

Security total Solution



# USER MANUAL

Korea techno complex Doore Korea.com



## Safety Precaution

Please check the following before installing your system.

- 1) Avoid exposing the DVR to direct sunlight or any other heat source.
  - ☞ It may cause fire.
- 2) Do not drop the DVR nor give any shock to it.
  - ☞ It may cause defect by affecting H/W & S/W of DVR system.
- 3) Make sure that the power plug is connected firmly.
  - ☞ Irregular power supply may damage the system seriously.
- 4) Check if the voltage of your country is compatible with the DVR.
- 5) Keep the DVR away from magnetic materials, vibrating place.
- 6) Do not disassemble the DVR without any permission from our customer service department .
- 7) Do not touch any parts inside the DVR case. It contains some high-voltage parts.
- 8) Choose well-ventilated area to position the DVR. Do not place it in a hot or cold area. (Operating temperature 0°C ~ 35°C)
- 9) Keep the DVR away from high voltage.
  - ☞ It may result in system instability, video quality deterioration and damaged data.
- 10) Always connect to an electric outlet that is grounded.
  - ☞ Failure to do so can cause electric shock or injury.
- 11) The DVR system must be grounded.
  - ☞ This prevents you from getting shocked in case of electric leakage.
- 12) If any problem occurs with the system, contact our service department without disassembling it.

110-051, 11FL Doryum-Dong, Jongro-Gu, Seoul, Korea

TEL :82-2-730-5206~7 FAX : 82-2-730-5208

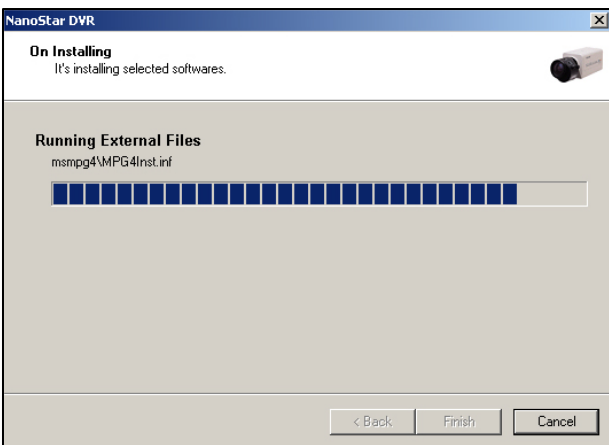
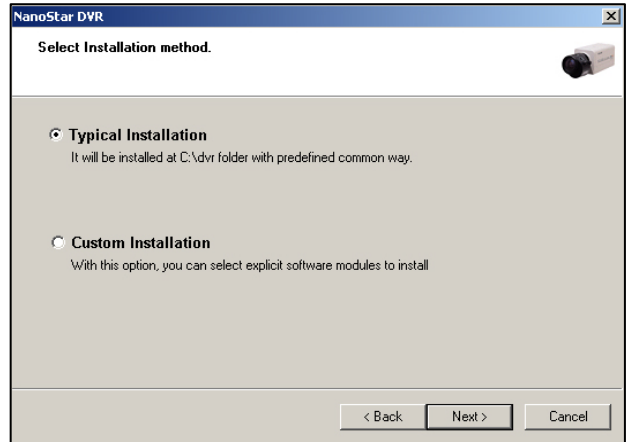
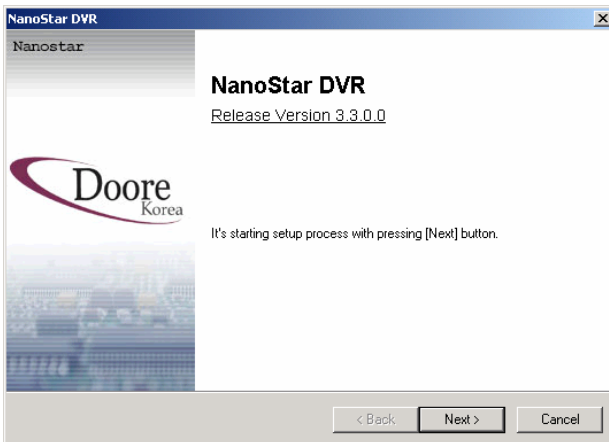
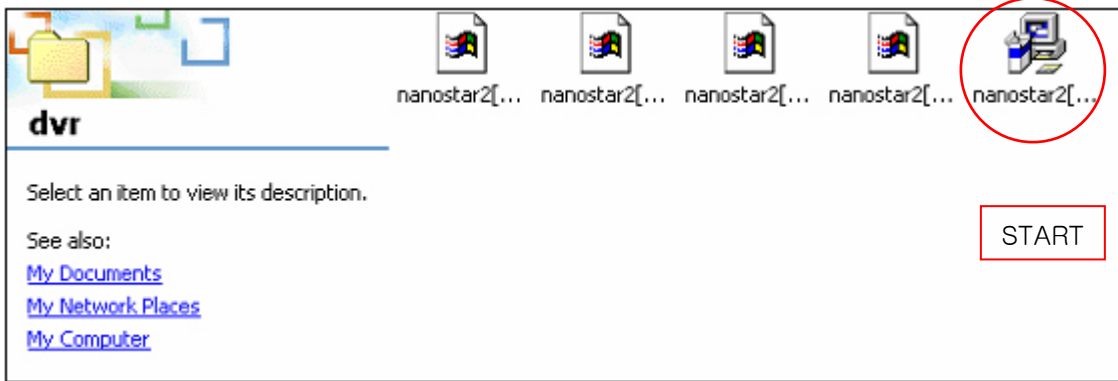
[www.camdis.co.kr](http://www.camdis.co.kr)

E-mail : [khyoon@camdis.co.kr](mailto:khyoon@camdis.co.kr)

# INSTALLATION

## 1) Installation of the Software :

- \* **Procedure:** Insert the Nanostar application CD on the CD ROM, double-click "Nanostar.exe" and it will be executed automatically.



1.1-1 Starting Installation: Click "Next"

1.1-2 Typical Installation:

A method to execute the DVR server program. Select "Typical installation and click "Next".

1.1-3 Installation of Drivers: Automatically install the selected softwares.

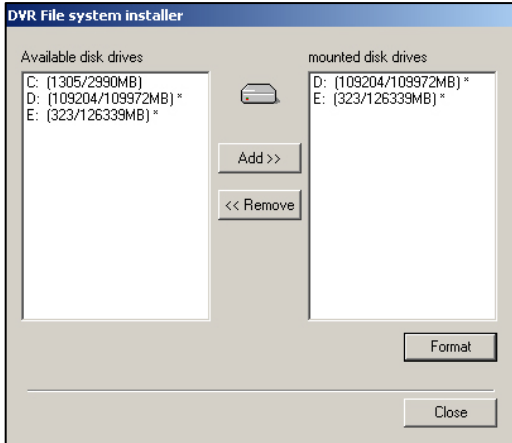
1.1-4 Authorization of Digital Signature

# INSTALLATION

## 1.1-5. Installation of DVR File System:

To record the image, the installation of the DVR file system is required.

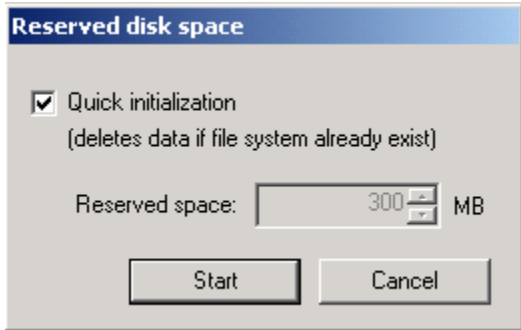
Warning: You need to pay special attention not to select Drive C, for Windows O/S and the DVR program are installed in Drive C.



A. After selecting a disk drive from the “Available Disk Drives”, add it to the “mounted disk drives” list and click “Format”

B. The HDD has to be formatted(initialized) to record images. Therefore, the DVR program must be executed after formatting

## 1.1-6 Initialization

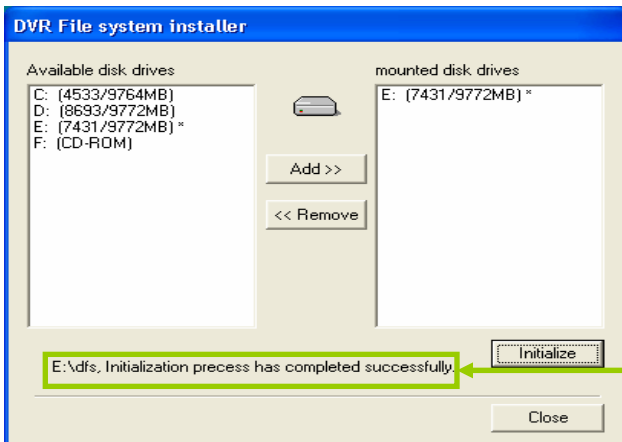


A. If you select “Quick initialization” and click “Start”, all the available space will be initialized for recording.

B. You can adjust the record able disk space by ‘not’ choosing “Quick initialization” and assign appropriate value in the box. However, it should be less than the total available disk space

## 1.1-7 Progress of File System Initialization

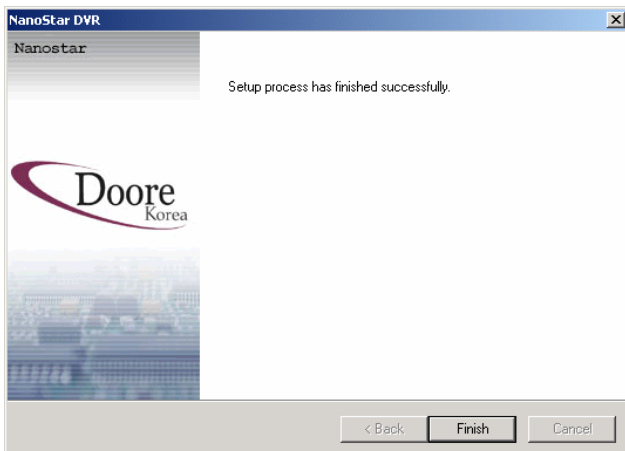
\* Initialization will be progressed automatically by clicking “Start.” Click “Finish” after the procedure is completed.



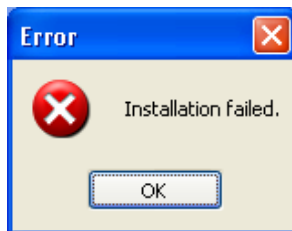
Completion message

# INSTALLATION

1.1–8 Finishing Installation: Click “Finish” after the procedure is completed.



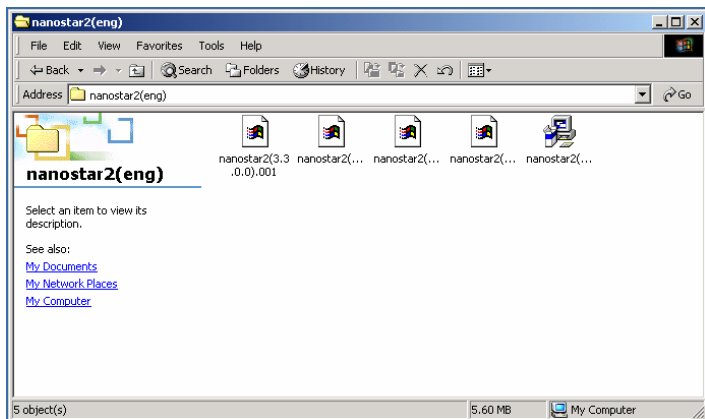
When you encounter with an error message “Installation failed.”, you have to retry the entire installation procedure.



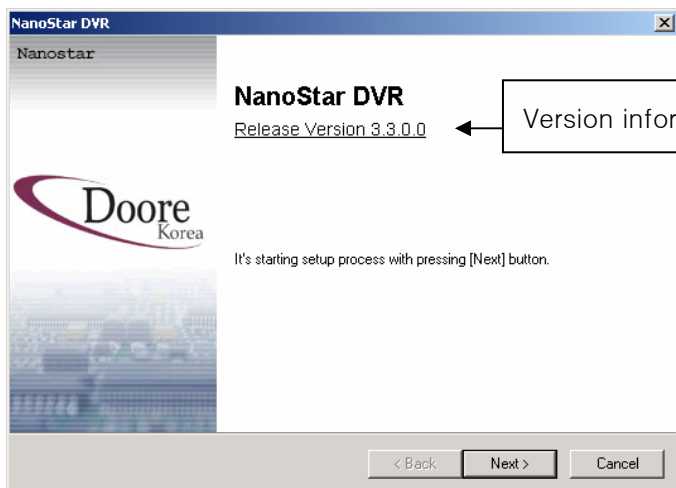
## 1–2 : Custom Installation:

Installation of the Client program and other programs: You can install the programs during the DVR server program installation procedure.

– By double-clicking “Nanostar.English(3.2.9.0).exe”, the installation procedure will start automatically.

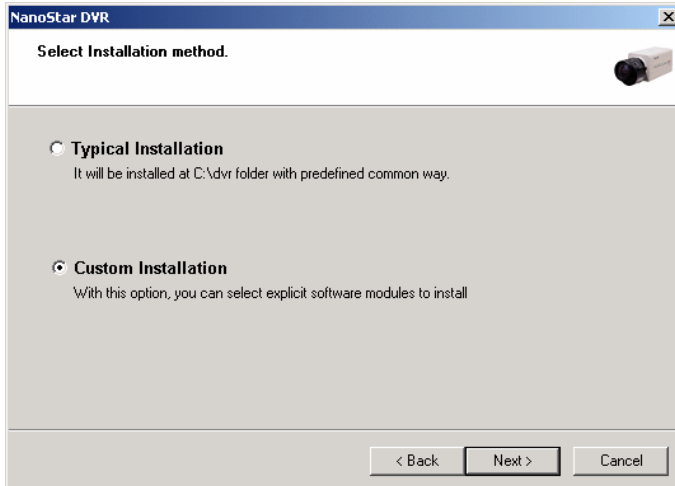


1.2–1 Starting Installation: When the installation starts, the directions shown below will appear. Click “Next” for the next procedure.

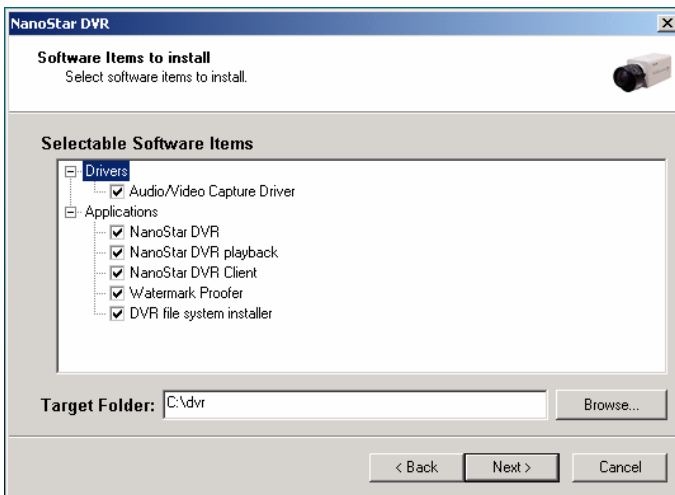


**Custom installation:**  
It is used where there is no capture card and therefore other application programs are required.

# INSTALLATION



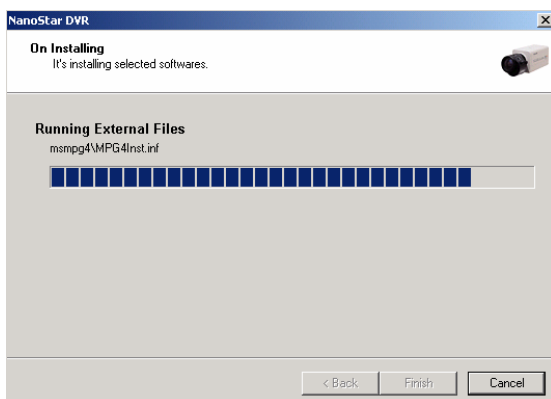
**1.2-2 Execution of Custom Installation :**  
By selecting “Custom installation”, you can choose software items



**1.2-3 Selection of Software Items:**  
You may choose the software items that you would like to install.  
If you select all, the installation will be the same as “Typical installation.”

## The functions of Each Application Program

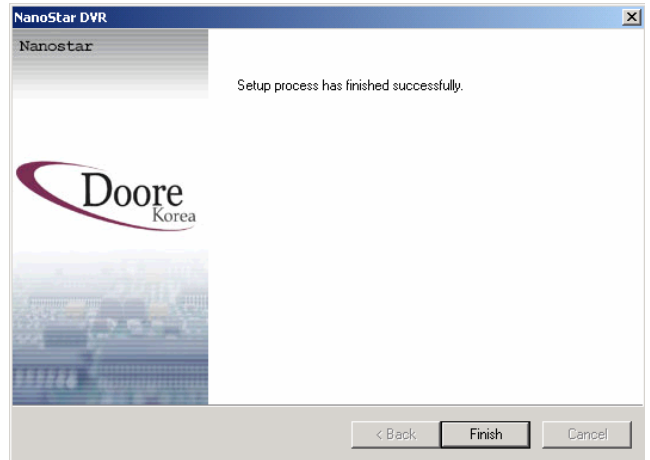
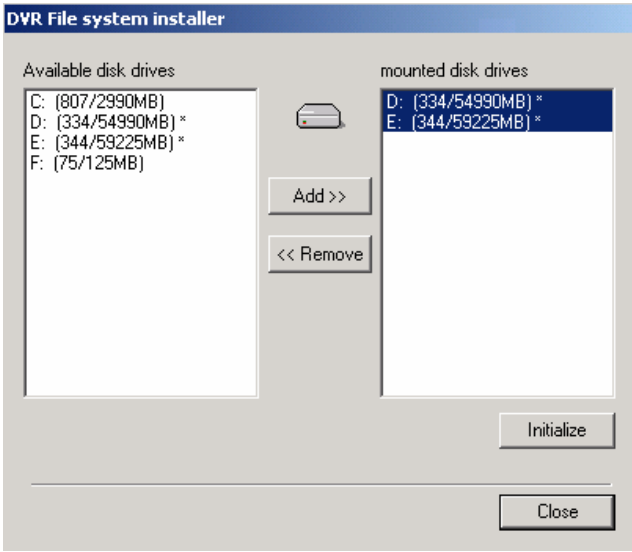
- A. Nanostar DVR: DVR execution program (To install this, a Capture card shall be installed first.)
  - B. Nanostar DVR Playback: Viewing Program (It enables you to search.)
  - C. Nanostar DVR Client: Client program (Using this program, you can access to the server remotely and control the program. Your control level depends on the level of your authorization. The administrator determines the levels of different users.)
  - D. Watermark Proofer: It enables you to check if a certain video data is forged or not. It can function properly through the BMP file format.
  - E. DVR File System Installer: It constitutes the DVR file system.
- ★ **Attention:** When you install the application program without a Capture card, you shall not select “Audio/video capture Driver.”



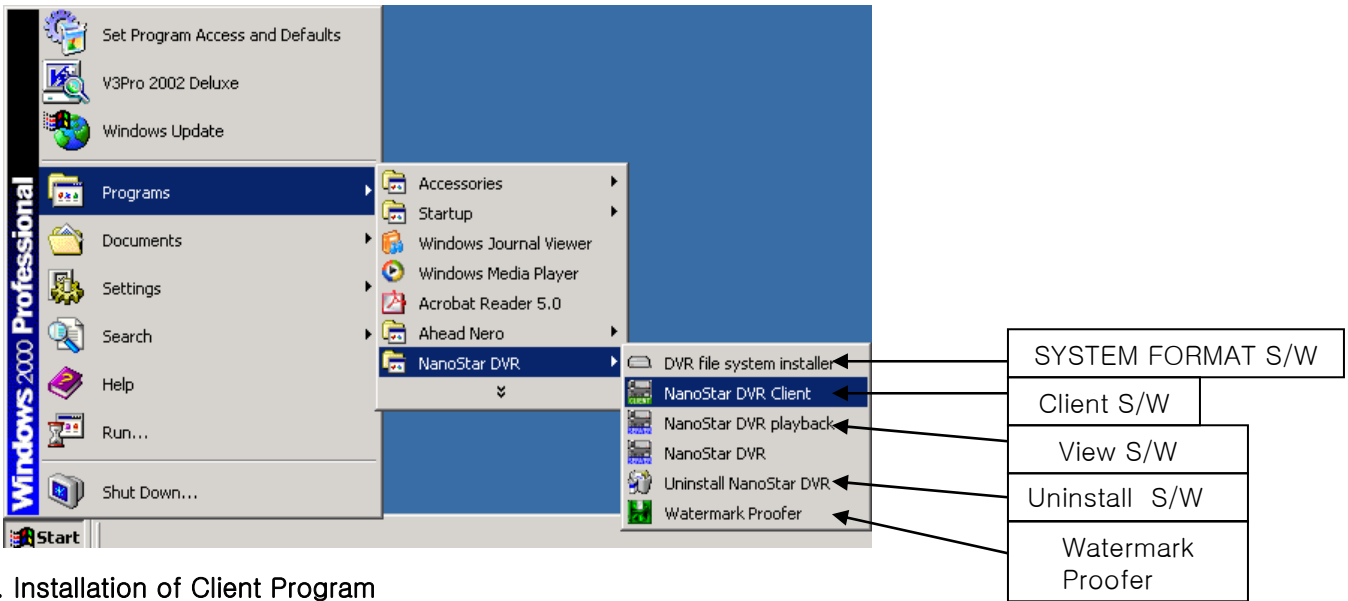
**1.2-4 On Installing :** installs drivers and executes application programs and external files.

# INSTALLATION

1.2-6 Installation of DVR File System : The DVR program can be executed without initializing.

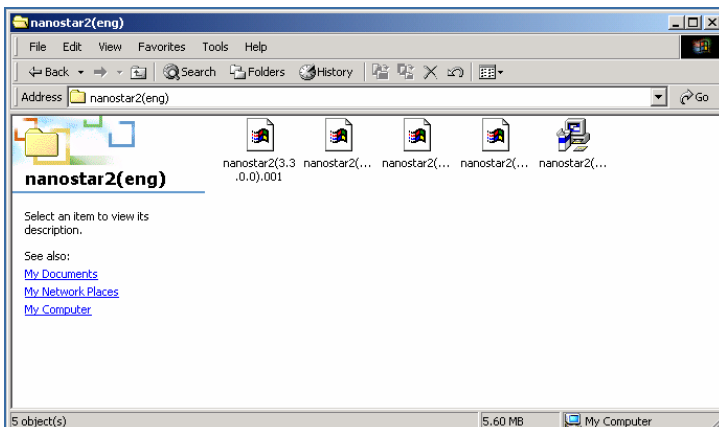


Execution of Program: Go to “Nanostar DVR” on the windows program list and select the one that you wish to execute.



## 2. Installation of Client Program

### 2.1 Installation Using a SW CD



# INSTALLATION

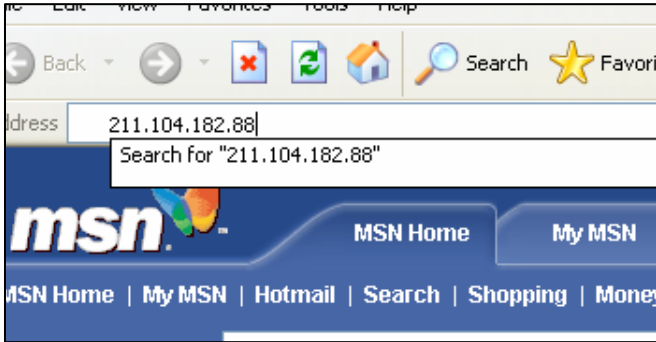
2.1-1 You can install the Client program by following the procedure explained in 1.2 “Custom Installation”.

## 2.2 Installation by Downloading

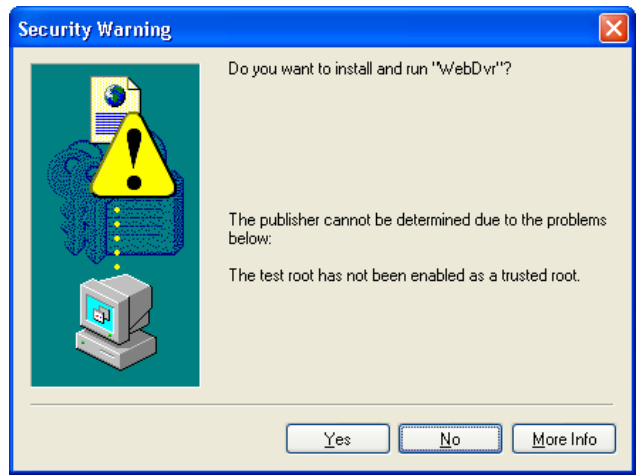
\* Attention: In this case, you server must have a fixed IP address.

### 2.2-1 Starting Installation

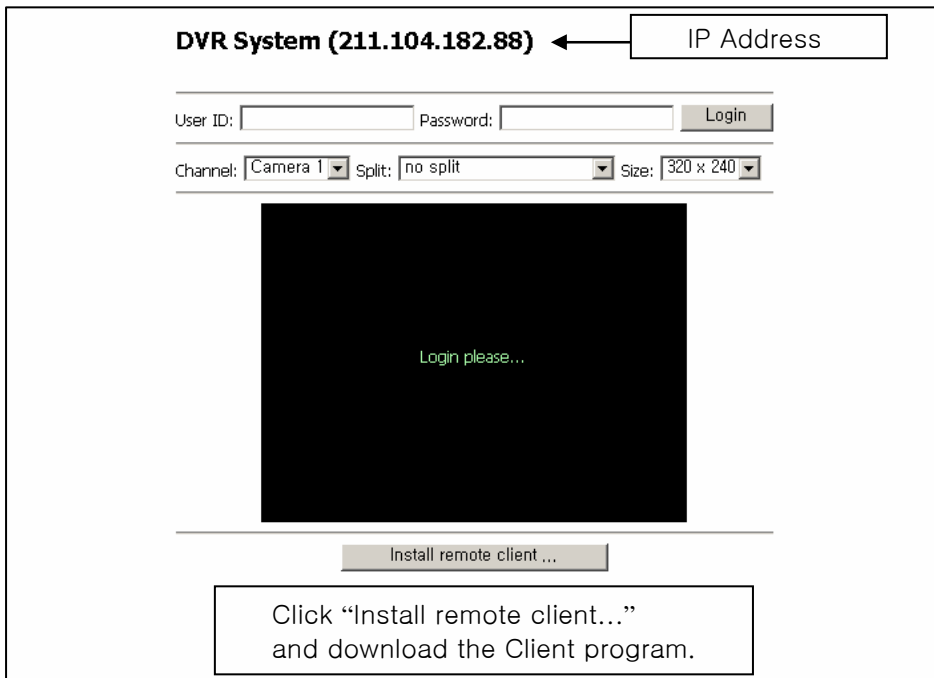
No1.To download the Client program from your DVR server, type in the IP address in the address box of the web browser.



No2. Authentication



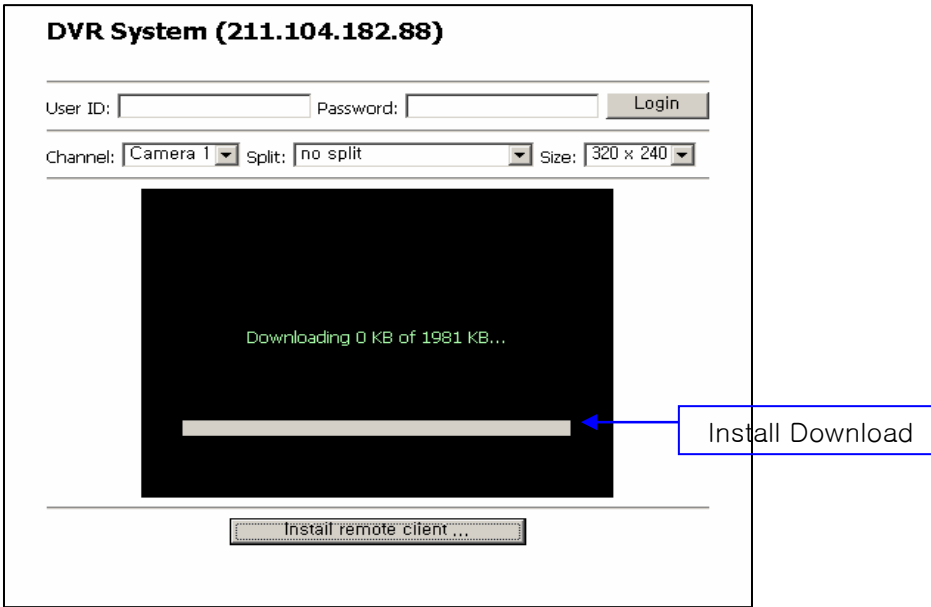
No3. Web Display and Connection Method



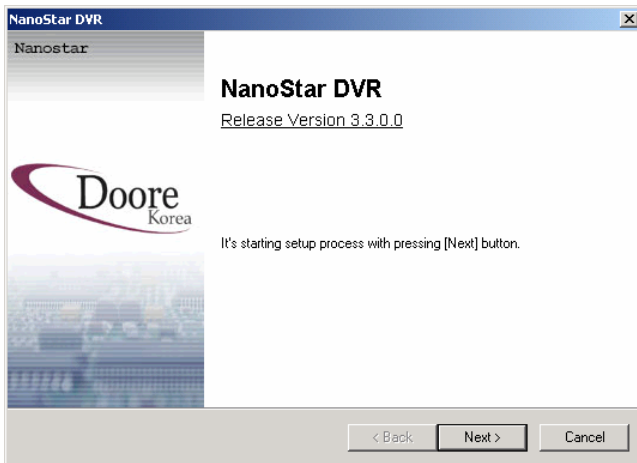
1. User ID: Type in the ID registered in the DVR server
2. Password: Type in the password registered in the DVR server
3. Channel: You can choose cameras that you would like to view.
4. Split: You can select the number of split fields.
5. Size: You can adjust the display resolution



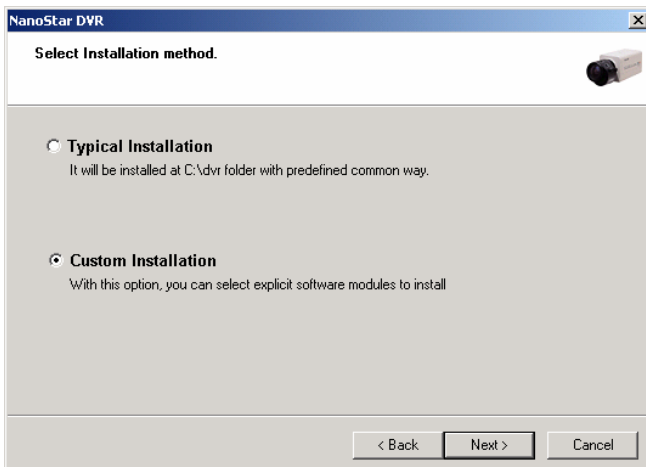
# INSTALLATION



No4. You can start the installation procedure by clicking “Next”

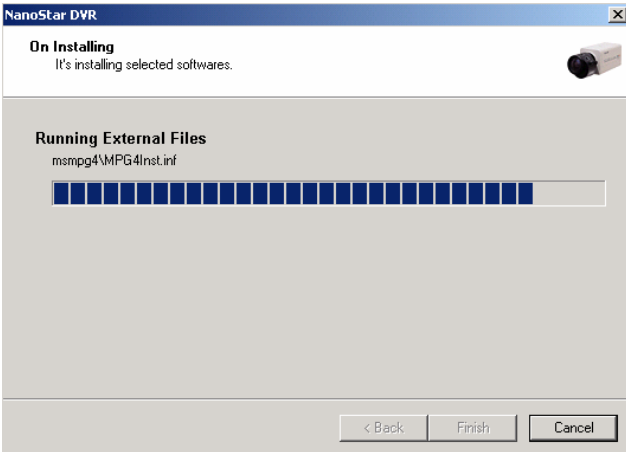


No5. Installation of Client Program: Select “Typical installation” or “Custom installation”, and click “Next”.

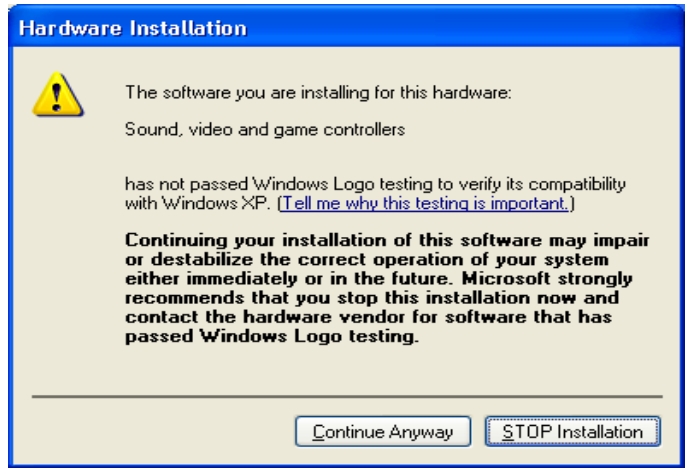


# INSTALLATION

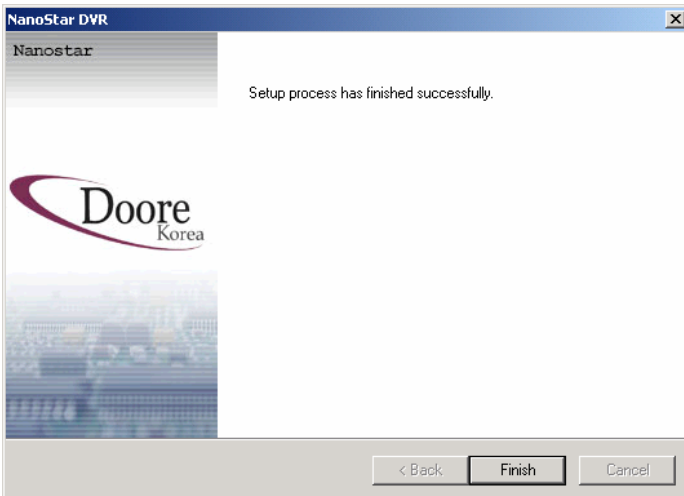
No6. Installing



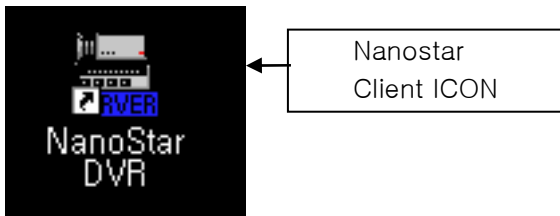
No7. Authentication of Digital Signature



No8. Finishing Installation



No9. Client program Icon: You can find the Client program icon on the desktop and the program list.



# INSTALLATION

## 3. Execution of Client program

### 3.1 TCP/IP Log-in:

### 3.2 PSTN Modem Log-in

\*Telephone No. Box ex)029211318

\*Local Call: 9211318

\*Long Distance Call: 02(area code) 9211318

\*International Call : 001(international call identification no)

\*International Call:001(international call identification no)  
82(country code) 2(area code) 9211318

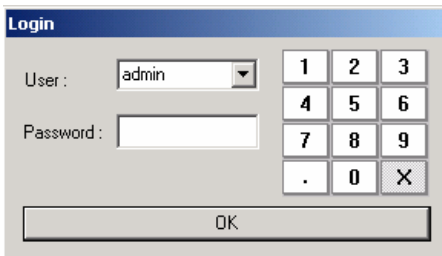
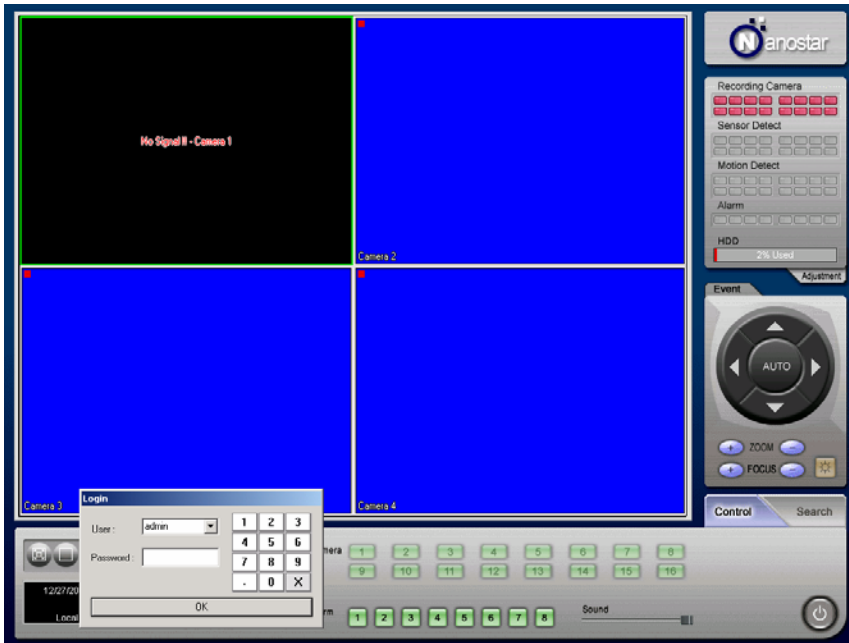
Attention:

- 1.Since the PSTN modem connection is slow, please use a modem card with the fastest transmission speed for better performance.
- 2.Timeout shall be set more than 180 seconds.

# INSTALLATION

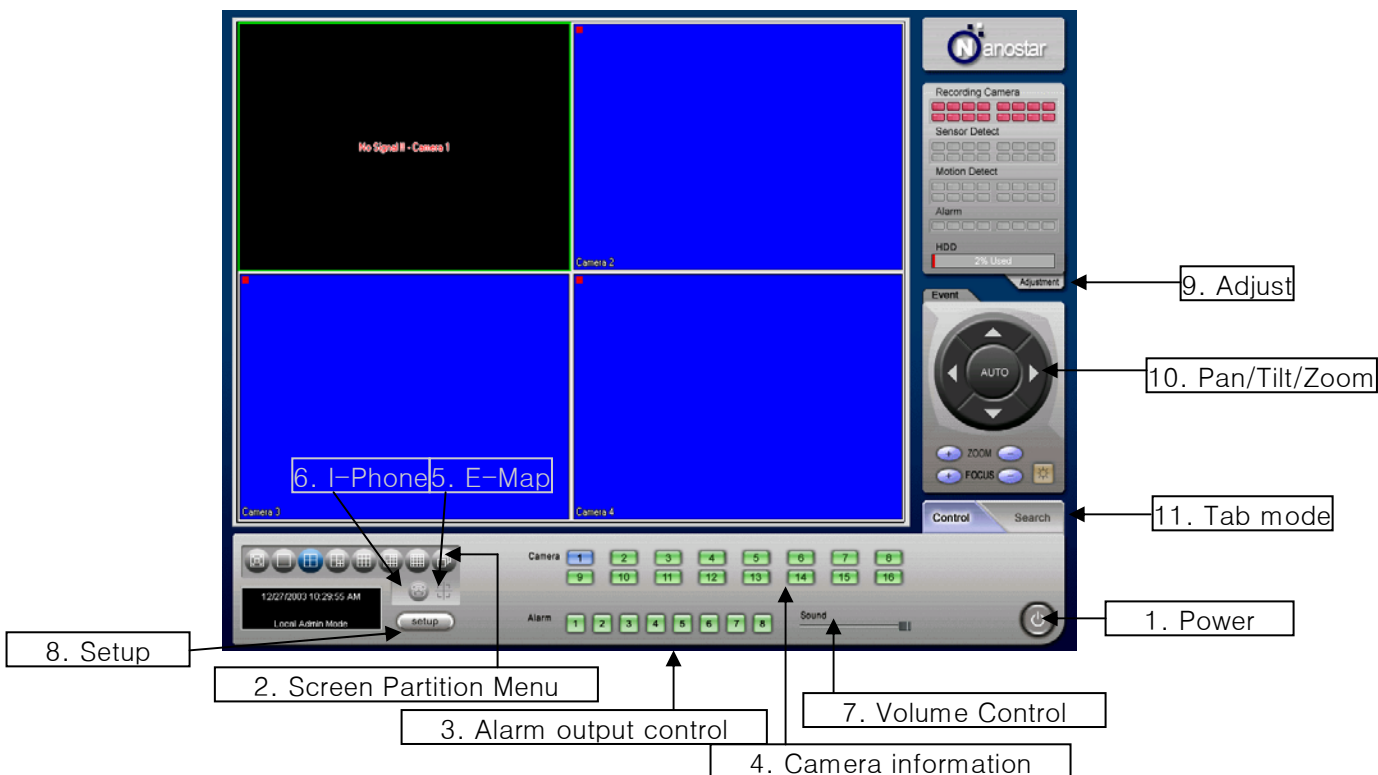
## 1) First screen

\* The screen below is the first screen as you execute the DVR program.



## 1) Log-in

The default user ID is “admin” and no password is required. If you press “OK”, the DVR program will executed automatically.



# INSTALLATION

1. Power Button: To exit or Log out the DVR program
2. Screen Partition Menu: To select the partition mode of the screen (the number of splits & the size of the screen)
3. Alarm Output Control: To control the output device connected to each camera manually
4. Camera: To select cameras that you wish to control
5. E-MAP: To open the saved map image ( It shows where the cameras are installed.)
6. I-Phone: To set up the I-phone menu
7. Volume Control: To control the speaker volume
8. Setup: the main menu for system setup(Details will be explained later).
9. Adjust: To control brightness, color, contrast and hue
10. Pan/Tilt/Zoom: To control PTZ
11. Tab Mode: To transfer to another mode
12. Light Control: To turn on/off the light

## 2.1 System Setup Menu

### 2.1-1 System

**NO.1** System Location: DVR System

**NO.2** System Power Management: Select  Disable  Shutdown  Reboot

**NO.3** Network: Server Type: TCP / IP, Video Quality: Medium, Port No.: 8013

**NO.4** Motion Alert: CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13 CH14 CH15 CH16

**NO.5** Auto Switching Interval: 1 Sec 10 Sec 10 Sec

**NO.6** TV-OUT Management: TV-OUT1 CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13 CH14 CH15 CH16; TV-OUT2 CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13 CH14 CH15 CH16

### Main Menu for System Setup:

Sets up the overall functions of the DVR system. Click “OK” after all the procedures are completed.

# INSTALLATION

## NO1. System Management



\* **System Location:** Identifies the place where the DVR is installed (You can edit it.).

1.1-1 Video Signal Type: Choose the type of video signal (either NTSC or PAL).

\* **Caution:** If you do not get a normal image on the display, please check the camera signal type.

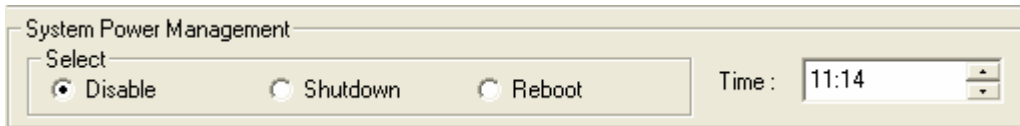
1.1-2 Channel Auto Scan: Automatically searches and sends the images of the connected cameras to the DVR system.

1.1-3 Shut Down System Power: If you select it, Windows® shuts down as the DVR program does. If you do not select it, only the DVR program shuts down (The System Power Management has been already set up as default.).

1.1-4 Display Motion Detection: If you select it, the status of the motion detection is visible on the screen.

1.1-5 OSD: To set the information of each camera to be displayed on the respective windows.

## NO2. System Power Management: Sets up the automatic on/off of the DVR system.



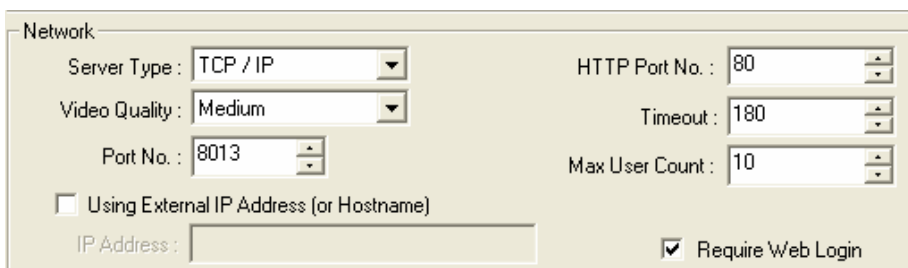
1.2-1 Disable: Not to use the system power management. (set as default).

1.2-2 Shutdown: The system shuts down at the time set.

1.2-3 Reboot: The system restarts at the time set. (When the OS is not stable, rebooting the whole system avoids any kinds of malfunctions. It is recommended to set the reboot time when monitoring is less needed.)

1.2-4 Time: To display/edit the time set (HH:MM).

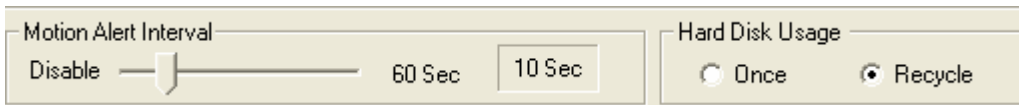
## NO3. Network Management



# INSTALLATION

1. **Server Type:** choose the network connection type for connecting the server.  
 None: Where there is no connection type available (The Client program will not be executed.)  
 TCP/IP: Where it is connected by LAN or WAN.  
 Modem: Where it is connected by PSTN modem. Only 1:1 connection can be made.
2. **Video Quality:** It chooses the quality of images transmitted. It is closely related to the network speed.  
 For sophisticated performance, choose a suitable level from 5 levels considering the actual conditions on the scene.
3. **TCP/IP Port Number:** It specifies the TCP/IP port number. The default value is 8013.  
 This feature is used for firewalls and etc.  
 ( Use the port number that is not used in other internet services.).
4. **External IP Address:** When the DVR server is connected by Router, the DVR server only gives you the internal IP address.  
 This internal IP address can not connect the DVR server to outward. The external IP is needed in this case.
5. **HTTP Port No.:** The default value is 80.  
 This feature is used for connecting through the web browser.  
 The value can be changed, but the default value is recommended.  
 If you change this value, you have to put it after the IP address.
6. **Timeout:** it sets up the length of time until the automatic shutdown of the system when there is disconnection with the DVR server.
7. **Max User Count:** It sets up the maximum number of users who can connect with the server.
8. **Use Default Web Page:** To use the DVR server as the default web page.
9. **Require Web Login:** To set up to log in on the web page.

## NO4. Motion Alert Interval & Hard Disk Usage



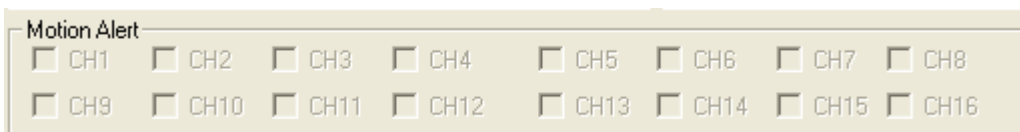
1.4-1 Motion Alert Interval: sets the time length that the full single screen mode lasts when a motion is detected.(from disable to 60 seconds).

1.4-2 Hard Disk Usage

Once: Data will be stored only once. When HDD becomes full, then data will NOT be stored.

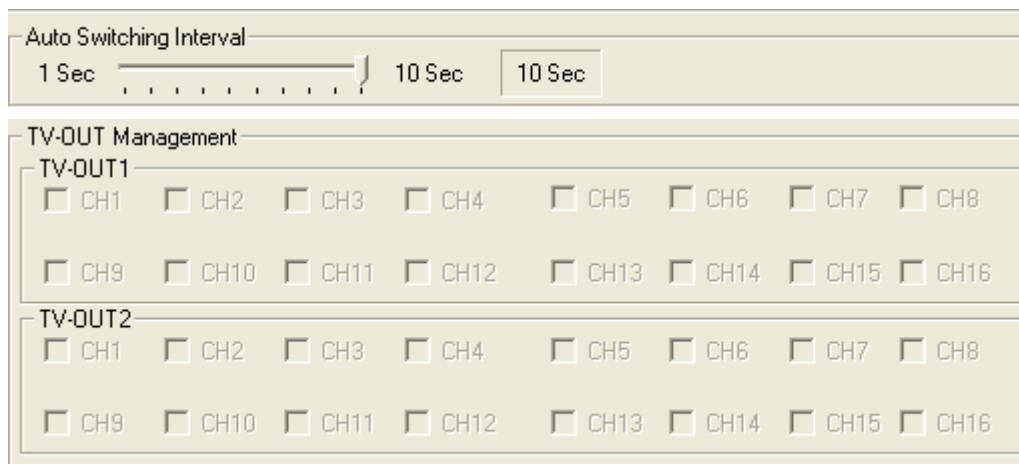
Recycle: It will overwrite on the oldest data when HDD becomes full.

## NO5. Motion Alert: selects the channels that will turn to the full single screen mode when a motion is detected.



# INSTALLATION

## NO6. TV-OUT-Related Setup

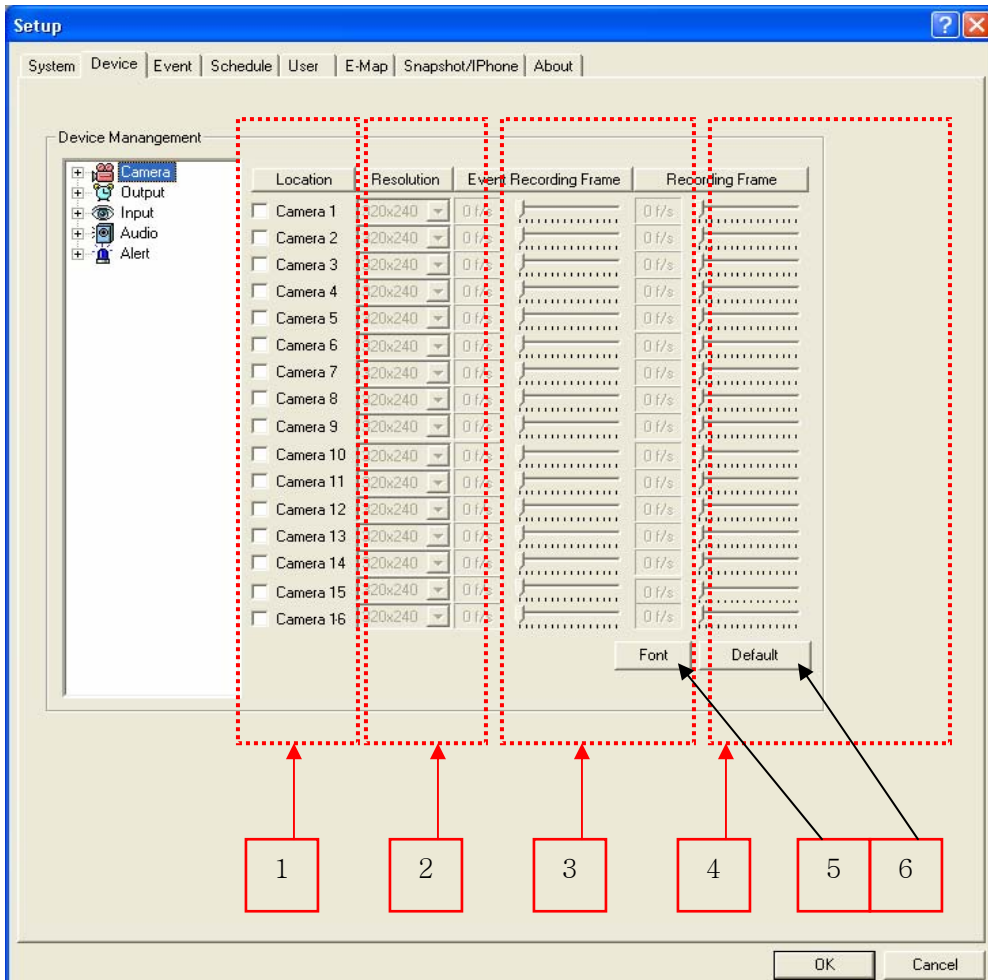


1. **Auto Switching Interval** : sets the interval of switching channels. Auto switching channel will work according to the interval set here  
(Available when there are more than 2 channels used.).
  2. **TV OUT Management** : sets TV output channels. Only the selected channels will be shown on TV.  
(The number of channels that show on TV depends on the model you are using.)
- \* NS-30 : Only 4 video outs are available per card. If you would like to display additional 4 channels, you need to connect to another TV.
  - \* 1212 (N4S~N16S) : Only selected channels are displayed on TV.
  - \* 4812 (N16L, N8L) : TV displays the same images as the server does.  
You can not select video out channels.
  - \* 2424 (N8D, N16D) : As this model has an additional board,  
TV-OUT1 and TV-OUT2 can be used at the same time.
  - \* N16L-4824 : As this model has an additional board,  
TV-OUT1 and TV-OUT2 can be used at the same time.  
One TV-OUT which is connected to a master board has the same features as LS series  
(The images shown on TV are the same as the ones on the server).  
And the other TV-out connected to a slave board has the same features as CS Series  
(It can select the video-out channels.).



# INSTALLATION

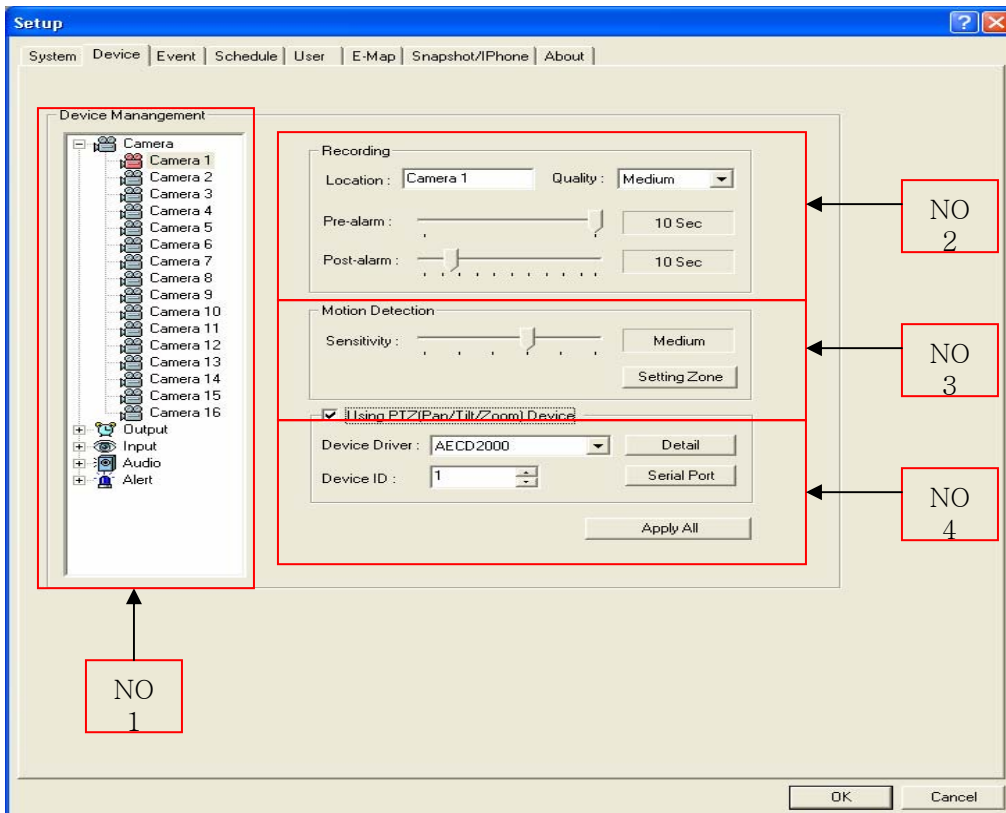
## 2.2 Device: sets the values for Camera, Output, Input, Audio & Alarm.



1. Location: marks each camera location.
2. Resolution: selects resolution. (320 \* 240, 640 \* 240, 640 \* 480)
3. Event Recording Frame: adjusts the recording frame rate when an event occurs.  
It can be increased for intense monitoring.
4. Recording Frame: adjusts the frame rate of normal recording.
5. Font: sets the font displayed on the screen.  
Default: loads the system default value.

# INSTALLATION

## 2.2-1. Camera



### No1. Details for Setting Each Camera

If you select a specific camera, you can setup the camera.

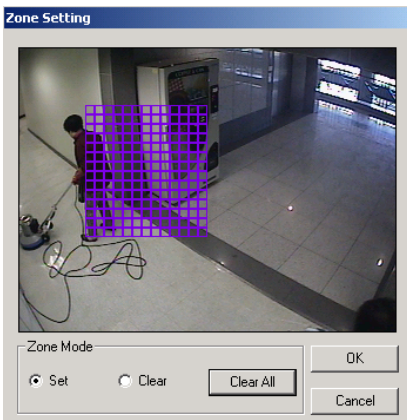
### No2. Recording

- 1-1. Location: indicates the location of a certain camera installed (You can type in words.).
- 1-2. Quality: Select from 5 different levels.
- 1-3. Pre-event Recording: sets the length of time to be recorded just before a motion is detected.
- 1-4. Post-event Recording: sets the length of time to be recorded after a motion is detected.

### No3. Motion Detection

**Sensitivity:** You can adjust Sensitivity (5 steps).

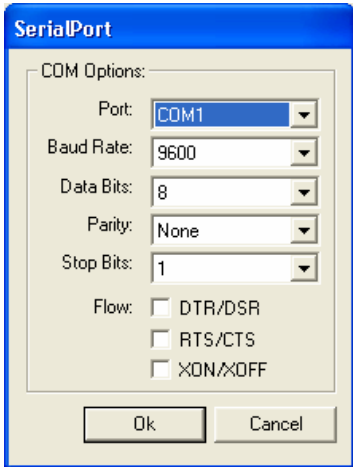
- 1-1. Zone Setting: selects the area that you wish to detect motions.
- 1-2. Setting the Area: sets the area to be motion-detected by dragging the mouse.
- 1-3. Clear: deletes the area that you selected for motion detection.
- 1-4. Clear All: deletes all the areas that you selected for motion detection.



### NO4. Using Pan / Tilt / Zoom

- 1. PTZ Driver: selects the suitable driver for the chosen camera.
- 2. PTZ ID: sets up ID for the camera.
- 3. Details: the detailed setup menu for PTZ cameras
- 4. Setup menu for serial port.

# INSTALLATION



Port: Output ports from the DVR to cameras

Baud Rate: Required value for communication with camera receivers

Data Bit:

Parity:

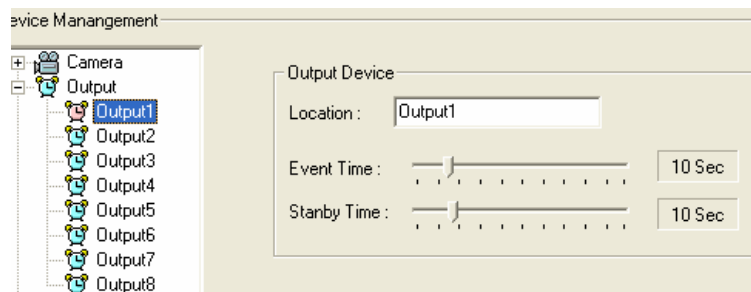
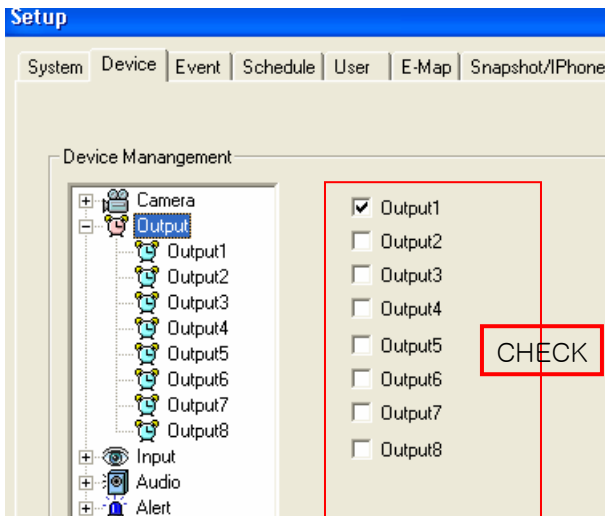
Stop Bits:

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

\* Apply All: Applies the same value to every channel of the DVR.

## 2.2-2. Output Device

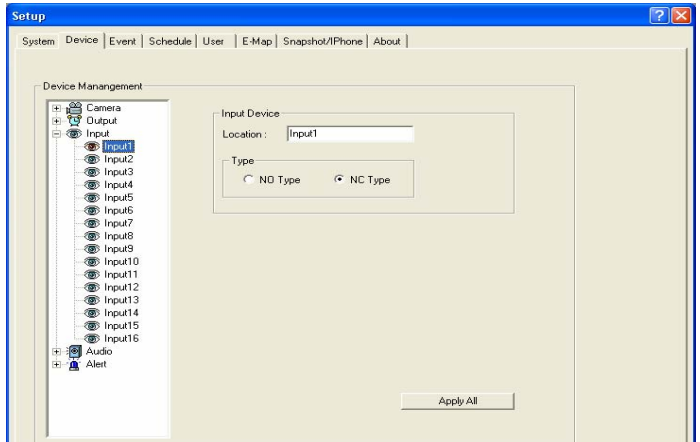
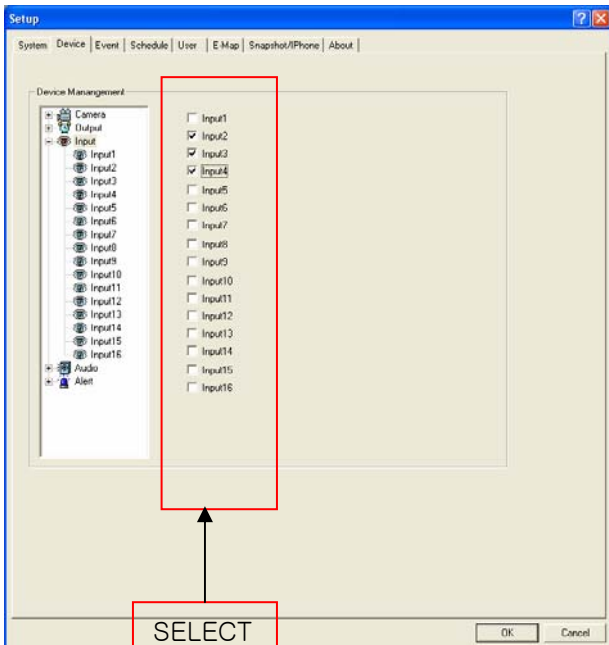
Select the channels that the output devices are needed.



A. Location: indicates the current location of an output device  
 B. Event Time: selects the length of time that the output device works when an event occurs.  
 C. Standby Time: selects the time length that output device is prepared to react when an event reoccurs.

# INSTALLATION

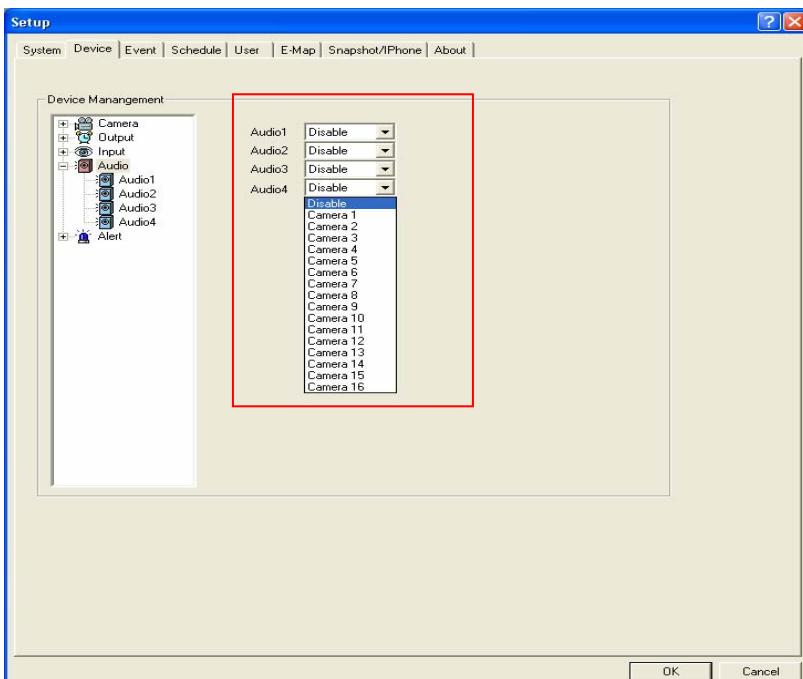
## 2.2-3 Input Devices (Sensor)



- A. Location : indicates the current location of an input device. You can name it as you wish for easy recognition.
- B. Type : selects the normal status of an input device.

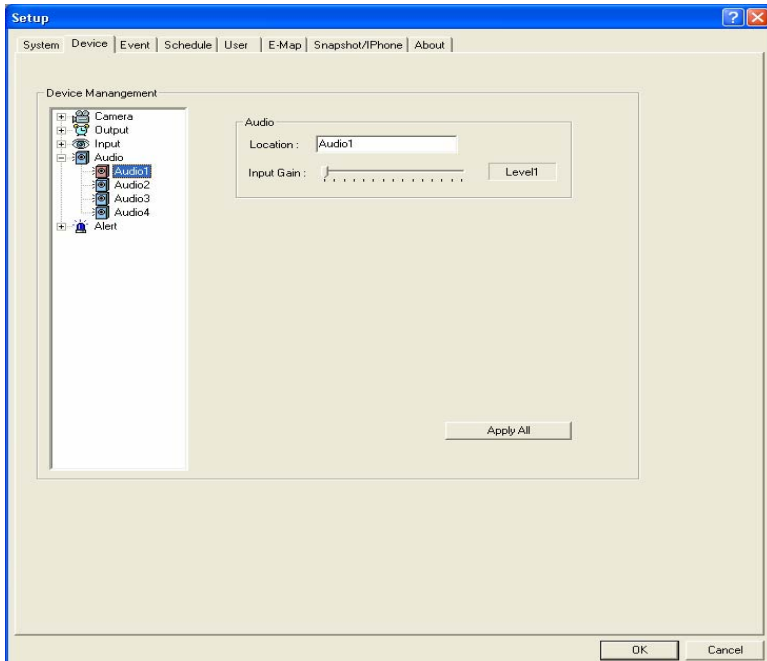
- \* NC(Normally Closed): means that an input device is normally closed.
- \* NO(Normally Open): means that an input device is normally open.
- \* Apply All: applies the same setup value to all available input devices.

## 2.2-4. Audio



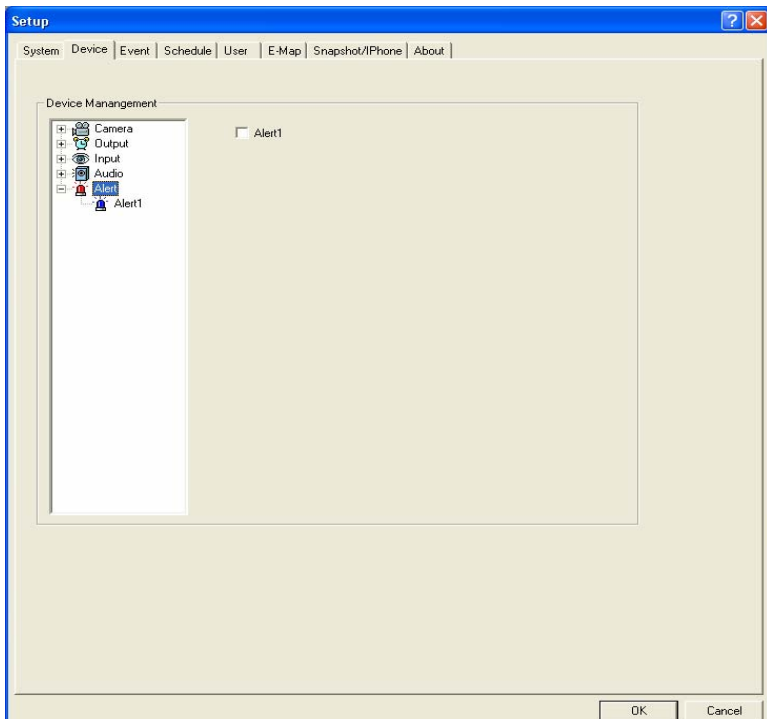
- A. Audio is recorded with the pictures of a chosen camera (channel). You can choose the cameras that you wish to record audio signals. For example, you can select any camera that you like to record "Audio 1".

# INSTALLATION



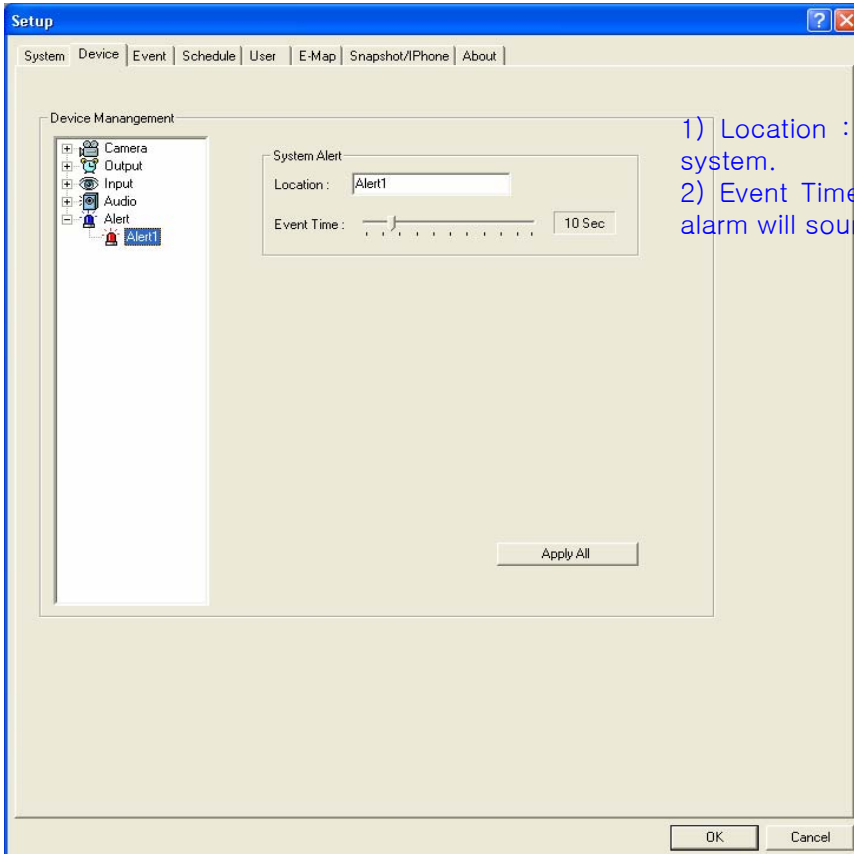
- 1) **Location:** indicates the current location of an audio input and you can name it as you wish for easy recognition.
- 2) **Input Gain:** selects input audio volume for the moment of an event.
- Apply All:** applies the same setup value to all available audio devices.

## 2.2-5. Alert



Setup for Alarms by Motions/Output Devices

# INSTALLATION



- 1) Location : indicates the current location of the system.
- 2) Event Time: sets up the length of time that the alarm will sound.

**\* Quick Stop:**

@@ We recommend you to use the products that we designate or recommend since the performance of an audio device relies upon what kind of Mother board you are dealing with.

**2.3 EVENT :** The purpose of the Event function is to enhance security using the existing devices efficiently. If one of the events (input, motion detection, no signal) happens, you can set up the relatively idle device to do additional assignments such as intensive monitoring, output device noticing and preset position viewing. It will supplement the dead corner of the surveillance system.

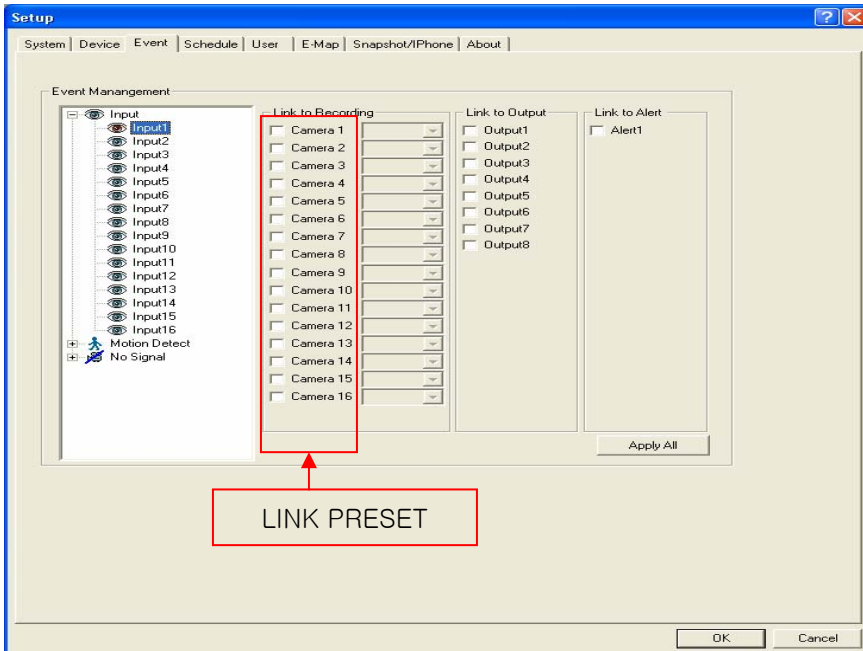
**2.3-1. INPUT :** sets up all the devices connected to the input devices including cameras, output devices and alarms to react when an input device operates.

One input device receives signals.

This one input device can initiate multi cameras, output devices and alarms if they are connected to the DVR system.

(1:N multiconnection)

# INSTALLATION



EX) 1:1  
 INPUT1 → CAMERA1(REC.) →  
 OUTPUT1 → ALERT

EX) 1:N  
 INPUT1 → CAMERA1~16(REC.) →  
 OUTPUT1~8 → ALERT

## \* Setup for Preset Link

Multiple connection is supported. All the cameras can not be supported by the system. If you select the cameras supported, the setup box will be activated. A signal to an input device will make the camera move to the preset position.

## 2.3-2. Motion Detect:

sets up all the devices connected to the motion detection including cameras and output devices, and sets them up to operate when a motion is detected.

**2.3-3. No signal:** Sets up alarms to trigger when no signal is received from the selected camera and sets up another camera to record when no signal is received from the selected camera.

It also sets up the output

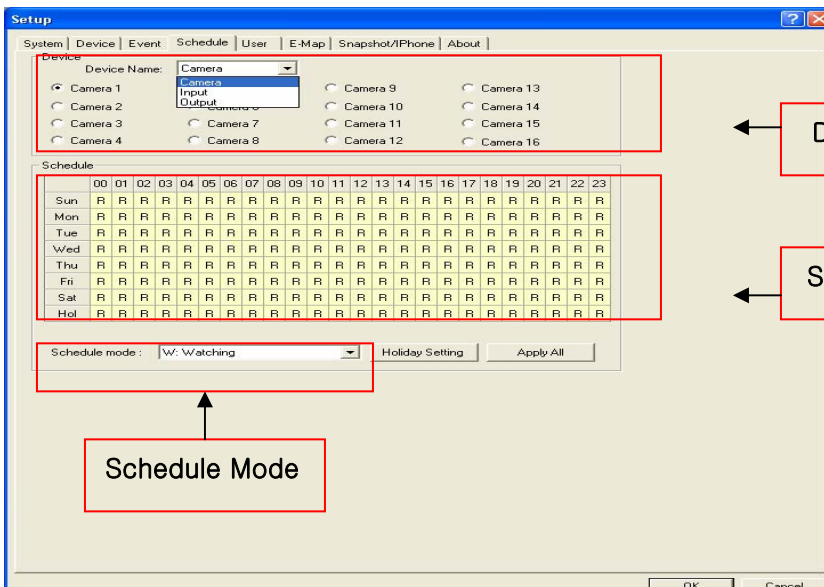
device to operate when no signal is received from the selected camera.

(e.g.: defective cable, camera line cut by invader, camera malfunction and etc.)

## 2.4 Schedule

\* You can set up the schedule for each device such as camera, input and output device.

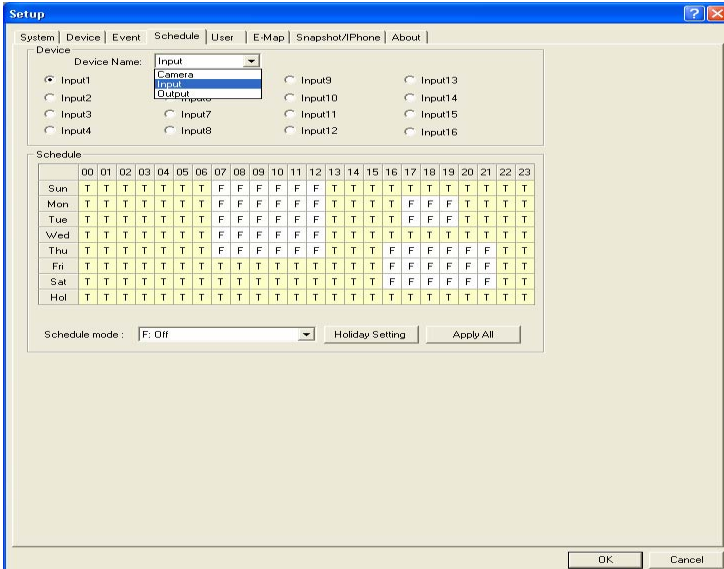
**No1.Camera Schedule:** Manually set up the recording schedule for each camera by day and time.



# INSTALLATION

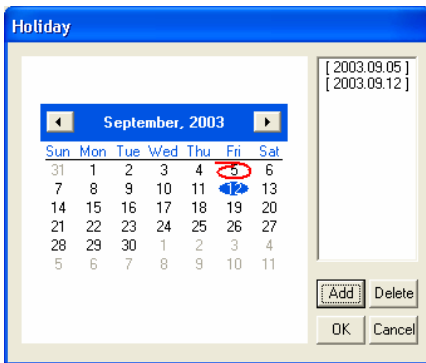
- 1) Device Selection: chooses a camera.
- 2) Camera Selection: selects a camera and sets up the recording schedule for each camera.
- 3) Schedule Mode: chooses one from the box and sets up the recording mode by dragging the mouse.
  - W:** Watch, Monitor
  - R:** Record
  - M:** Record only when a motion is detected
  - A:** Record with different recording frames. You can set up different recording frames (When a motion is detected → event recording frame, When it is not → recording frame).

## NO2. Input & Output schedule

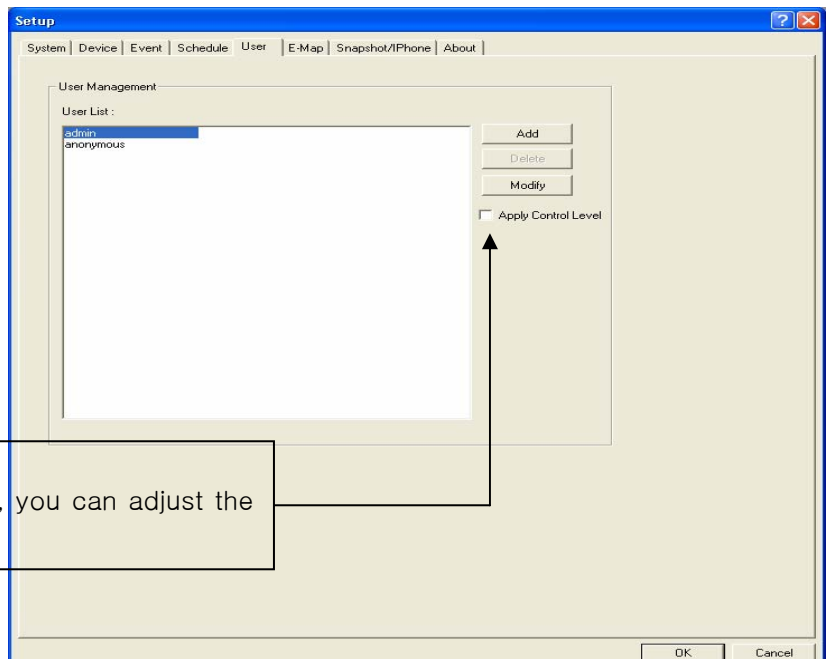


1. The input schedule supports 8 channels and the output schedule has a 16-channel setup. Scheduling is set for one week.
2. **Device Selection:** chooses Input (Output). Input (Output) Selection: selects Input (Output) and sets the schedule.
3. **Schedule Mode:** You can choose one from the box and set the recording mode by dragging the mouse.
  - T: activates the chosen device
  - R: deactivates the chosen device

## NO3. Holiday Setting: Users can set a certain date as Holiday.



- Add:** Add holiday.
- Delete:** Delete holiday.



**\* Control Level**  
If you select "Apply Control Level", you can adjust the authority of a certain user.



# INSTALLATION

## NO1. User Management

### -User List :

Admin: the user who has all the authorities for the system and there is only one administrator appointed.

A. Only the users listed on this user list can operate the system and can have access to the server remotely using the Client program.

B. Each user may have limited authorities

## NO2. Add & Delete of User

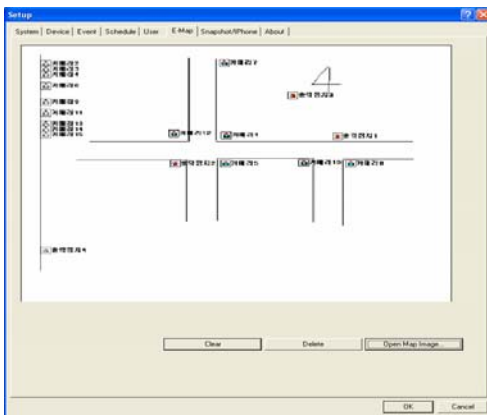
**User:** Name & Password.

**Access:** assigns the necessary authorities to the user

**Visible Channel:** assigns the necessary channel to the user.

**Control Level:** User priority (highest: 0) will be assigned to the user.

## 2.6. Electronic Map:



\*Through the map, you can check the location and the condition of each device.

\* Motion detection outputting of output devices and inputting of input devices are displayed in different colors on the map.

\* The map can be obtained from the Display Window of the system.

# INSTALLATION

## 2.7 Snapshot/ I-Phone

### NO1. Snapshot

**Using Event Mailer: sets up the details.**

**Server:** Type in the SMTP server IP and the port number.

**Mail:** Type in e-mail addresses and subject.

**Use Event Text as Subject:** The event text will be used as a subject by selecting this.

**Event:** Select the items, and mails will be delivered to the recipients when the selected events occur.

**Use Iphone I-phone**  
Mark this box, and the setup window will be displayed.

**Property**

Incoming port no.: 8015

Outgoing port no.: 8016

Timeout (sec.): 5

- A. Incoming port no.:** sets the incoming port no.
- B. Outgoing port no.:** sets the outgoing port no.
- C. Timeout:** If connection does not succeed within the time set, it will be terminated automatically.

### No2. Control

**Connection**

Host name or IP address : [ ]

[ Connect ] [ Cancel ]

#### \* Connection

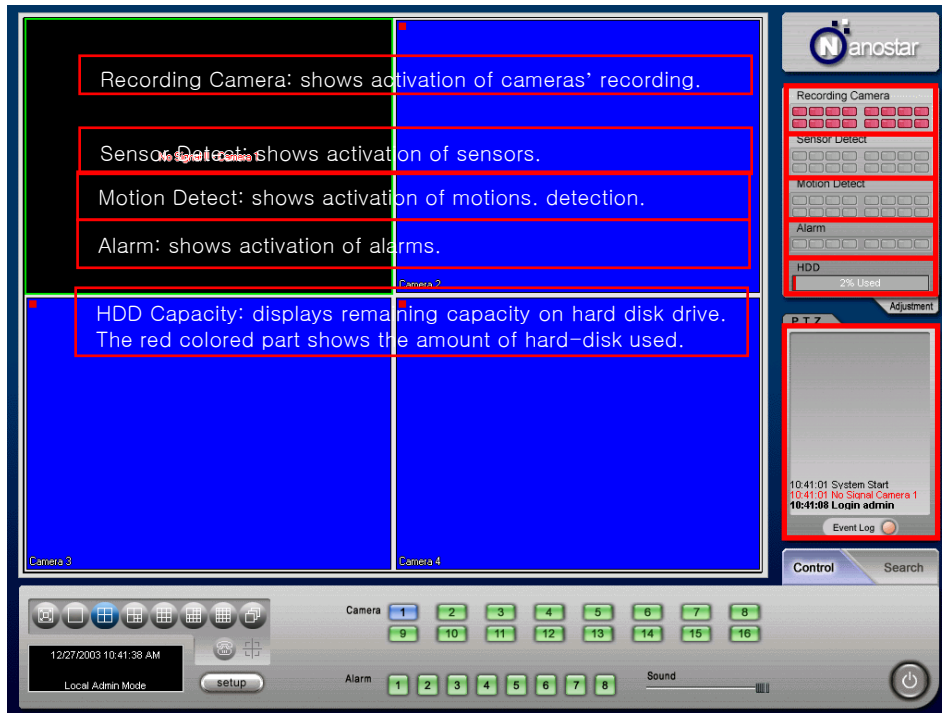
Host Name or IP Address: Type in the IP address to be connected.

## 2.8 About

Version info. Is displayed and maintenance info. is saved in the text format.

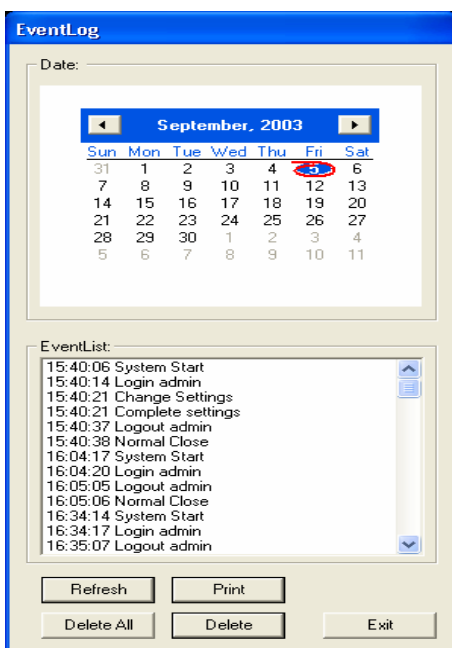
# INSTALLATION

## 3) Status Window



\***Gray**: indicates inert cameras/ sensors/motion sensors.  
 \***Green**: indicates active cameras/ sensors/ motion sensors.  
 \***Red**: indicates cameras on recording,  
 and sensors and motion sensors being activated.

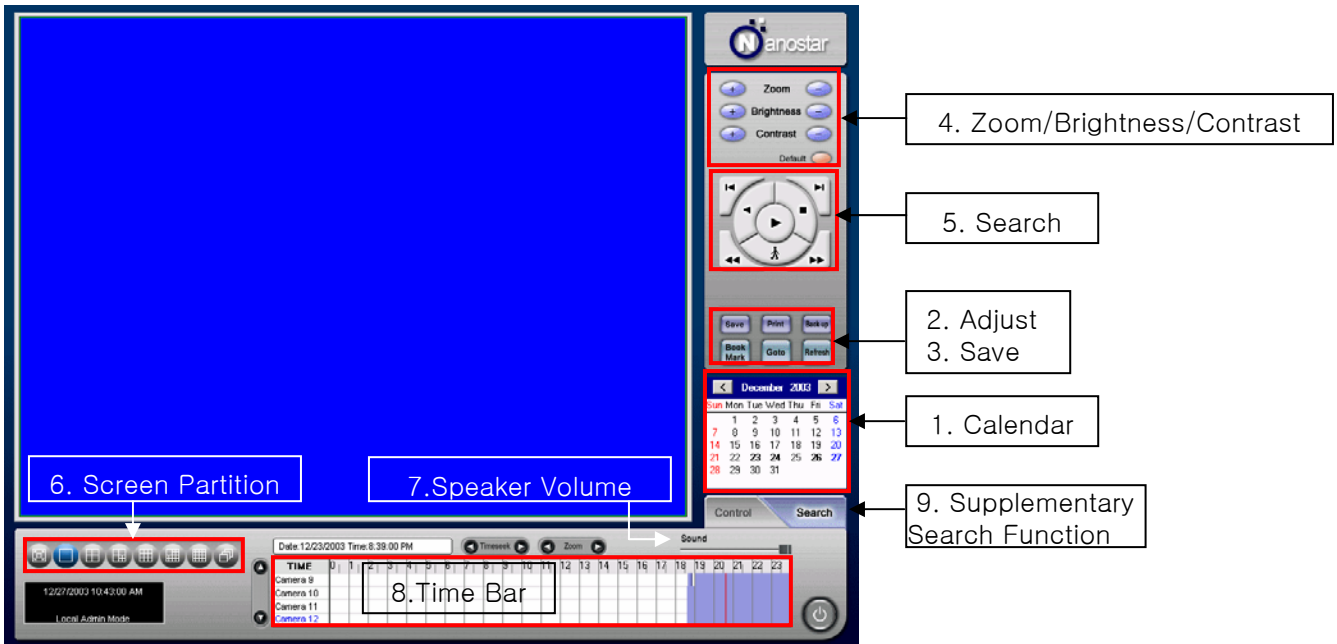
## A. Event Log: searches and deletes saved event files.



**A. Date:** selects a date to be searched.  
**B. Event list:** lists every event that happened during the chosen date. (e.g.: system start/end, recording start, log-in, log-out etc.)  
**C. Refresh:** renews the event list.  
**D. Print:** prints out the event list  
**E. Delete All:** deletes all events saved in the system.  
**F. Delete:** deletes all events saved only for the selected date.

# INSTALLATION

## 3) SEARCH



**NO1. Calendar :** selects the date to be searched.

– Recorded dates will be shown in bold letters. The circled date indicates today.

**NO2. Adjust :** edits/saves/prints archived images.

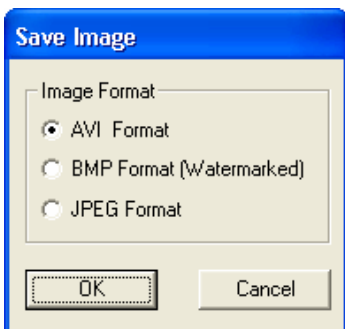
–Blur : gives soft edge to the image. Sharp: gives sharpness to the image.

–Normal : returns to the original image.

**NO3. Save :**



\* Saving images in 3 different formats (AVI, BMP, JPG).



**A.AVI format:** Motion pictures and audio can be saved together.

**B.BMP format:** watermarked images can be saved only in this format.

**C.JPEG format:** Normal still image.

Image quality is not as good as BMP but less HDD capacity is required.

### 1-1. Save as AVI Format



**Mute:** saves video only (without audio).

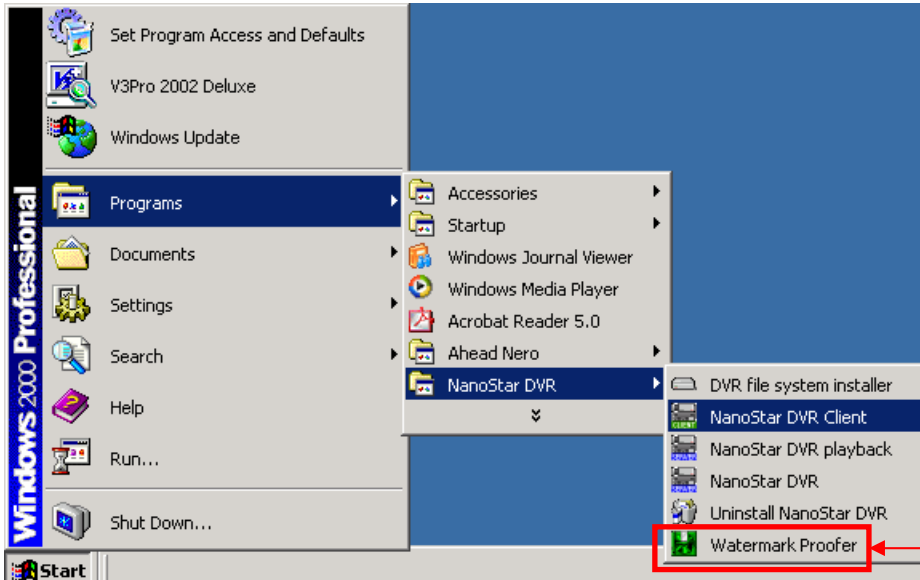
**High Speed:** saves with high speed.

**Start:** displays the window with “Save image as...”. In this window, you can set the path and the file name.

# INSTALLATION

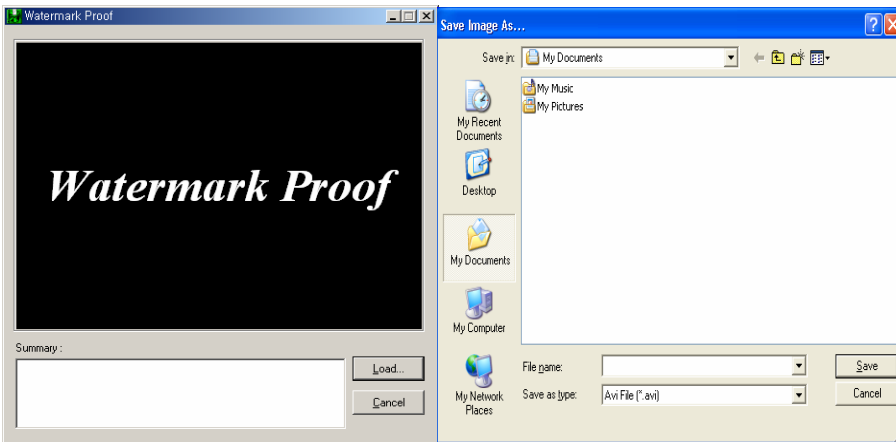
1-2. Save as BMP Format (watermarking format applied)  
 -Images will be saved as still ones with watermarking.

**\* WATERMARK PROOFER**

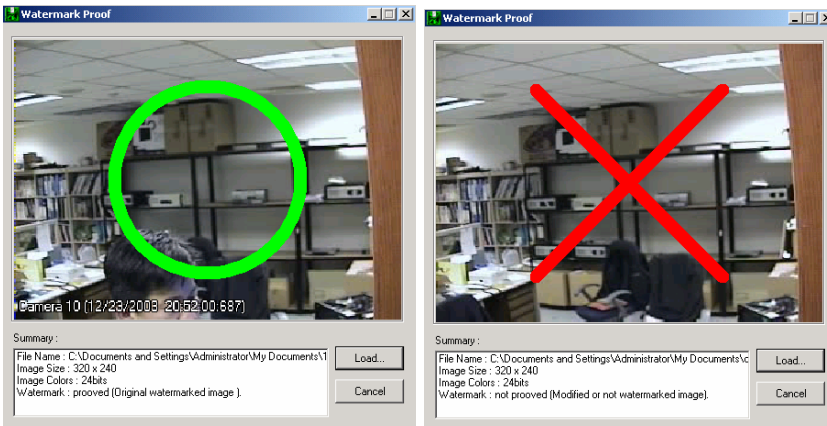


WATERMARK PROOFER EXE

- \* To view the saved data and to check if the image has been modified, you have to execute the Watermark Proofer program from the program list.
- \* Execute the watermark proofer program form the program list.



1-1. Save as JPEG Format  
 Start : displays the window with "Save image as...". In this window, you can set the path and the file name.



- \* If the program operates properly, the illustration above will be shown.
- \* Click "Load" and select the file you want from the file list.
- \* If the image is a modified one, you will see "X" on the image. And if the image is original, "O" will be shown on the image.

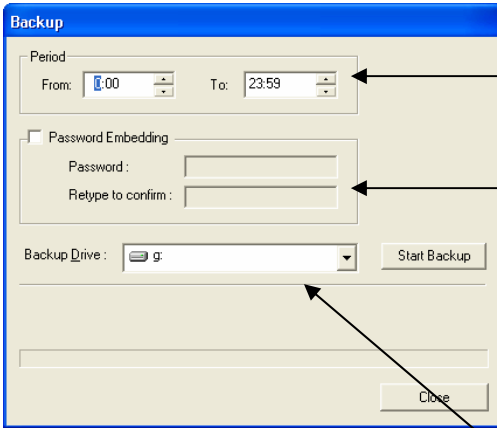
# INSTALLATION

## 1-1. Save as JPEG Format

Start : displays the window with “Save image as...”. In this window, you can set the path and the file name.

## 1-4. Print: selects and prints images.

## 1-5. Backup



**1-1.Date:**  
sets up the backup period.

**1-2.Password:**  
\* If you set the password, you have to key in the password when you try to view the images using the viewer program.  
\* If the password is not set, you can view the images using the viewer program without any further process.  
The backup data is regarded as recorded data in DVR system, you can search the backup data in DVR system.

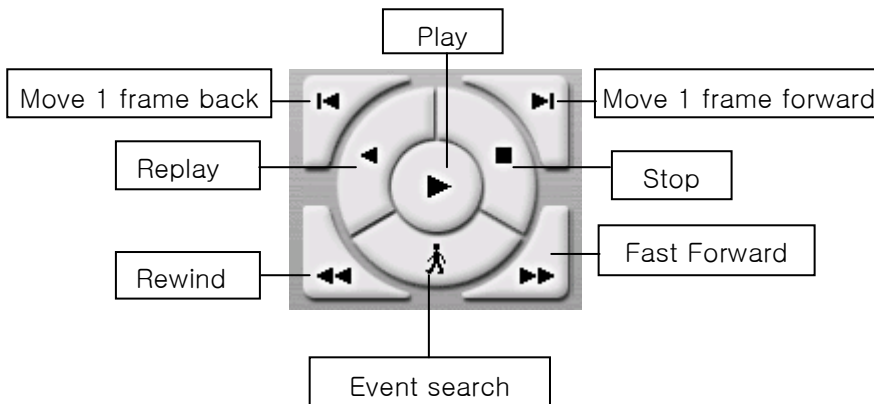
**1-3.Backup Drive:**  
selects the driver that you wish to back up the recorded data.  
Backup Media: HDD, CD-R, CD-RW, DVD, etc.

## NO4. Zoom/ Brightness/ Contrast



- \* Zoom: Zoom in/out
- \* Brightness: adjusts brightness.
- \* Contrast: adjusts contrast.
- \* Default: loads the default value.

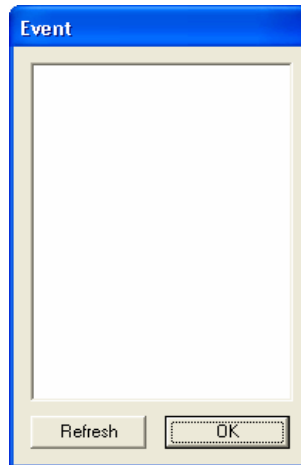
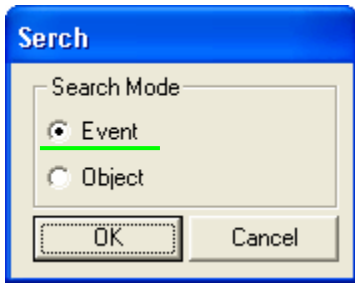
## NO5. Search



<<\*\*\*\* Speed: speeds up to 5 times as fast as normal speed.

# INSTALLATION

## A. Event Search

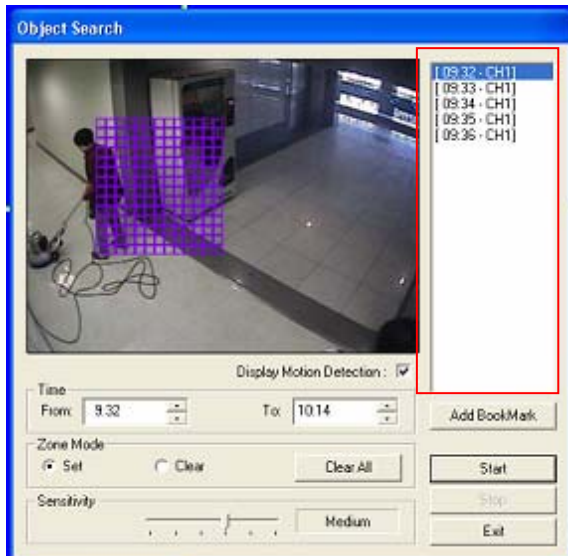


### \* Event Search:

If you click one from the event list, the corresponding image will be displayed.

## B. Object Search

–You can easily check and search motions in the selected channel



### Object Search Window:

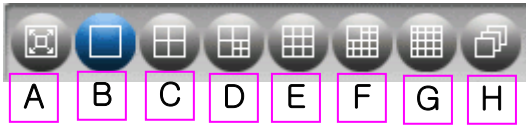
If you click one from the list, the selected image will be displayed.

- **Camera Information:** displays camera name, date and time.
- **Time:** sets the target time
- **Zone:** selects an area and displays the selected area.
- **Clear:** selects and deletes the undesired parts of the area.
- **Clear All:** clears all the selected areas.
- **Sensitivity:** You can choose the proper level from 5 levels. Please note that high sensitivity produces a massive amount of search results. It may delay your search process.
- **Addition to Shortcut:** click “Addition to Shortcut” after selecting the time for search from the Object Search Window, and it will be added to the Favorite



# INSTALLATION

NO6. Screen Partition Menu : selects screen partition mode.

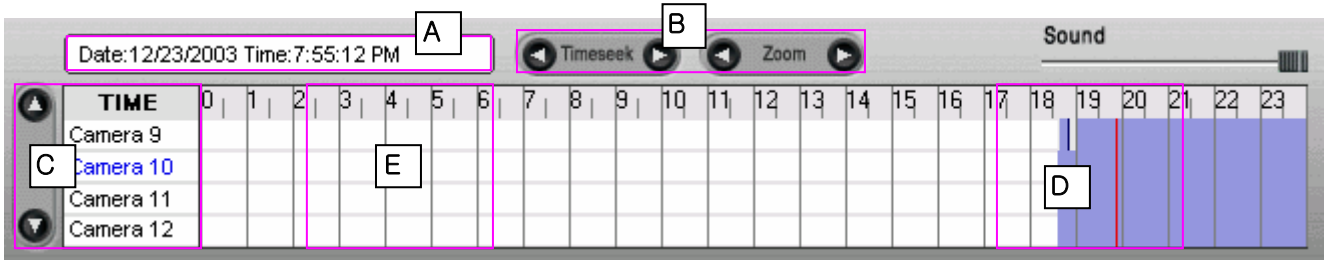


**H. Auto Switching Channel** : is the sequence view that shows each channel automatically according to the user's time setting. Auto channel switching interval can be established in the Setup Menu on the Control Window

- A. **Full screen**: shows full screen.
- B. **Single Full Screen**: shows single full screen.
- C. **4 Partition Screen**: shows 4 partition screen.
- D. **7 Partition Screen**: shows 7 partition screen.
- E. **9 Partition Screen**: shows 9 partition screen.
- F. **13 Partition Screen**: shows 13 partition screen.
- G. **16 Partition Screen**: shows 16 partition screen.

NO7. **Speaker Volume** : adjusts the audio volume in the searched data.

NO8. **Time Bar**: displays the recorded data of the selected date.



- A. **Time Information**: shows the time and the date of the selected data.
- B. **Zoom & Time Seek**: controls the time for search in details. The maximum is 3 hours. When zooming is completed, you can move the time slot by clicking "Seek".
- C. **Select camera groups** (You can choose them by moving the scroll bar vertically.).
- D. **Adjust timeline**.
- E. **Adjust time space**.
  - Index of Recorded data
  - > Blue: Only video recorded
  - > Green: Video and audio recorded together
  - > Yellow: only audio recorded

NO9. **Supplementary Search Function**



- A. **Favorites ( Bookmark )** : You can easily search data by adding desired time periods to the Favorites.
- B. **Time Search ( Go to )** : After setting desired time, you can search data.
- C. **Renewal ( Refresh )** : reloads searched data.

