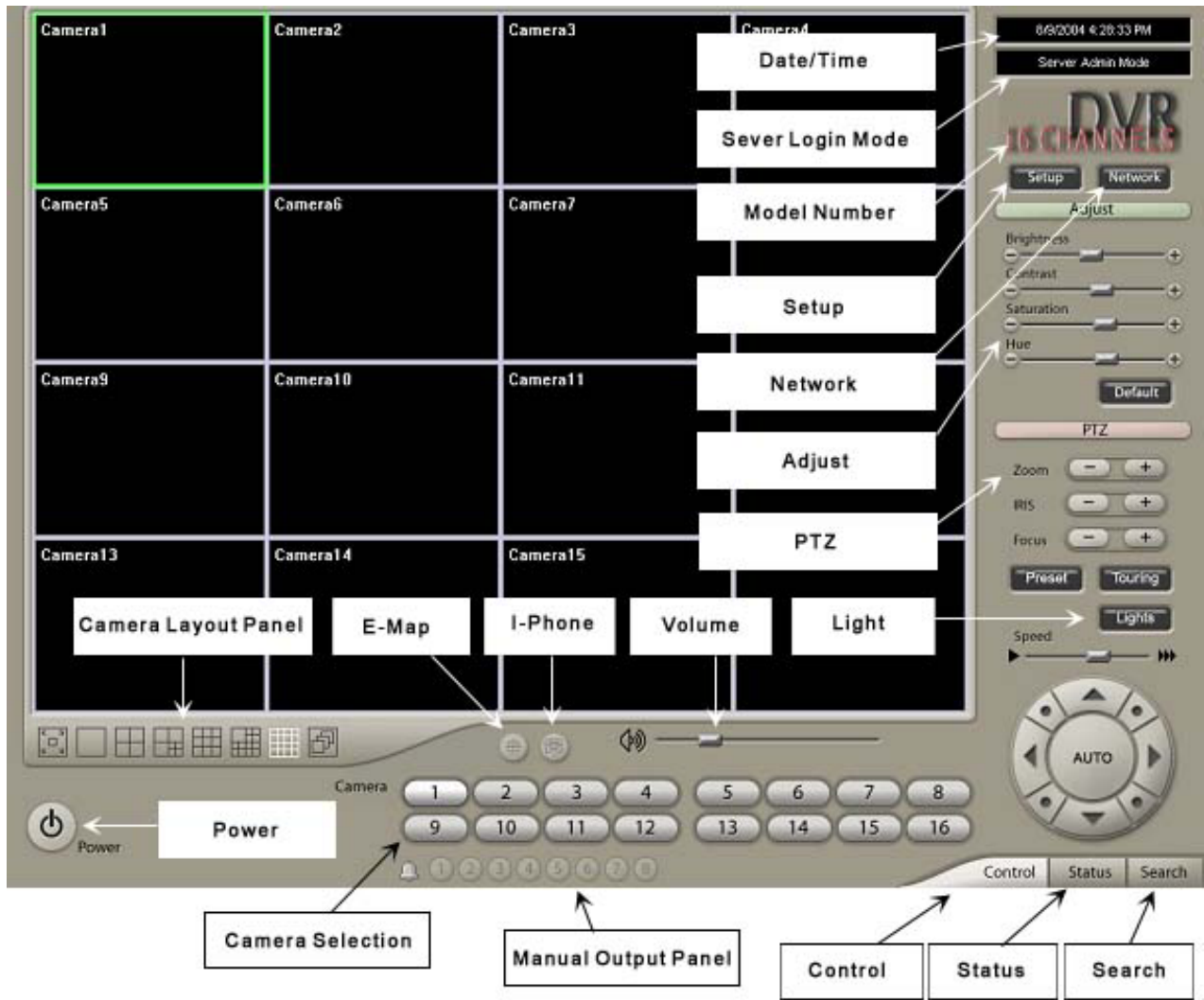
Note: Virtual keypad is available wherever typing is required.

3.3 Exit/Logout



To end DVR system, select “Exit” and type in password.

3.4 Control Screen





## 3.5 Setup

### 3.5.1 System

**Setup**

System | Device | Event | Schedule | Network | User

**System Information**

Name :

Admin. Name :

Telephone No. :

**System Power Management**

Reserved Time :

☒ Disable

☐ Shutdown

☐ Reboot

☐ Exit & Turn off Computer

**Auto-switching Interval**

1 Sec.  10 Sec.

**E-map / TV-OUT**

**On-screen Display**

**Text Inserter**

**Hard Disk Usage**

☐ Once ☒ Recycle

**I-Phone**

☐ Use I-Phone

Version 4.1.0.0 (Built 2005.3.18)

#### 3.5.1.1 System Information

**System Information**

Name :

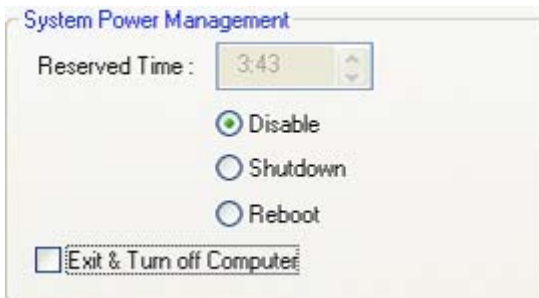
Admin. Name :

Telephone No. :

Create a DVR name and put in administrator information. They will be displayed on outgoing e-mails.

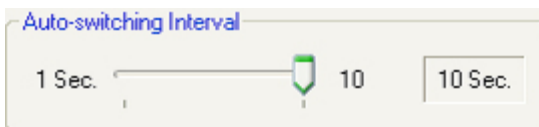


### 3.5.1.2 System Power Management



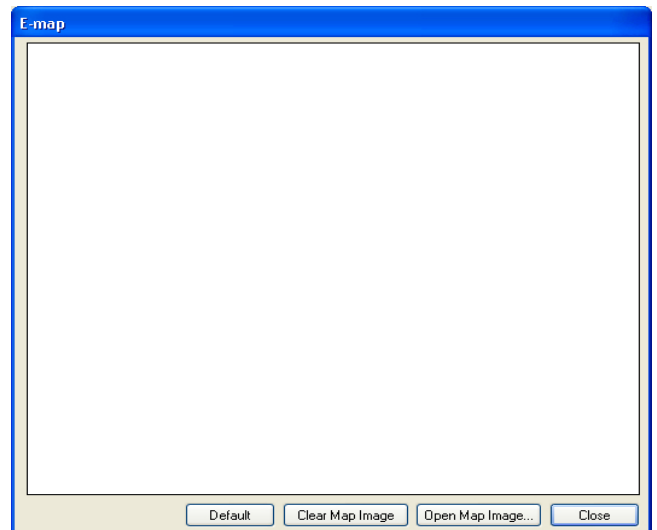
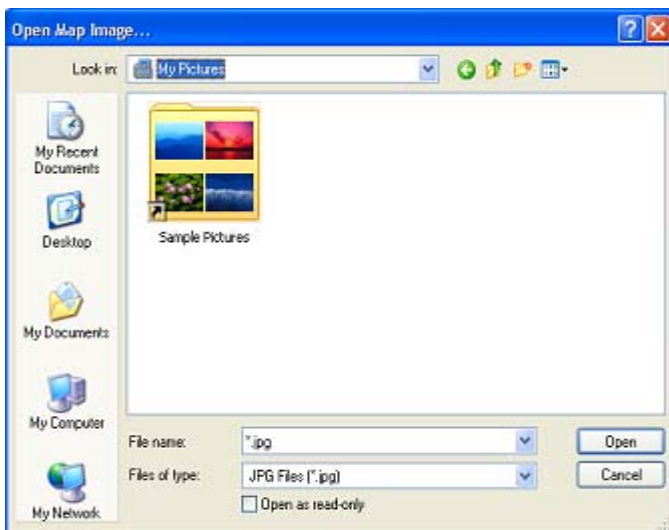
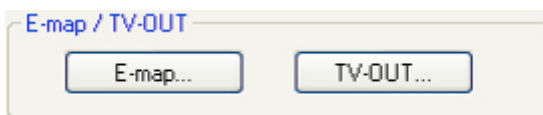
- Reserved time: Time set to shut down or to reboot computer
- Disable: selected when System Power Management is not to be used
- Shutdown: selected when shutting down computer is required at the time set
- Reboot: selected when rebooting computer is required at the time set
- Exit & Turn off Computer: By checking the box, computer will be turned off automatically as a user exits from DVR system.

### 3.5.1.3 Auto-switching Interval

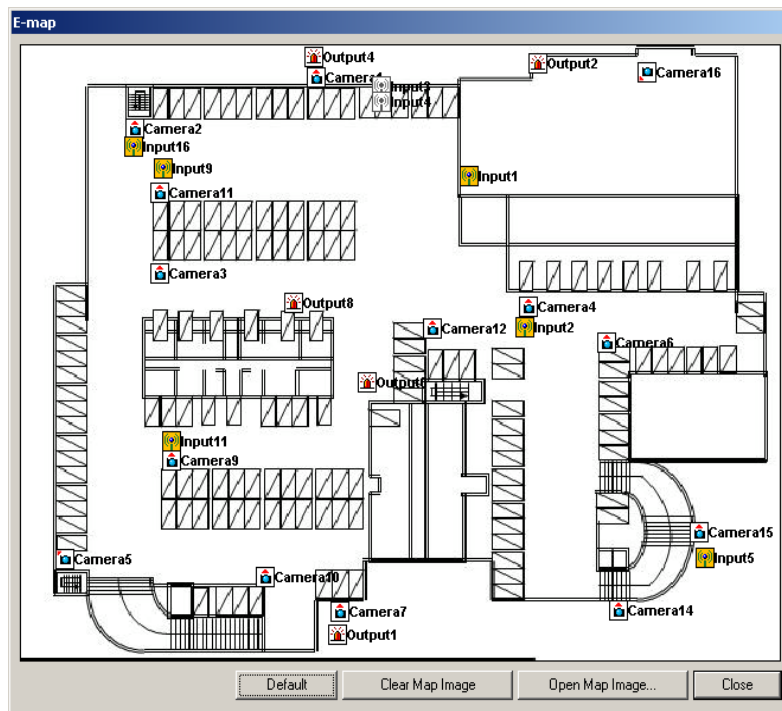
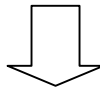
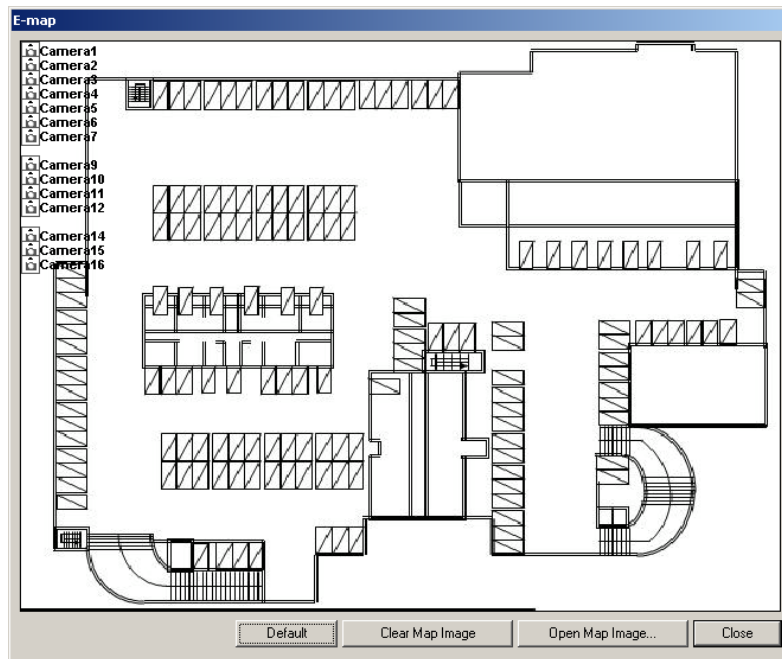


Auto-switching Interval is a function that allows Green Square around selected camera to move to the next one at the interval set.  
e.g.) Camera 1 -> 10 sec. -> Camera 2 -> 10 sec. -> Camera 3....

### 3.5.1.4 E-map



Click on the "E-map" button to design E-map.  
Click on "Open Map Image" to select an E-map image.



The above is a designed E-map sample. Drag mouse to position Camera/Input/Output and design E-map.



Click on the E-map button positioned next to the I-phone button to open E-map.  
 White Camera: Not on Recording, Yellow Camera: On Recording,

- White Input/White Output: Not Activated
- Yellow Input/Yellow Output: Activated

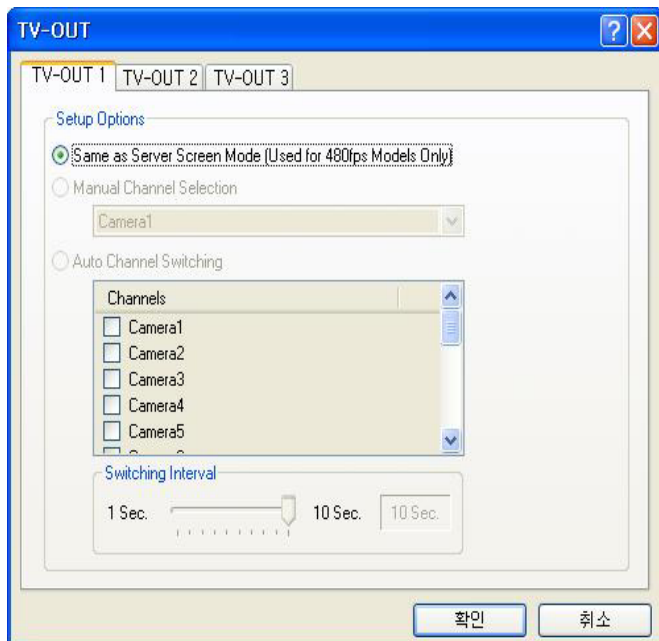
### 3.5.1.5 TV-OUT



TV-OUT is a function that sends selected cameras to a call monitor (external analog monitor). Click on the "TV-OUT" button for setup.

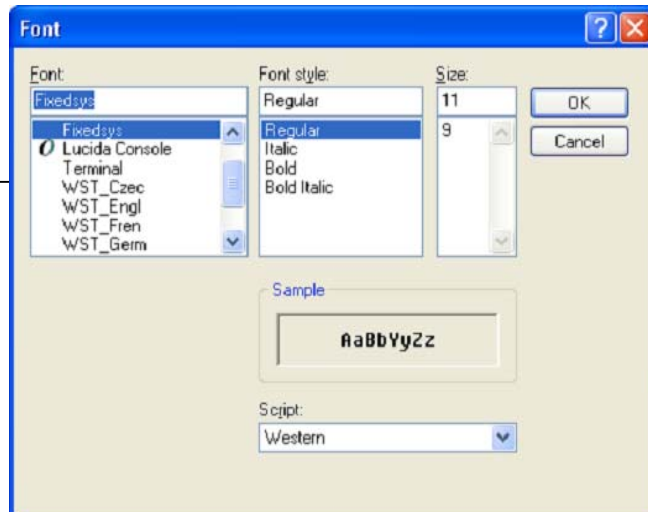
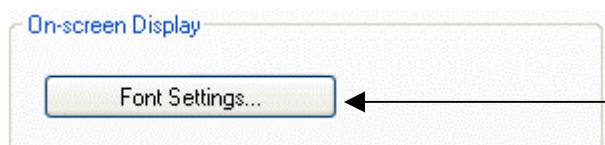
The Number of TV-Out Supported

0403	0806S	1209S	1612S	0412	0812	1612	1624D	0824D	1648	1648D
1	2	3	4	1	1	1	2	2	2	3



- The models such as 240FPS/240FPS and 480FPS/120FPS support 2 TV-OUTs. 480FPS/240FPS support 3 TV-OUTs and the rest of the models support 1.
- Setup Options:
  - Same as Server Screen Mode (For 480FPS/120FPS only) - TV-OUT Monitor displays what's on DVR server. Manual Channel Selection - Channels are selected manually. Once "Manual Channel Selection" is selected, channels can also be selected manually on Control screen by placing mouse on camera picture and clicking the right mouse.
  - Auto Channel Switching - Selected channels rotate to display at the switching interval set.
- Switching Interval: The length of time to stay at one camera

### 3.5.1.6 On-screen Display



On a camera screen, you may click one right mouse to control OSD as bellows.

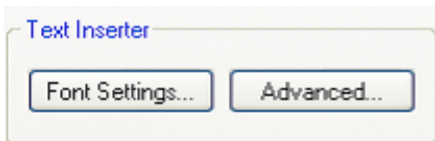
- Show Camera Names and Status: By checking it, camera names and status will be displayed on camera pictures.
- Show Motion Detection Blocks: By checking it, green motion detection blocks will be displayed on camera pictures when recording schedule is set as "M" (Setup/Schedule).
- Show Object Detection Blocks: By checking it, blue object detection blocks will be displayed on camera pictures.





Note : One right mouse click can be a very useful tool. Manual TV-out and OSD setup can be done. Additionally, instant recording can start by one click.

### 3.5.1.7 Text Inserter

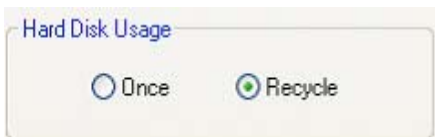


Text Inserter is a function that allows DVR system to integrate with POS machines.

Simply install "Text\_Inserter\_Plugin\_for\_POS" on DVR Server, and transactions that occur will be displayed on selected camera pictures. Transaction recording and text search are possible as well.

For more detailed installation and information, refer to Appendix 1.

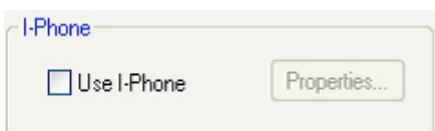
### 3.5.1.8 Hard Disk Usage



Hard Disk Usage is to select data storage method. If "Once" is selected, data will be stored up to the point where HDD reaches its maximum capacity.

If "Recycle" is selected, data will be overwritten from the point HDD reaches its maximum capacity based on "First In First Out".

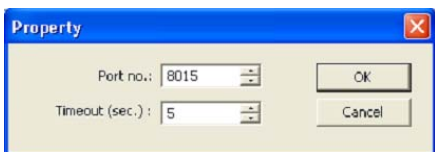
### 3.5.1.9 I-Phone



I-Phone is "Two-Way Audio Communication".

Check the box, go to Control Screen, and click on the I-Phone button for audio communication.

For more detailed I-Phone setup, refer to Appendix 2.



- Port No.: The port number for I-Phone use has to be set up. Normally the default value is good to use.
- Timeout: It indicates the maximum length of connection trial. If there is no response within the value set, call will be cancelled.



### 3.5.1.10 Version Info.

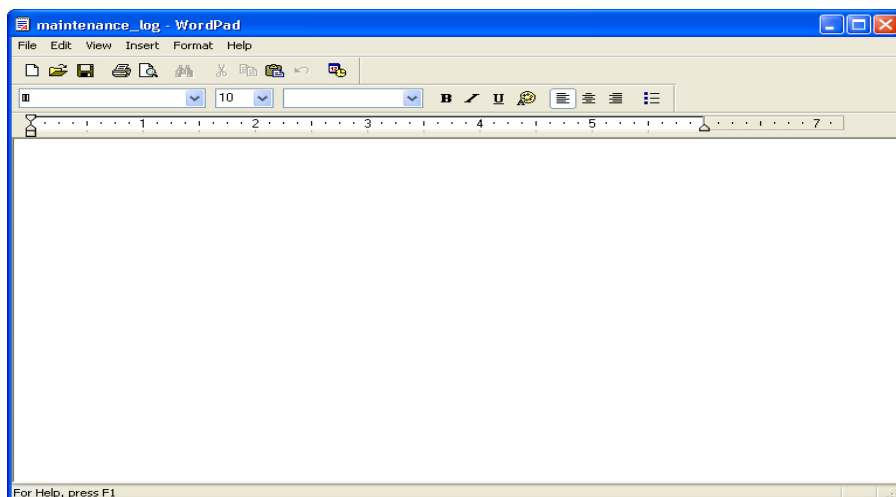
Version 4.1.0.0 (Built 2005.3.18)

- Version 4.1.1.0: version name
- Version 2005.03.18: built date

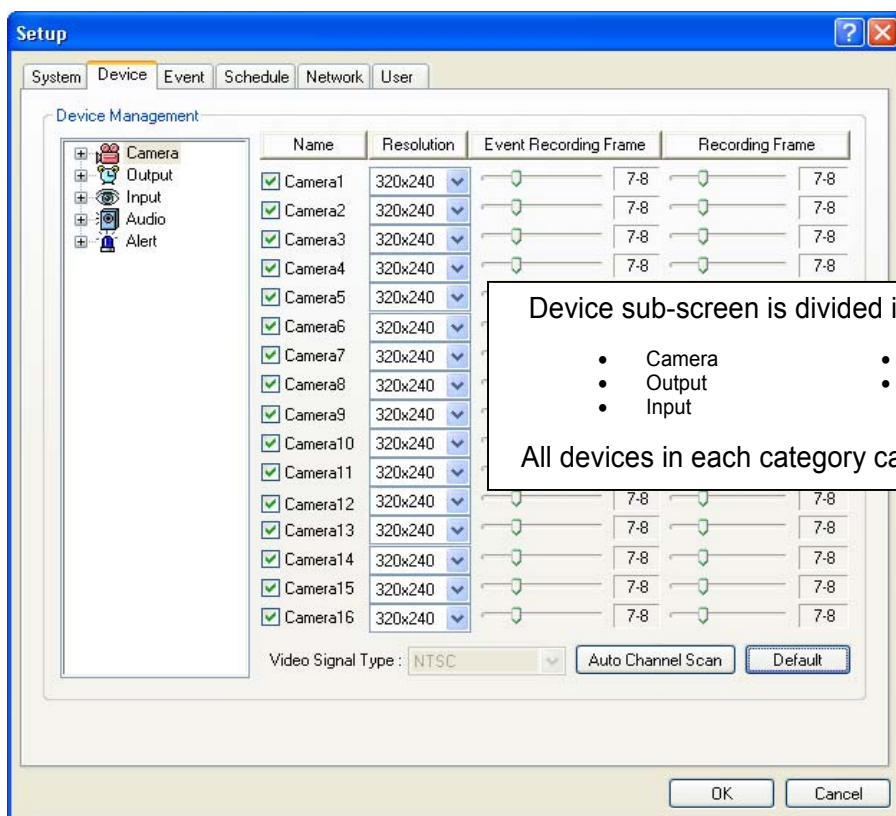
### 3.5.1.11 Maintenance Log

Maintenance Log

It is used to record and view maintenance history.



## 3.5.2 Device



Device sub-screen is divided into 5 different setup categories

- Camera
- Output
- Input
- Audio
- Alert

All devices in each category can be set up on one same page.



### 3.5.2.1 Camera

Checking the boxes will enable cameras.

Different resolutions and recording frame rates can be set up for different cameras.

- Video Signal Type: Select either NTSC or PAL.
- Auto Channel Scan: It automatically identifies all the active video channels. Make sure to always click and scan after S/W version change.
- Default: It sets "Event Recording Frame" and "Recording Frame" as default values.

Name	Resolution	Event Recording Frame	Recording Frame
Camera1	320x240	7-8	7-8
Camera2	320x240	7-8	7-8
Camera3	320x240	7-8	7-8
Camera4	320x240	7-8	7-8
Camera5	320x240	7-8	7-8
Camera6	320x240	7-8	7-8
Camera7	320x240	7-8	7-8
Camera8	320x240	7-8	7-8
Camera9	320x240	7-8	7-8
Camera10	320x240	7-8	7-8
Camera11	320x240	7-8	7-8
Camera12	320x240	7-8	7-8
Camera13	320x240	7-8	7-8
Camera14	320x240	7-8	7-8
Camera15	320x240	7-8	7-8
Camera16	320x240	7-8	7-8

Video Signal Type: NTSC Auto Channel Scan Default

OK Cancel

[Camera]

Double-click on "Camera" for more individual Camera setup.

Select recording picture quality.

- Pre-alarm (max. 10 sec.): Length of time to be recorded before event
- Post-alarm (max. 60 sec.): Length of time to be recorded after event

Camera1

Name: Camera1

Recording Quality: Medium

Pre-alarm: 10 Sec.

Post-alarm: 10 Sec.

Motion Detection

Sensitivity: Medium

Object Detection: People Count

Mosaic

Use Mosaic: No

Data Retain

Use Data Retain: No

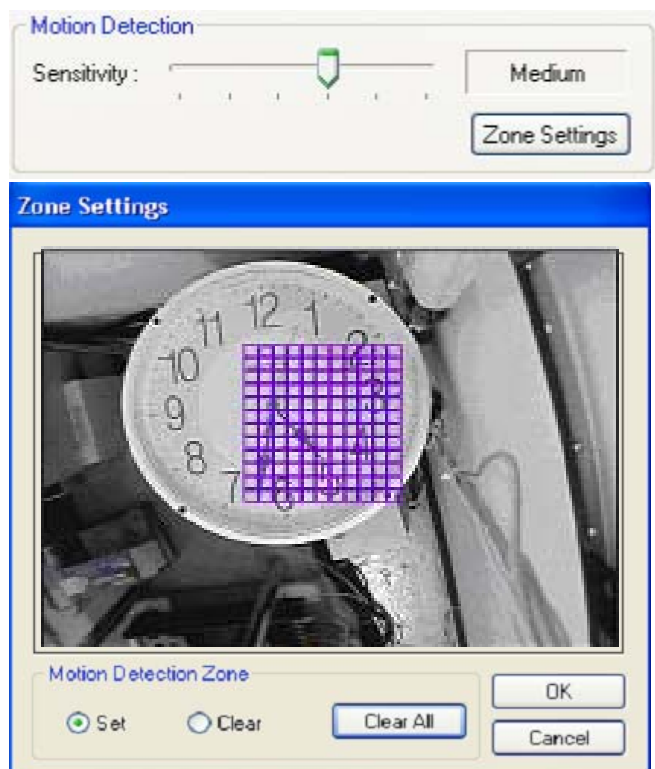
Model Name: AECD2000 / Network Korea Co., Ltd.

Camera ID: 0

Using Previous State: 5 Sec.

Apply All

OK Cancel

**[Motion Detection]**

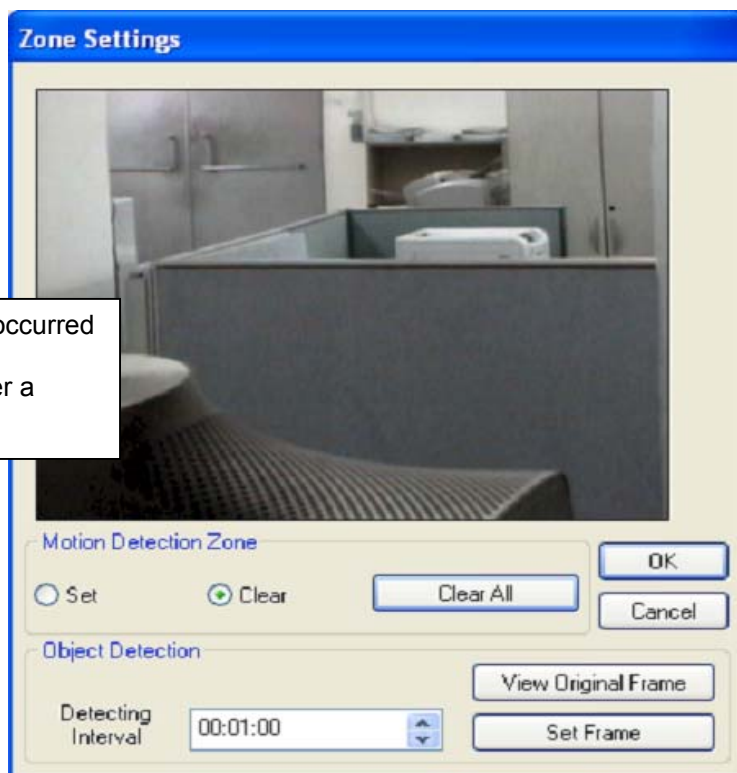
DVR system is designed to have unlimited motion detection zones and to have different motion detection sensitivity levels.

**Zone Settings:**

1. Select "Set", drag mouse to set motion detection zones and click "OK".
2. Select "Clear" to clear certain areas inside motion detection zones.
3. Click on "Clear All" to clear all the motion detection zones.

**[Object Detection]**

It is a function that marks all the changes occurred from the original scene.  
DVR will detect new & missing objects after a certain period of time (detecting interval).





Object Detection Blocks

Click the right mouse and select "Clear Object Detection Blocks" to remove all the blocks.

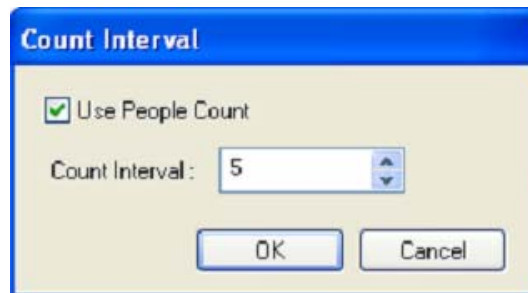
#### How to Set up:

- Tick the "Object Detection" box and click on "Zone Settings".
- Drag the mouse to select object detection zone (same as "Motion Detection").
- Click on the "Set Frame" button to select original (default) image.
- Go to "Detection Interval" and determine when to mark new object after its pause.
- Go to "Setup/Schedule" and select "M"
- Go to the "Control Screen" and find the red-squared "Object Detection" symbol.
- One click on the "View Original Frame" button will display original image set.
- Click it again to reactivate the "Set Frame" button.



## [People Counter]

It is a function that counts people coming in and out of a certain place.

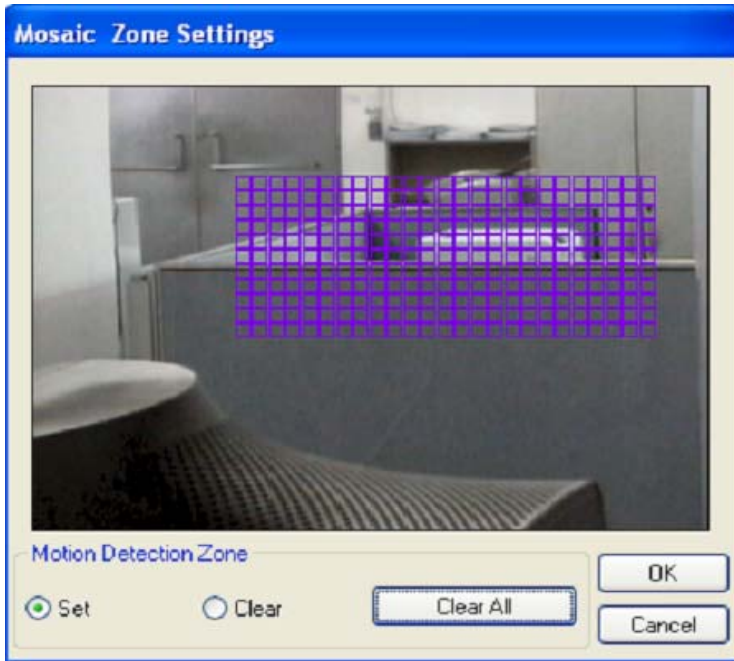


### How to Set up:

1. Click on the "People Count" button.
  2. Tick the "Use People Count" box.
  3. Set "Count Interval".
  4. Go to "Zone Settings and set "People Counting Zone".
  5. Go to Setup/Schedule and select "M".
  6. Go to the "Control Screen" and find the word, "Counting".
- Caution: "Object Detection" and "People Counter" cannot be used simultaneously.
  - Note: DVR will count the number from 0 again by selecting "Reset".

**[Mosaic]**

It is a function that veils restricted areas to keep regular users uninformed.

**How to Set up:**

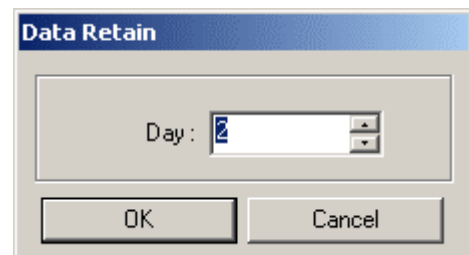
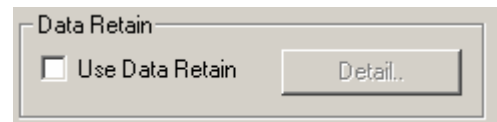
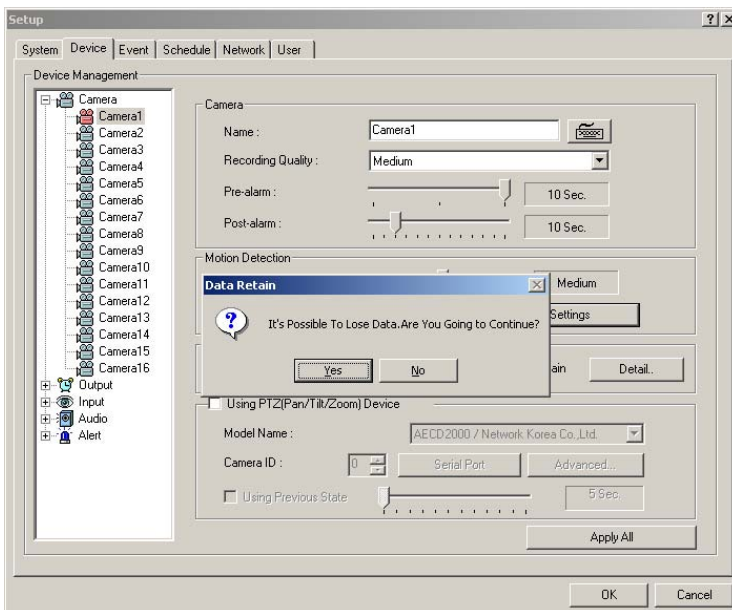
- Tick the "Use Mosaic" box.
- Click on "Mosaic Zone Settings".
- Set "Mosaic Zone".
- Go to the "Control Screen" and find veiled areas.

**Note**

1. While using Mosaic, "Save" or "Print" cannot be performed.
2. To see unveiled area, logging in as "Admin" or "Admin Mode" is required.

**[Data Retain]**

It is a function that retains data only for the period set. For example, if 10 days is set, DVR will delete all previous data before 10 days regardless of the capacity remaining in HDD.



## [PTZ Camera Setup]

☒ Using PTZ(Pan/Tilt/Zoom) Device

Model Name : AECD2000 / Network Korea Co.,Ltd.

Camera ID : 0 Serial Port Advanced...

☐ Using Previous State 5 Sec.

When using a PTZ camera, check the box and select a model name. DVR system supports nearly 40 different protocols.

- Camera ID: Leave it as it is if only one PTZ camera is used. Otherwise, give each camera a different number.
- Using Previous State: Tick the box and set time period to move camera back to initial position after a certain period of time.

Select the port used for PTZ camera.

Bit per Second: It is 9600 for most of PTZ cameras. But a few can have different values. Refer to camera manual.

- Apply All: The same settings will be applied to the rest of the cameras by clicking on "Apply All".

**Serial Port Settings**

Port: COM1

Bit per Second: 9600

Data Bits: 8

Parity: None

Stop Bits: 1

Flow Control: ☐ DTR/DSR ☐ RTS/CTS ☐ XON/XOFF

Ok Cancel

## [Preset & Touring]

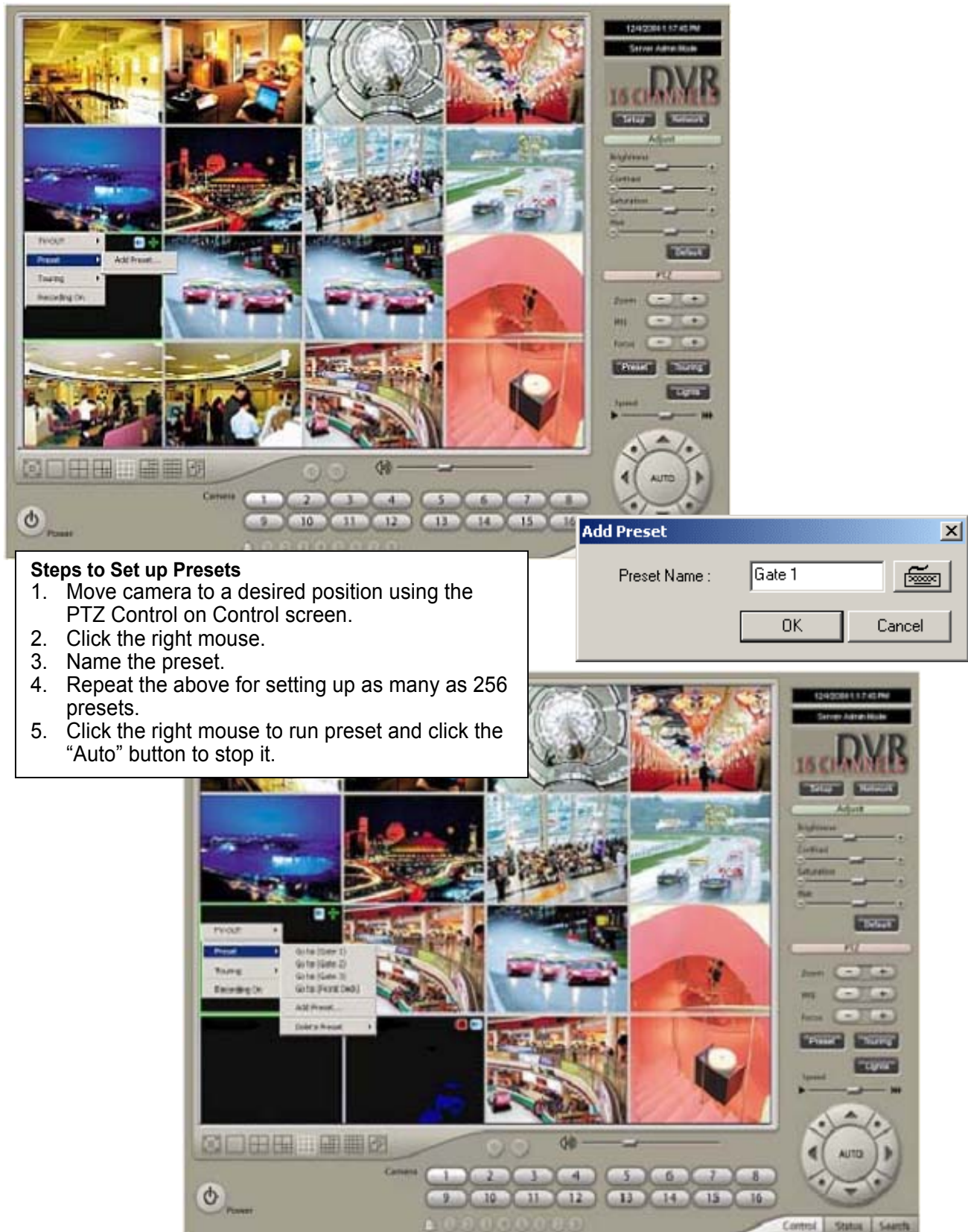


Either click the right mouse on camera picture or click on the Preset (Touring) button for Preset (Touring) setup and use.



## [Preset]

"Preset" is a function that enables a camera to move from one position to another automatically.



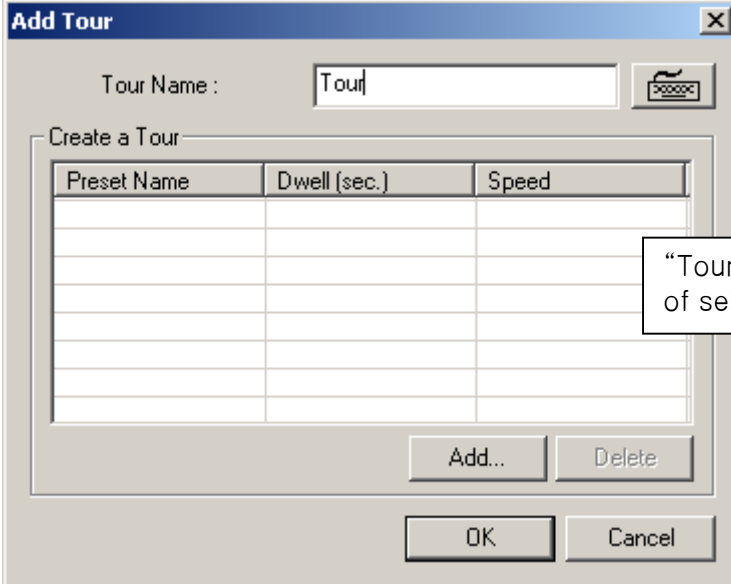
The screenshot displays the DVR control interface with a 16-channel video grid. The interface includes a top status bar with the date and time (12/4/2004 1:17:45 PM) and the text 'Server Admin Mode'. Below this, there are buttons for 'Setup', 'Monitor', and 'Adjust'. The 'Adjust' section contains sliders for Brightness, Contrast, Saturation, and Hue, along with a 'Default' button. The 'PTZ' section includes buttons for 'Zoom', 'Pan', 'Tilt', 'Roll', 'Preset', 'Tracking', 'Speed', and 'Auto'. The 'Preset' button is highlighted. The video grid shows various scenes, including a large hall, a stage, and a car race. A context menu is visible over one of the video channels, showing options like 'Preset', 'Tracking', 'Recording On', 'Add Preset...', and 'Delete a Preset...'. The 'Add Preset' dialog box is open, showing a text field for 'Preset Name' with the value 'Gate 1' and buttons for 'OK' and 'Cancel'.

**Steps to Set up Presets**

1. Move camera to a desired position using the PTZ Control on Control screen.
2. Click the right mouse.
3. Name the preset.
4. Repeat the above for setting up as many as 256 presets.
5. Click the right mouse to run preset and click the "Auto" button to stop it.



### [Touring]



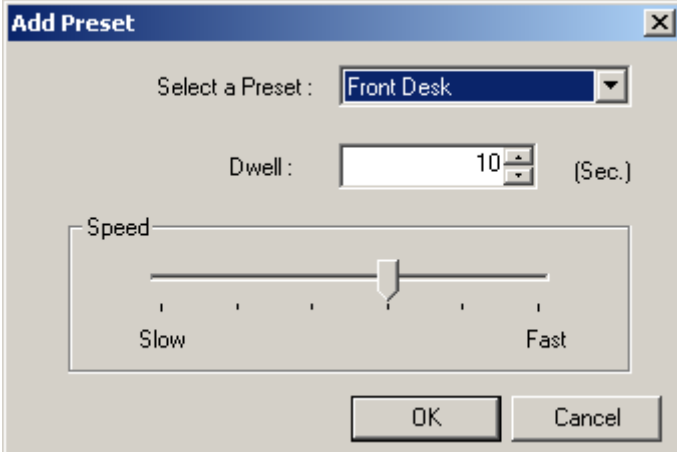
The "Add Tour" dialog box has a title bar with a close button. It contains a "Tour Name:" label followed by a text box containing the word "Tour" and a small icon button. Below this is a section titled "Create a Tour" containing a table with three columns: "Preset Name", "Dwell (sec.)", and "Speed". The table has five empty rows. At the bottom of the table are "Add..." and "Delete" buttons. At the very bottom of the dialog are "OK" and "Cancel" buttons.

Preset Name	Dwell (sec.)	Speed

"Touring" is a function that enables a group of selected presets to work repeatedly.

#### Steps to Setup a Tour

1. Click the right mouse.
2. Name the tour.
3. Click on "Add".
4. Select a preset.
5. Click "OK".
6. Repeat the above to have more than 1 preset in the tour.
7. Click the right mouse to run the tour.



The "Add Preset" dialog box has a title bar with a close button. It contains a "Select a Preset:" label followed by a dropdown menu showing "Front Desk". Below this is a "Dwell:" label followed by a text box containing "10" and a "(Sec.)" label. Below the dwell field is a "Speed" label and a horizontal slider control. The slider has tick marks and is labeled "Slow" on the left and "Fast" on the right. At the bottom are "OK" and "Cancel" buttons.

- Dwell: The length of time that camera will pause before moving to the next preset.
- Speed: Moving speed for selected preset.

Add Tour

Tour Name : Tour

Create a Tour

Preset Name	Dwell (sec.)	Speed
Front Desk	10	3
Gate 1	10	3
Gate 2	10	3
Gate 3	10	3

Add...

Delete

OK

Cancel

12/4/2004 1:17:45 PM

Server Admin Mode

DVR

16 CHANNELS

Setup Network

Adjust

Brightness

Contrast

Saturation

Hue

Default

PTZ

Zoom

IRIS

Focus

Preset Touring

Speed

AUTO

Control Status Search

TV-OUT

Preset

Touring

Recording On

Run (Tour)

Stop Touring

Add Tour...

Delete Tour

Power

Camera

1 2 3 4 5 6 7 8

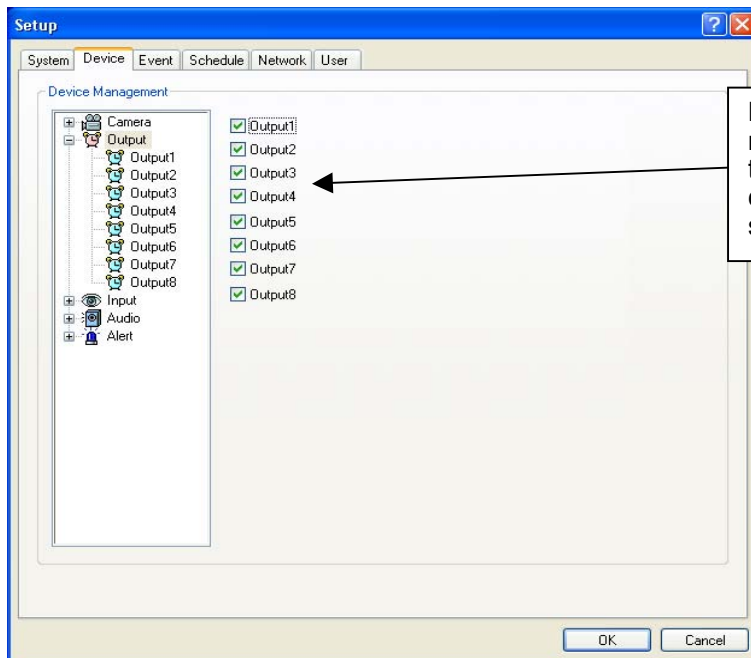
9 10 11 12 13 14 15 16

1 2 3 4 5 6

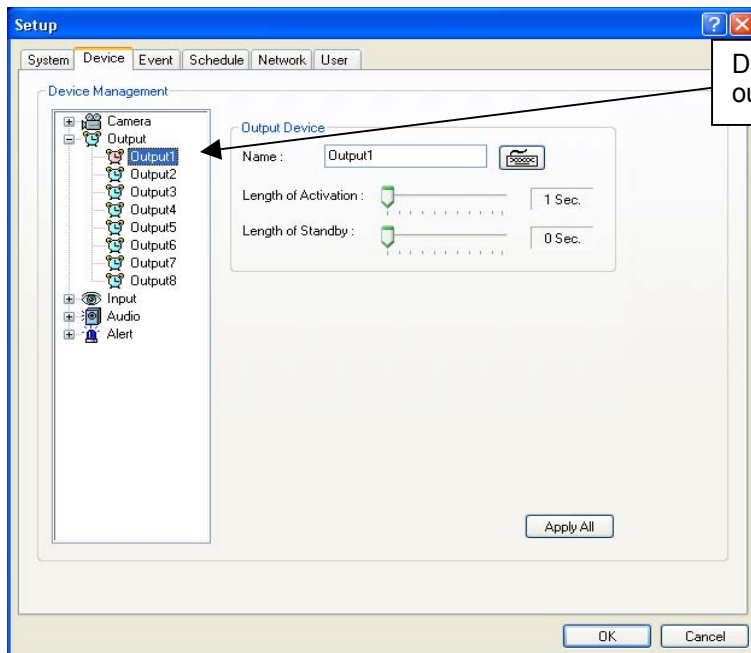
Advanced PTZ setup can be done by one right mouse click. Make sure that the PTZ camera to set up supports advanced PTZ control functions first.



### 3.5.2.2 Output Device



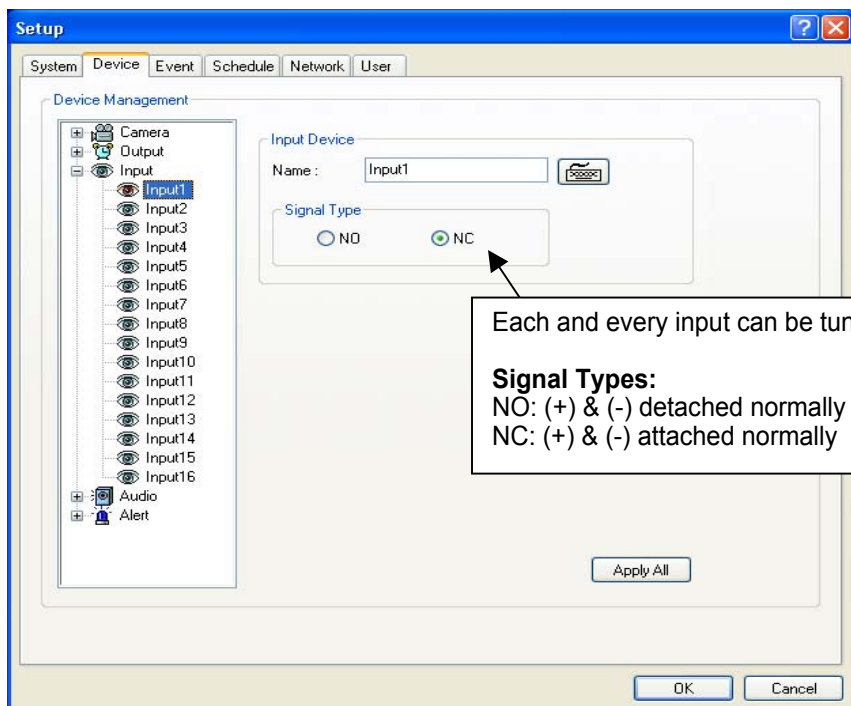
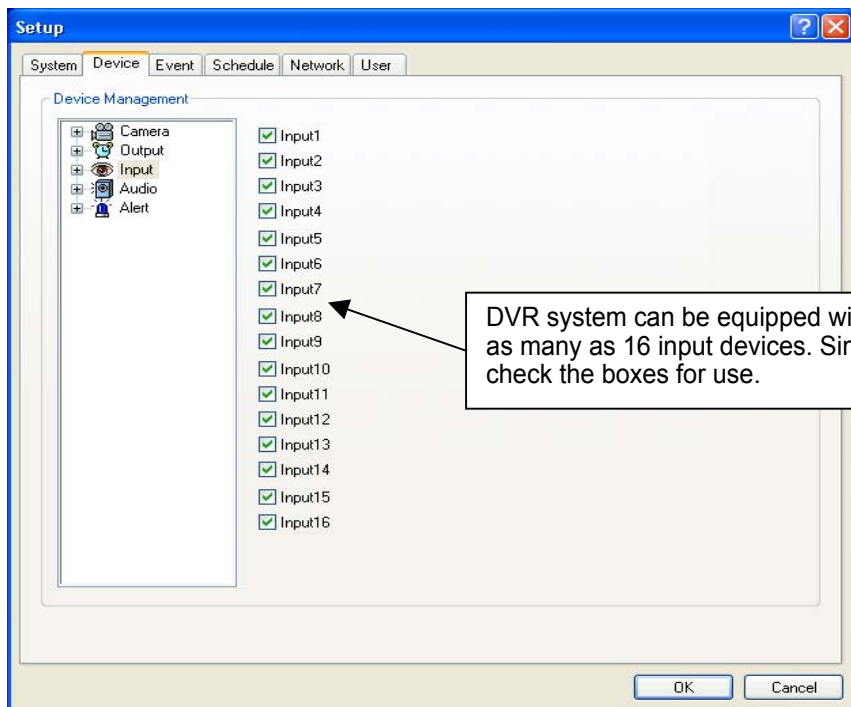
DVR system can be equipped with as many as 8 output devices. Simply check the boxes for use. In addition, outputs can be manually activated from Control screen (Manual Alarm).



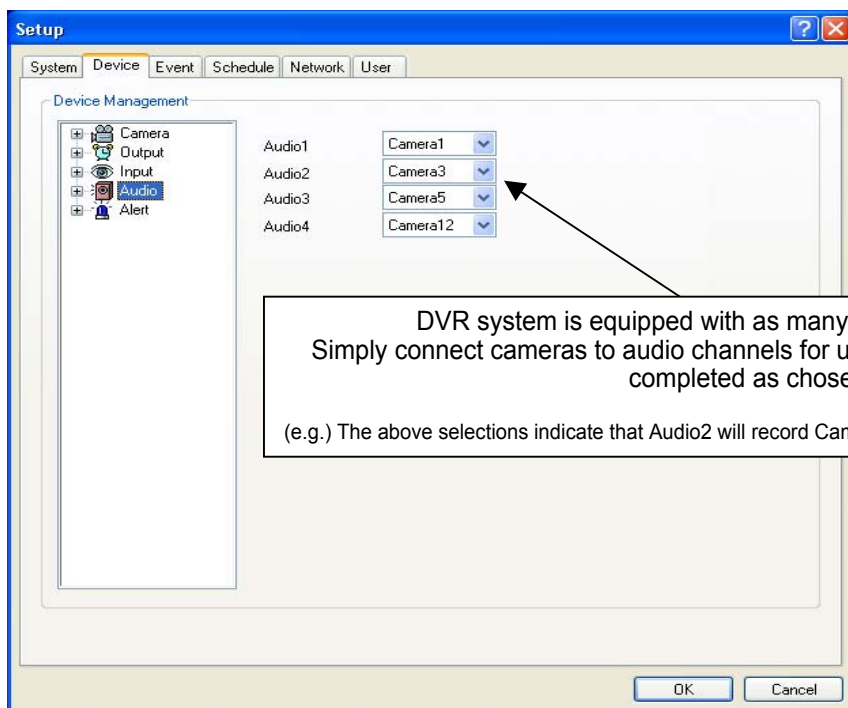
Double-click on "Output" for individual output setup.

- Name: Output device name.
- Length of Activation: The length of output activation (1–60 sec.).
- Length of Standby: The length of output deactivation until reactivation (0–60 sec.).
- Apply All: The same settings will be applied to the rest of the output devices.

### 3.5.2.3 Input Device

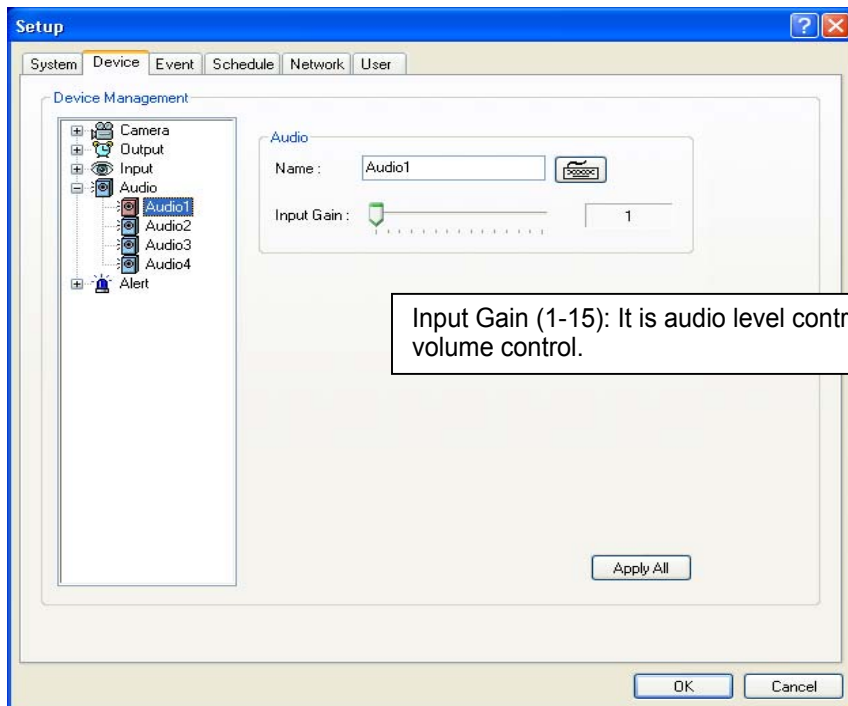


### 3.5.2.4 Audio



DVR system is equipped with as many as 8 audio channels.  
Simply connect cameras to audio channels for use, and audio recording will be completed as chosen.

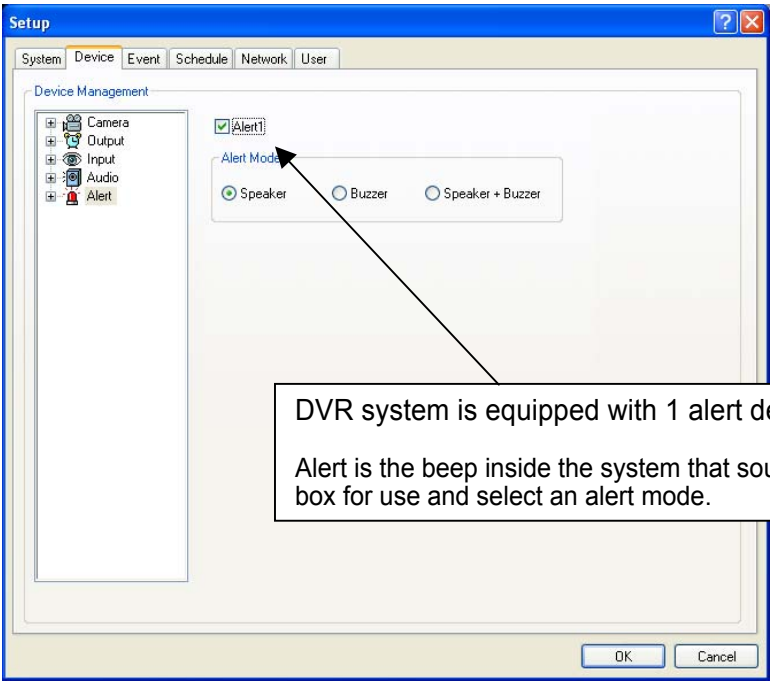
(e.g.) The above selections indicate that Audio2 will record Camera 3, Audio3 will record Camera5, etc.



Input Gain (1-15): It is audio level control similar to volume control.

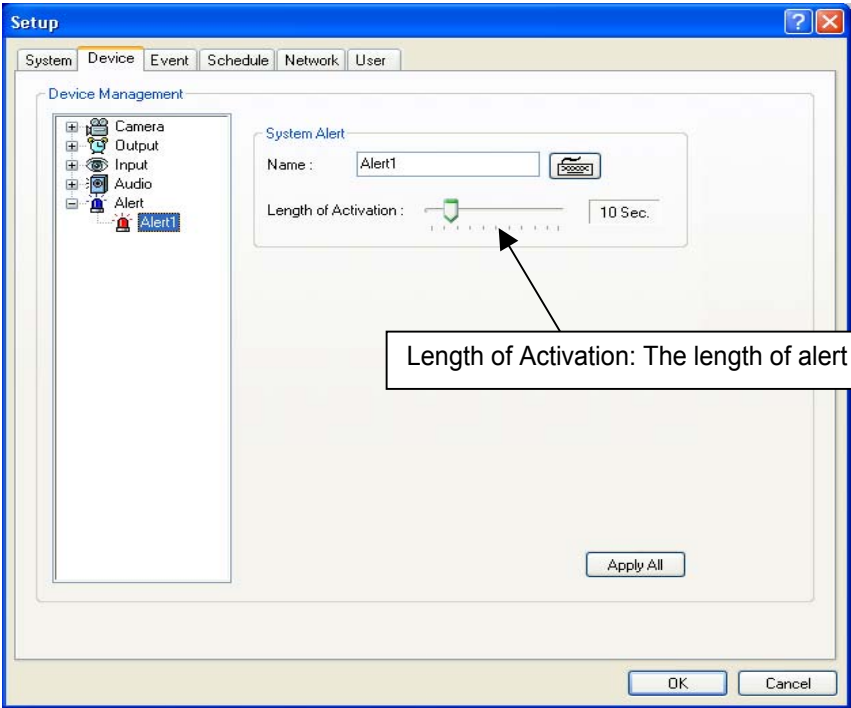


3.5.2.5 Alert



DVR system is equipped with 1 alert device.

Alert is the beep inside the system that sounds in the case of event. Check the box for use and select an alert mode.



Length of Activation: The length of alert activation (1-60 sec.).

### 3.5.3 Event

“Event” consists of 3 different groups; “Input”, “Motion Detection” and “No Video Signal”. On this menu, devices can be set to respond to different events.

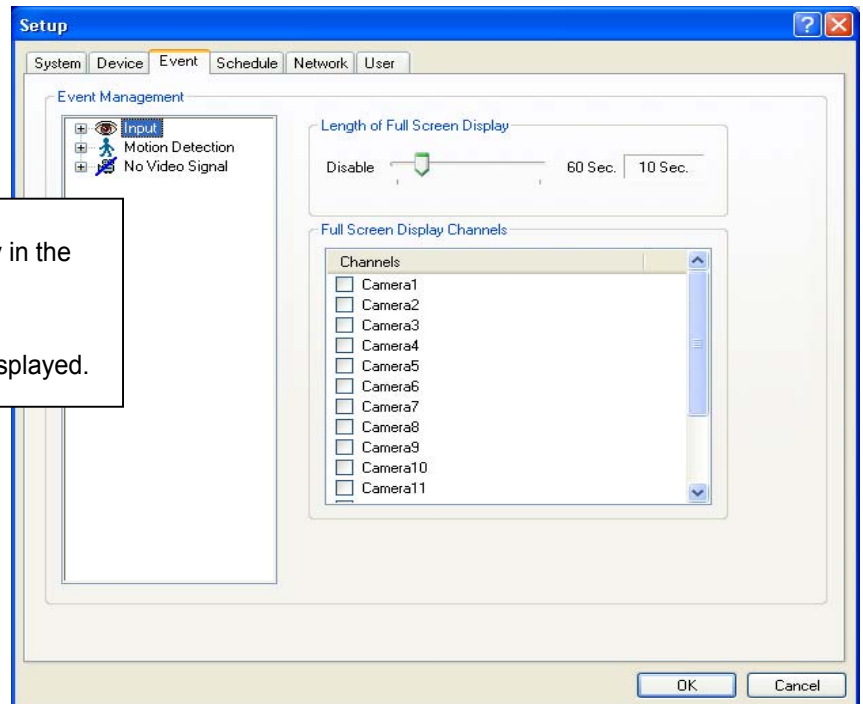
#### 3.5.3.1 Input

##### Length of Full Screen Display:

The time length for full screen display in the case of input device activation.

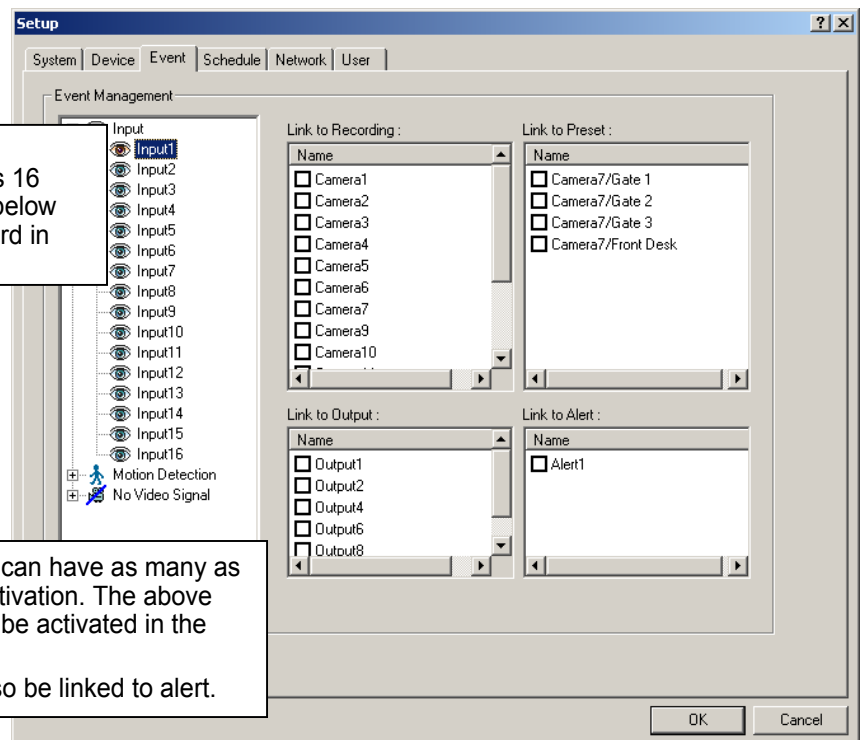
##### Full Screen Display Channels:

Camera channels to be full-screen displayed.



##### Link to Recording:

One Input device can have as many as 16 recording cameras on activation. The below example shows that Camera1 will record in the case of Input1 activation.

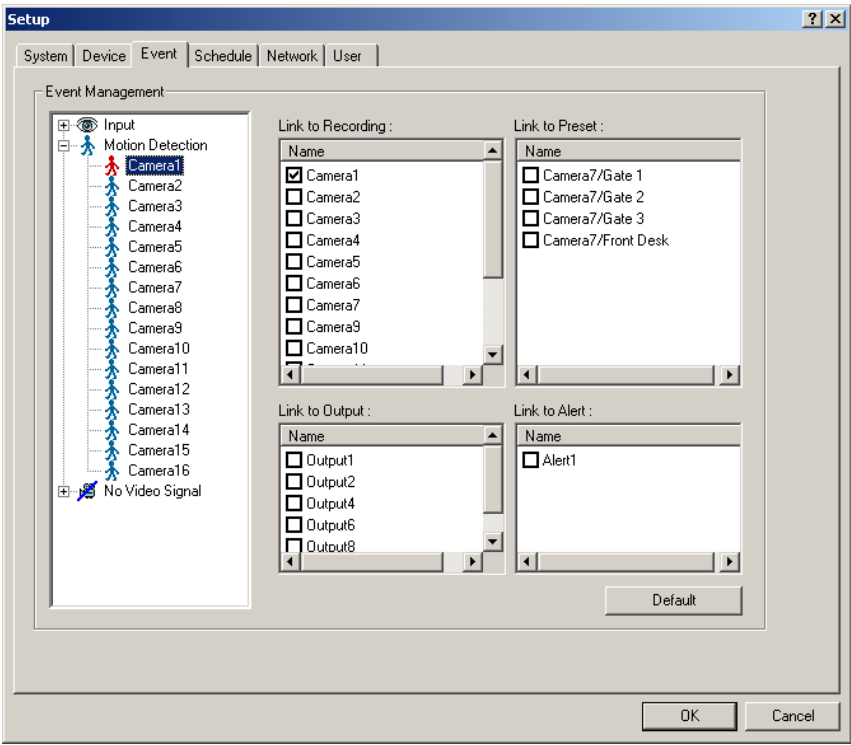
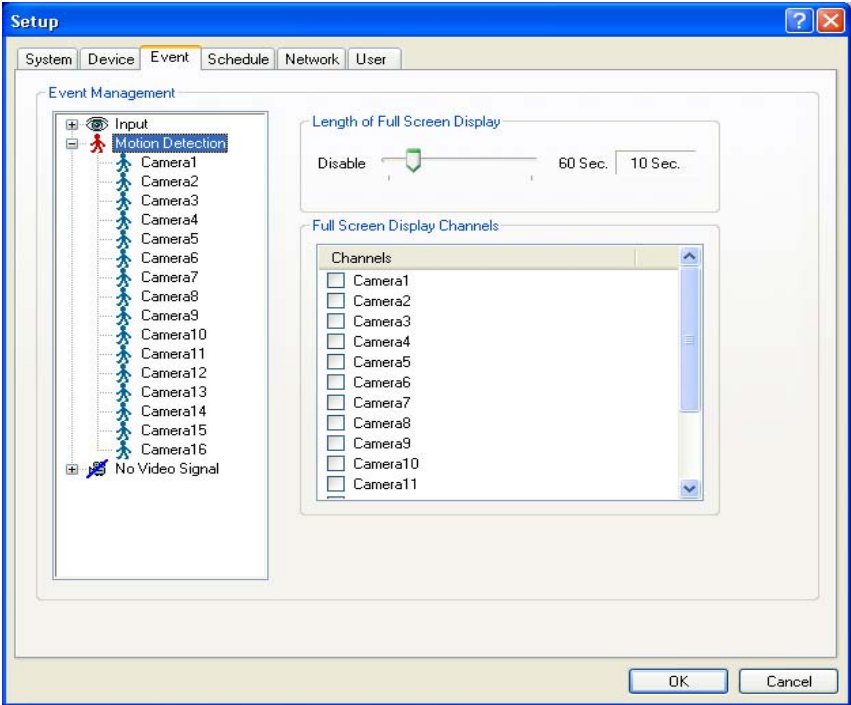


- Link to Output: One Input device can have as many as 8 activating output devices on activation. The above example shows that Output1 will be activated in the case of Input1 activation.
- Link to Alert: Input device can also be linked to alert.

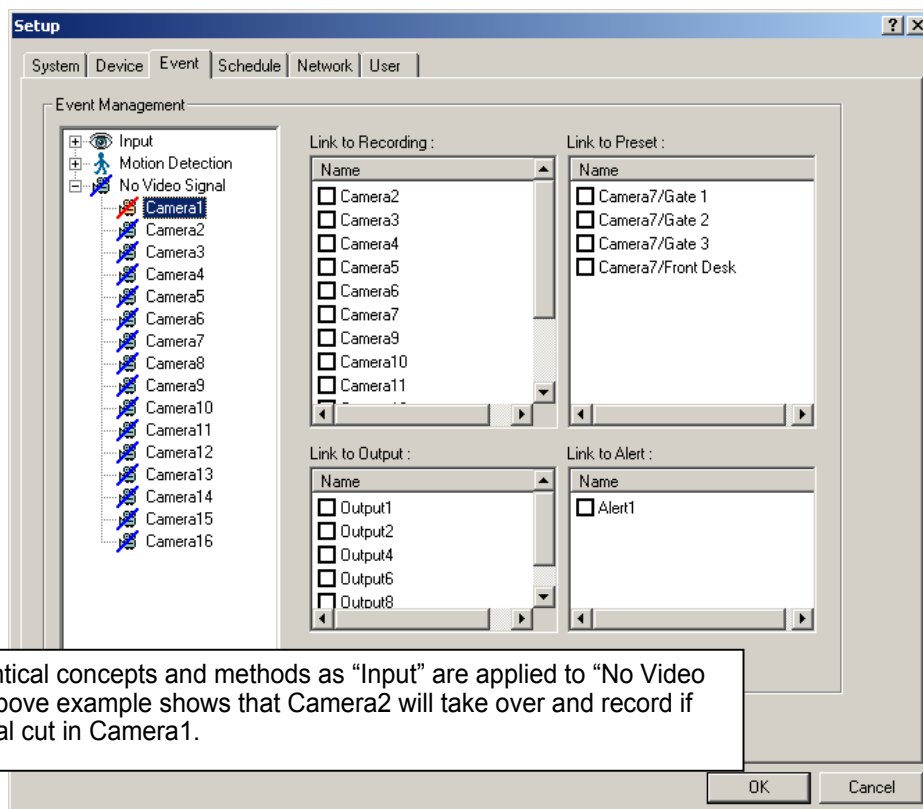


3.5.3.2 Motion Detection

The same identical concepts and methods as “Input” are applied to “Motion Detection”.



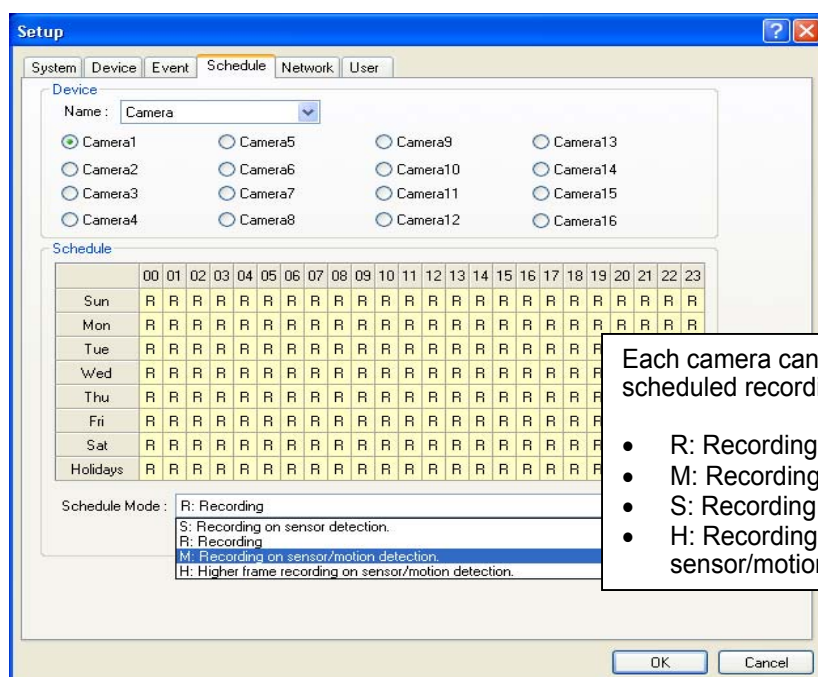
## 3.5.3.3 No Video Signal



The same identical concepts and methods as "Input" are applied to "No Video Signal". The above example shows that Camera2 will take over and record if there is a signal cut in Camera1.

## 3.5.4 Schedule

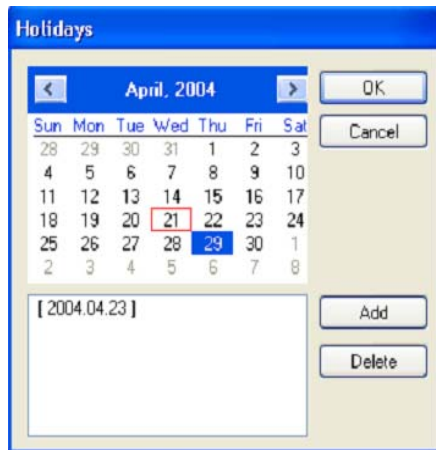
"Schedule" is a place where the different activities of different devices are determined.



## 3.5.4.1 Camera

Each camera can have different recording options; scheduled recording by time & day and selective recording.

- R: Recording at all times
- M: Recording only on motion detection
- S: Recording only on sensor detection
- H: Recording at all times and higher frame recording on sensor/motion detection



The holiday recording schedule set at the bottom of the "Schedule" table will be applied to selected dates.

### [Manual (Instant) Recording]

It is a function that enables users to react on an emergency situation properly by making DVR to start recording immediately.



- Start "Manual Recording" by selecting "Recording On".
- Stop "Manual Recording" by selecting "Recording Off".

#### Note:

1. The purple icon indicates that it is on "Manual Recording".
2. Only 'Admin' can use "Manual recording".

3.5.4.2 Input

Setup

System Device Event **Schedule** Network User

Device

Name: Input

☒ Input1      ☐ Input5      ☐ Input9      ☐ Input13  
☐ Input2      ☐ Input6      ☐ Input10      ☐ Input14  
☐ Input3      ☐ Input7      ☐ Input11      ☐ Input15  
☐ Input4      ☐ Input8      ☐ Input12      ☐ Input16

Schedule

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holidays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Schedule Mode: 0: Enable  
0: Enable  
X: Disable

OK Cancel

3.5.4.3 Schedule

Setup

System Device Event **Schedule** Network User

Device

Name: Output

☐ Output1      ☐ Output5  
☐ Output2      ☒ Output6  
☐ Output3      ☐ Output7  
☐ Output4      ☐ Output8

Schedule

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holidays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Schedule Mode: 0: Enable  
0: Enable  
X: Disable

OK Cancel

### 3.5.5 Network

**Setup**

System | Device | Event | Schedule | **Network** | User

**DVR Server**

Supported Network : TCP/IP

Port No. : 9091 Details...

Timeout : 180

Maximum Users : 10

Transmitted Video Quality : Medium

Bandwidth : ADSL (384K bps)

**Web Server**

Port No. : 80

☒ Web Login Required

**Central Station**

☐ Report to Server on Event

Properties...

**E-mail**

☐ Send E-mail on Event

Properties...

**Dial Alarm**

☐ Call on Event

Properties...

OK Cancel

#### 3.5.5.1 DVR Server

**DVR Server**

Supported Network : TCP/IP

Port No. : 9091 Details...

Timeout : 180

Maximum Users : 10

#### Supported Network:

1. TCP/IP - Connecting to DVR Server from Client using LAN or DSL
  2. PSTN - Connecting to DVR Server from Client using PSTN or ISDN modem
  3. None - Not allowed to connect to DVR Server remotely
- Port No.: The default port number is 9091.
  - Timeout: The time length of trials to connect to DVR Server from Client
  - Maximum Users: The maximum number of users that can be logged in remotely.
  - Details: It shows all the port numbers that are available to use.

Transmitted Video Quality : Medium

Bandwidth : ADSL (384K bps)

- Transmitted Video Quality: Video quality to be transmitted to Client.
- As a reminder, the higher video quality gets, the slower network transmission speed becomes. Therefore, it is often recommended to select low video quality when using "Narrowband".
- Bandwidth: Make sure to select the right bandwidth to have the right network performance.

Note: DVR will automatically appoint a proper IP address to router. No router setup required.

### 3.5.5.2 Web Server

Web Server

Port No. : 80

☒ Web Login Required

- Port No.: Fixed HTTP Port No.
- Web Login Required: If the box is checked, login is required when connecting to DVR server using web browser. If the box is NOT checked, automatic login as "anonymous" will be done.

### 3.5.5.3 Central Station

Central Station

☒ Report to Server on Event

Properties...

"Central Station" is a function that enables Client with static IP to manage multi DVR sites. Check the box and click on "Properties" for setup.  
 \* Note: "DVR Manager" must be installed on Central Station Server (Client). For more details, refer to Appendix 3.

Central Station

Server Information

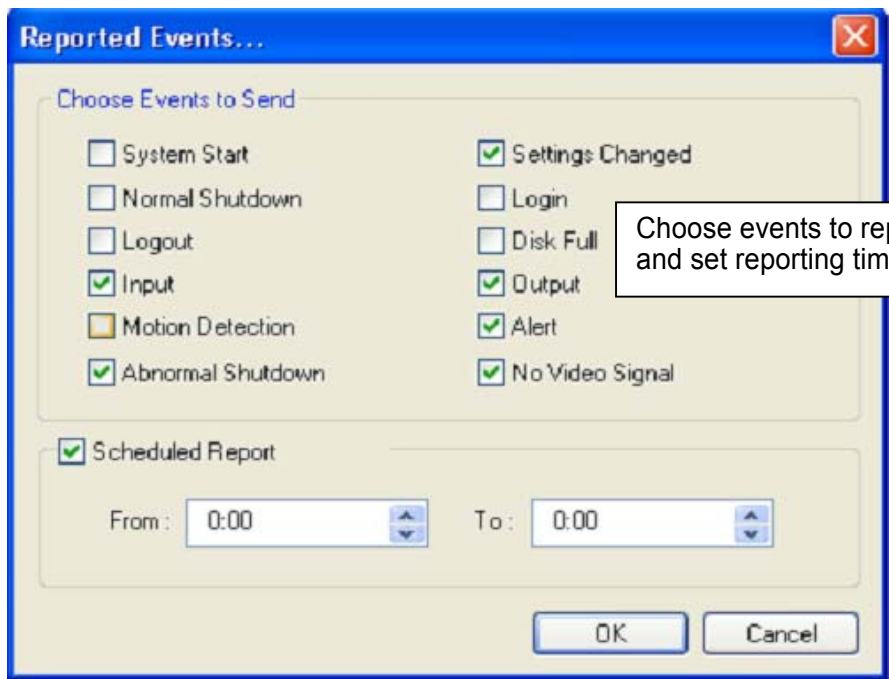
IP Address : [ ] [ ]

Port No. : 9100 [ ] [Default]

[Reported Events...] [OK] [Cancel]

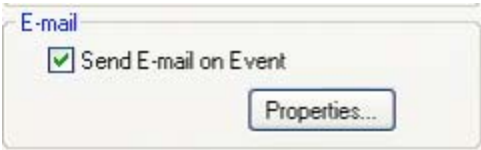
Type in the IP address of Central Station Server (Client with Static IP) and click on "Reported Events" for more setup.





Choose events to report to Central Station server and set reporting time period.

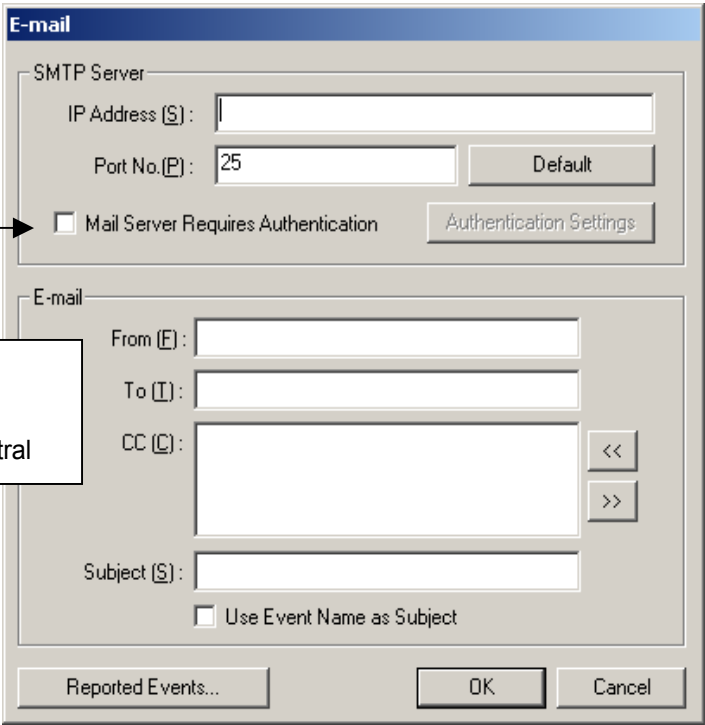
3.5.5.4 E-mail



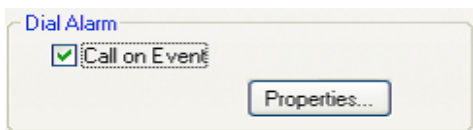
E-mail is a function that enables DVR system to send out e-mails when selected events occur. Check the box and click on "Properties" for setup.

Note: Some e-mail service may require authentication for ID and PW.

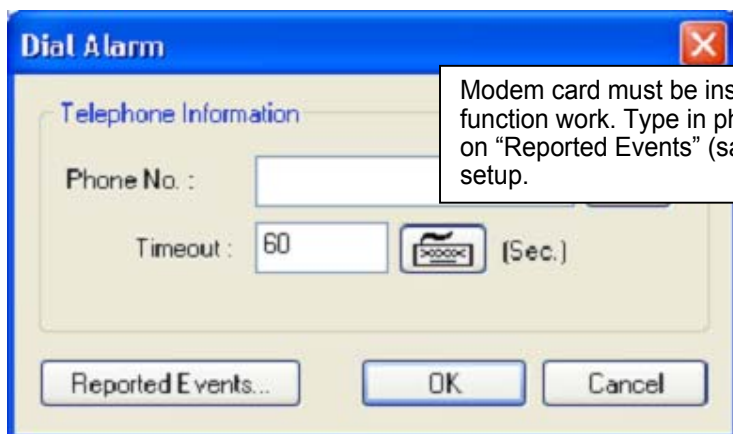
Make sure to put in the right IP address of SMTP server. Then, click on "Reported Events" for more setup. The "Reported Events" menu is the same as Central Station



### 3.5.5.5 Dial Alarm

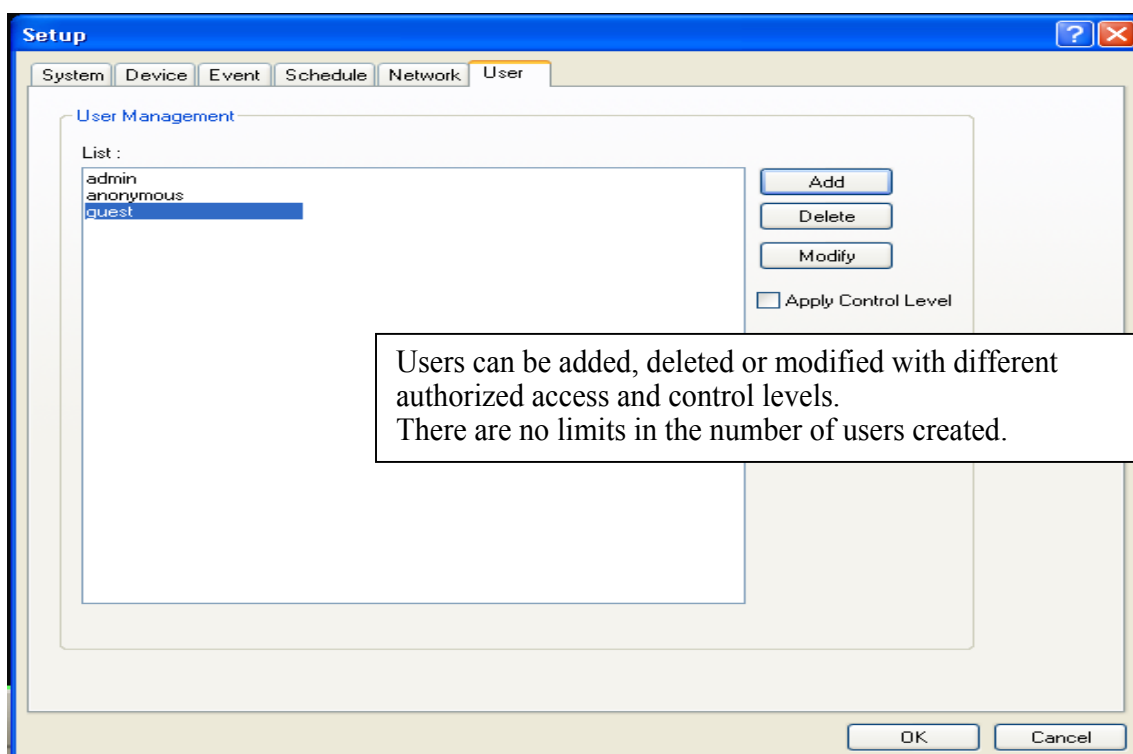


"Dial Alarm" is a function that enables DVR system to call out on selected events. Check the box and click on "Properties" for setup.

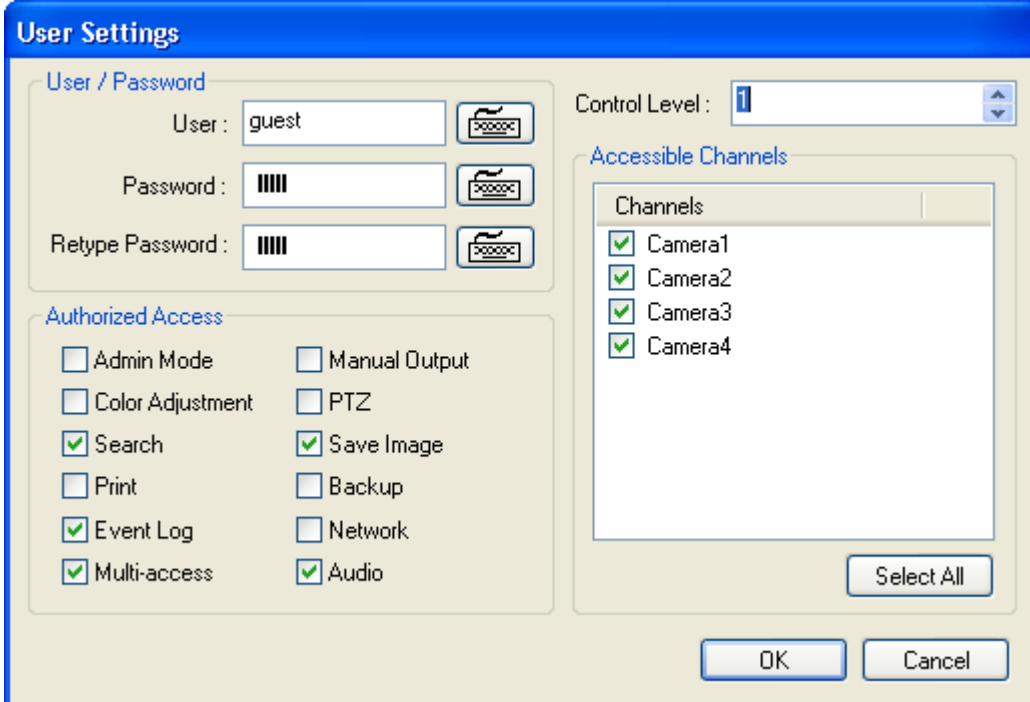


Modem card must be installed inside DVR system to make this function work. Type in phone (mobile) number to report. Click on "Reported Events" (same setup as Central Station) for more setup.

### 3.5.6 User



Users can be added, deleted or modified with different authorized access and control levels. There are no limits in the number of users created.



The 'User Settings' dialog box is divided into several sections. The 'User / Password' section at the top left contains three input fields: 'User' with the text 'guest', 'Password' with four masked characters, and 'Retype Password' with four masked characters. Each field has a small icon to its right. To the right of these fields is a 'Control Level' dropdown menu showing the number '1'. Below the password fields is the 'Authorized Access' section, which contains two columns of checkboxes. The first column includes 'Admin Mode', 'Color Adjustment', 'Search' (checked), 'Print', 'Event Log' (checked), and 'Multi-access' (checked). The second column includes 'Manual Output', 'PTZ', 'Save Image' (checked), 'Backup', 'Network', and 'Audio' (checked). To the right of the 'Authorized Access' section is the 'Accessible Channels' section, which features a list box titled 'Channels' containing 'Camera1', 'Camera2', 'Camera3', and 'Camera4', each with a checked checkbox. Below the list box is a 'Select All' button. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

**User Settings**

User / Password

User : guest

Password :

Retype Password :

Control Level : 1

Accessible Channels

Channels

- ☒ Camera1
- ☒ Camera2
- ☒ Camera3
- ☒ Camera4

Select All

OK Cancel

**Authorized Access**

<input type="checkbox"/> Admin Mode	<input type="checkbox"/> Manual Output
<input type="checkbox"/> Color Adjustment	<input type="checkbox"/> PTZ
<input checked="" type="checkbox"/> Search	<input checked="" type="checkbox"/> Save Image
<input type="checkbox"/> Print	<input type="checkbox"/> Backup
<input checked="" type="checkbox"/> Event Log	<input type="checkbox"/> Network
<input checked="" type="checkbox"/> Multi-access	<input checked="" type="checkbox"/> Audio

- Authorized Access: Checked functions will be allowed to access remotely.
- Accessible Channels: Checked channels will be allow to view remotely.
- Control Level: The lowest number will be allowed to have the first priority to set up, control, etc remotely.
- Admin Mode: A user who can go into the setup and program (given the same authorization as "Admin"). Only ONE user with "Admin Mode" can log in remotely.
- Network: If checked, remote access authorization will be given.
- Multi-access: If checked, multi-users with the same user name can log in remotely at the same time.

## CHAPTER 4

### View Log Application (Status)

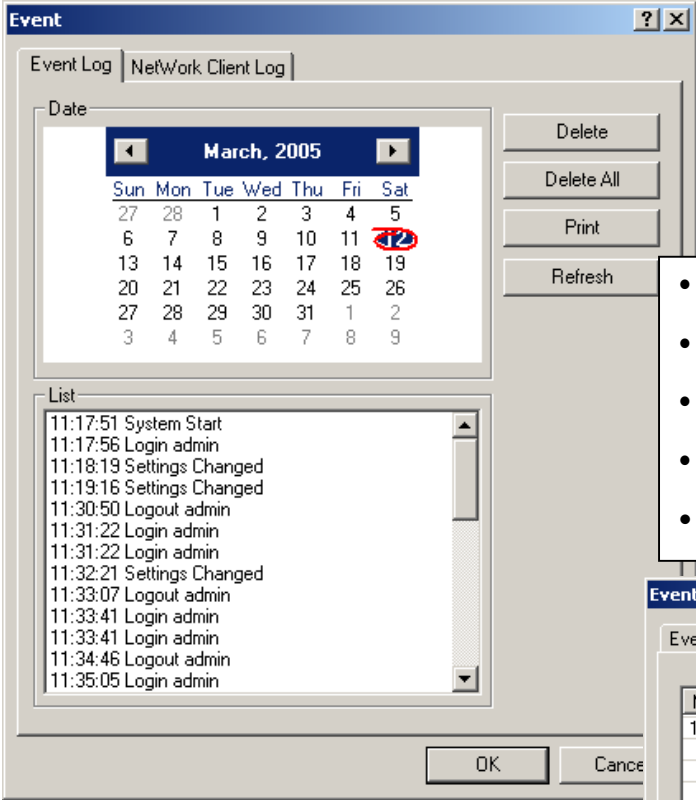


## 4.1 Screen Features

- Recording Camera: It shows recording status.
- Sensor Detection: It shows sensor detection status.
- Motion Detection: It shows motion detection status.
- Alarm: It shows alarm activation status.

- HDD Capacity: It shows HDD capacity used for recording.
- Event: It shows events occurred.
- Event Log: It shows all the previous events occurred by date.

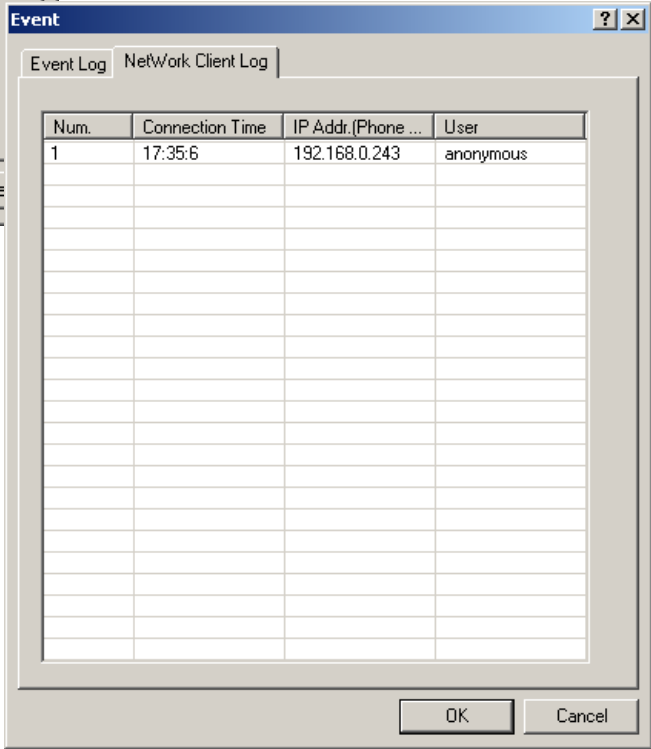
### 4.1.1 Event Log



- **Date:** All dates with events will be marked in bold numbers.
- **List:** All events for a certain selected date will be shown.
- **Delete All:** If clicked, all the previous records will be deleted.
- **Delete:** If clicked, only the events for a certain selected date will be deleted.
- **Refresh:** If clicked, events will be updated.

**Network Client Log:**  
Remote login records will be also kept on  
DVR server.

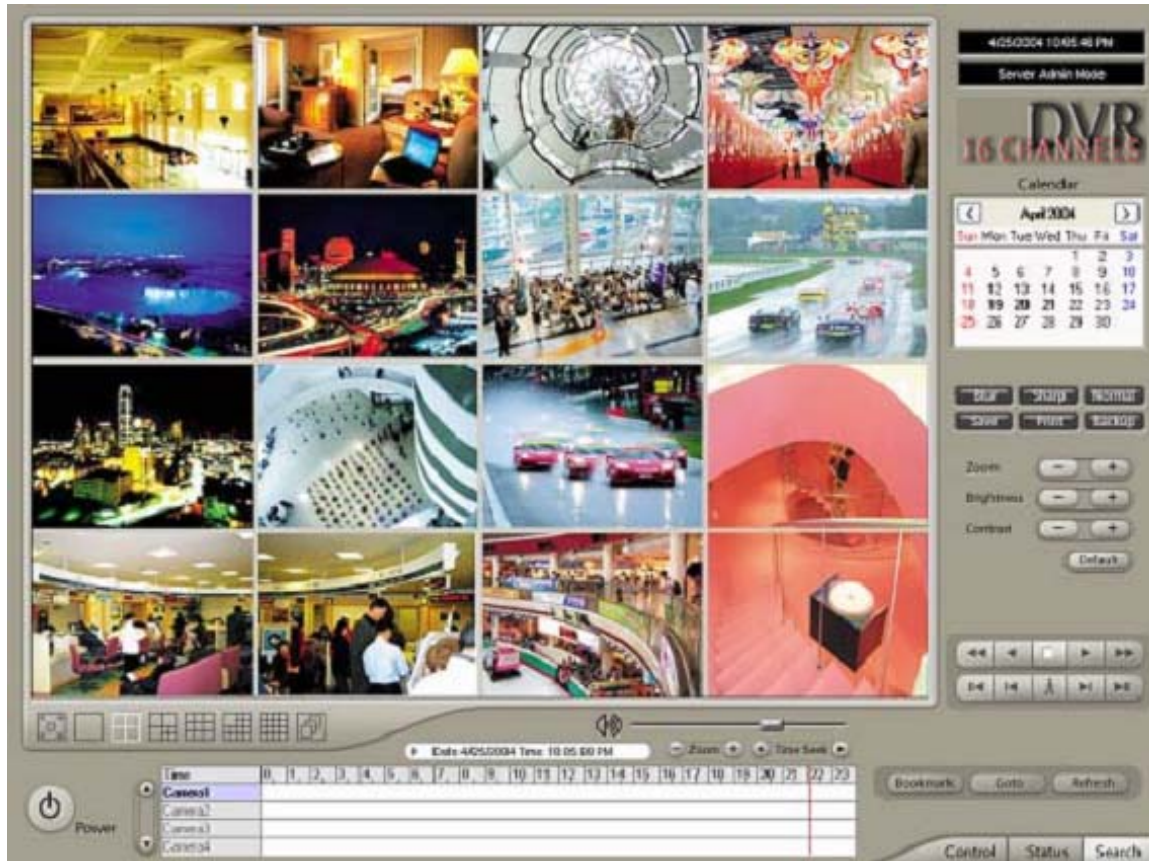
**Network Client Log:**  
Remote login records will be also kept on  
DVR server.





# CHAPTER 5

## Playback Application (Search)

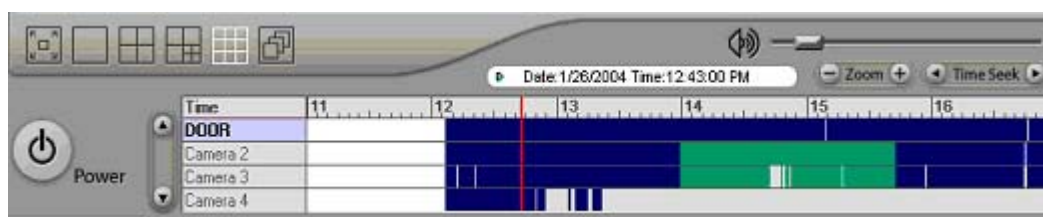


### 5.1 Search Features 1

- Calendar: All dates with recorded data will be marked in bold numbers.
- Blur/Sharp/Normal: Buttons to adjust sharpness of image
- Zoom: Buttons to zoom in/out
- Brightness: buttons to adjust brightness
- Contrast: buttons to adjust contrast
- Default: Default for Zoom/Brightness/Contrast

### 5.2 Search Features 2

#### 5.2.1 Playback

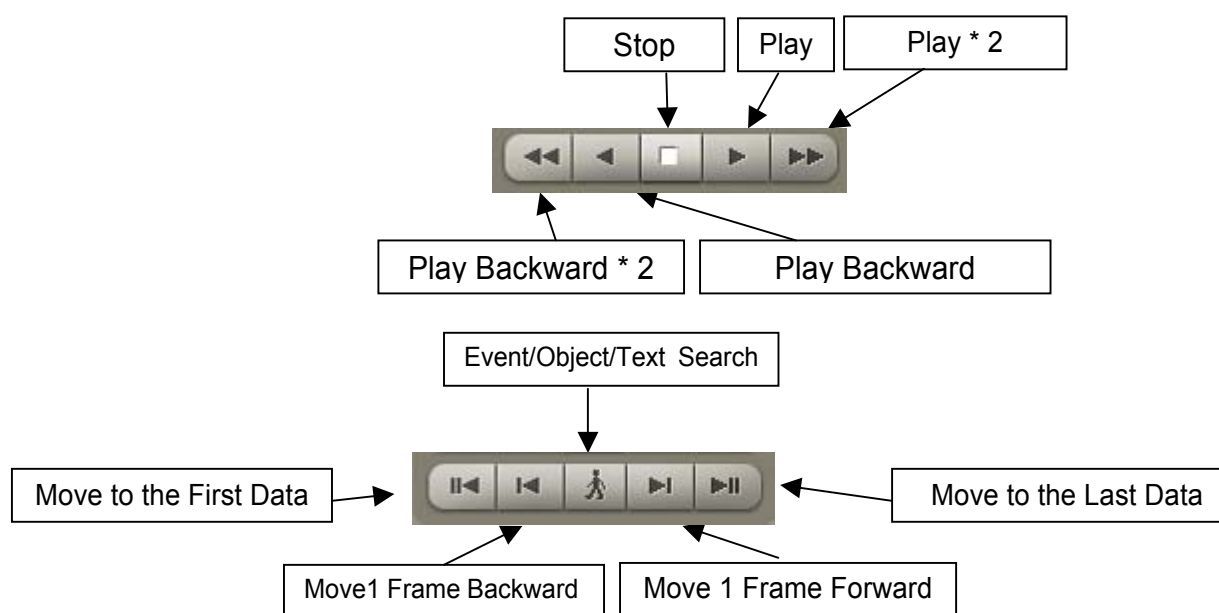




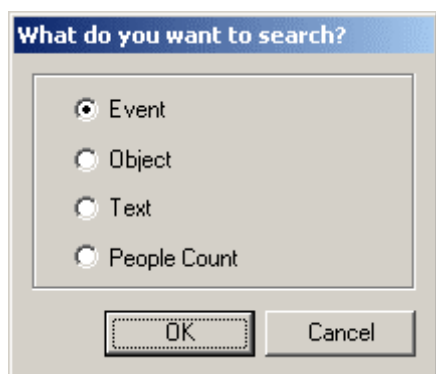
For playback, simply select date, screen mode (1, 4, 9, 16, etc.), time by one click on the time bar and click the play button.

What different colors mean on the time bar:

- Blue: Recorded data by sensor & motion detection
- Purple: Recorded data by 24-hour-recording
- White: No recorded data in all cameras
- Gray: No recorded data for some cameras
- Green: Blue + audio
- Light Green: Purple + audio
- Dark Red: Purple + recorded text data (POS)
- Orange: Even- recorded data with recorded text data.
- Dark Yellow: Event-recorded data + recorded text data + audio
- Yellow: Purple + recorded text data + audio

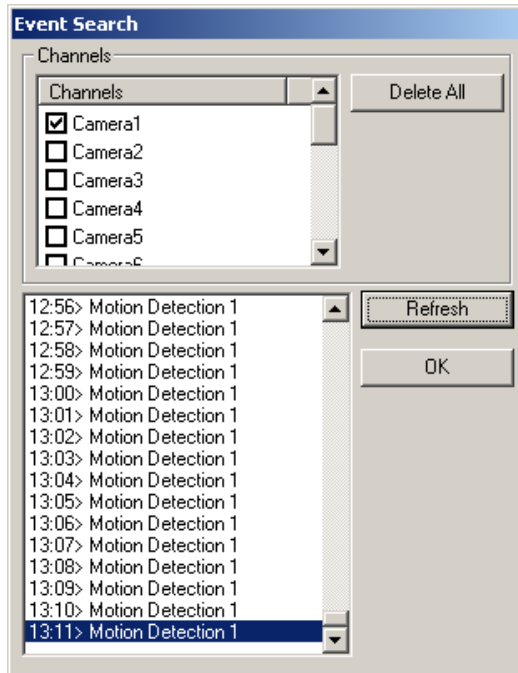


### 5.2.2 Event/Object/Text /People Count Search



#### [Event Search]

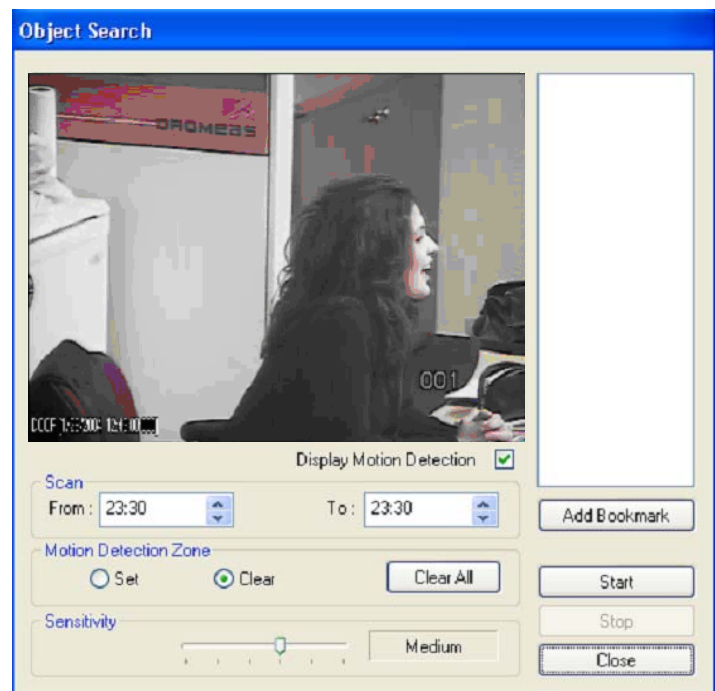
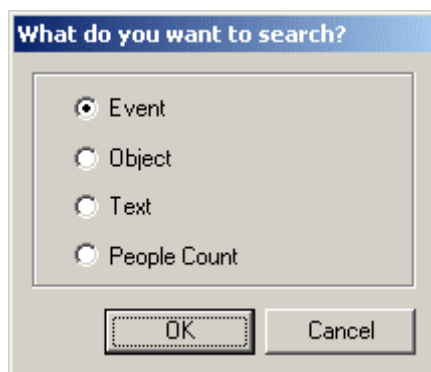
Click the Event/Object Search button and select "Event".



Select channels for Event Search.

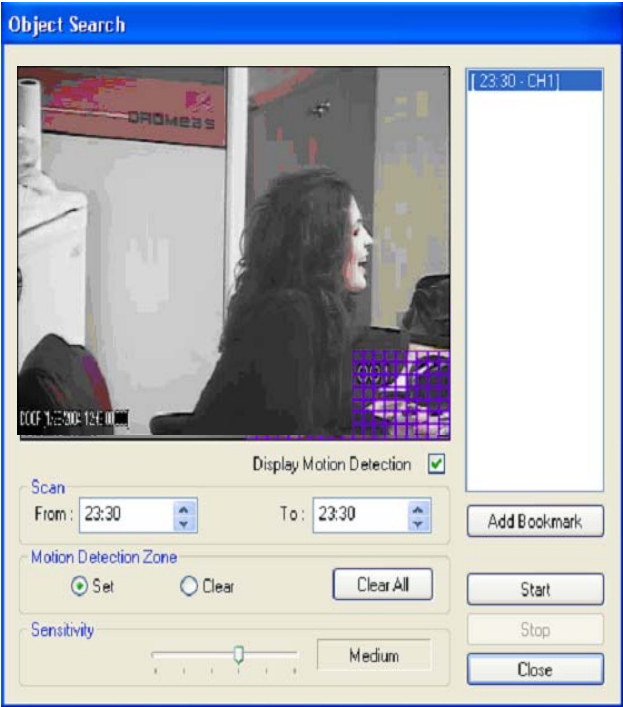
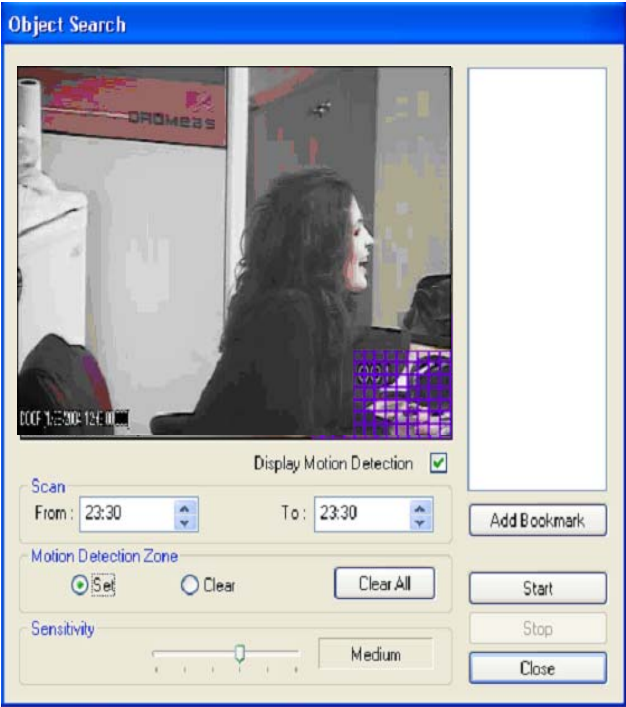
Select one event from the event list and click "OK", and the selected event will be displayed. Click "Refresh" to update the list.

### [Object Search]



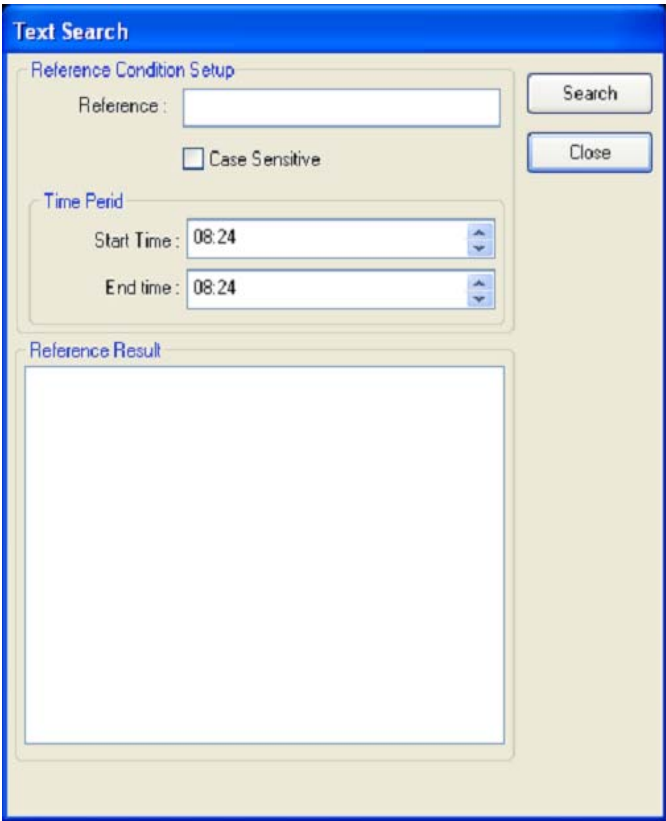
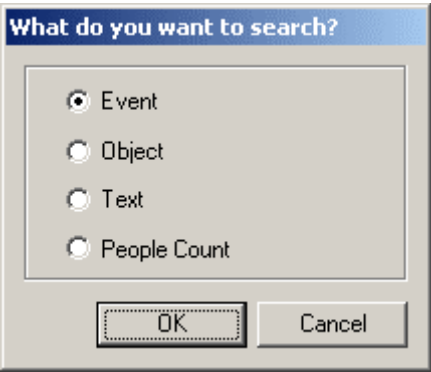
**Object Search is only to search certain selected objects for a certain period of time.**

- Scan: Set the time period for object search
- Motion Detection Zone: Select "Set" and mark areas for object search by dragging mouse. "Clear" is used to erase certain areas inside motion detection zones.
- Sensitivity: Set motion detection sensitivity level.
- Clear All: Click on it to clear all the motion detection zones set.



[Text Search]

It is to search POS text data with image according to selected time period and item.



**[People Count Search]**

**What do you want to search?**

☒ Event  
☐ Object  
☐ Text  
☐ People Count

OK Cancel

It is to search people count statistics according to selected time period & camera.

Select date, camera & time, and statistics will be shown as below.  
Statistics can also be saved as text file.

**People Count Search**

Daily count

March, 2005							4h	5h	6h	7h	8h	9h	10h	11h	12h
Sun	Mon	Tue	Wed	Thu	Fri		0	0	1	2	12	16	19	11	0
27	28	1	2	3	4		0	0	1	2	12	16	19	11	0
6	7	8	9	10	11										
13	14	15	16	17	18										
20	21	22	23	24	25										
27	28	29	30	31	1										
3	4	5	6	7	8										

People count statistics

Camera

☒ Camera1  
☐ Camera2  
☐ Camera3

Hour

☐ Hour0  
☐ Hour1  
☐ Hour2  
☐ Hour3

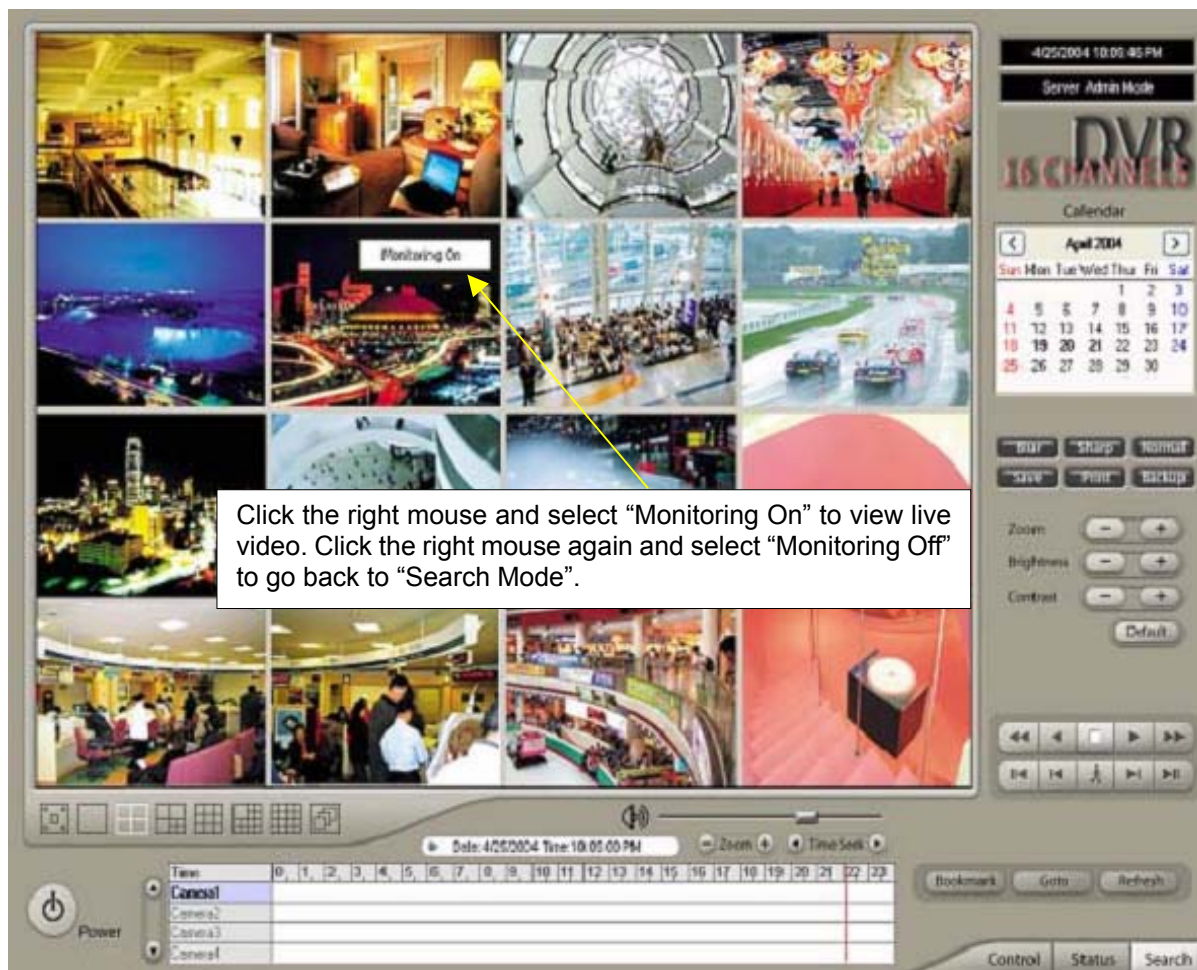
Start: 2005:03:14 0

End: 2005:03:14 Search

Delete Delete All Report Close

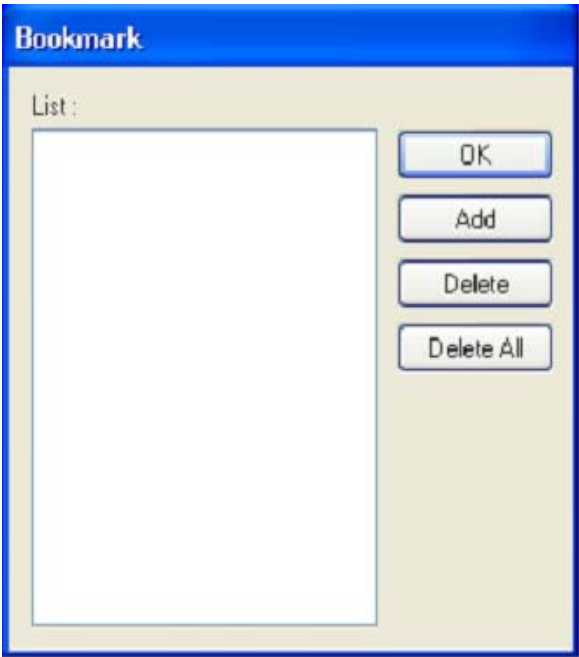
### 5.2.3 Monitoring & Searching

It is a feature that enables user to view live video while searching recorded data.





5.2.4 Bookmark & Go To

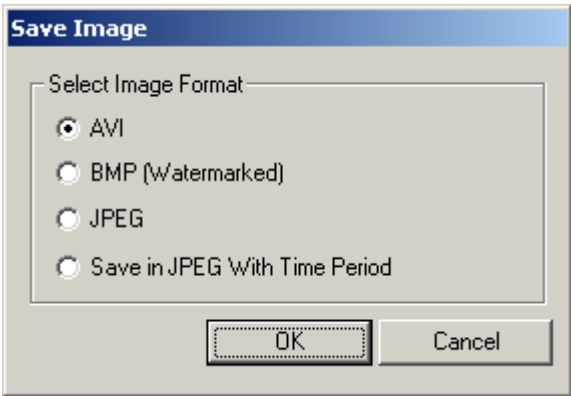


Bookmark (Favorites): Added data from “Object Search” are stored here.

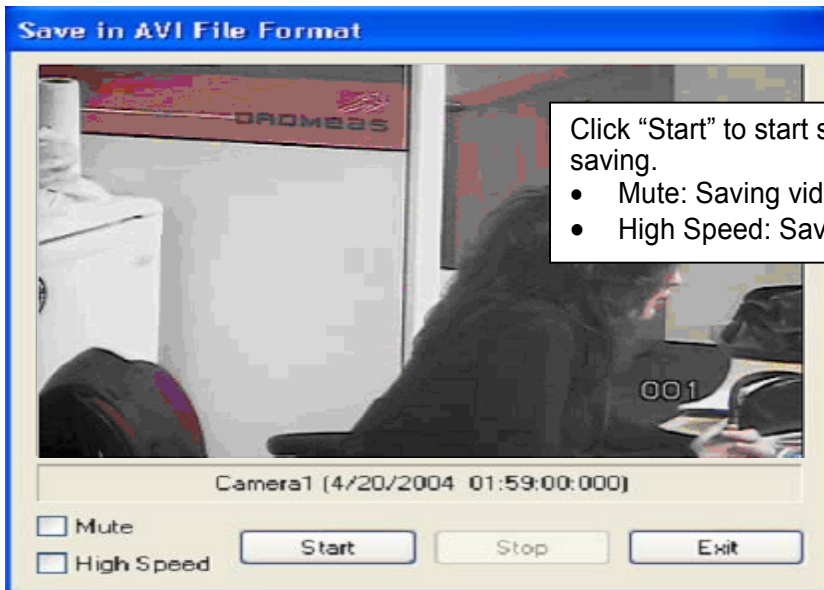
Go To: Select desired time to search and click “OK”.



5.2.5 Save

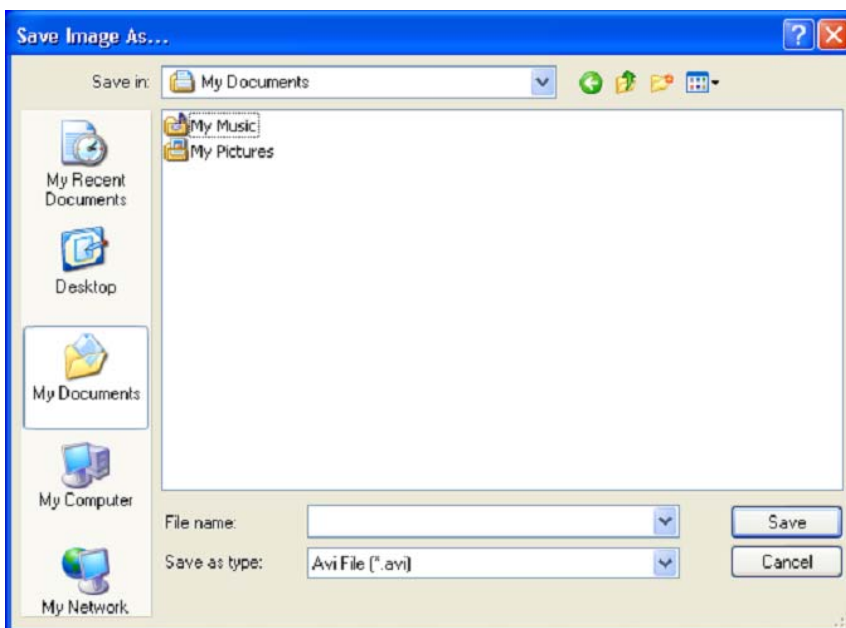


- AVI: For saving motion pictures and audio
  - BMP: For saving images, Watermarked images can be saved.
  - JPEG: For saving regular still images. Quality is not as good as BMP but less HDD is used.
- Save in JPEG with Time Period: For scheduled save in JPEG

**[Save in AVI Format]**

Click "Start" to start saving and "Stop" to stop saving.

- Mute: Saving video only (no audio)
- High Speed: Saving in high speed



[Save in BMP Format]

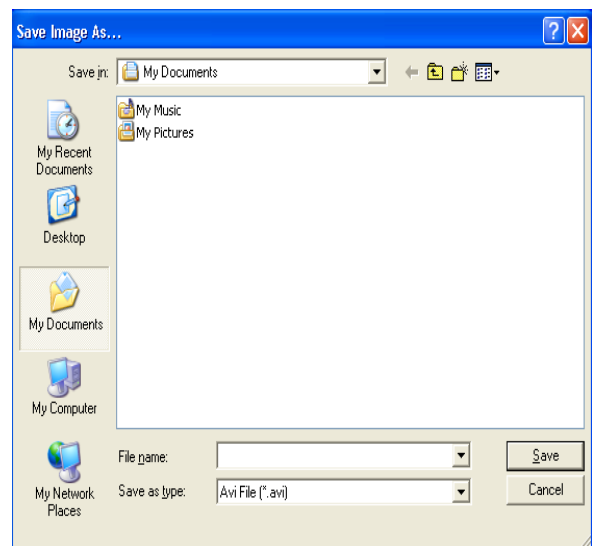
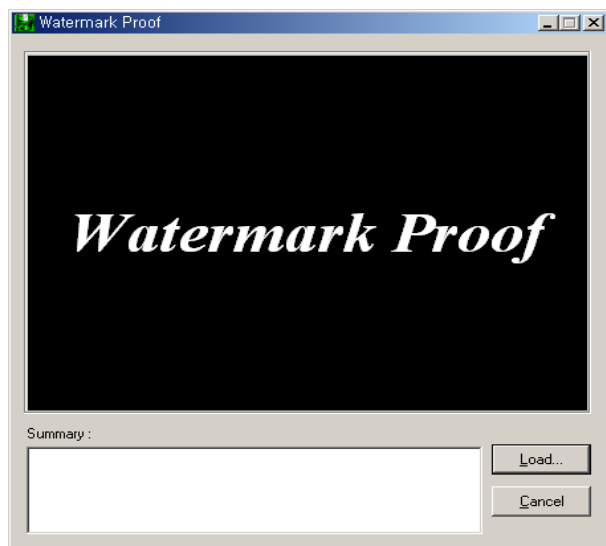


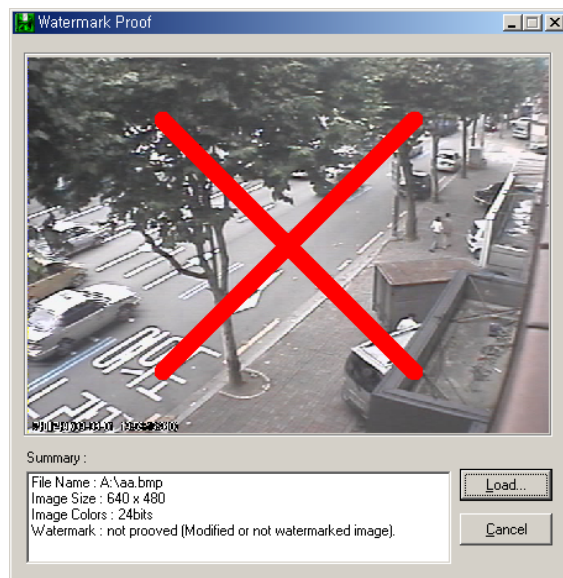
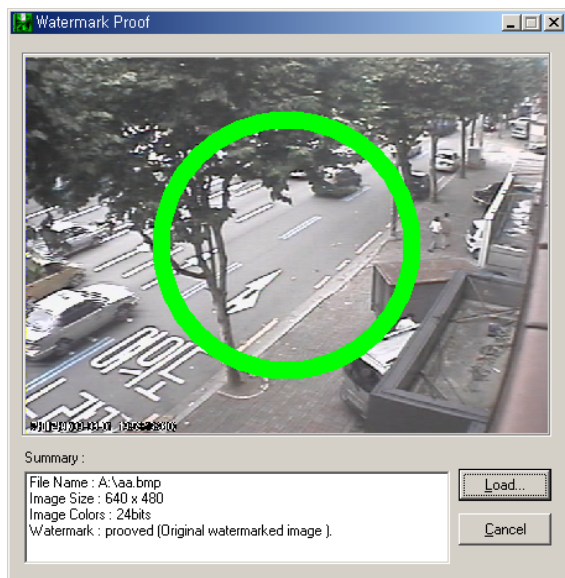
Click "Start" and select "BMP" as you save images. Saved images can be checked using "Watermark Proofer".

[Watermark Proofer]



Execute "Watermark Proofer" and check if certain saved images are forged or not.





[Save in JPEG Format]



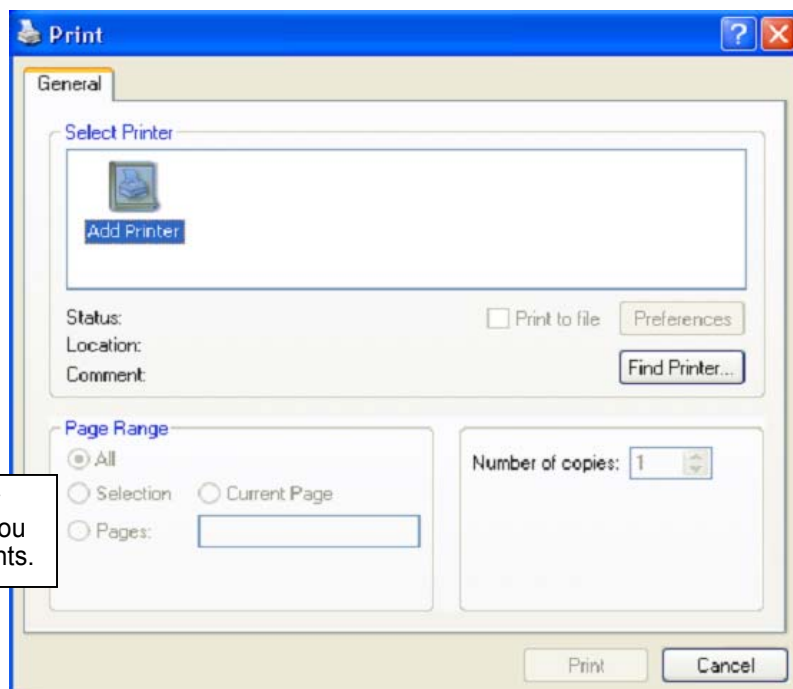
Click "Start" and select "JPEG" as you save images.

[Save in JPEG with  
Time Period]



Select time period and select channels to be saved  
in JPEG.

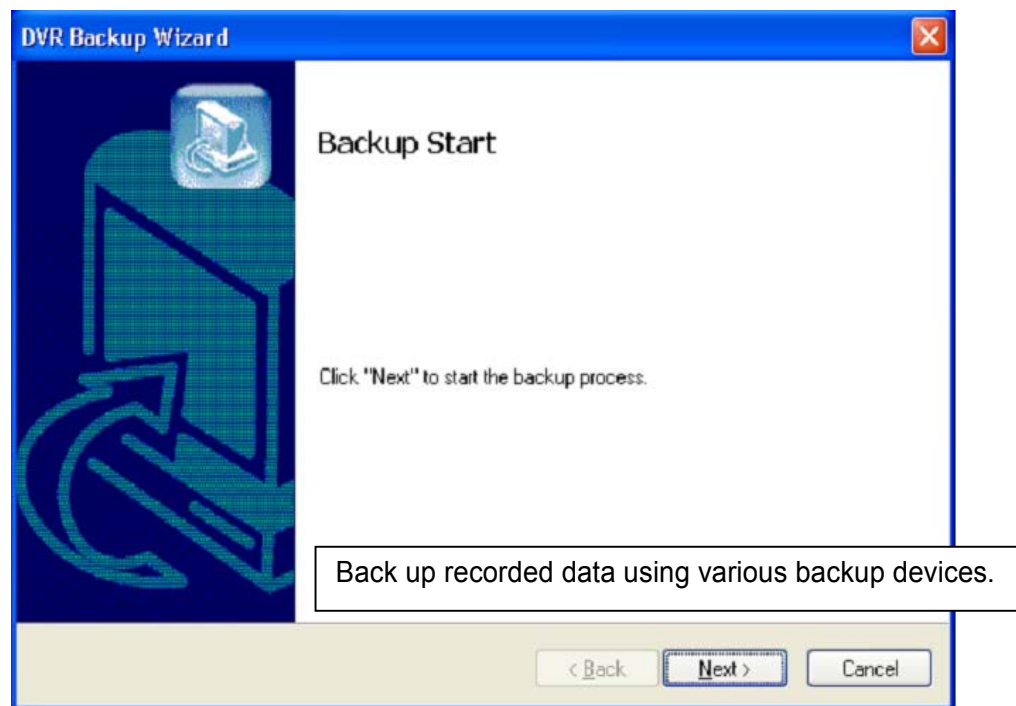
## 5.2.6 Print



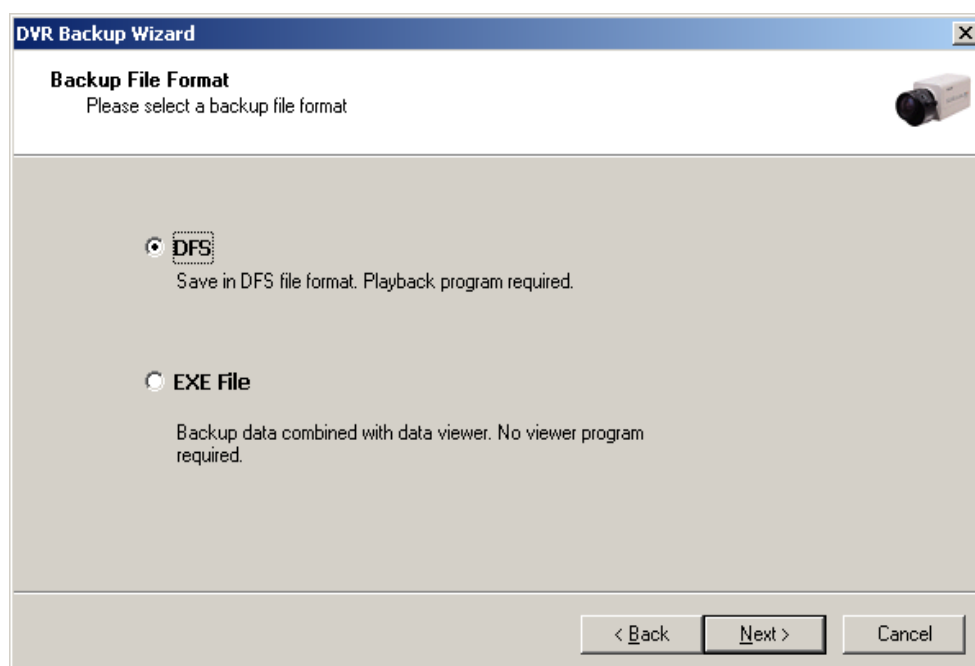
Click the "Print" button and follow  
the same printing procedure as you  
would normally print out documents.

## 5.2.7 Backup

The recorded data can be copied from the hard disk to external storage devices, such as CD-R, DVD.



### 5.2.7.1 DFS Back up





**DVR Backup Wizard**

**Backup Device**  
Please select backup device

Select Time Period

From 4/25/2004 00:00

To 4/25/2004 23:59

Password

Password

Retype Password

Backup Folder F:\ Browse...

< Back Next > Cancel

**Select Time Period:** Specify time period for backup. The minimum period for backup is 1 minute. If password is set, viewing backup data will be possible only when it is typed in.

**Backup Folder:** Click the “Browse” button, select a drive to back up and enter a desired folder name.

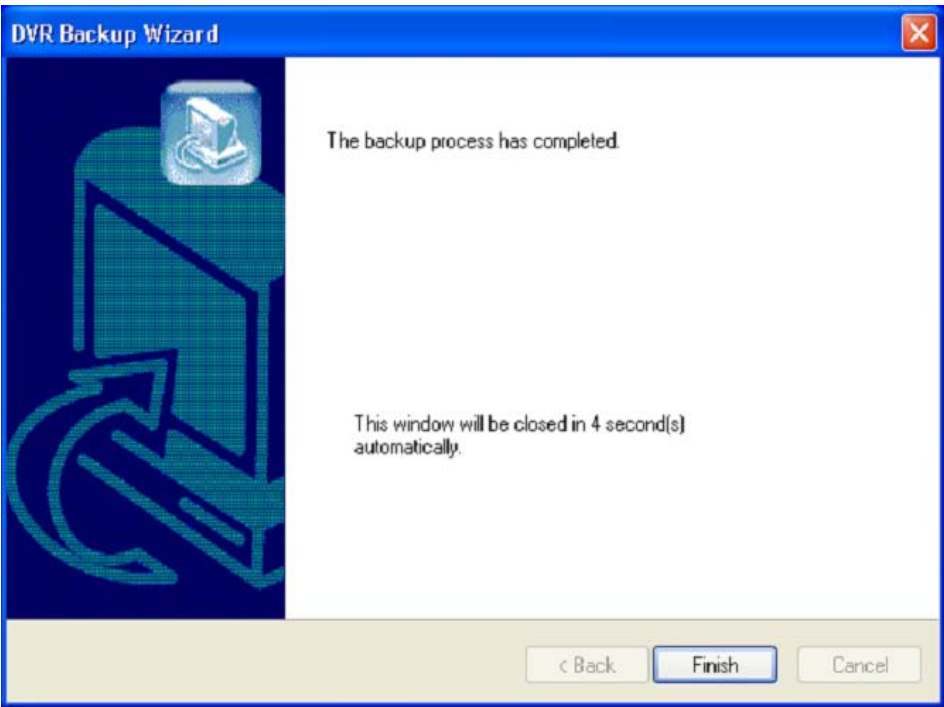
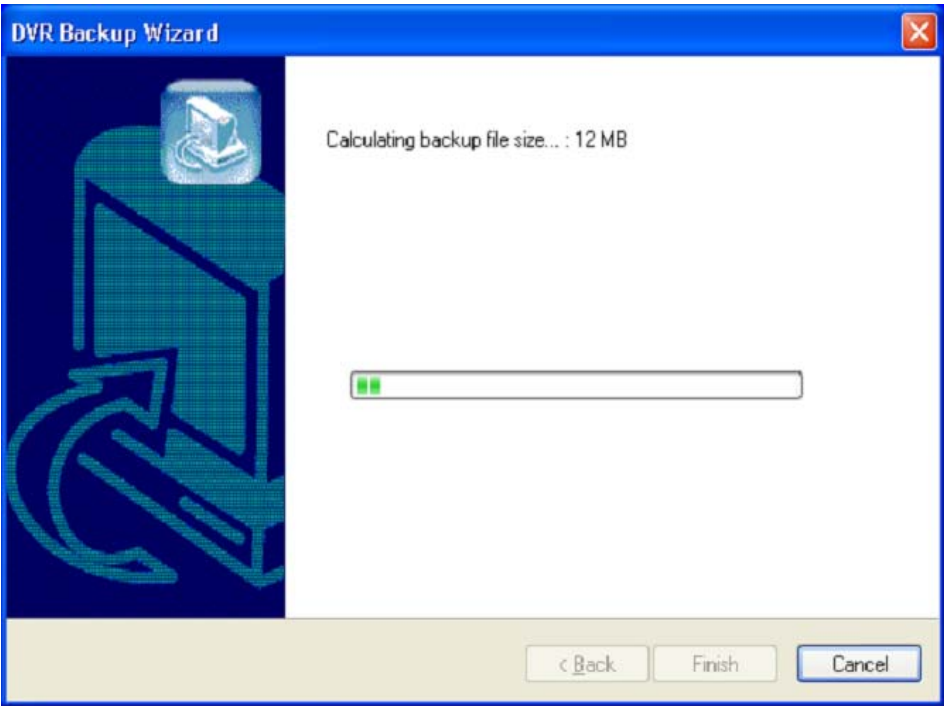
**DVR Backup Wizard**

**Camera Channels**  
Select camera channels.

Channels

<input checked="" type="checkbox"/> Channel 1	<input checked="" type="checkbox"/> Channel 2	<input checked="" type="checkbox"/> Channel 3	<input checked="" type="checkbox"/> Channel 4
<input checked="" type="checkbox"/> Channel 5	<input checked="" type="checkbox"/> Channel 6	<input checked="" type="checkbox"/> Channel 7	<input checked="" type="checkbox"/> Channel 8
<input checked="" type="checkbox"/> Channel 9	<input checked="" type="checkbox"/> Channel 10	<input checked="" type="checkbox"/> Channel 11	<input checked="" type="checkbox"/> Channel 12
<input checked="" type="checkbox"/> Channel 13	<input checked="" type="checkbox"/> Channel 14	<input checked="" type="checkbox"/> Channel 15	<input checked="" type="checkbox"/> Channel 16

< Back Next > Cancel



### 5.2.7.2 EXE Back up

**DVR Backup Wizard**

**Backup File Format**  
Please select a backup file format

☐ **DFS**  
Save in DFS file format. Playback program required.

☒ **EXE File**  
Backup data combined with data viewer. No viewer program required.

< Back   Next >   Cancel

Any recorded data can be saved as “.Executable” file. No viewer program is required to see saved data.

Note:

- File size limited up to 1 GB.
- 1 Channel backup only.

**DVR Backup Wizard**

**Backup Device**  
Please select backup device

Select Time Period

Date: 2005-03-14

Start Time: 13:39   End Time: 13:39

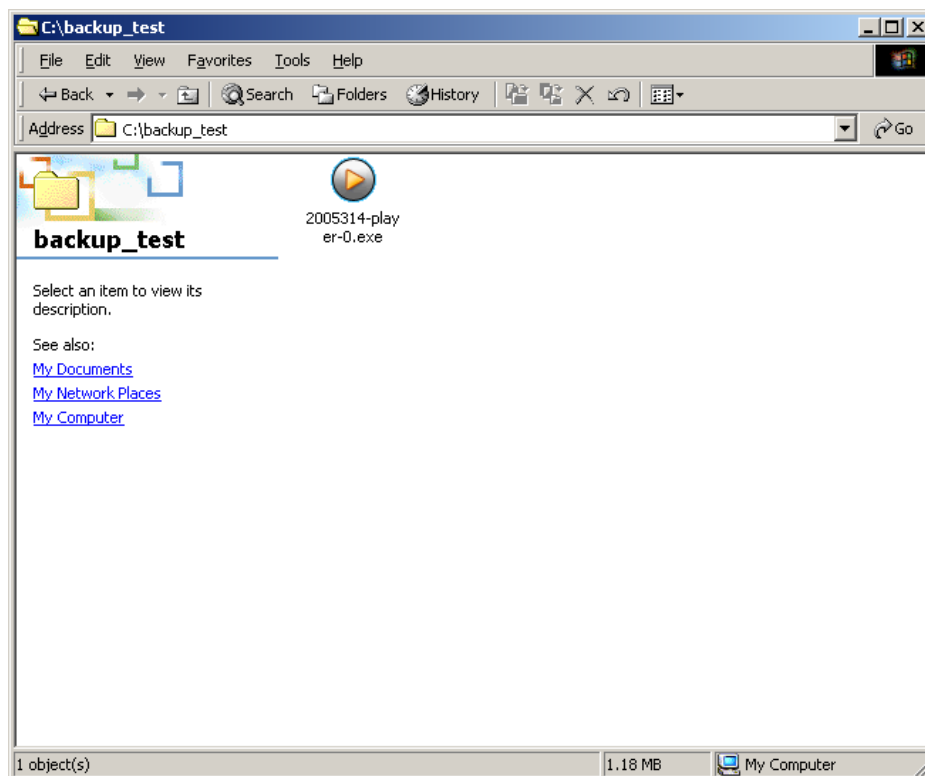
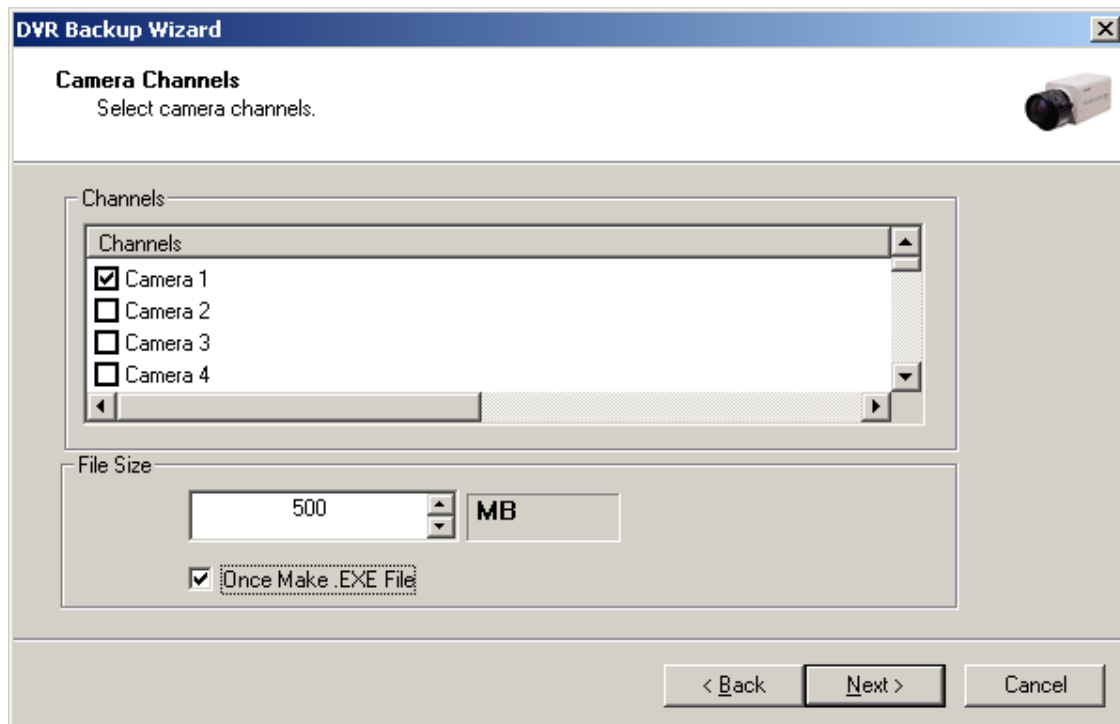
Password

Password: [ ]   Retype Password: [ ]

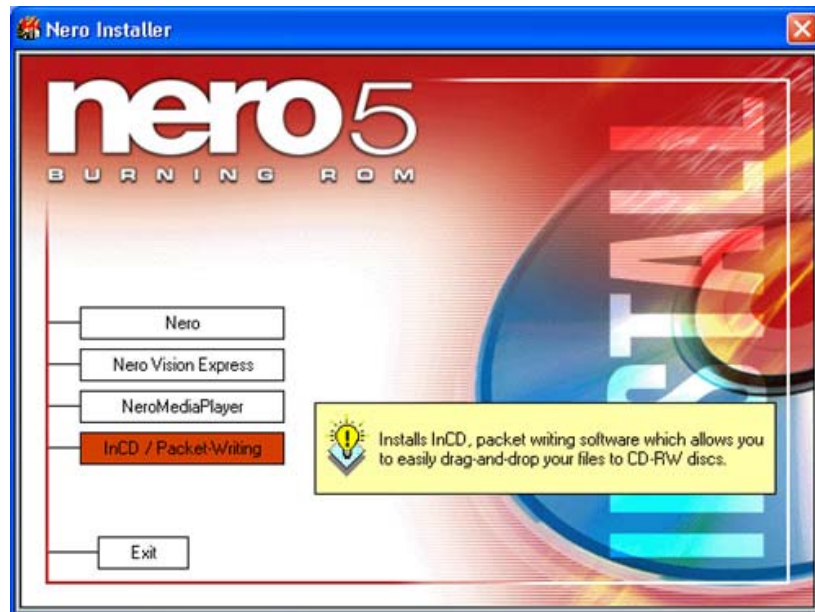
Backup Folder: F:\backup   Browse...

< Back   Next >   Cancel

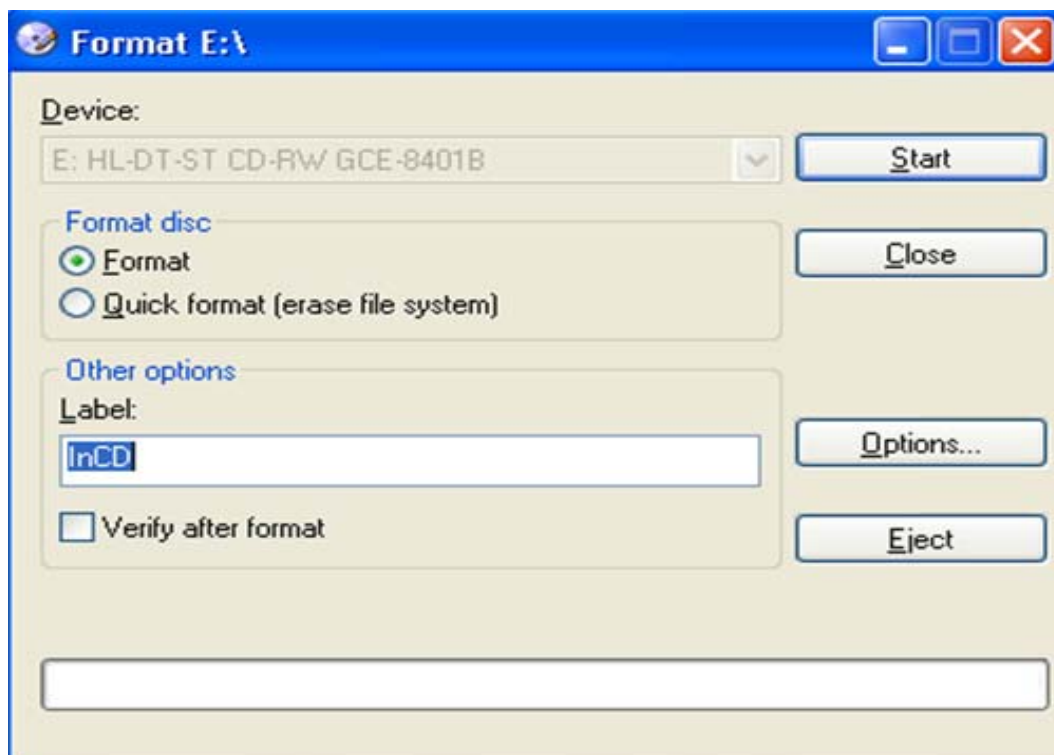
1. Select "EXE File".
2. Specify time period, password, drive, etc.
3. Select ONE channel to back up.
4. Specify file size up to ONE GB. If it is larger than 1GB, multiple exe files will be created.
5. Tick the "Once Make EXE File" box to create only one file with the file size specified.
6. Double-click the exe file created to see data.



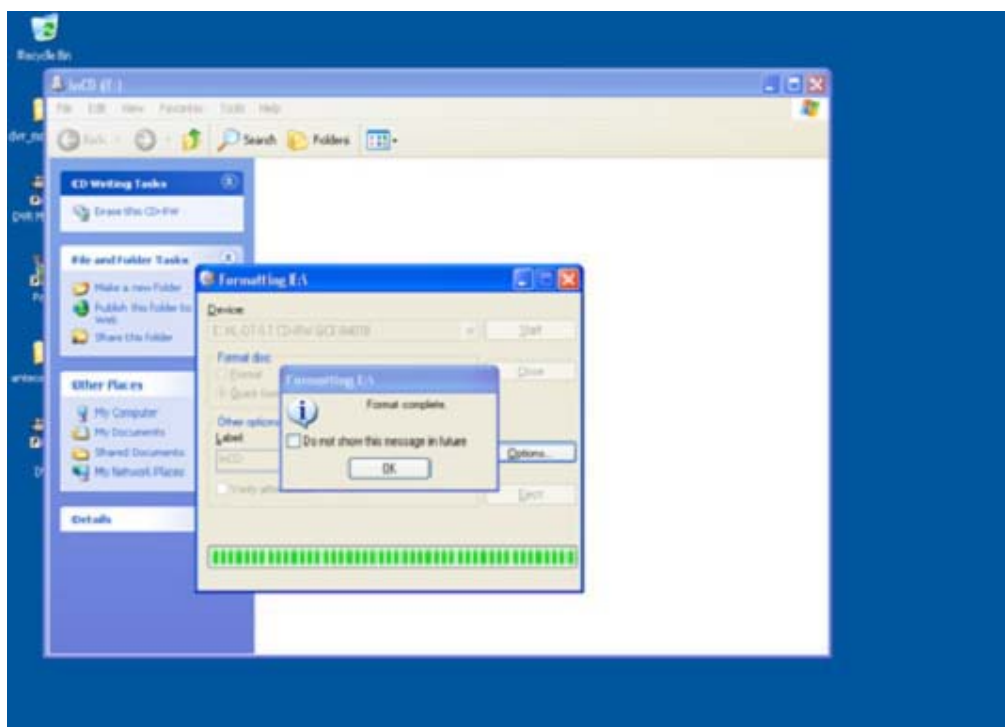
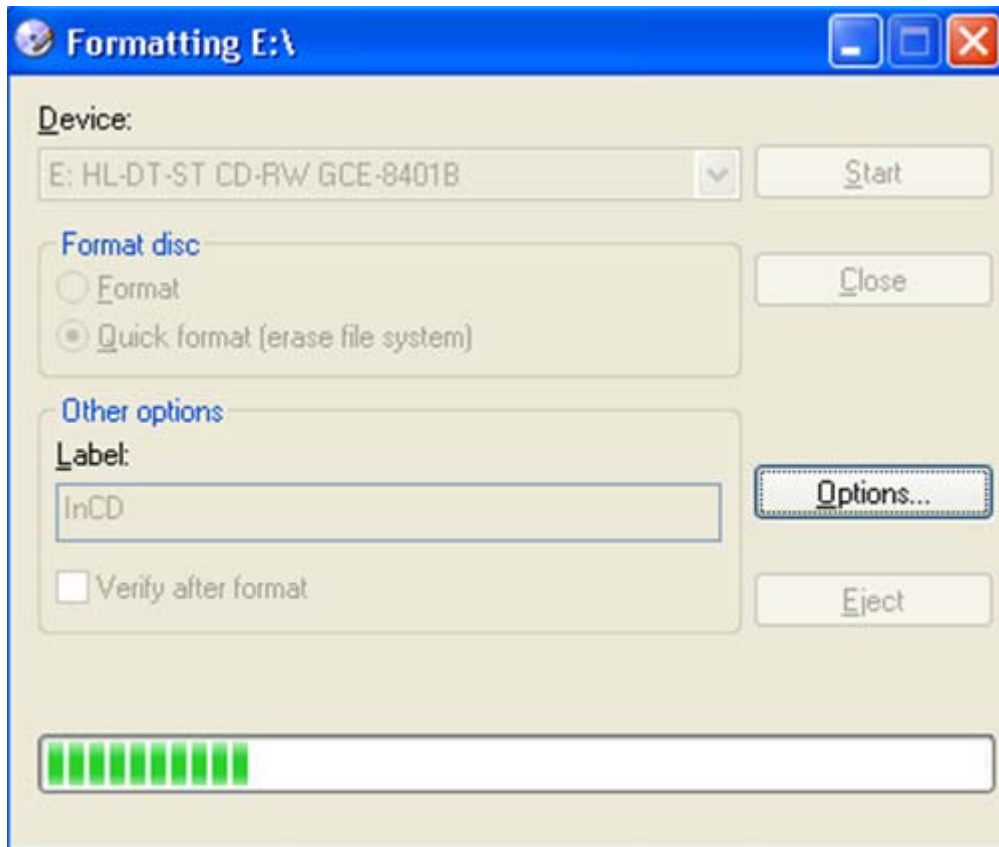
### 5.2.7.3 Run CD Burner (For Non Windows XP Users)

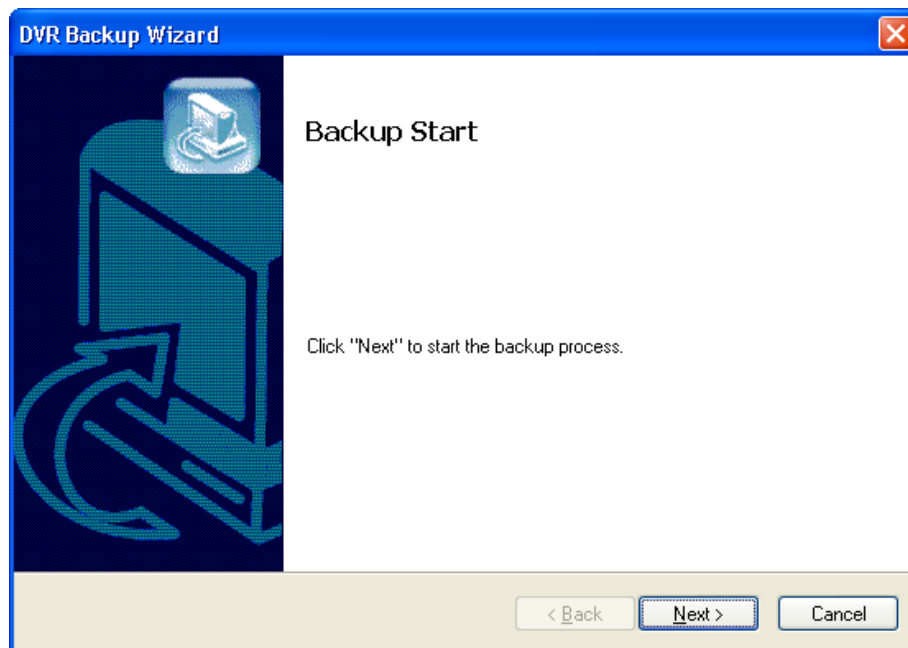


1. Install bundle CD and install INCD.
2. After installing INCD, run "**InCDL.exe**" which is the INCD Launch Program.
3. Insert a blank RW CD and then start formatting it (If it is a brand-new one, click "Format" instead of "Quick Format").

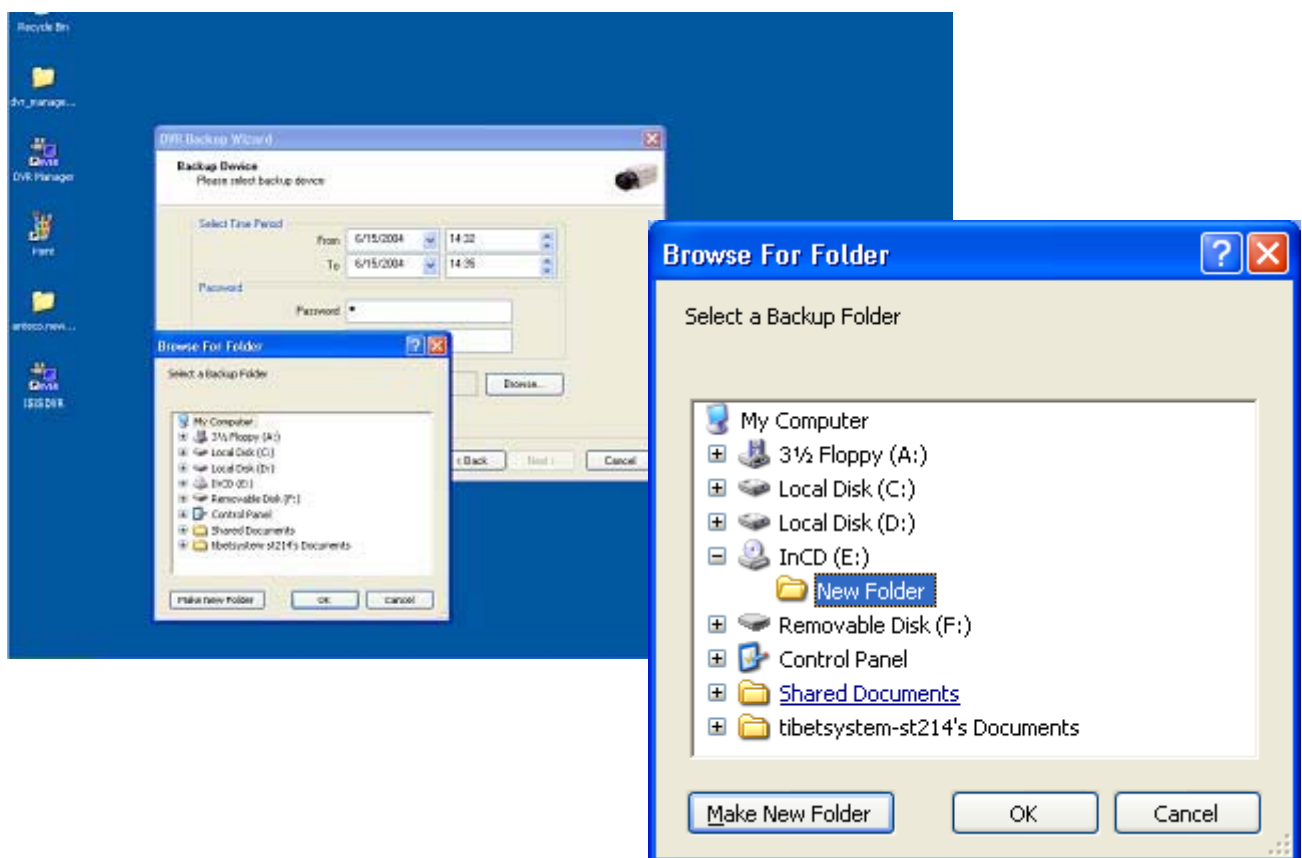


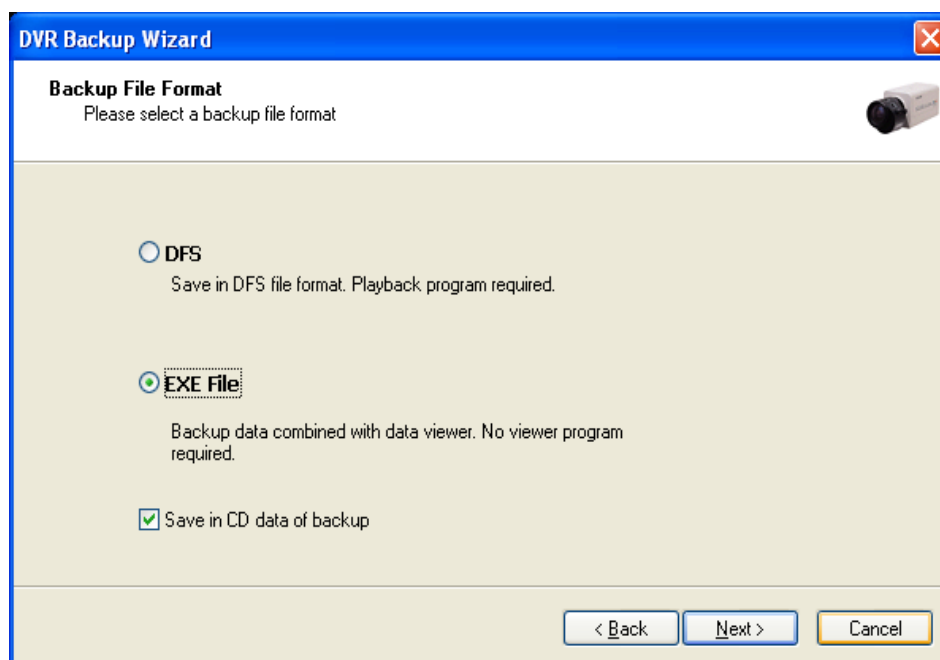
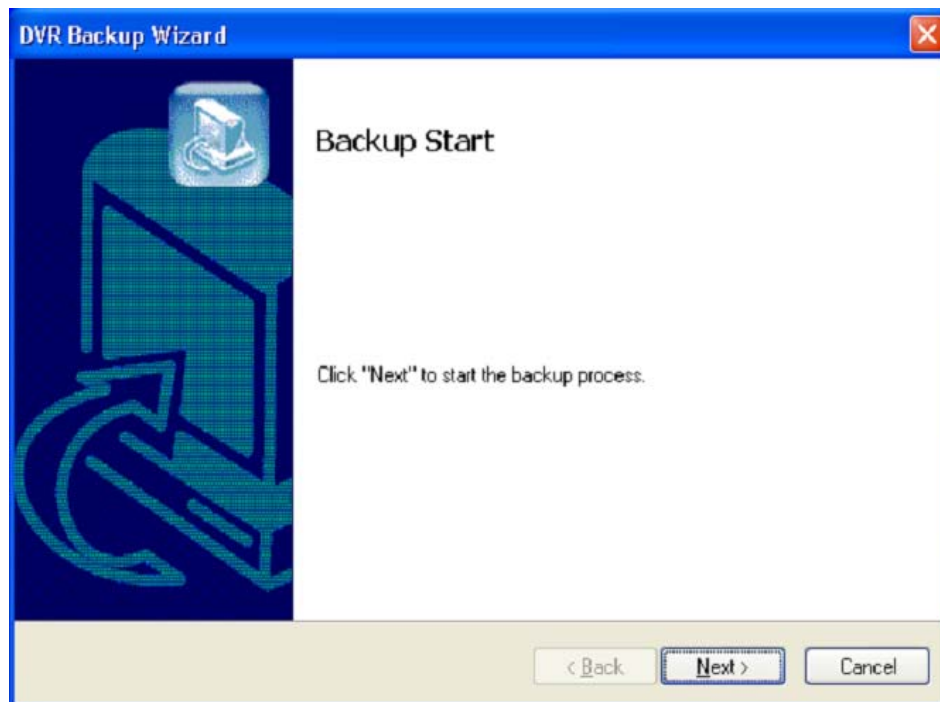






5. Leave the DVR Program and insert the blank Re-Writable CD which has been formatted.
6. Select "Backup" and click "Next" to start.
7. Select time period & password and click "Browse" to create a folder.



**5.2.7.4 Run CD Burner (For Windows XP Users Only)**

Windows XP users can back up data directly in a CD without exiting the DVR Program.

1. Tick the "Save in CD data of backup" box and click "Next".

**DVR Backup Wizard**


**Backup Device**  
Please select backup device


**Select Time Period**

Date: 2005-03-16

Start Time: 17:04 End Time: 17:05

**Password**

Password:  

Retype Password:  

Select CD-RW:

Use Folder:

< Back Next > Cancel

2. Select Time Period : Specify time period and password.
3. Select CD-RW drive.
4. Create folder name if it should be used and click "Next".
5. CD information will be shown as below.

**CD BURNING**

Select CD Device

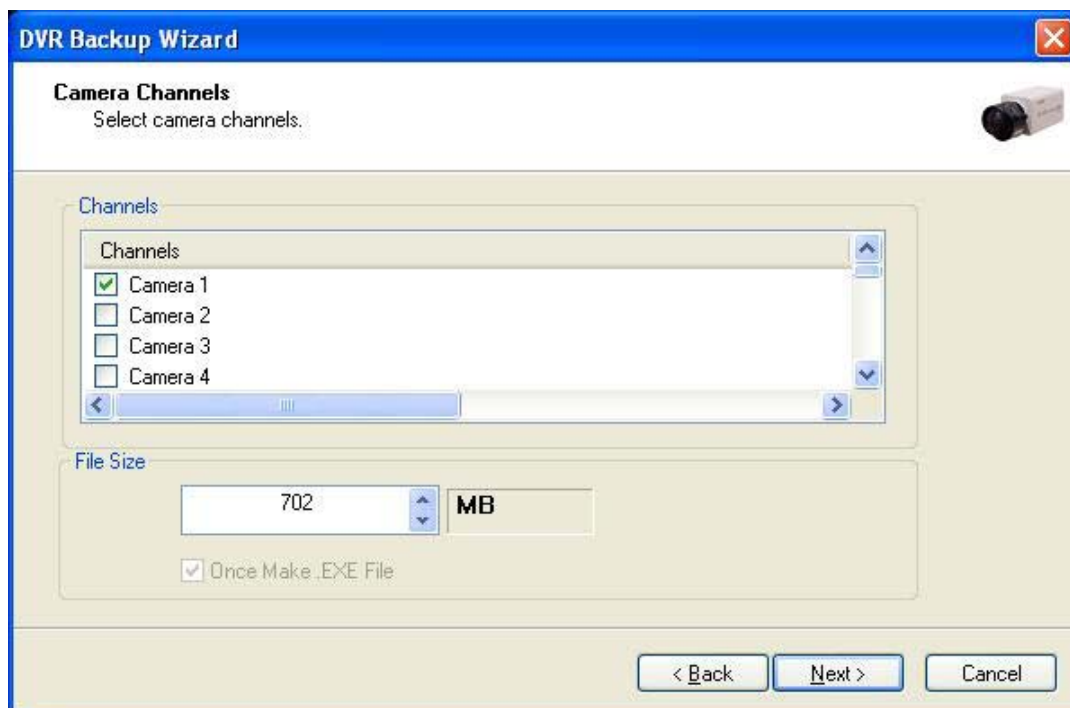
TSSTcorp CD-R/RW TS-H292A TS02

Close

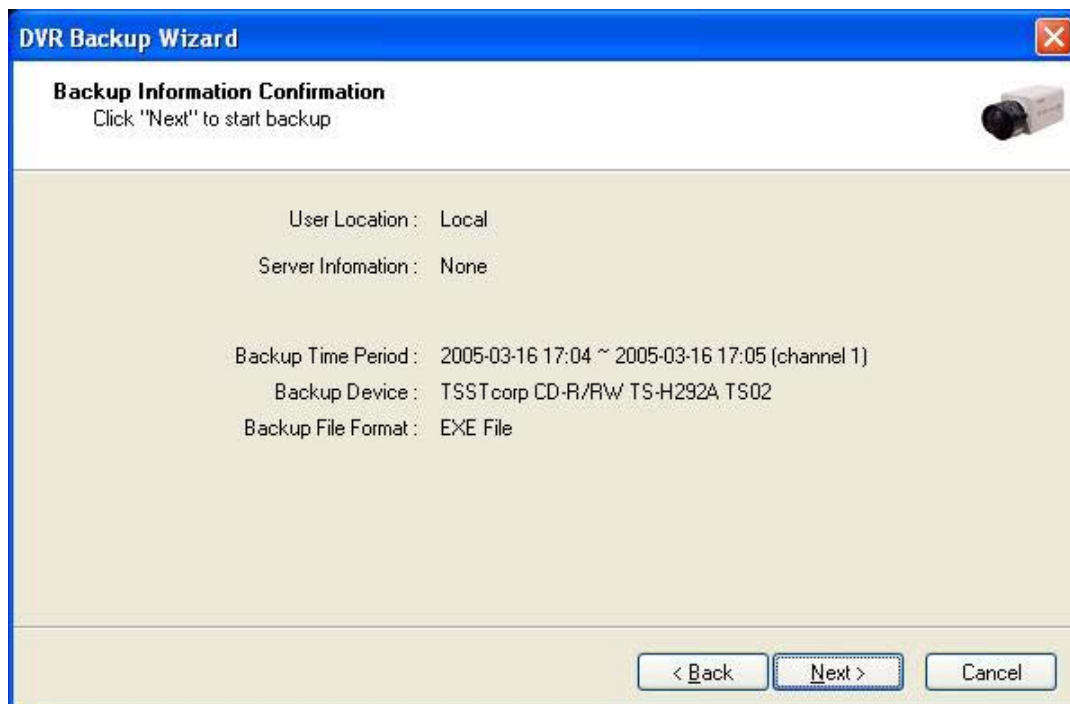
Eject

**CD Information**

Default Recorder drive letter = F:\  
Recorder #1  
PnP ID : TSSTcorp CD-R/RW TS-H292A TS02  
Path : \Device\CdRom0  
Vendor : TSSTcorp  
Product : CD-R/RW TS-H292A  
Revision : TS02  
DiskFreeSpace : 702 MB

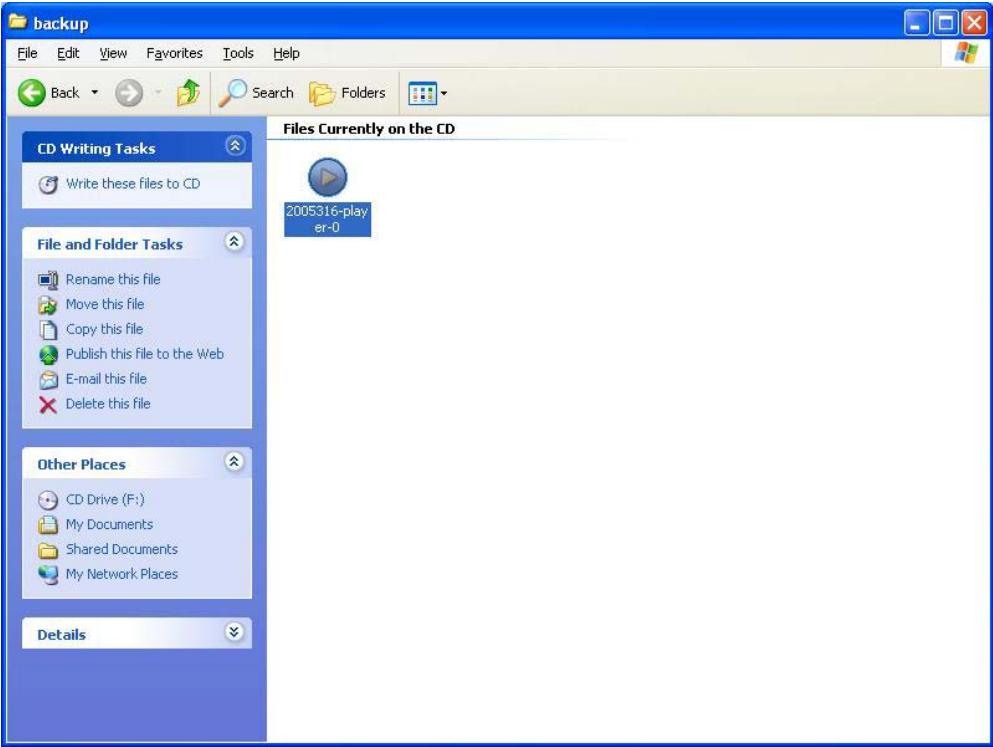
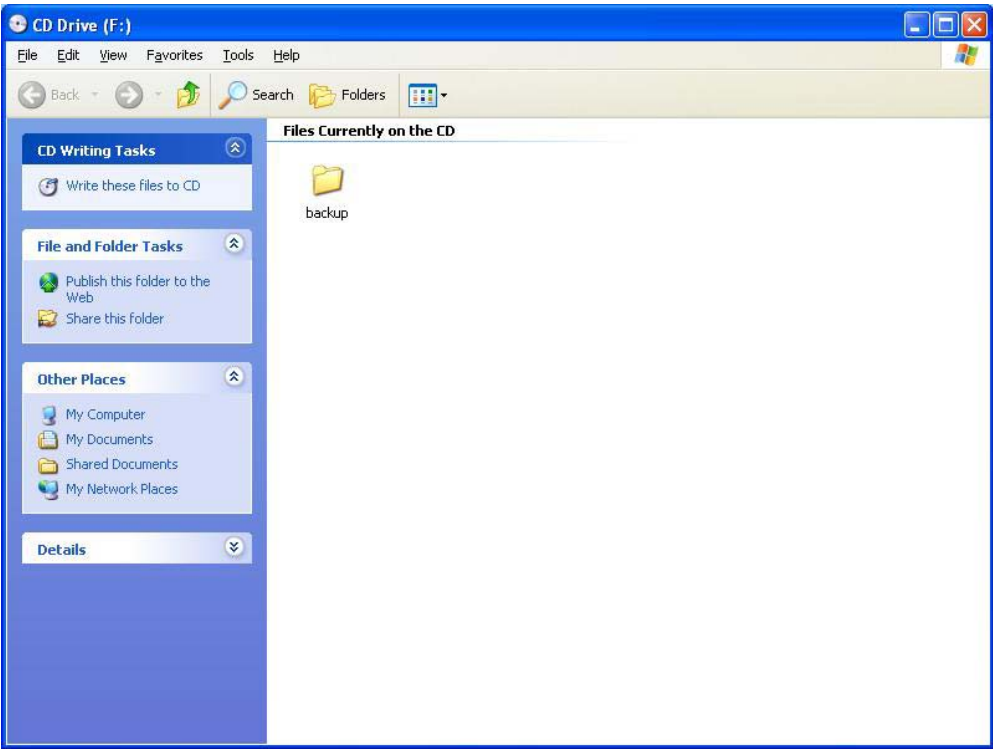


6. **Select 1 channel to back up.**
7. **Identify the maximum file size indicated. An attempt to back up more than the size indicated will result in a failure.**



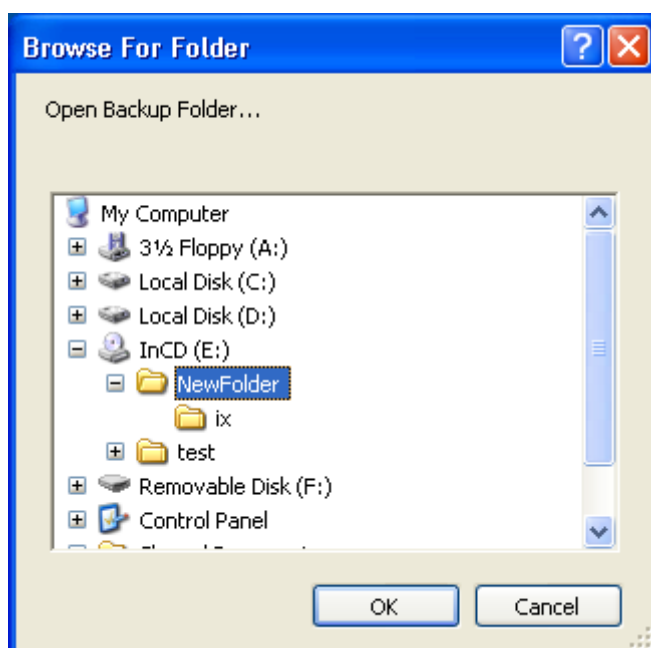
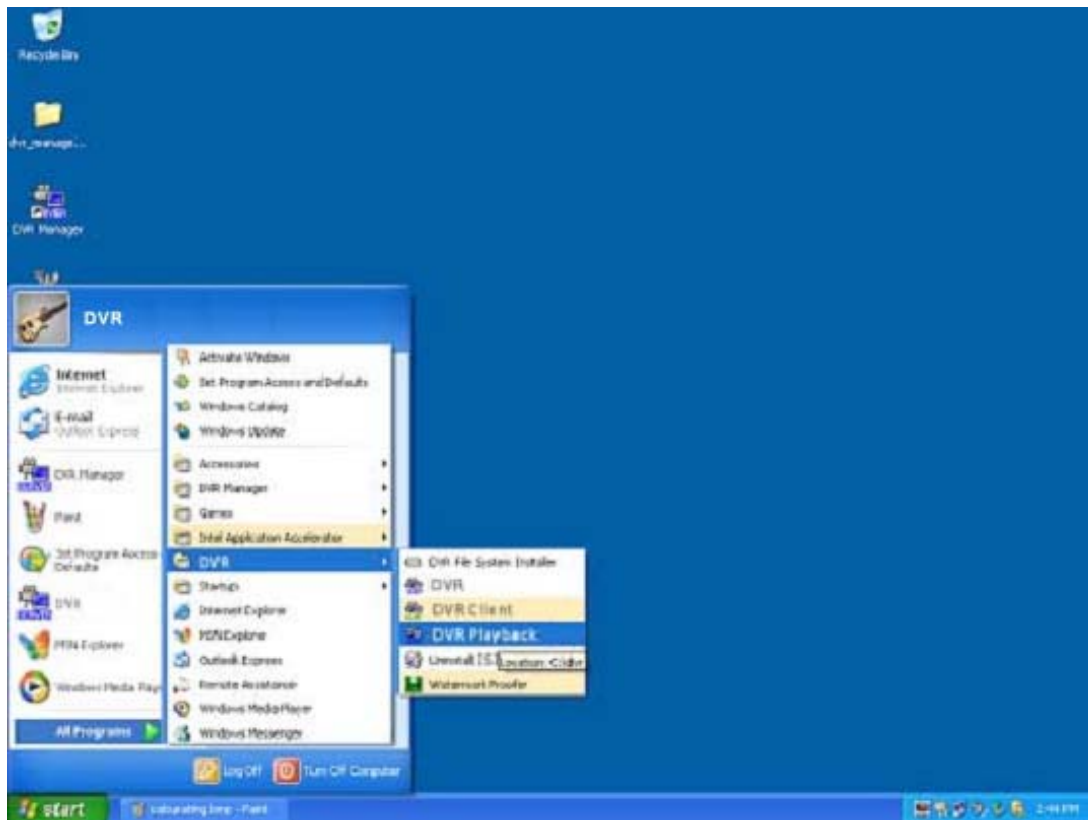


8. After completing back up, find the files created in the CD.



### 5.2.7.5 Playback

1. Click the “Start” button and run the “DVR Playback Program”.
2. Select a folder (subfolder) to see saved data.



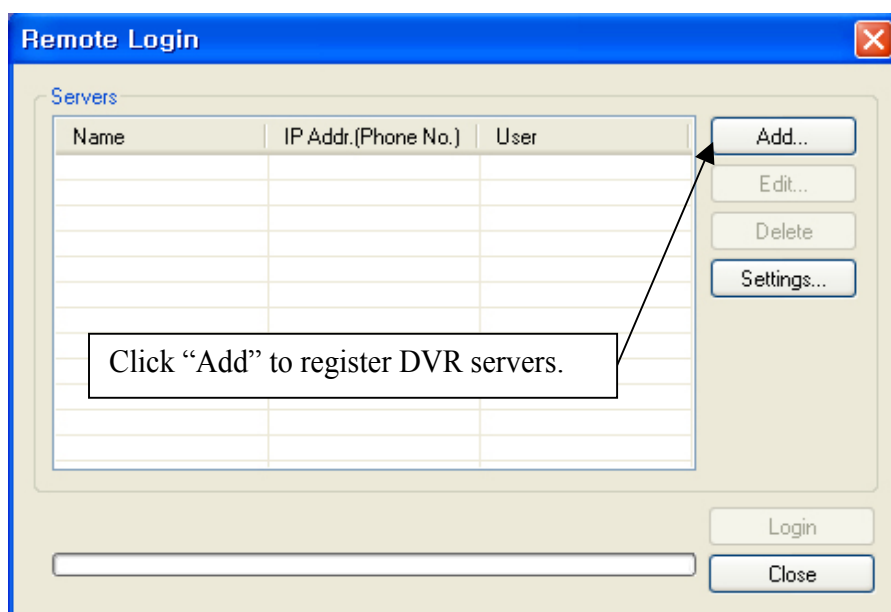
## CHAPTER 6

### Remote Monitoring System (Client)

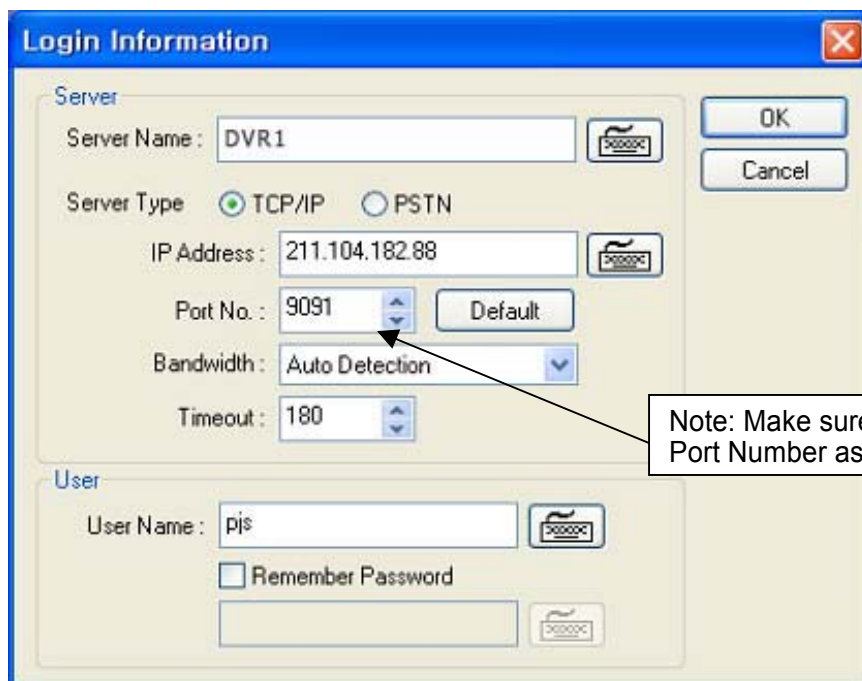
#### 6.1 Program Execution



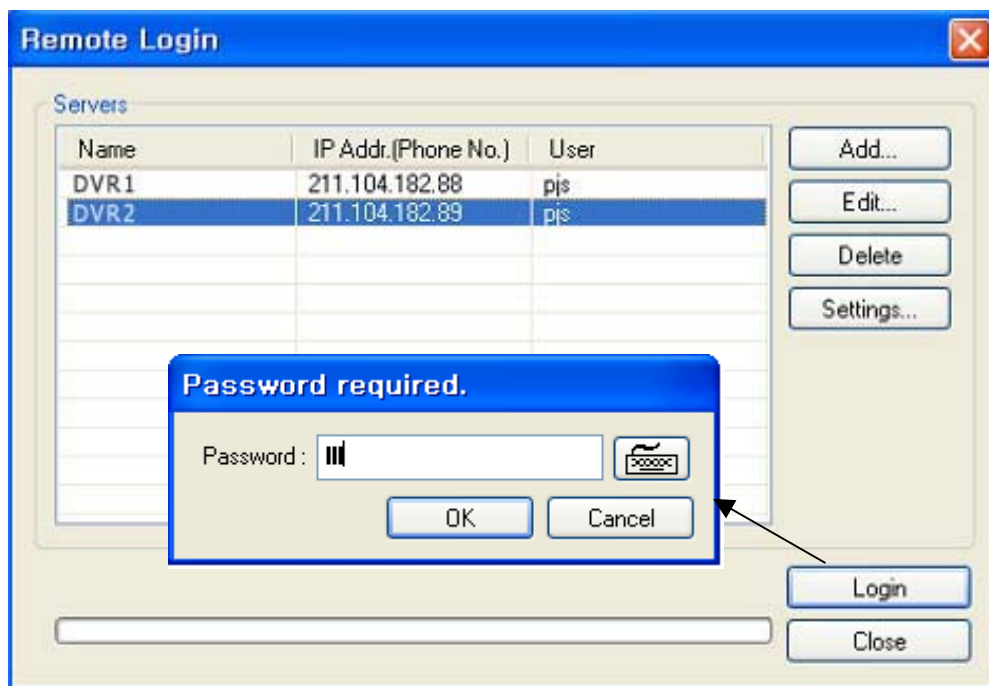
Double-click on the “DVR Client” icon on the desktop to execute Remote Monitoring System (Client).



Click “Add” to register DVR servers.

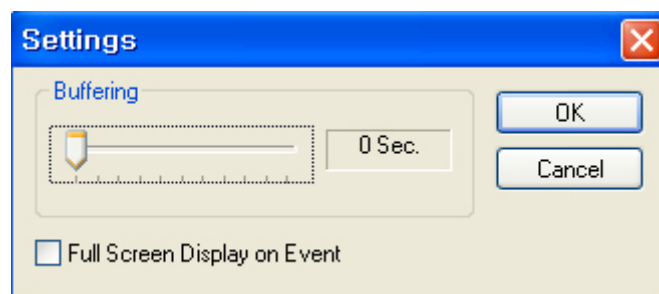


Note: Make sure to put the same Port Number as DVR server.



There can be more than one DVR server registered. Select one from “Servers”, click on “Login” and type in password to log in.

- Edit: Login Info. Changes can be made here.
- Delete: Registered servers can be deleted with one click.



Full Screen Display on Event: If checked, full screen will be displayed on events.

## 6.2 Remote Save and Backup



The instant AVI file save of real time video can be done remotely.

1. Click the right mouse to start saving.
2. Click the right mouse to stop saving.

Remote Backup can also be done.

The same procedure as "DFS Backup" is used.



### 6.3 Real Time Audio



Click the right mouse and select "Enable Audio" to hear real time audio.

**Note:** Changing "Setup" remotely can be done if remote user is "Admin" or "Admin Mode".

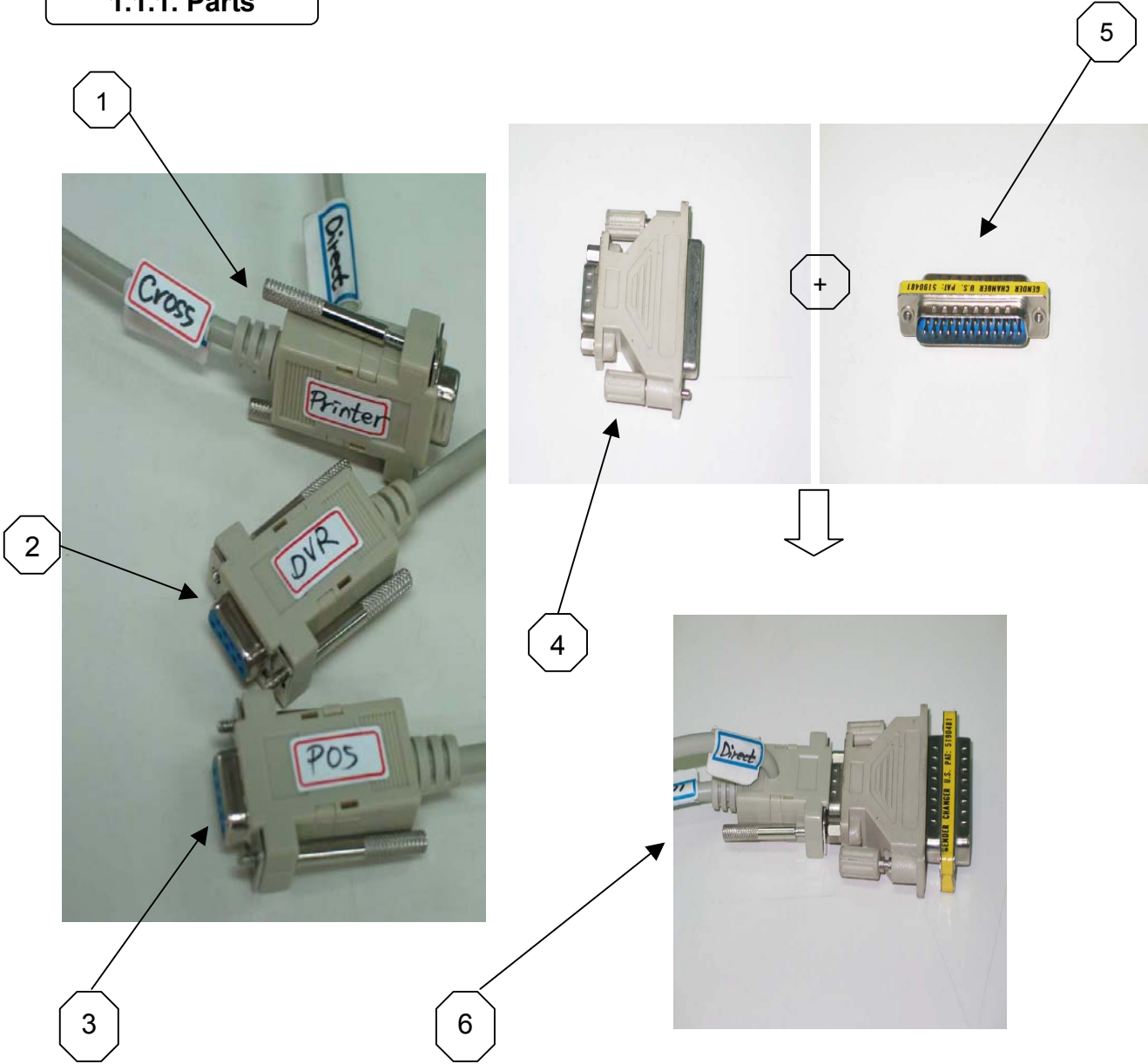
**Appendix 1**  
**POS DVR**

**TABLE OF CONTENTS**

- 1.1 Hardware Installation
  - 1.1.1 Parts
  - 1.1.2 Installation
- 1.2 Software Installation
  - 1.2.1 Installation & Setup

1.1 Hardware Installation

1.1.1. Parts





7

## Part Names

1. RS232 Serial Cables (Cross & Direct)
2. RS232 Serial Cable
3. RS232 Serial Cable
4. RS232 Serial Converter (9 pins into 25 pins)
5. Gender Changer
6. #1 + #4 + #5
7. DVR
8. POS Printer
9. Point of Sales (POS)



8



9

### 1.1.2 Installation

Part # 2 goes into  
COM Port 1 of Part # 7.



Part # 1 goes into  
Serial Port of Part # 8.



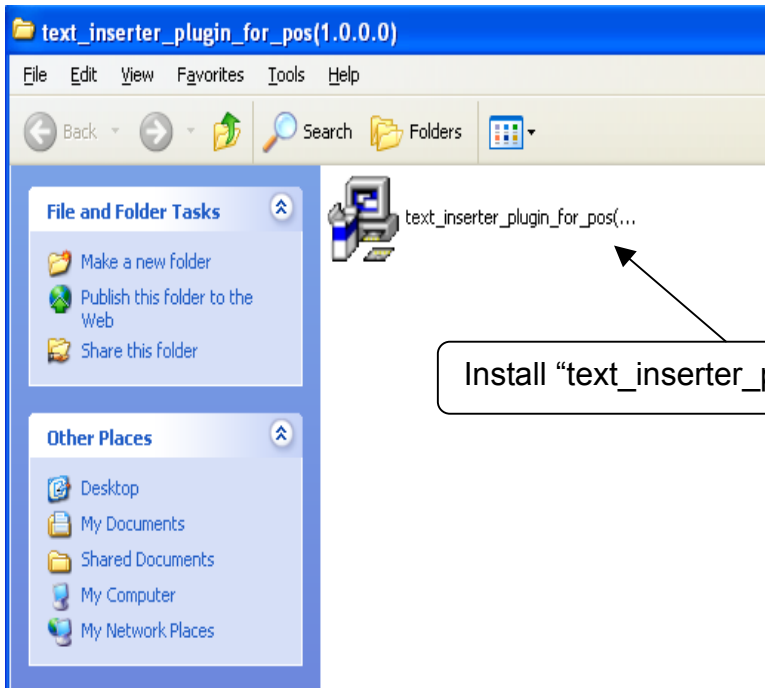
Part # 3 goes into  
Serial Port of Part # 9.



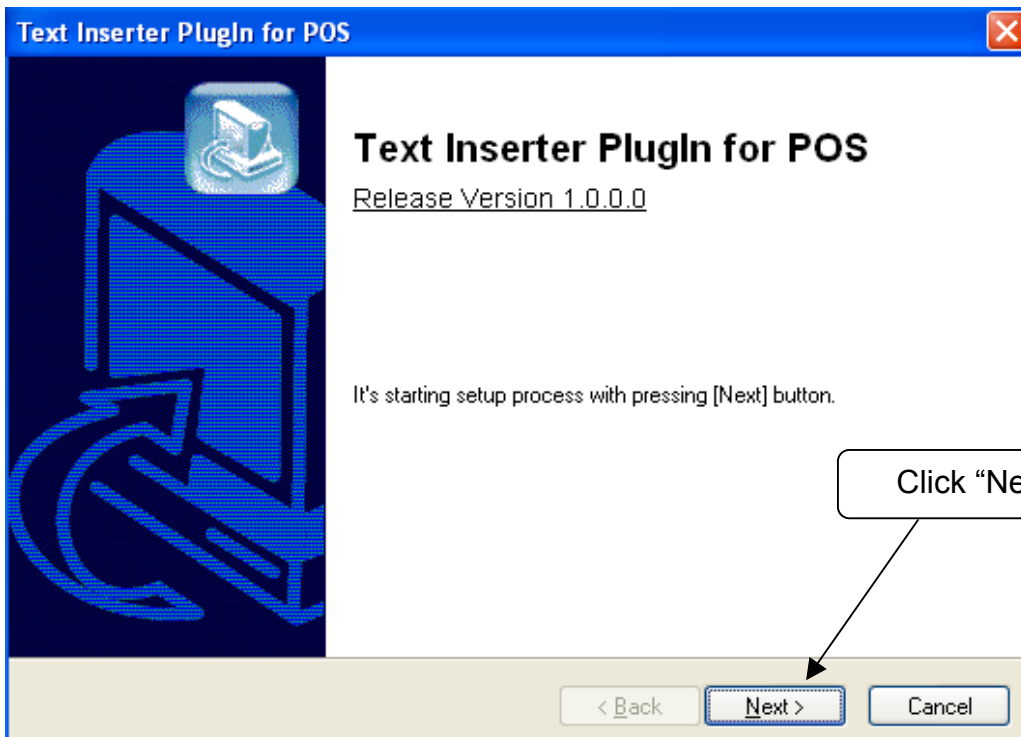


## 1.2 Software Installation

### 1.2.1 Installation & Setup



Install "text\_inserter\_plugin\_for\_pos" on DVR Server.



Click "Next" to start.

## Text Inserter PlugIn for POS

Select Installation method.


☒ **Typical Installation**

It will be installed at C:\dvr.plugins\posti folder with predefined common way.

Select "Typical Installation" for automatic installation.

☐ **Custom Installation**

With this option, you can select explicit software modules to install

&lt; Back

Next &gt;

Cancel

## Properties

Device Connection

Text Filter

About...

Specify the serial port connected to each POS machine.

<input checked="" type="checkbox"/> Channel 1 :	COM1	...	<input type="checkbox"/> Channel 9 :	COM9	...
<input type="checkbox"/> Channel 2 :	COM2	...	<input type="checkbox"/> Channel 10 :	COM10	...
<input type="checkbox"/> Channel 3 :	COM3	...	<input type="checkbox"/> Channel 11 :	COM11	...
<input type="checkbox"/> Channel 4 :	COM4	...	<input type="checkbox"/> Channel 12 :	COM12	...
<input type="checkbox"/> Channel 5 :	COM5	...	<input type="checkbox"/> Channel 13 :	COM13	...
<input type="checkbox"/> Channel 6 :	COM6	...	<input type="checkbox"/> Channel 14 :	COM14	...
<input type="checkbox"/> Channel 7 :	COM7	...	<input type="checkbox"/> Channel 15 :	COM15	...
<input type="checkbox"/> Channel 8 :	COM8	...	<input type="checkbox"/> Channel 16 :	COM16	...

Select camera channels and click the Com Port buttons for serial port configuration.

OK

Cancel

Apply

## Serial Port Configuration

Port Name :

Baudrate :

Databits :

Parity :

Stopbits :

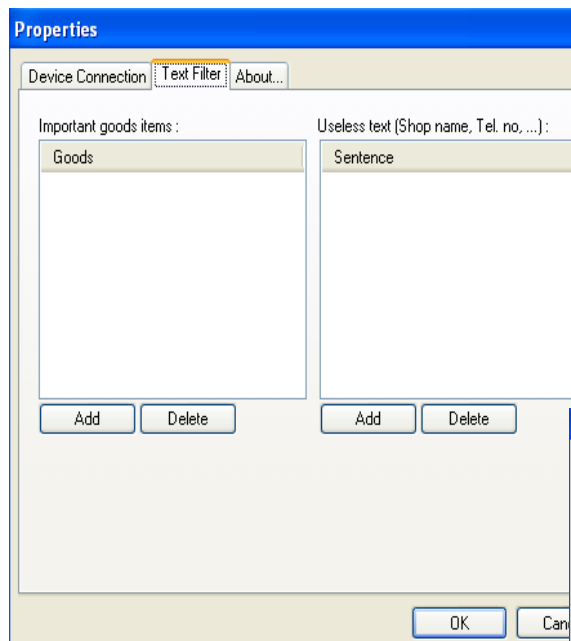
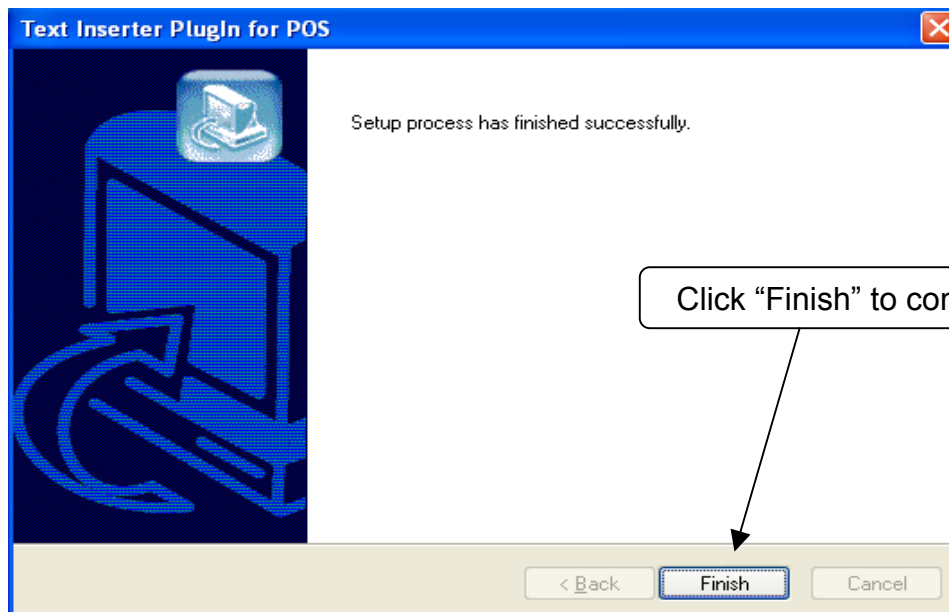
Flow Control : ☐ DTR / DSR  
☐ RTS / CTS  
☐ XON / XOFF

Make sure to select "COM1" if POS printer is connected to Com Port 1.

The Baud rate value is normally 9600.

OK

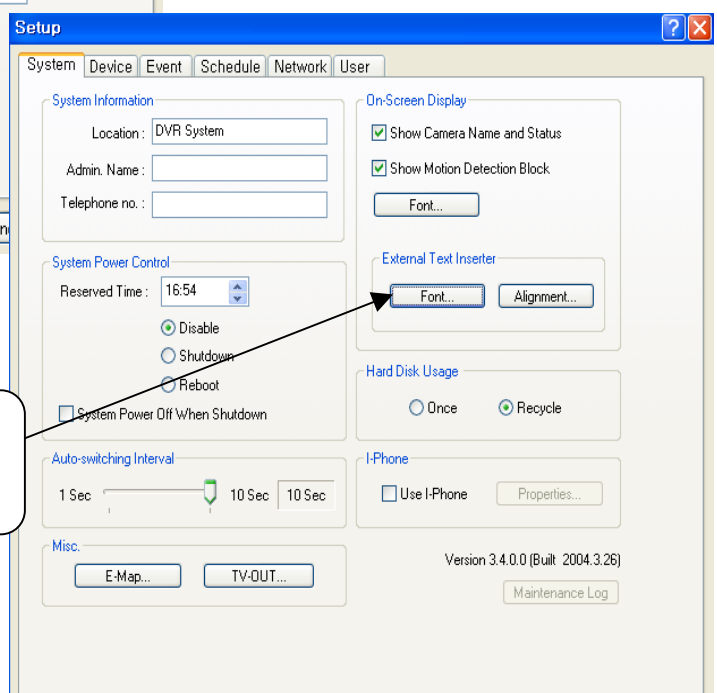
Cancel



Leave everything else.

Select words to be highlighted and words to be omitted.

Go to "Text Inserter" in the DVR setup and choose different fonts and different display corners.



**Appendix 2**

**I-Phone**

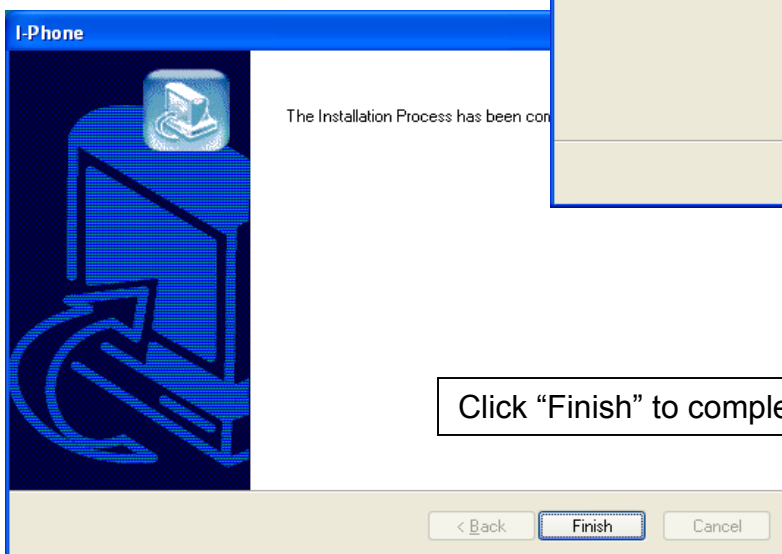
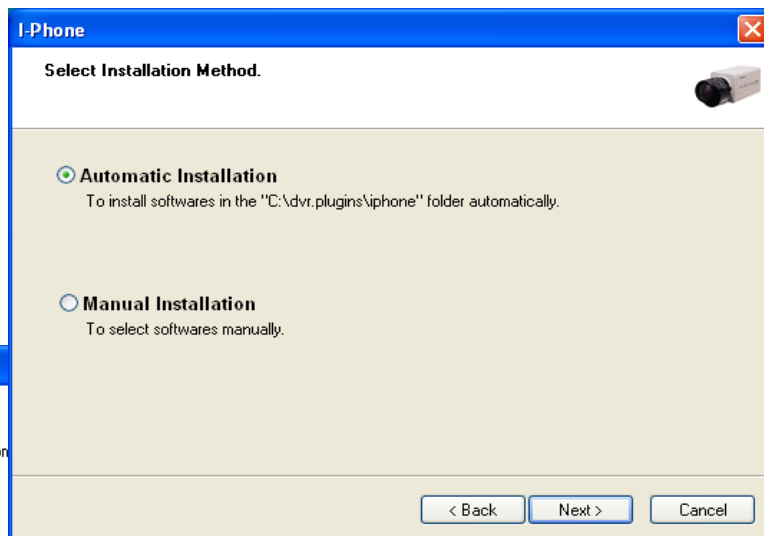
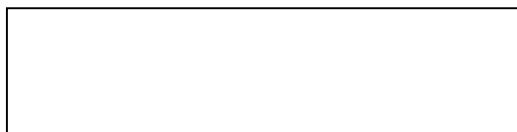
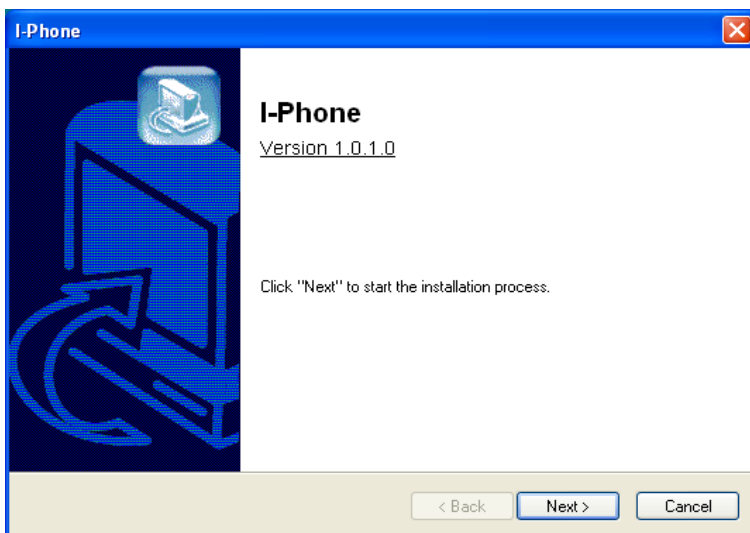
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- 2.1 Installation
- 2.2 Execution
- 2.3 Audio Setup

## 2.1 Installation

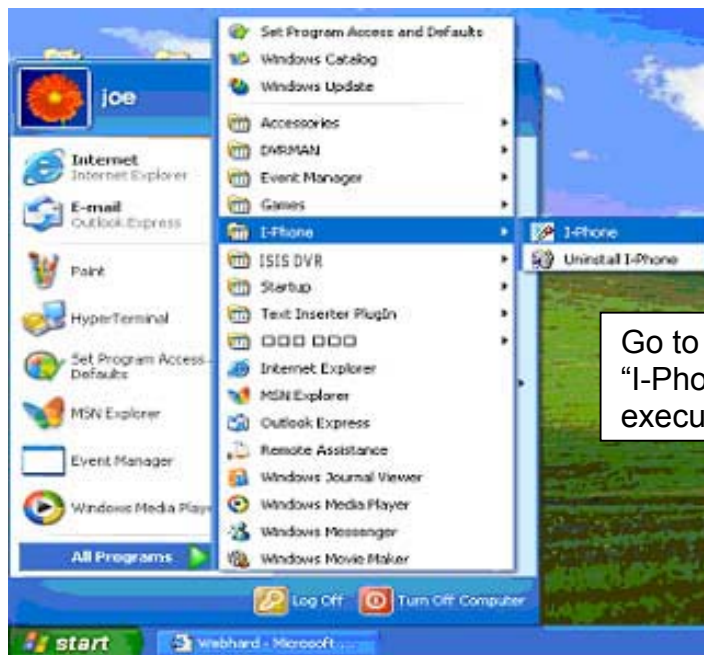
Any system used for "Two-way Communication" must have static IP and "I-Phone (1.0.1.0).exe" must be installed.

For I-phone installation, double-click on "I-Phone(1.0.1.0).exe".

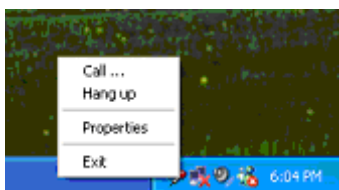


Click "Finish" to complete the process.

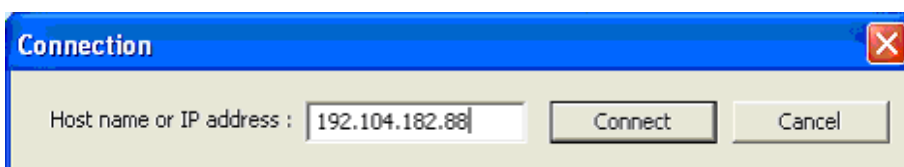
## 2.2 Execution



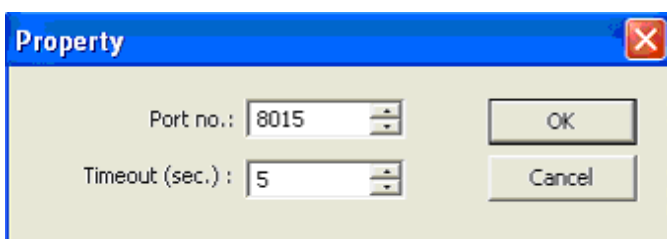
Go to "Start", "All Programs", find "I-Phone" and select it for execution.



Find the I-phone icon at the right bottom and click it for the next step.



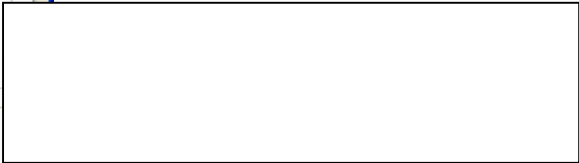
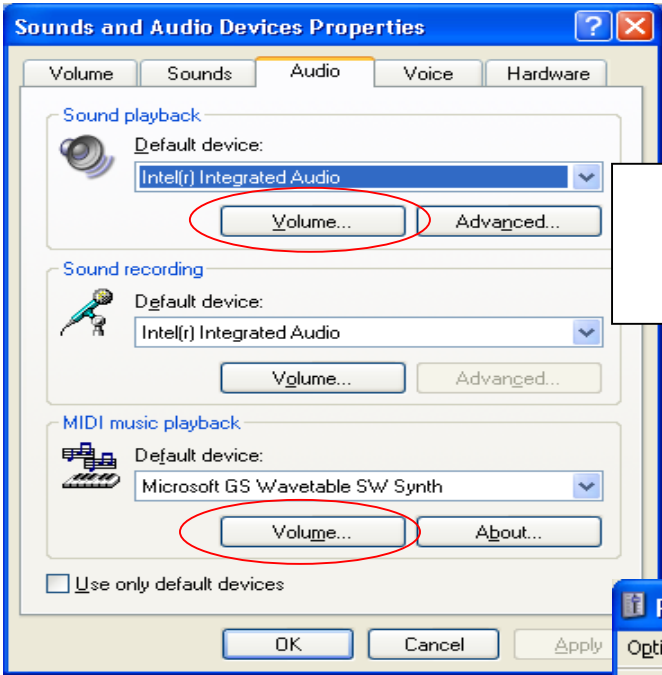
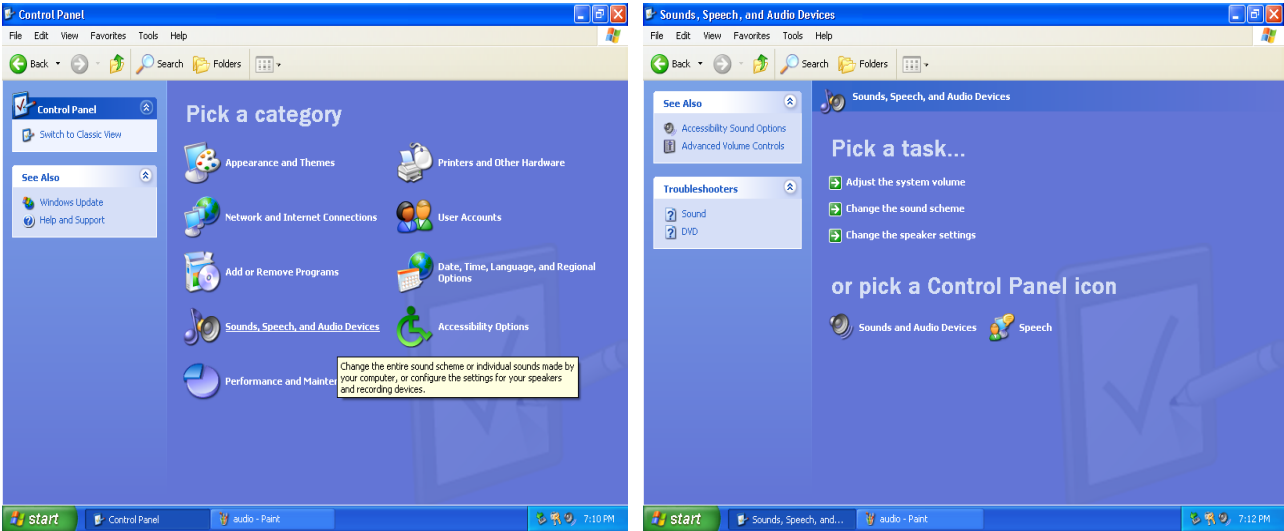
Select "Call for Two-Way Communication", type in IP address and click "Connect".



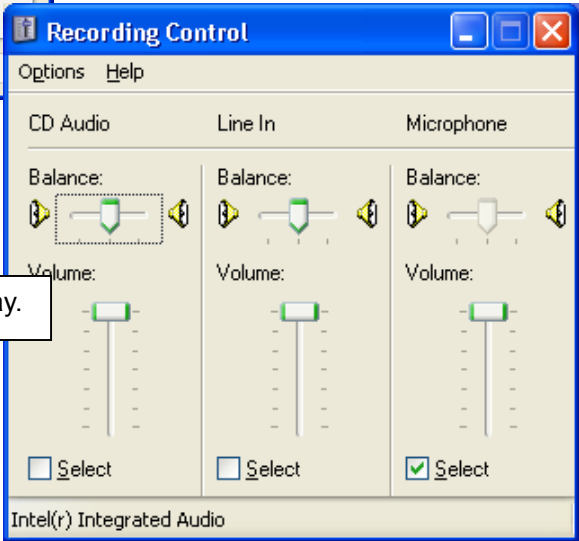
Property: The default port number is 8015 and the default timeout value is 5 seconds. Leave them as they are unless other values must be used.



2.3 Audio Setup



Recording Control should be set up this way.

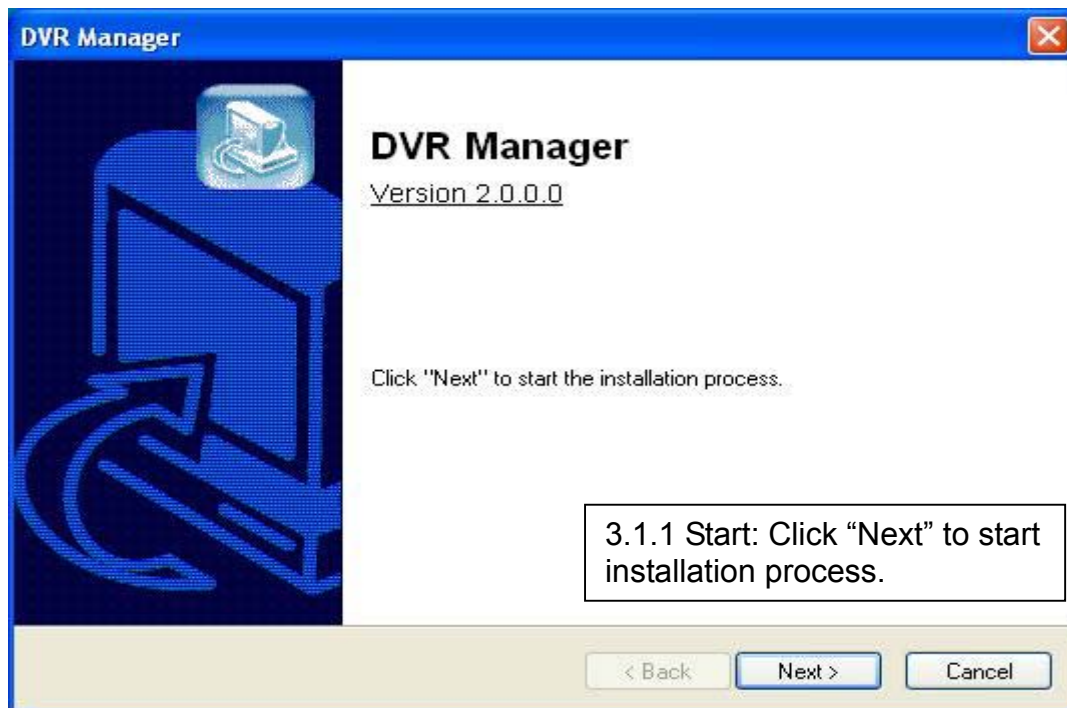


<p><b>Appendix 3</b> <b>DVR Manager</b></p>
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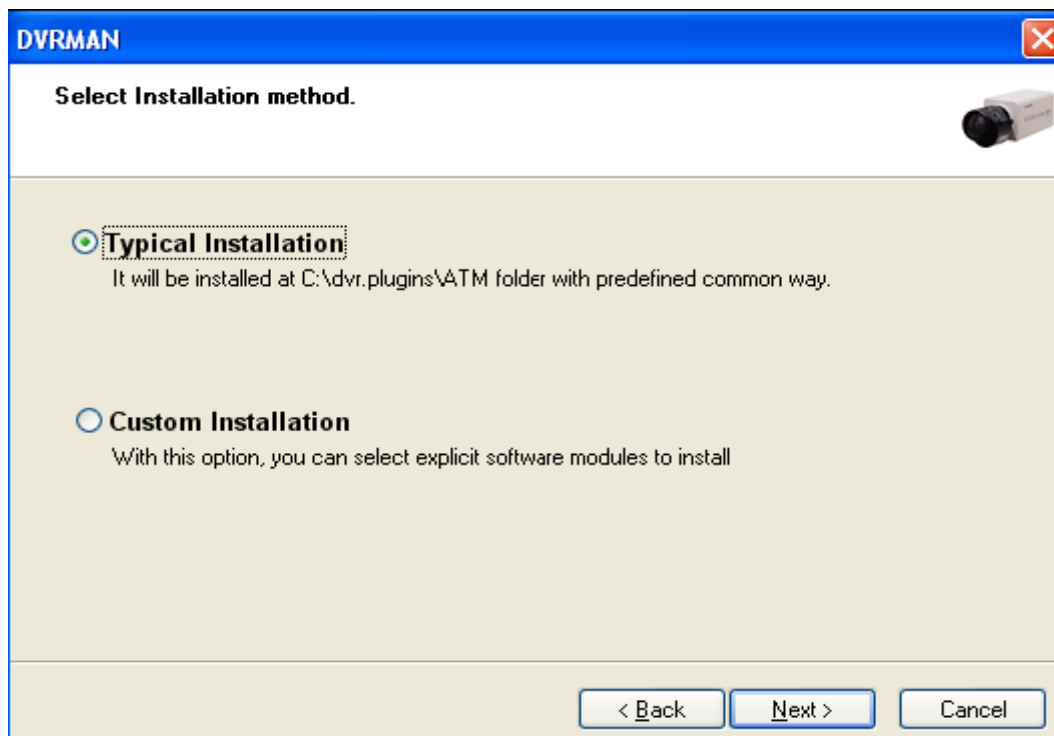
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  - 3.1.2 Selection of Installation Method
  - 3.1.3 On Installing
  - 3.1.4 Finish
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  - 3.2.1 DVR
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  - 3.2.3 C & S (Central Station)
    - 3.2.3.1 Setup
    - 3.2.3.2 Event
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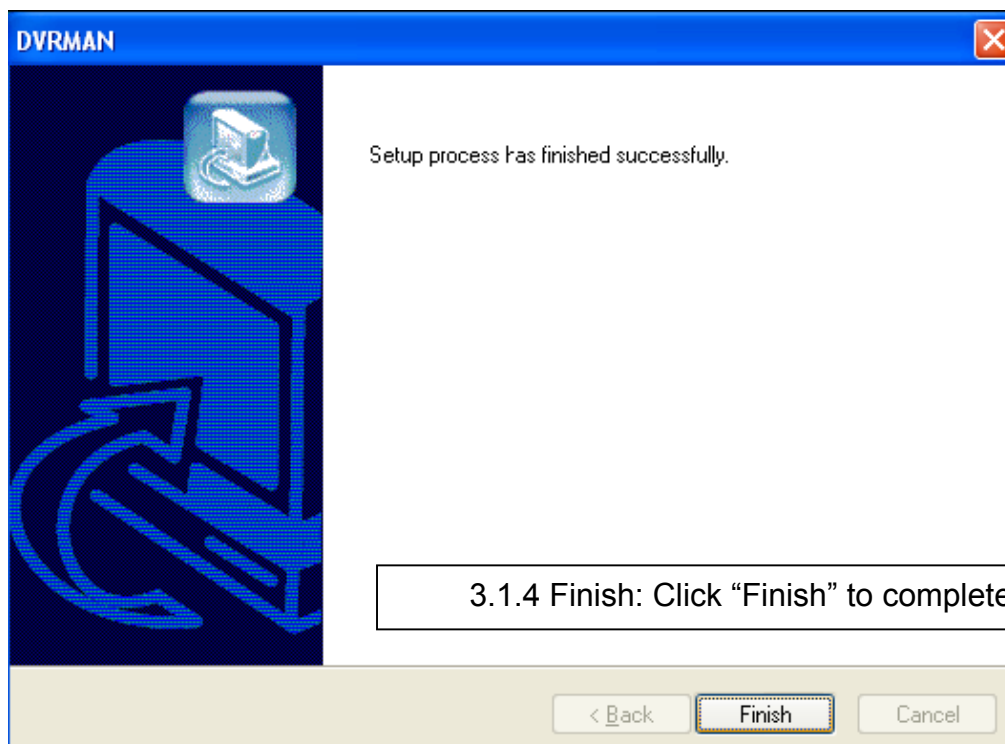
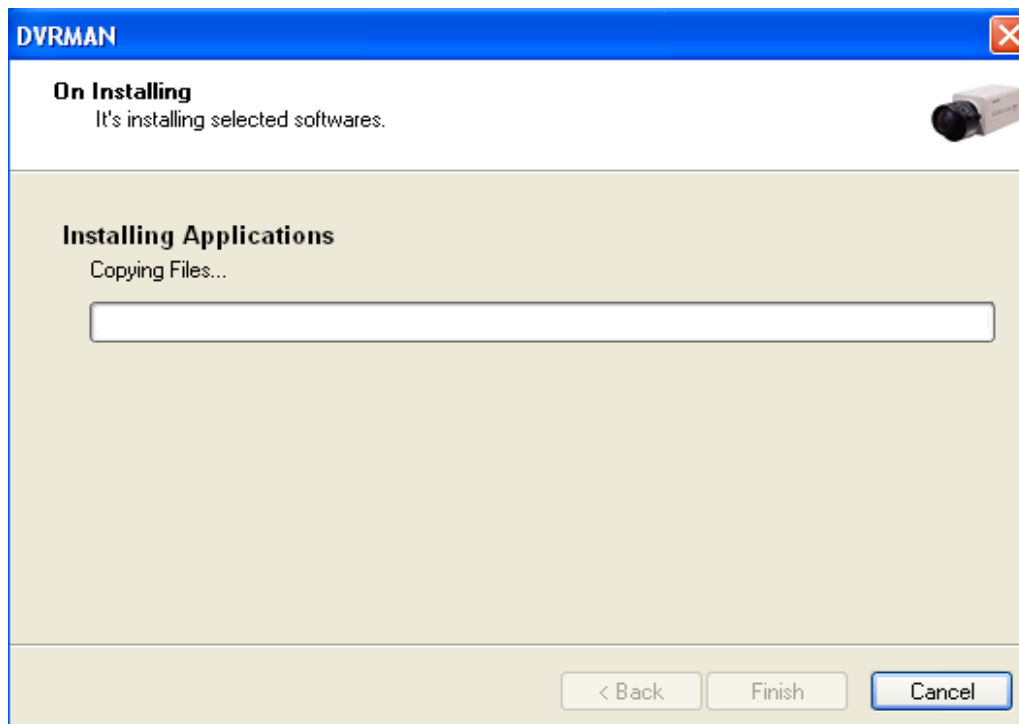
### 3.1 Installation



#### 3.1.2 Selection of Installation Method: Select "Automatic Installation".



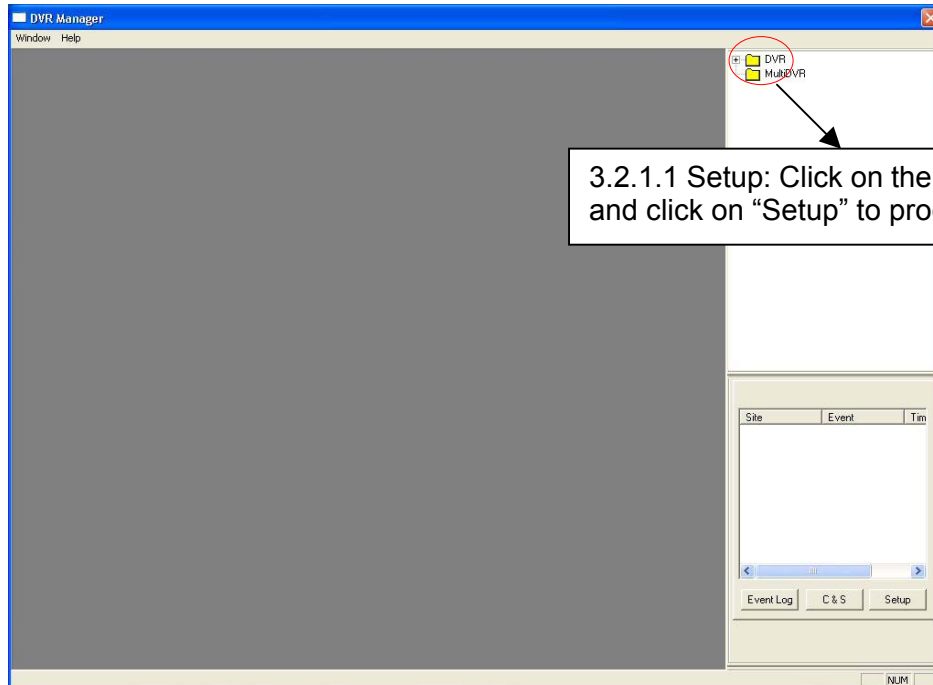
### 3.1.3 On Installing (copying drivers and files)



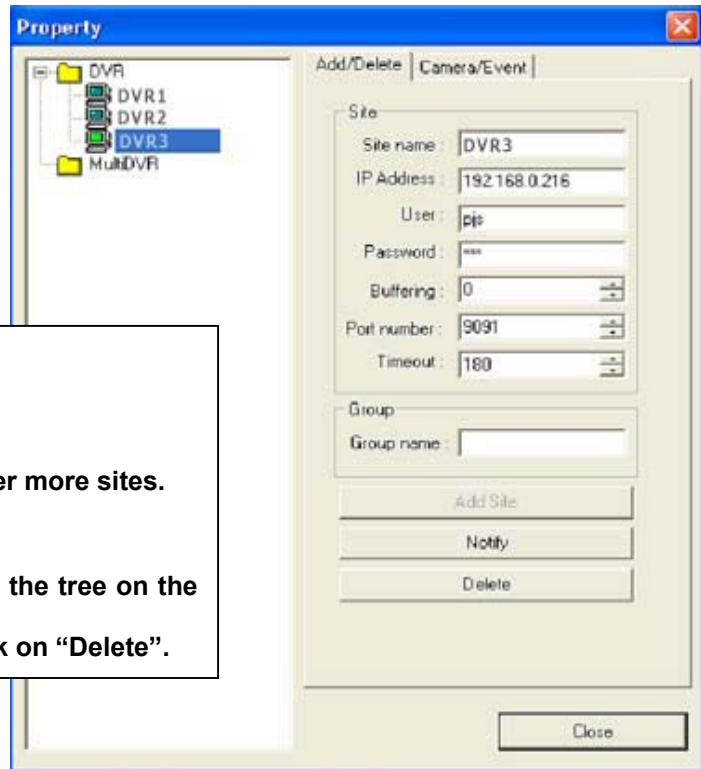
### 3.1.4 Finish: Click "Finish" to complete.

## 3.2 Execution

### 3.2.1 DVR: It monitors one specific site selected.



3.2.1.1 Setup: Click on the folder, "DVR" and click on "Setup" to proceed.

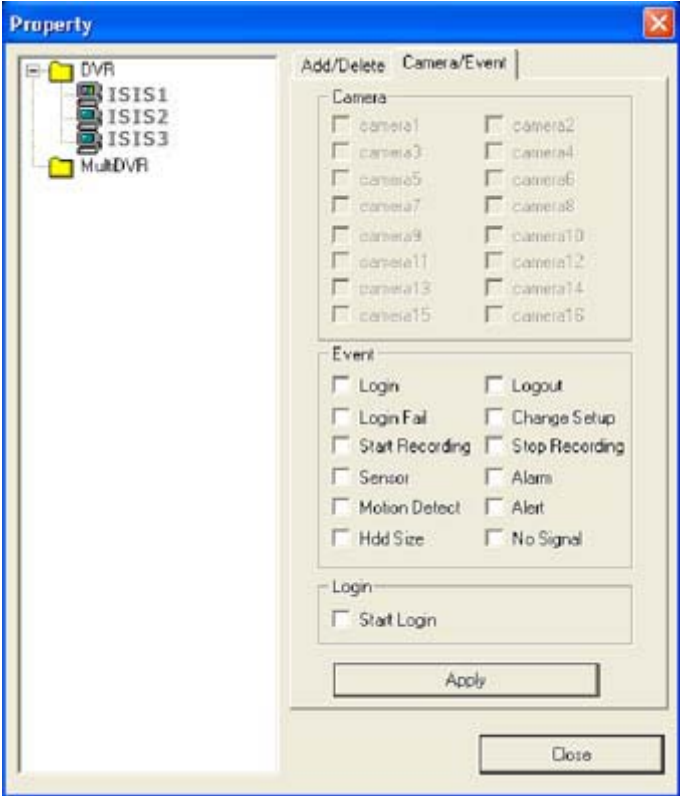


#### Registration Steps:

1. Click on the folder, "DVR".
2. Type in all the required info.
3. Click "Add Site" for completion.
4. Repeat the above steps to register more sites.

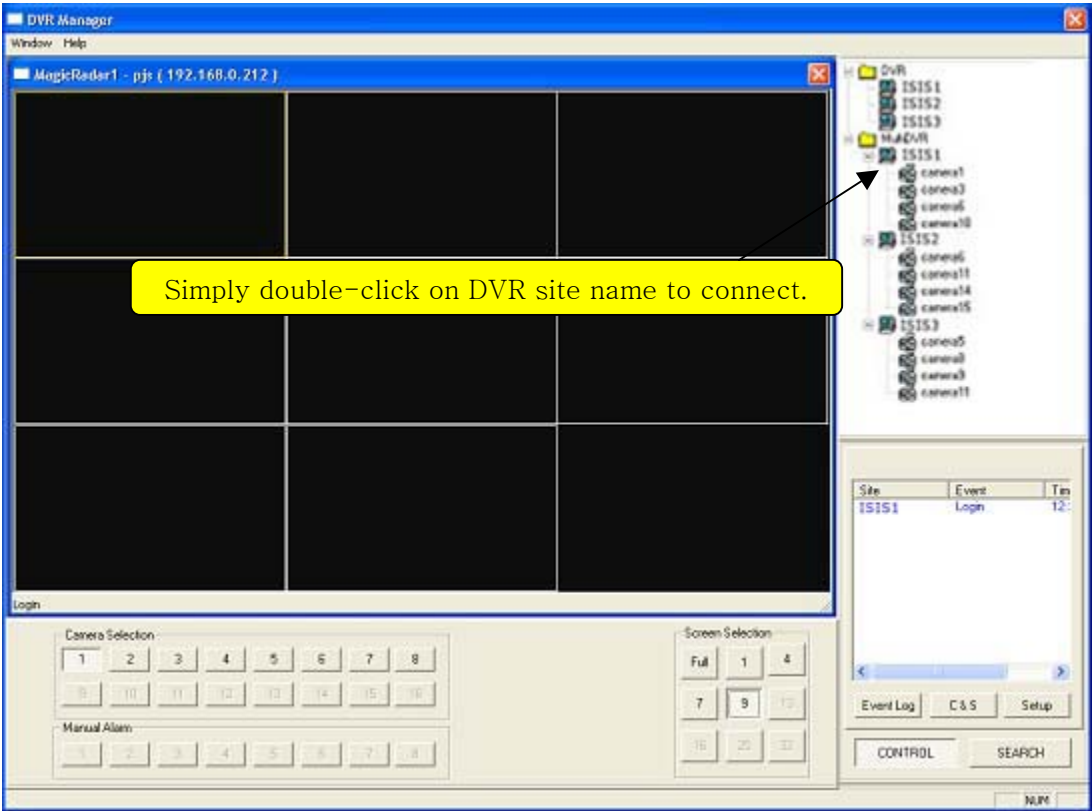
#### Note:

1. To edit a DVR site, select it from the tree on the left, edit it and click on "Notify".
2. To delete a site, select it and click on "Delete".



Checked events will be reported to DVR Manager and recorded in Event Log.

3.2.1.2 Control



Simply double-click on DVR site name to connect.



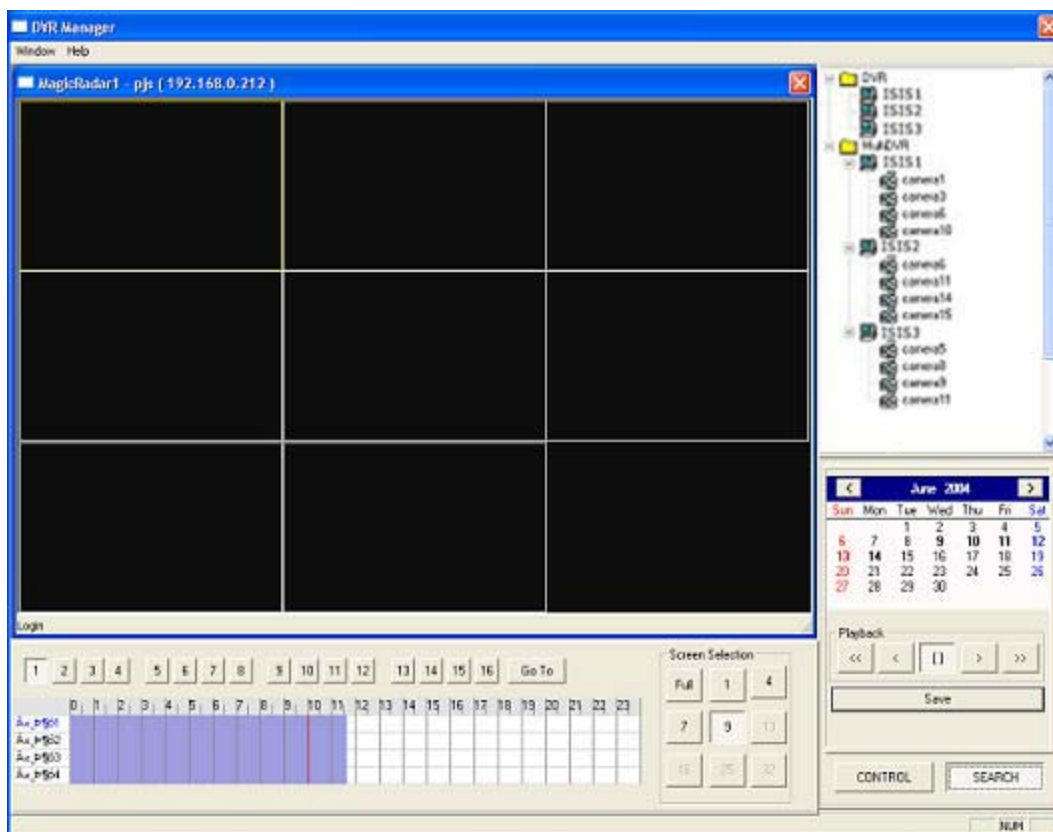
## Event Log

**Manual Alarm**

- Steps
1. Set alarms on DVR Server.
  2. Monitor on DVR Manager.
  3. Detect event.
  4. Click alarm button.

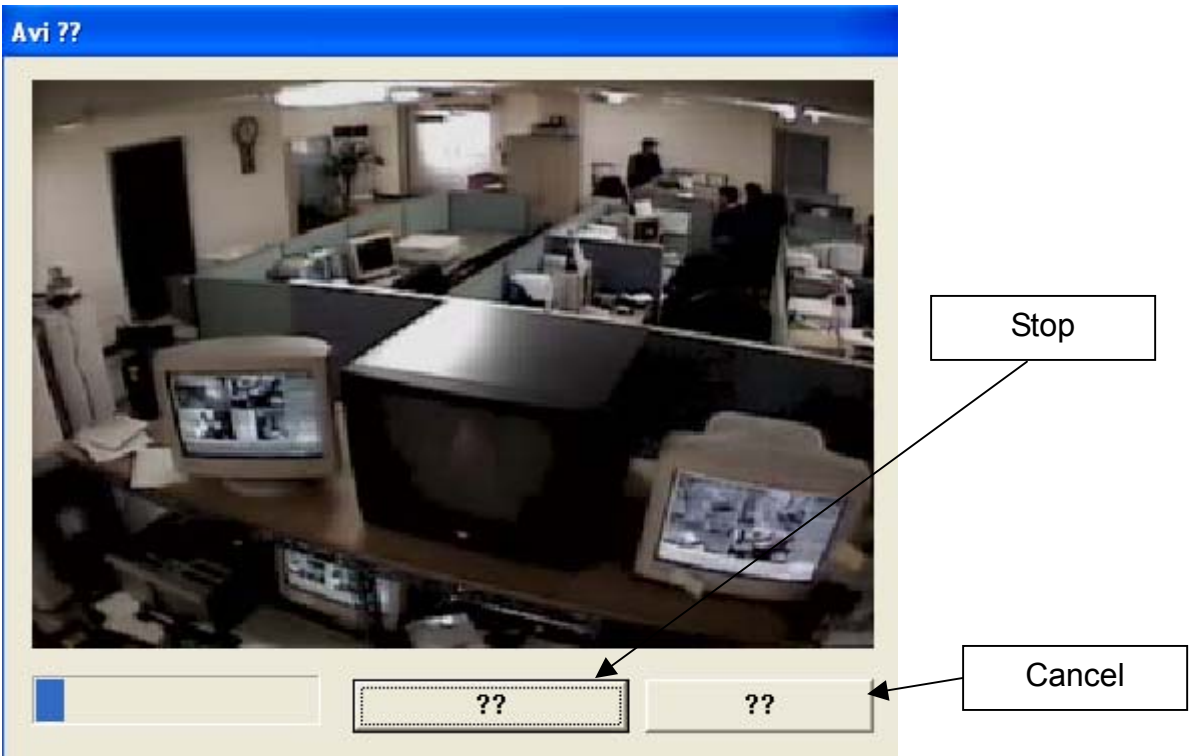
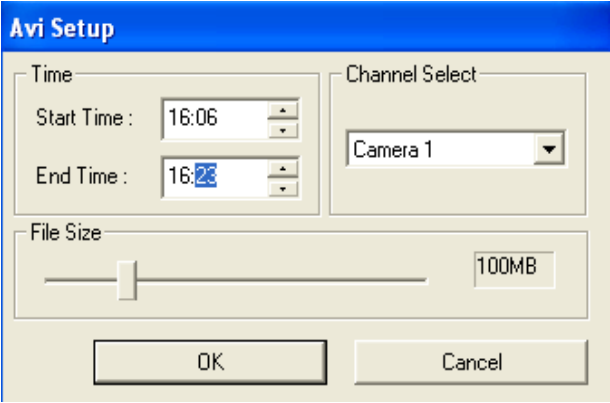
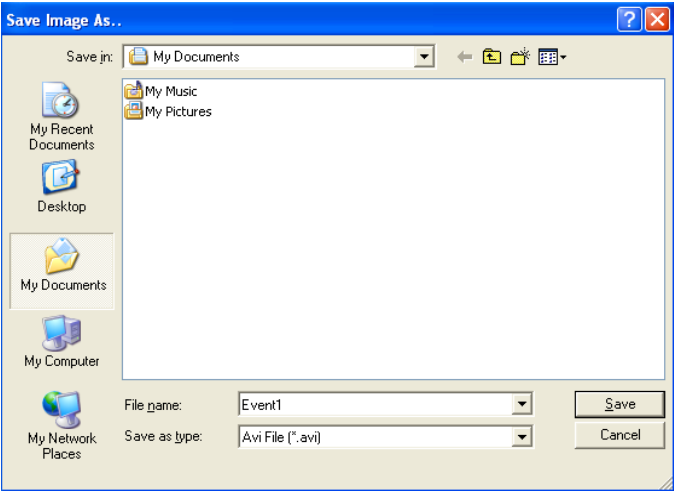


## 3.2.1.3 Search

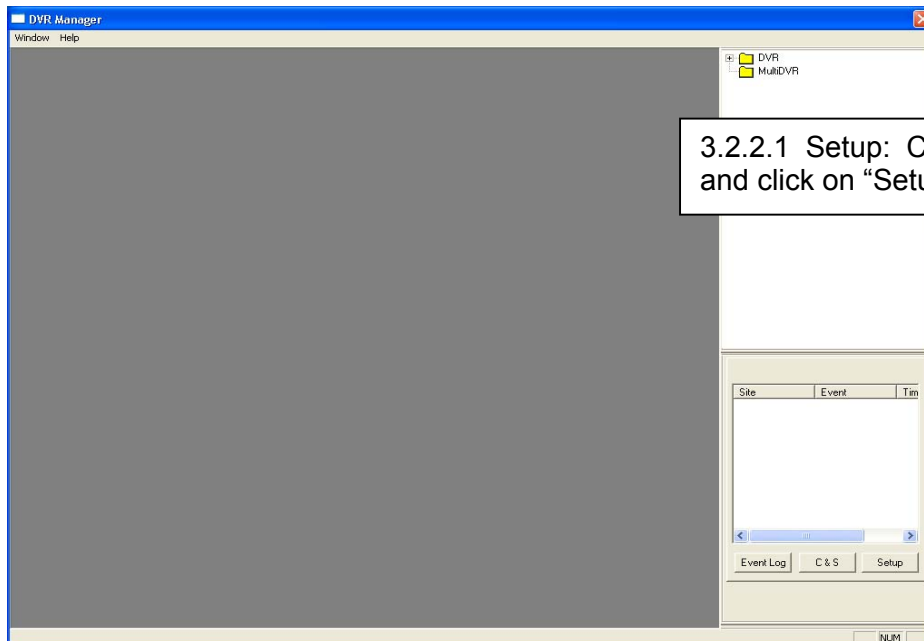
**Search Steps:**

1. Select a DVR site from the tree at the top right for playback.
2. Select a date from the calendar.
3. Select time to be searched either by clicking on the time bar or by using "Go To".

Saving in AVI File Format



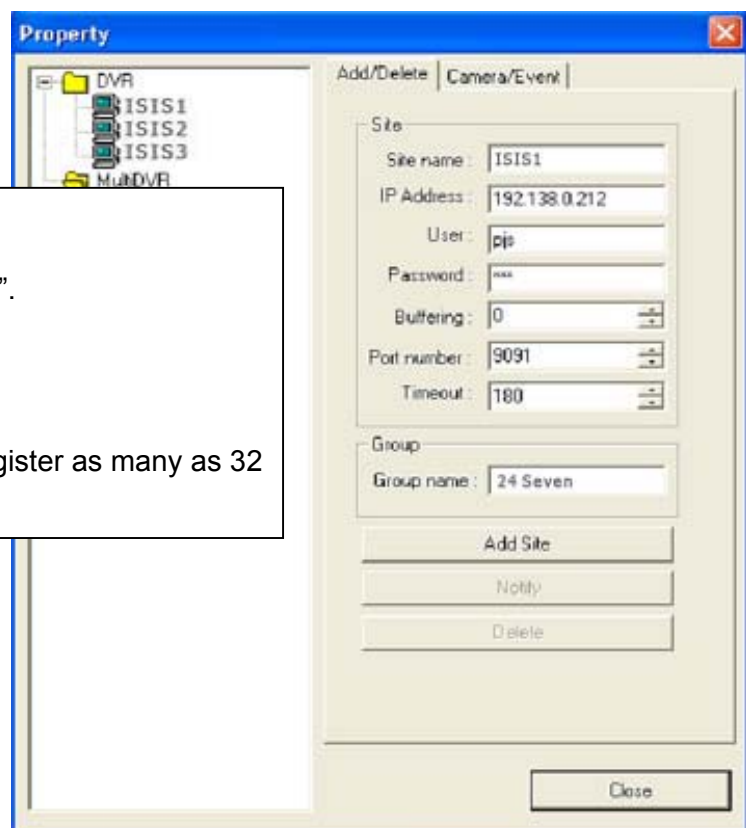
### 3.2.2 MultiDVR: It monitors as many as 32 cameras from different DVR sites.

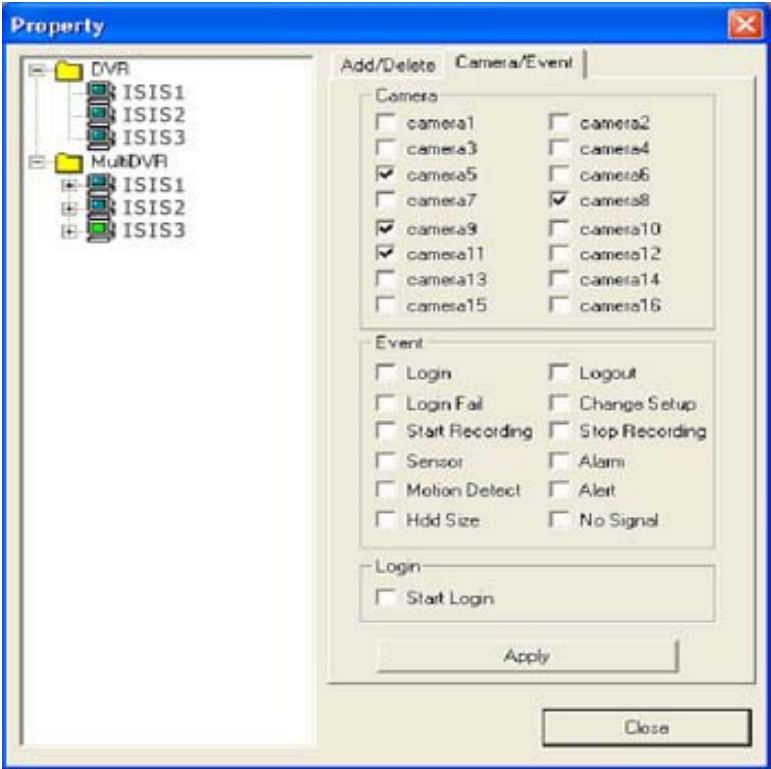


3.2.2.1 Setup: Click on the folder, "DVR" and click on "Setup" to proceed.

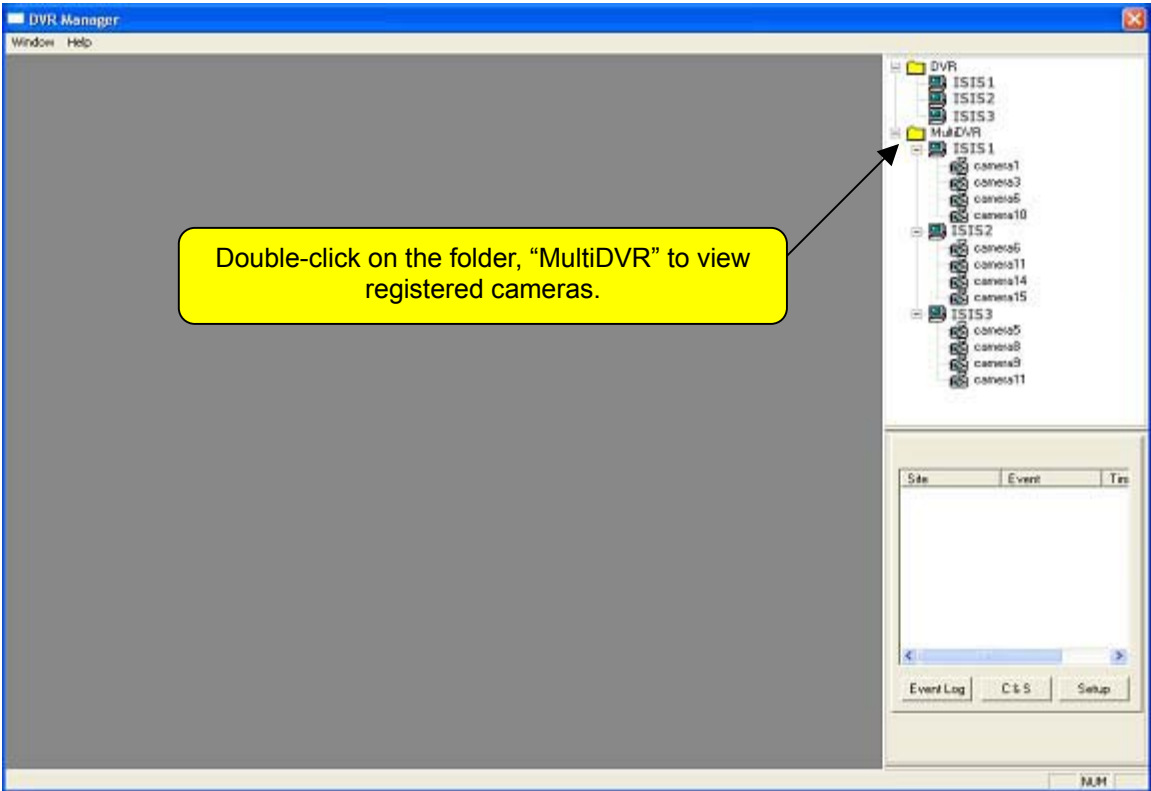
#### Registration Steps:

1. Click on the folder, "MultiDVR".
2. Type in all the required info.
3. Click on "Camera/Event".
4. Select cameras to monitor.
5. Click on "Apply".
6. Repeat the above steps to register as many as 32 cameras.



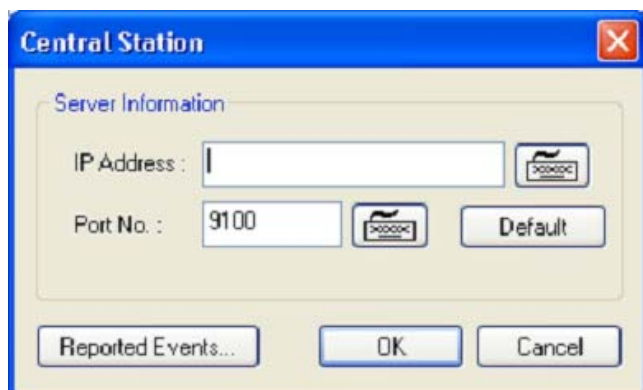


3.2.2.2 Control

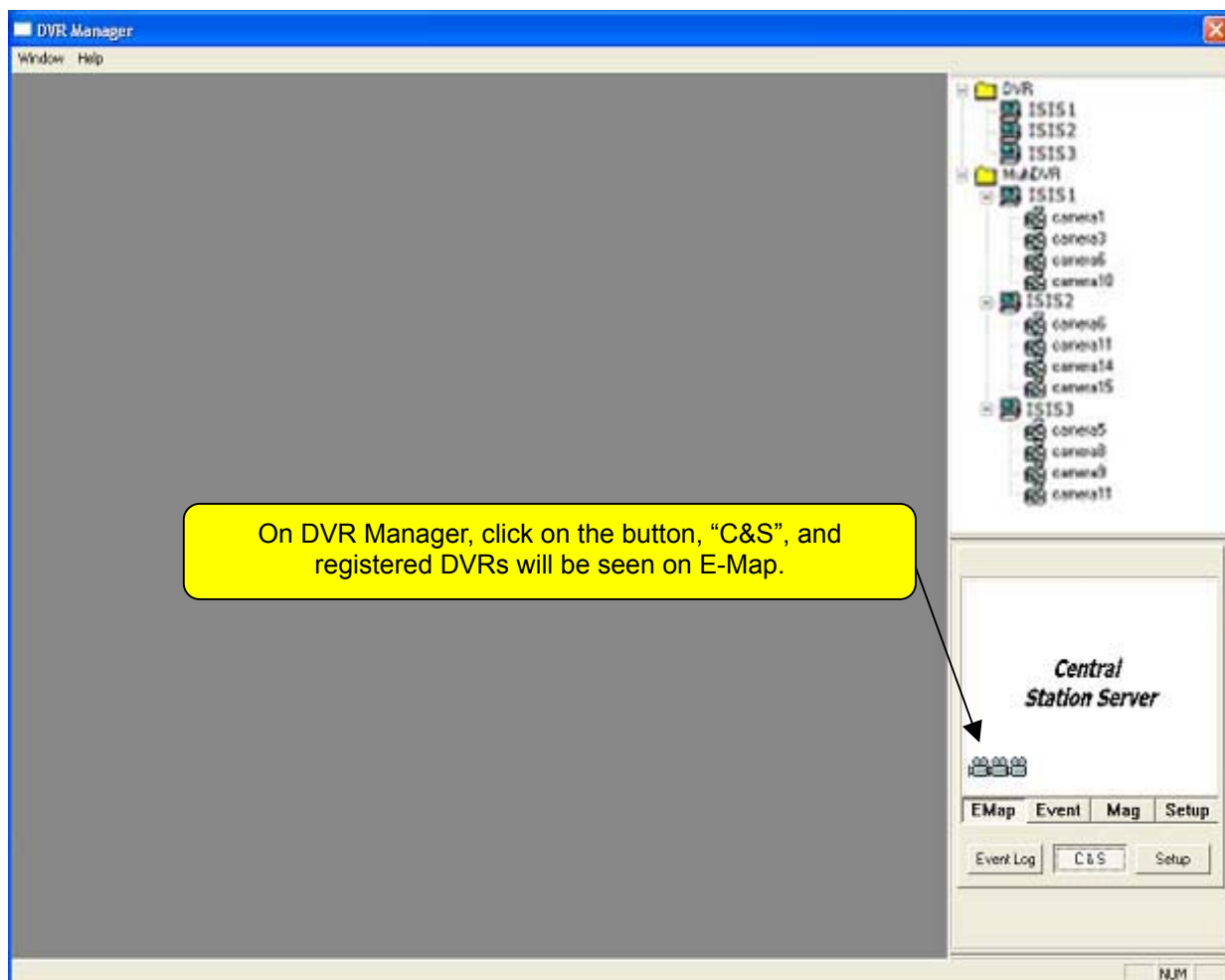


3.2.3 C & S (Central Station): It manages events received from numerous DVR sites.

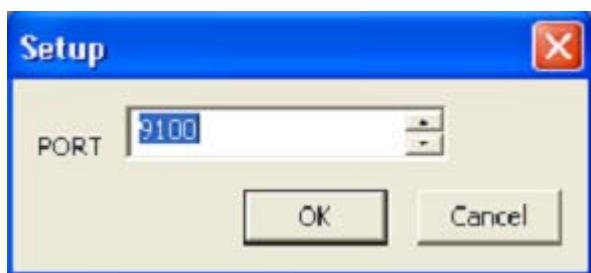
#### 3.2.3.1 Setup



On each DVR server, go to "Setup/Network" and check the box next to "Central Station". Then, type in the IP address of DVR Manager and select events to report.

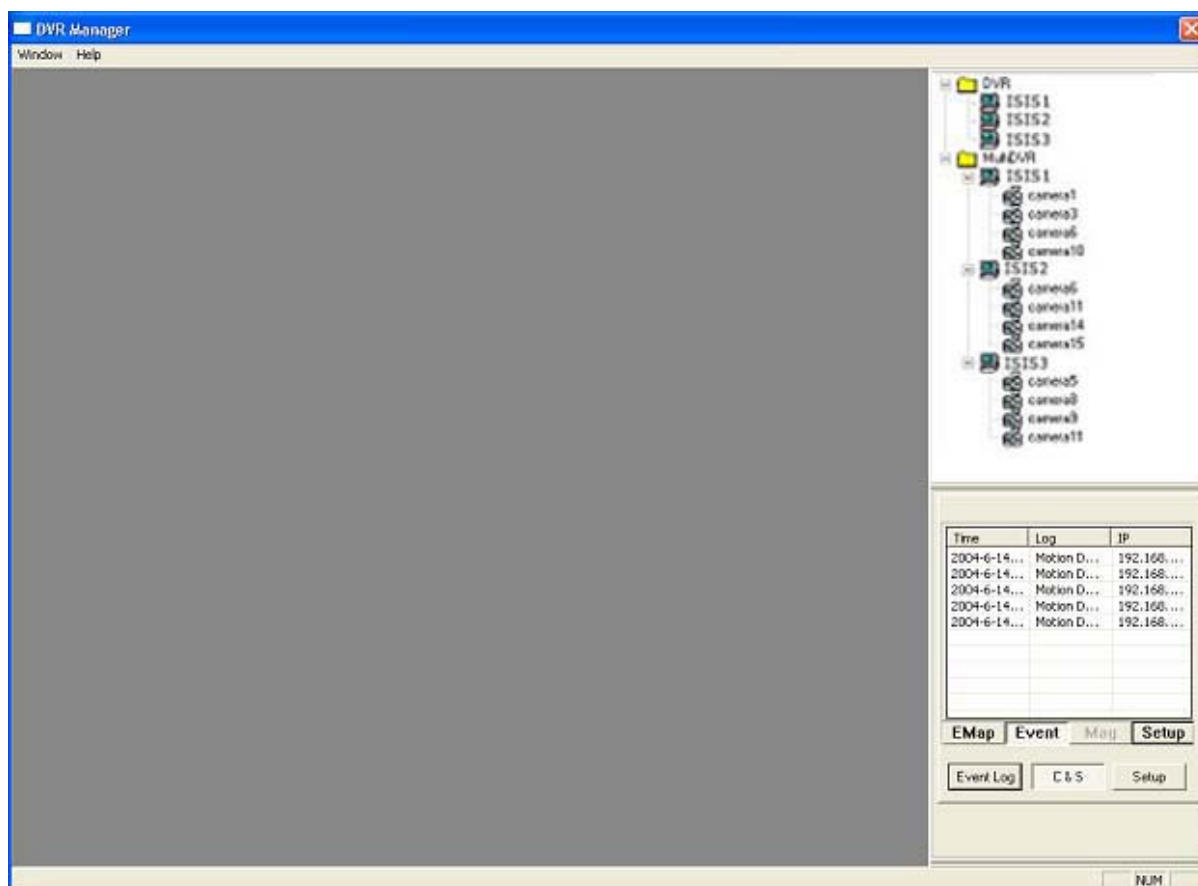


On DVR Manager, click on the button, "C&S", and registered DVRs will be seen on E-Map.



Click on "Setup" for port setup. The default value, 9100 is good to use in all cases.

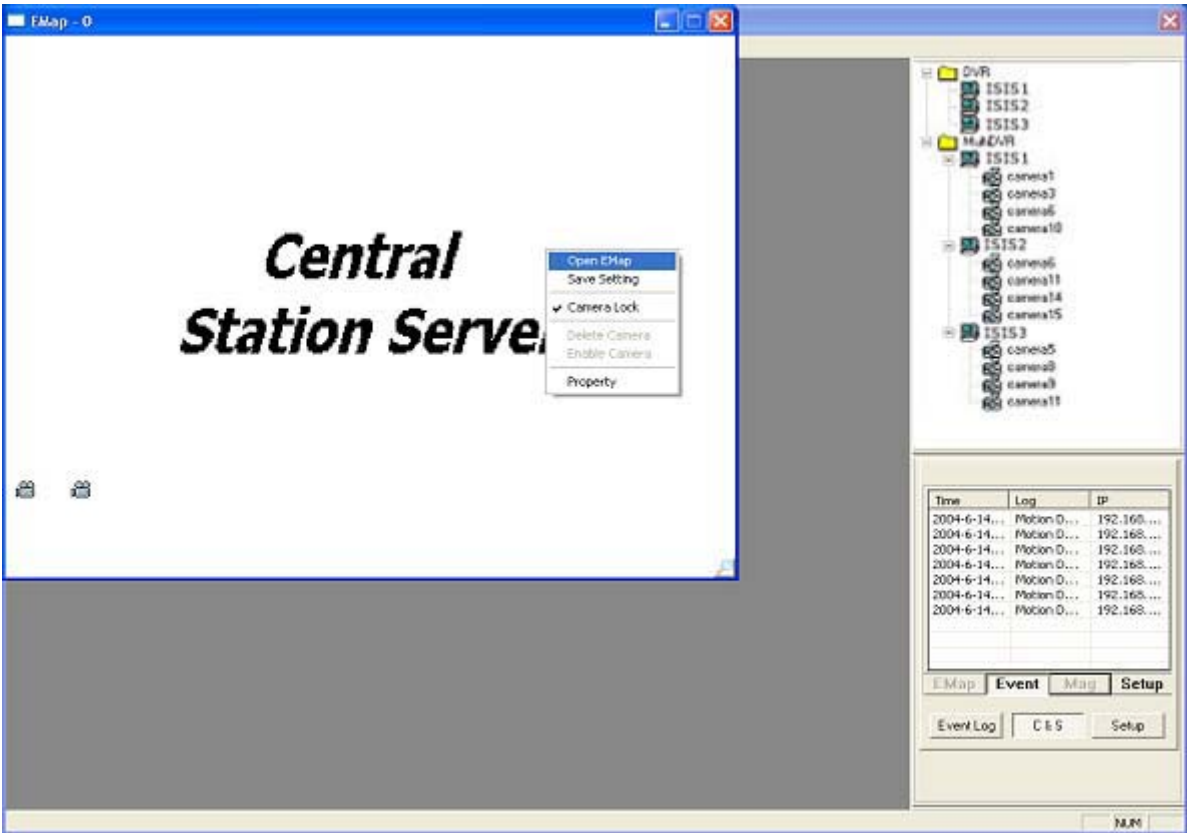
### 3.2.3.2 Event



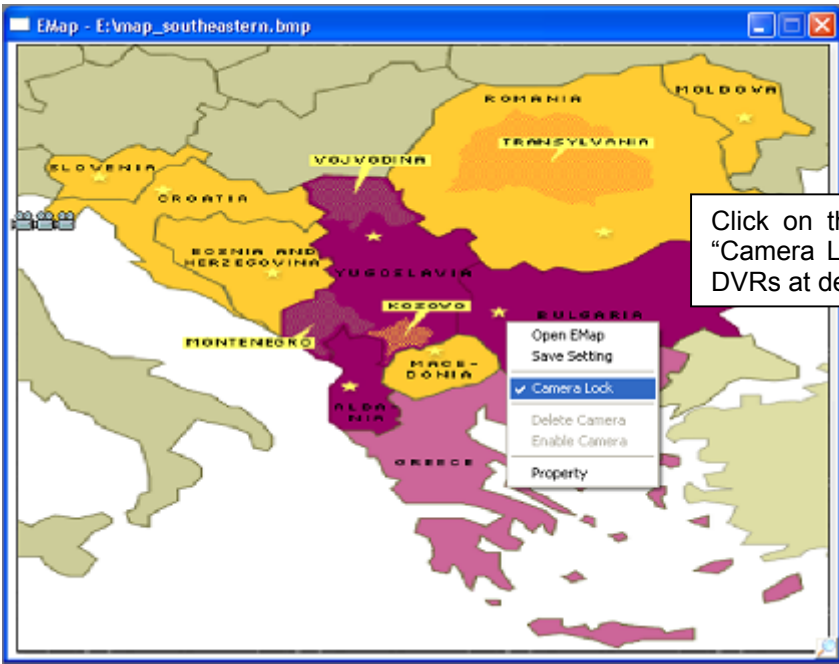
"Event" displays all the events coming in from registered DVRs.  
Double-click on event to go to DVR server.



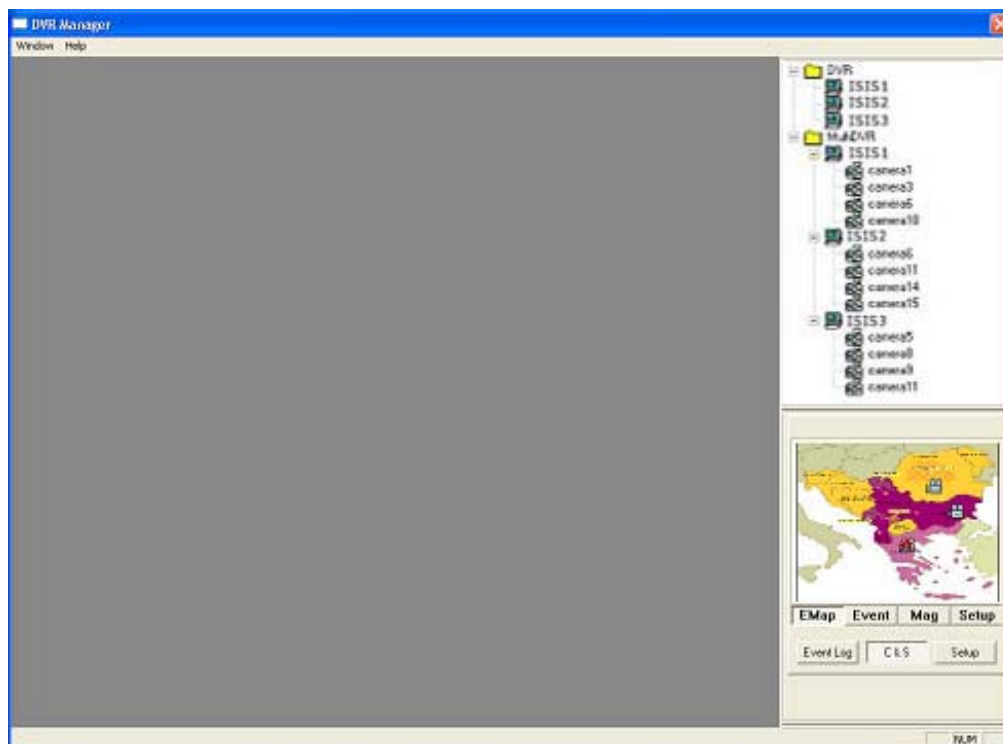
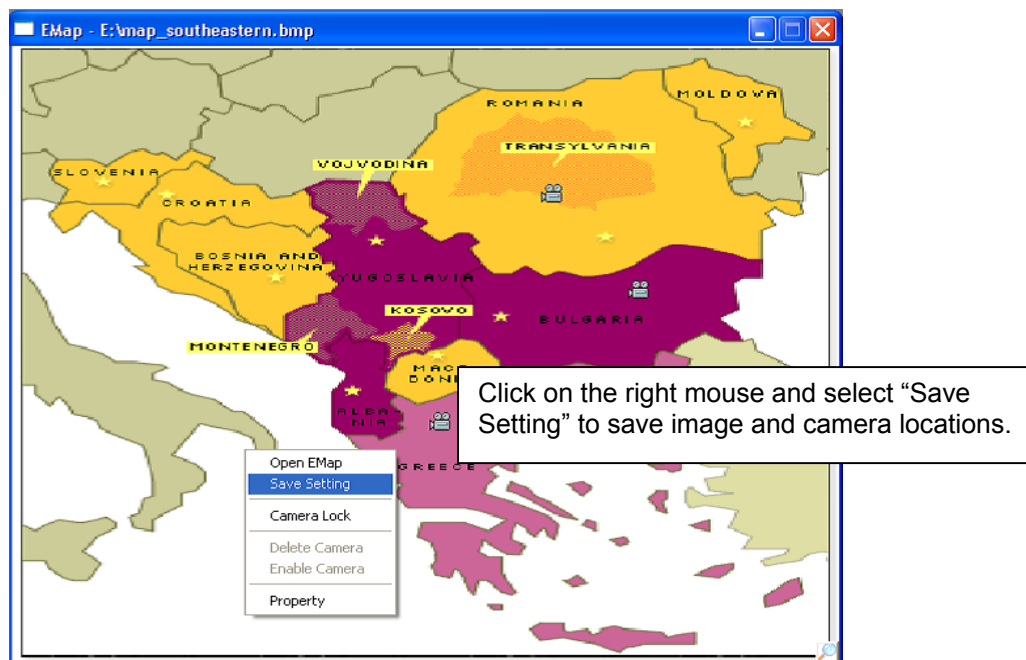
3.2.3.3 E-Map



Click on “Mag” to configure E-Map. To create an E-Map image, click on the right mouse and select “Open E-Map”. Only BMP file can be in use.



Click on the right mouse and select “Camera Lock” to be able to position DVRs at desired locations.



After configuration, selected E-Map image and all DVR sites at selected locations can be viewed. To visit a certain DVR site using E-Map, click on "Mag" and double-click on the site (camera-shaped symbol). Any DVRs (cameras) blinking in red and blue have events happening.

Restricting incoming events and receiving only desired events can be done regardless of DVR setup. On E-Map, click on the right mouse and select "Property". Only checked events will be reported to C&S. Click on "All Apply" to give the same conditions to all the rest of the DVR sites.

