Content
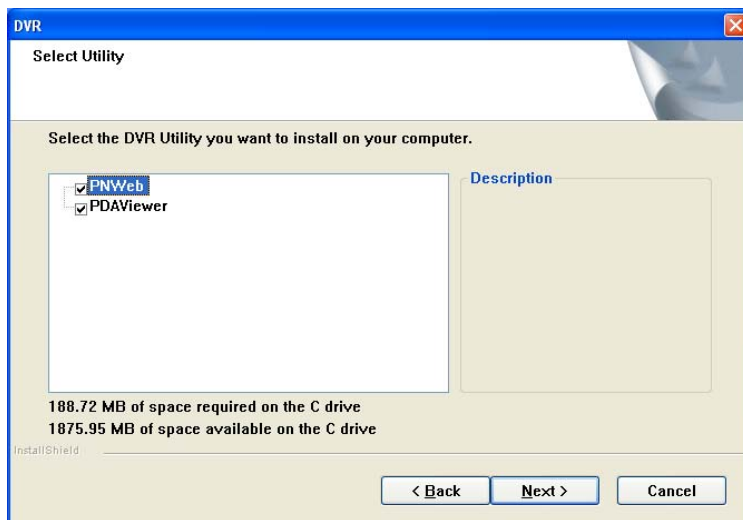
I. Installation

1. Software Installation

(1) Copy DVR S/W on your Device.

(2) Double click DVR S/W and then click 'Next'.

(3) Choose Display Type for 1024x768(Regular) or 1680x1050(Wide)

(4) Click 'Next' and below window appears.
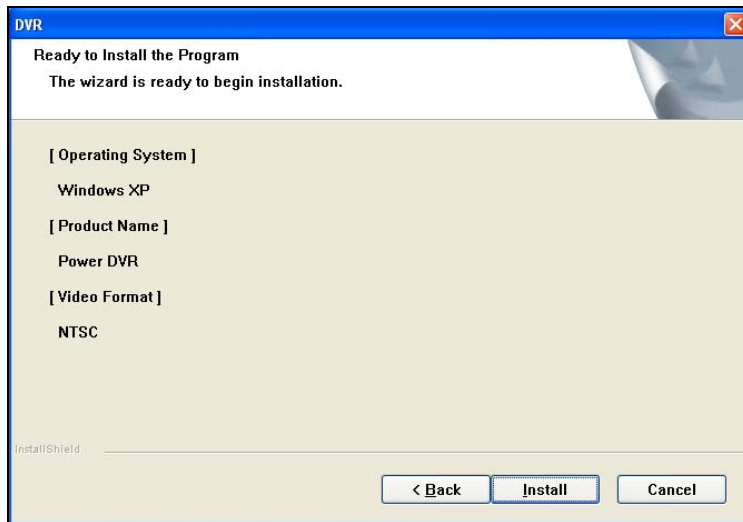
(5) Click 'Install' and below window appears.

(6) Select the DVR Utility and then click 'Next'. (PNWeb is default selected)

(7) Start to install DVR program.
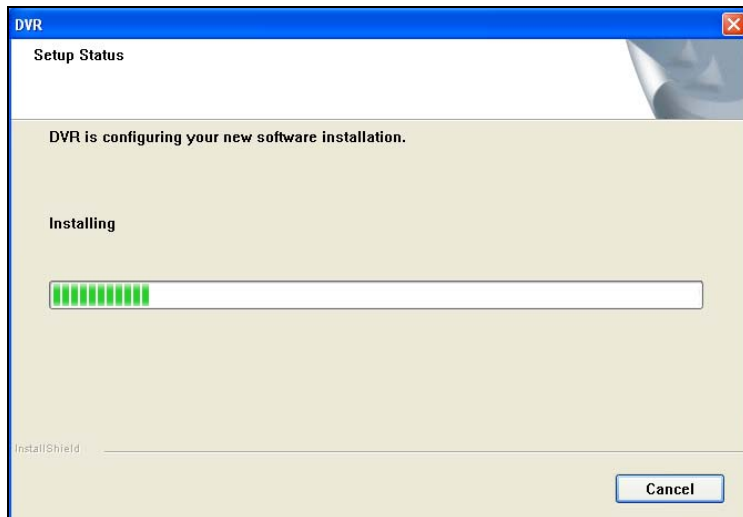
(8) Installation is finished and 'Select Record Drives' window appears like below.
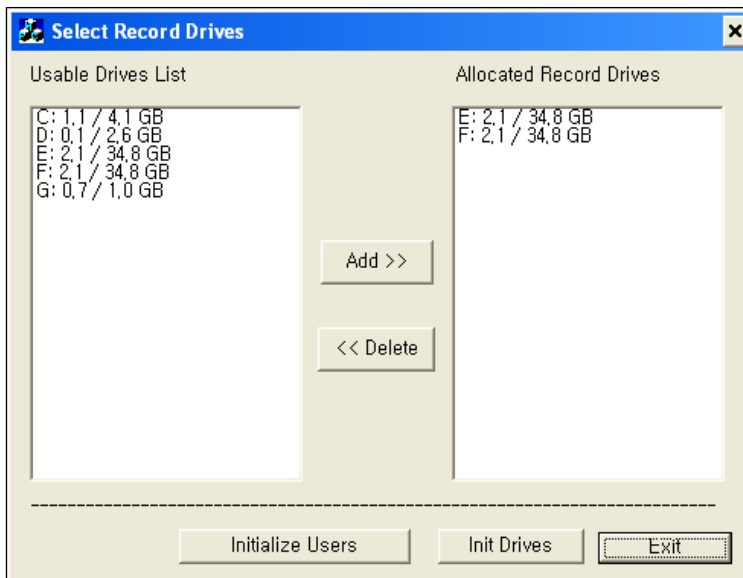
    ① Select record drives from 'Usable Drives List'
    ② Click 'Add' and Click 'Exit'

※ **Caution**

    Be very careful not to add 'C Drive', because it is used for O/S and DVR program.

        a.   HDD has to be initialized to record data.

        b.   <Initialize Users>button can be used, when you forgot DVR user name & password.

II. DVR Operation

1. General Operation

All controls for DVR are conducted via the mouse and graphical user interface displayed on a PC monitor.
The basic operation of the all models can be broken down into the following four modes:

- **Live Mode** – Typical operator viewing and control mode. Enable to view & control cameras (includes PTZ/Dome cameras) and system status.
- **Search Mode** – Enable to search video files for immediate retrieval and playback of incident video. Search by event, date, time and camera channel.
- **Backup Mode** – Provides capability to backup video data for long term archiving or for incident video storage into the selected back-up device such as network drive, USB memory stick and CD/DVD.
- **Exit** – Shut down the DVR application and return to Windows desktop.
- **User ID and Password Protection**
  Log-in and to change modes of operation, or to access different modes, User ID and passwords are required.
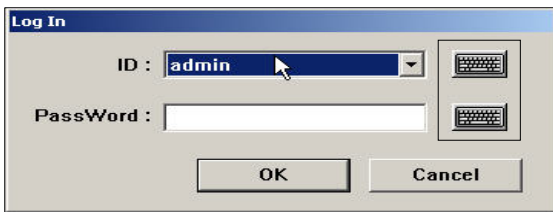
2.   Start Up Screen and Log-in

Click the Login Icon to open your login in window then insert User ID and Password (Default admin password is "333")
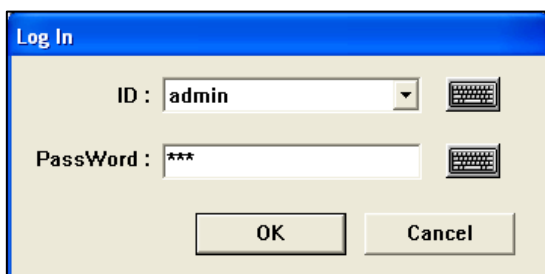
3. Virtual Keyboard

Clicking on the keyboard icon next to the password field will open the Virtual Keyboard.

Enter your password with your mouse and click the OK button. The text will be entered into the password box.
Click OK to enter live view.

4. Exit

Click on the Exit button. ( ) on Live Mode and below window appears.


- ➢ **Log Out** – Back to the Start up Screen
- ➢ **System Reboot** – After showing Warning message, system reboots
- ➢ **System Shutdown** – After showing Warning message, system will shutdown
- ➢ **Exit to Desktop** – After closing DVR program, windows desktop screen appears

III. Live Mode

This is the main screen of DVR and you can view any channel of surveillance and the status of the DVR. You can also configure the Pan/Tilt, configuration, Search, Backup, Display settings etc.

1. Status of DVR
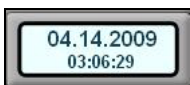
This shows the current date and recording time.

If you click a channel number, you can see the selected image in a full screen. Clicking the channel image does the same function and double-clicking again returns to the original screen.

The color of channel shows the Recording status of each channel, Motion, Camera, and Sensor Detecting.

Selected channel is shown in orange.

When recording the relevant channel is shown in green.

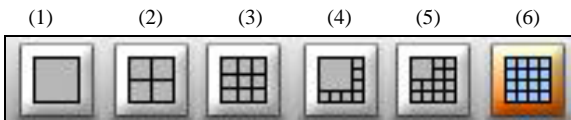When detected motion or sensor of the relevant channel is shown in red.

This indicates the status of Video input and when there is no image or when the wire of relevant channel is cut.

HDD CAPACITY
97%

This shows graphically the current usable space on your HDD.

2. Screen Division

(1)   (2)   (3)   (4)   (5)   (6)

Screen Division of Live mode consists of 1, 4, 9, S-6, S-8, 16

(1)   Displays a single selected screen.
(2)   Displays 4 divided screens.
(3)   Displays 9 divided screens.
(4)   Displays 1 channel in large view and the next 5 channels in smaller view.
(5)   Displays 1 channel in large view and the next 7 channels in smaller view.
(6)   Displays 16 divided screens.

     (Clicking the same button again lets you view the next set of channels for that mode.)

3. Surveillance Order

(1) Screen Switching

In 1, 4, 9, S-6, S-8 divided screen mode, clicking this button switches to next channel in configurable time interval.

(2) Full-Screen

Clicking this button shows the current image in Full-screen.
Right-Clicking returns to the previous mode.

4. Event Reminder (Away mode)

 If you click this button, a red star will appear at the left corner of the screen when motion is detected. With this red star, you can see where motion was captured while you were away.

Clicking this button again toggles off the away mode and the red star will disappear.

5. Pan/Tilt Function(PTZ)

(Only with cameras support this function)

This is a function to control the Pan/Tilt of supported cameras.

You can move the position of the camera up/down and left/right.

This zooms in and out of the image.

This changes the iris of the image.

This changes the focus of the image. (Most cameras support Auto Focus)

If you set two positions P1 and P2, and press the AUTO button, the camera will move back and forth from P1 to P2.

P1 Button - This sets the beginning point of the camera.

P2 Button - This sets the ending point of the camera.

Spare Power Button turns power on/off for other external equipment.

Power Button turns the camera on/off.

Light Button turns the light on/off. (Only for cameras with this special feature)

Preset Button - Pressing the middle of the Pan/Tilt window will pop up another Preset Keypad Window. The preset function will change the axis of the camera to where the user previously set it to.

This deletes one saved point.

This deletes all saved point.

After inputting the number of a saved point, pressing this button will apply the preset.

This button lets you save the current location in the next successive order.

This saved the location of the camera.
You can save 0~999 locations (3digits) per channel. First move your camera to a location you want and click this button to save.

6. Backup

This function is for storing important recorded files in other storage devices. You can use CD-RW and you can also use an extra HDD or Network Drive. After clicking the Backup Button and inputting the password, the backup window will open.

Select a drive that you are going to backup.

The left window shows saved file in the DVR and the right window shows files in backup drive and space available.

Selecting a backup file on the left window will show the size of the file. Select files that are no bigger than the space available on the backup drive.
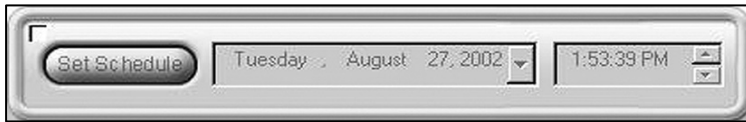
Clicking the Start Button will save selected files to the backup drive.

Clicking the Stop Button will stop backup.

This will close the backup program. Pressing this button will not stop back up.

This will backup the selected file at the preset time. If you want Schedule Backup,first check the check-box and set the date and time.

Clicking the Set Schedule Button will run backup at the appointed time. Schedule Backup will save all data selected.

 Schedule Backup can be configured to backup everyday, every week, and every month.
If you input the password, the schedule setup window will pop up.
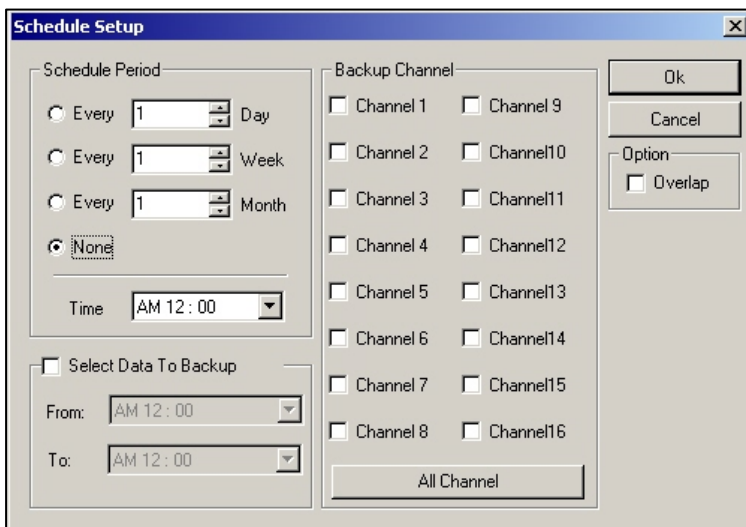
(1) **Schedule Period**
You can set the backup period as of everyday, every week, every month and None including the time you would like to begin the backup.

(2) **Select Data To Backup**
When you check this feature, you can back up from a certain time period.

(3) **Backup Channel**
You can choose which channels you want to back-up or all channels.

(4) **Overlap**
When checked, the data for backup will be saved from the starting position.
When unchecked, the data for backup will be saved from the last finished position.

7. Other Functions

 This button is for setting up the DVR.

 This button is for search & playback of recording files.

 This button is for live audio.

IV. Configuration

SETUP   This button is for configuring the DVR.
If you click this button, a window, as shown below, will pop up and prompt you for your password.

If you have the privilege for setup, you will not be required to enter password.

If you don't have it, you will get the below message and then if you click "Yes" button, you should input another ID and Password available for the use.
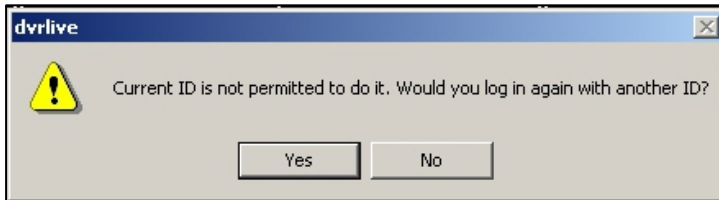
DVR configuration has 11 tabs. This can be changed according to the status of upgrades. Most tabs are for one channel.

1. Channel/Sensor

This setup screen consists of 10 basic categories.

① **Channel**
Up to 10 letters (20 characters) in English for the Channel Title

② **Sensor Input**
Out of 16 sensor tabs, if selected sensor detects motion, it operates as it is set. You can enter a name or location of Sensor, under Input Sensor Name. You can select the type of Input Sensor, either N/C (Normal close) or N/O (Normal Open).
Ex) Infrared ray Sensor, Porch, Parking Lot…
(You can set up what type of sensor in Input Sensor)

③ **Sensor Output**
Out of 16 sensor tabs, if input sensor or motion detection is activated, a signal is sent to the selected Sensor Output to activate the sensor. You can enter the name or the location of a sensor under Output Sensor Name. You can select the type of Sensor Output, either High or Low.

④ **Delete Previous Files**
When this function is selected, it will delete previous files if there is no more space on your HDD.
It deletes the oldest file first.

⑤ **Display Camera Titles**
If you do not check this, it will not show sub-titles on the Live Screen.

⑥ **Dwell Time**
This sets up the switching time in second between channels when activated.

⑦ **Display HDD Capacity**
When indicating space on the Live Screen, you can select the form of indication.

※ **Caution**

If Delete Previous Files is not selected, you cannot save new recorded data when your HDD is full.

2. Motion Detection

When setting up Motion Detection Recording, you can set up the area and sensitivity of detection.
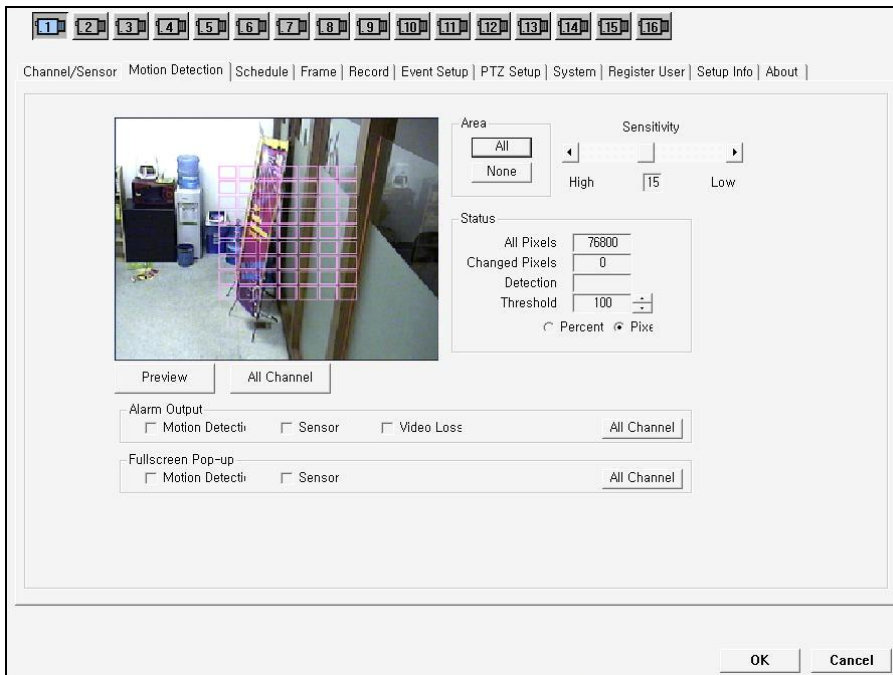
① **Setting up the Area of Detection**
   - All : Detects the whole area. In all area mode, resolution is set to 76,800 pixels (Total number of pixel in NTSC) on screen
   - None : Disables whole detecting area
   - User Configuration : After checking None button, you can select the area of detection by clicking and dragging.

② **Status**
   - All Pixels : This shows the pixel size of selected area.
   - Changed Pixels : This shows the number of changed pixels of the selected area
   - Detection : If motion is captured within the configured area of detection, exclamation marks(!!!) will appear.
   - Threshold : If the amount of motion satisfies the configuration in the selected area, it will be detected.
        It can be configured by percentage and number of pixel.

③ **Detection Sensitivity**
   - This configures the sensitivity level of detection.
   - As sensitivity increases, the detection level becomes more acute; as sensitivity decreases, the detection level becomes duller. (According to the sensitivity level of detection, Motion detection sets up sensitivity)

④ **Preview**
   It is possible to simulate setup. After clicking this button, you can see the sensitivity with exclamation marks (!!!).

⑤ **Alarm Output**
   Selecting full-screen mode will allow you to hear sound from the Line Out terminal when an event occurs.
   You can select the event types (Motion Detection, Sensor) as you want.

⑥ **Full screen Pop-up**
   Selecting alarm mode will allow you to view a specific channel in one screen when an event occurs.
   You can select the event types (Motion Detection, Sensor, Video Loss) as you wish.

3. Schedule
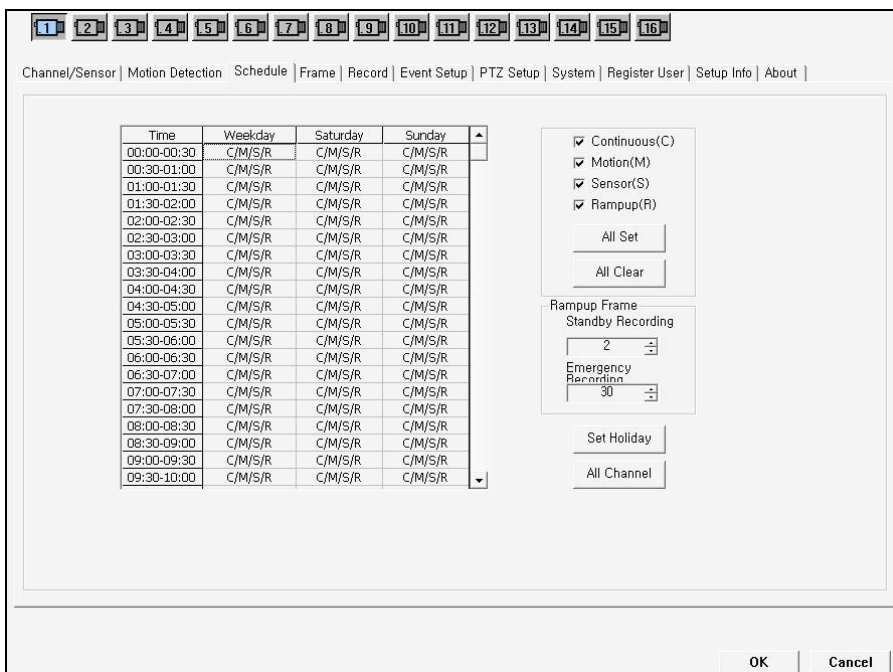
① **Schedule** by Weekday, Saturday and Sunday in 30 min blocks.

② **Recording Mode**
   Continuous, Motion, Sensor and Ramp-up modes(All set & All clear for easy usage)

③ Apply settings to multiple cells at the same time by highlighting cells with your mouse then selecting record modes.

④ **Set Holiday**

Set Holiday by calendar, Holiday record settings execute your preconfigured Sunday Schedule.
(Holiday setting will follow Sunday Schedule)

⑤ **Ramp-Up**

Standby
Recording
2

Emergency
Recording
30
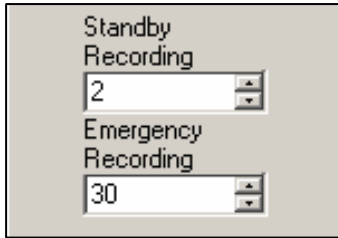
- To use Ramp-up, you must have Continuous record schedules as well as Motion, Sensor or both.

- Your Standby & Emergency recording settings take effect and the frame rate you have set for that channel on the Frame tab is ignored.

- Standby and Emergency Recording are set independently for each channel.

- Set Standby Recording for the non-event frame rate when Ramp-up is   scheduled. This is the frame rate that will be used under continuous record setting.

- Set your Emergency Recording speed to what you wish your event (motion or sensor) record speed should try to achieve. This feature will increase your frame rate based on the systems un-used frame rate.

- Keep in mind if you have a 120 fps unit and have your system set up to use 110 fps you only have 10 fps to use for Ramp-up.

4. Frame
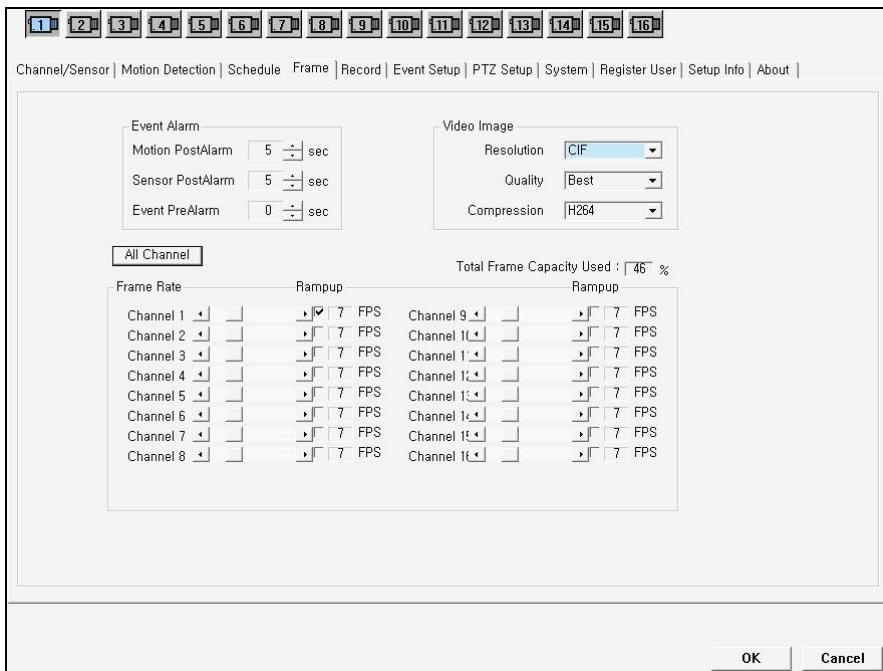
① **Motion/Sensor Post-Alarm & Event PreAlarm**
   You can set Pre-alarm & Post-alarm in Motion, Sensor or both of them.

② **Setup Status of Frame rate**
   You can see selected channel, total frame capacity and frame rates for each channel.
   Also you can adjust the frame rate in each channel by using scroll buttons.

③ **Ramp-Up**
   Preset Ramp-up frame rate will be shown next to frame rate display.

④ **Video Image**
   The user can configure picture quality, recording resolution and compression method.
   All configurations can be set according to cameras connected to the DVR.
   (Resolution : CIF(320*240)/Half D1(720*240)/D1(720*480), Quality: Good/Better/Best, Compress Format : H.264)

※ **Caution**

   The value of capture quality can be different in each model.

   - Clicking the "All Channels" button will apply Resolution, Quality of picture, and Compress Format settings
     to all channels.

5. Record
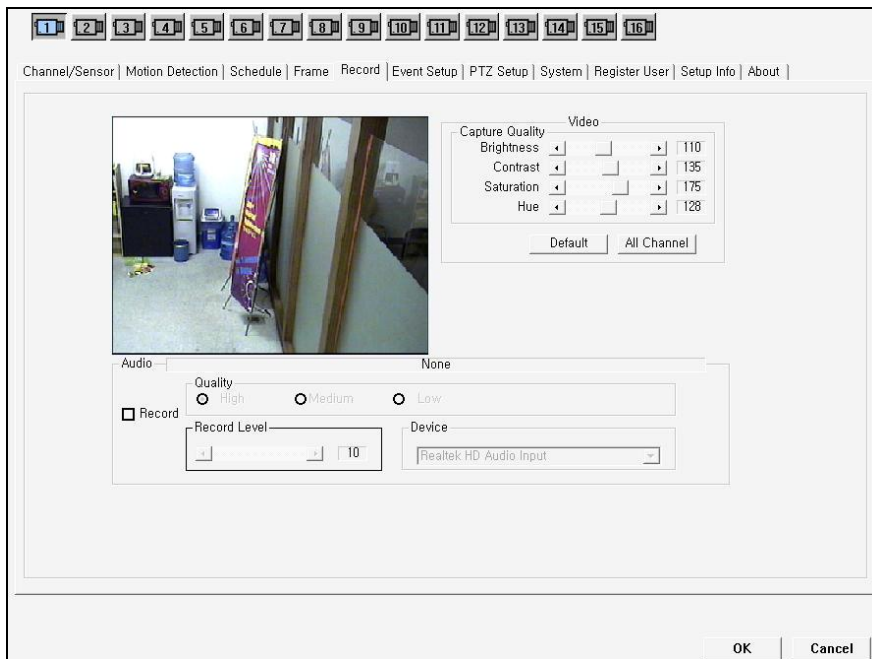
① **Capture Quality**
You can set Brightness, Contrast, Saturation and Hue for each channel & all channels.

② **Audio**
You can record sound through the Line-In terminal on the sound card. Click Record button to record sound on the channel you want to record sound.

③ You can see the selected channel right under the preview screen.

④ You can set Quality(High/Medium/Low) and sound level with the audio device.

6. Event Setup

Email Notification

When an Event (Motion Detection, Sensor, Video Loss) occurs, it sends type of event, occurred time, occurred channel and name of occurred server via mail.

➢ **Email Server Name :**
Supply the name of your SMTP Server. If you do not have a domain name server, you can enter an IP address of a mail server.

➢ **Email Address :**
Enter an e-mail address where you want to receive mail. If more than one person wants to get mail, separate the e-mail address with semicolons.
ex)   A@Z; B@Z; C@Z.....

➢ **Account Authentication :**
When the SMTP server requires security, check the Security Configuration category. Enter account and password of the SMTP server. Ask Mail server authorizer for more information.

➢ **Event Notification :**
You can choose a specific event that needs to be reported when an event occurs. Unselected events will not send any e-mail when an event occurs.

➢ **Channel that needs to be sent :**
You can choose a channel that needs to be reported. Unselected channels will not send any e-mail when an event occurs. You can choose the channel that needs to be reported by clicking on the channel button at the top of the window and pressing the Clear button will delete all selected channels. The channel that needs to be reported is also used in the Client Connecting Function.

7. PTZ Setup

① Pan/Tilt allows you to configure the camera model, RX Number, Playing, Speed and Control port.

② Set original value of PTZ Driver

③ Basic setup values can be different according to model, so check the model and then select.

④ **PTZ :** Select model of PTZ driver

⑤ **Address :** Set RX(Receiver) and Address using the up/down buttons.
   This is the control number of the RX device so only identical devices can control it.

⑥ **Pan Speed :** Sets the rate of left/right movement.

⑦ **Tilt Speed :** Sets the rate of up/down movement.

⑧ **Halt Time :** Sets up how long it is going to stop at a certain location during Auto Panning.

⑨ **Zoom/Focus :** Sets the rate of Zoom and Focus.

⑩ **Serial Port Setup :** In DVR, the RS232 to RS485 signal converter port is appointed.

8. System

① **System Time :** Set system date and time. (Click 'apply' button to adjust)

② **Reboot Schedule :** Set to reboot DVR regularly.

③ **Audio :** Select one function between Sound Card and MUX

④ **Auto Logout :** Automatically DVR will logout after certain time passed.

⑤ **Network Port :** Set Bandwidth & CMS port to connect by client S/W.

⑥ **System Devices :** Easy access to Network, Printer, Devices Manager and Sound & Multimedia settings without exiting the software.

⑦ **User History :** Show log data of users and their recent operations.

9. Register User
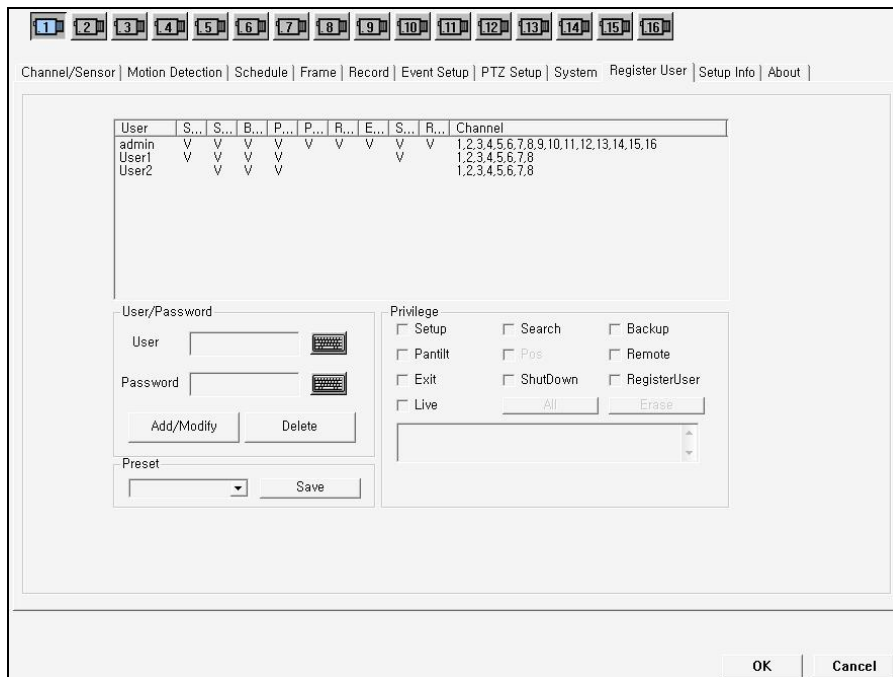
① **User list :** You can see registered users with their privileges
(Setup, Search, Backup, Channel)

② **User/Pass :** You can add, modify and delete User name & Password

③ **Privilege :** You can select privileges by clicking check boxes.

④ **Preset :** You can make Preset user data and save it.

10. Setup Info

① **Channel :** Shows configuration for Channel Name, Recording Frame,
     Recording Quality and Sensor Input/Output.

② **Motion :** Shows configuration for Motion Detection.

③ **Pan/Tilt :** Shows configuration for PTZ

④ **Print :** Prints contents mentioned above

⑤ **Save :** Can save configuration as a file (Default file name : Backup)

⑥ **Load :** Opens a saved file

11. About

Product information

  - Show Model Name, Program Version and Trans Version.

V. Search

In Search, you can view recorded data files in 1, 4, 8, 16 divided screen mode and it is possible to zoom in, play fast, edit images, print and save images.

Use the Search Program to search recorded files efficiently by entering the appropriate search variables (date, time, channel and recording mode). With the easy interface, you can search the recorded files precisely and can play back recorded files easily and fast.

1. Recording Calendar

Bold type date
- Recorded date

Pink color date
- Current day

Date where recorded data exists is activated.

2.   Time Line

HOUR

MINUTE

SECOND
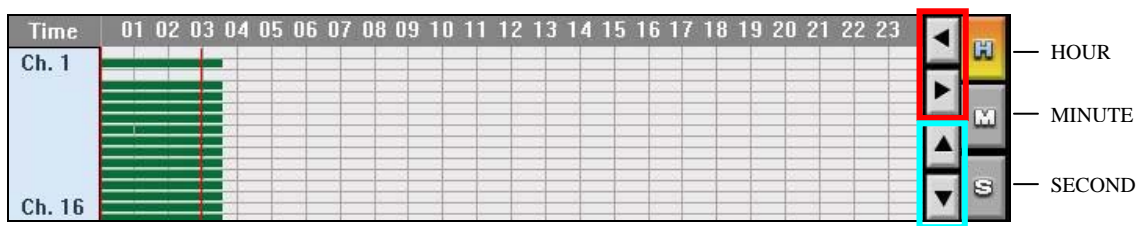
① As you select date in the calendar, Time Line shows recording status.

② A period of time when recorded data exists is highlighted in green color.

③ As you click a specific point on the line, red line appears and moves in the direction of playback.

④ Also, you can move red line with buttons in the red box.

⑤ You can view recording data in types of hour, minute and second by using HOUR, MINUTE and SECOND buttons.

⑥ You can change channel with buttons in the sky blue box when screen division is 1 or 4 or 8

3.   Screen division
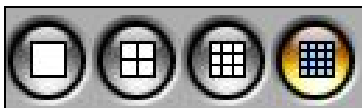
Screen division of SERCH MODE consists of 1, 4, 8 and 16.

4.   Playback controller

PLAYBACK SPEED CONTROL

REVERSE

PLAY

PREVIOUS

NEXT FRAME

STOP
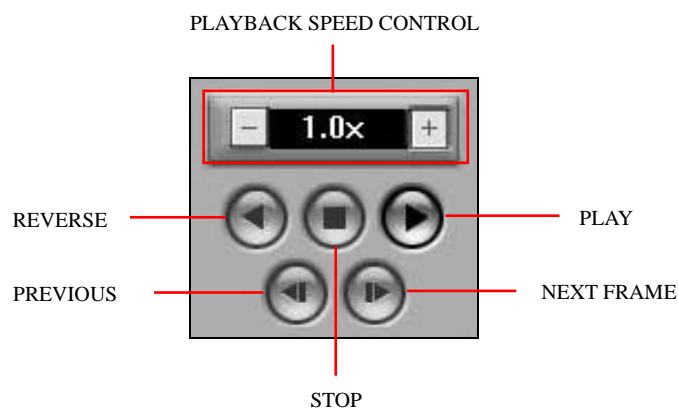
(1) How to use this controller is the same as those of VCR or DVD Player.

(2) You can playback at the speed of 0.5times to 20 times by using PLAYBACK SPEED CONTROL.

5. Functions

When video is played, the Play button is activated and if you press the Play button, the Stop button will be activated. Pressing Stop button while playing will activate above buttons.

(1) Image Enhancement

 You can adjust sharpness, softness and brightness of still image

 This button is used when you want to go back to a previous screen

 This button is used when you want to go back to the first screen

 This button is used when the screen is too bright or too dark.
It automatically controls Brightness and Contrast to improve the quality of the picture.

 This button is used when you wish to see the image in black and white.

This button is used when you wish to get rid of the noise without degrading the quality of the picture. If activated, it gets rid of the noise and improves the quality of the picture.

This button is used when the screen is too sharp. It gives you a smoother picture.
This button is used when you want to go back to the first screen.

This button is used when the outline is dim. It gives a clear outline to give you a better image.

This button is used when there is too much noise on the screen.

This button is used when there is not much noise on the screen.

This button is used when you wish to save the improved image in a USB Memory or External HDD. The size of the image is saved in 640X480 resolution unlike the Search Image.

This button is used when you want to print out the screen.

(2) Print

This prints out the still image.

Print size can be set by user, such as Full size, 1X, 0.5X as below.

Print Position

- ◉ Full Size
- ○ 1X
- ○ 0.5X

[OK]   [Cancel]
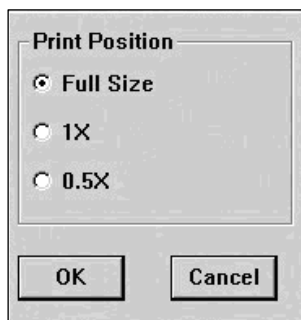
(3) Power Search

If you want to search fast recording data on some motion which is detected in a specific area, you can use Power Search function.

① **Search** : You can search for recording files on max 30X playback if you set some certain areas by selecting grid.

② **Init** : You can go back to initial status.

③ **Audio :** If you check this, you can save audio together with video.
   (Save offset & Detect offset can be set as user's customization)

④ **Continuous :** If you check this function, the detected still image will be shown in each stop.

⑤ **Detected File List :** You can save the detected still image on the DVR through "Save Folder".

(4) Panorama

 You can see the screen that is displayed like a panorama in full-screen.
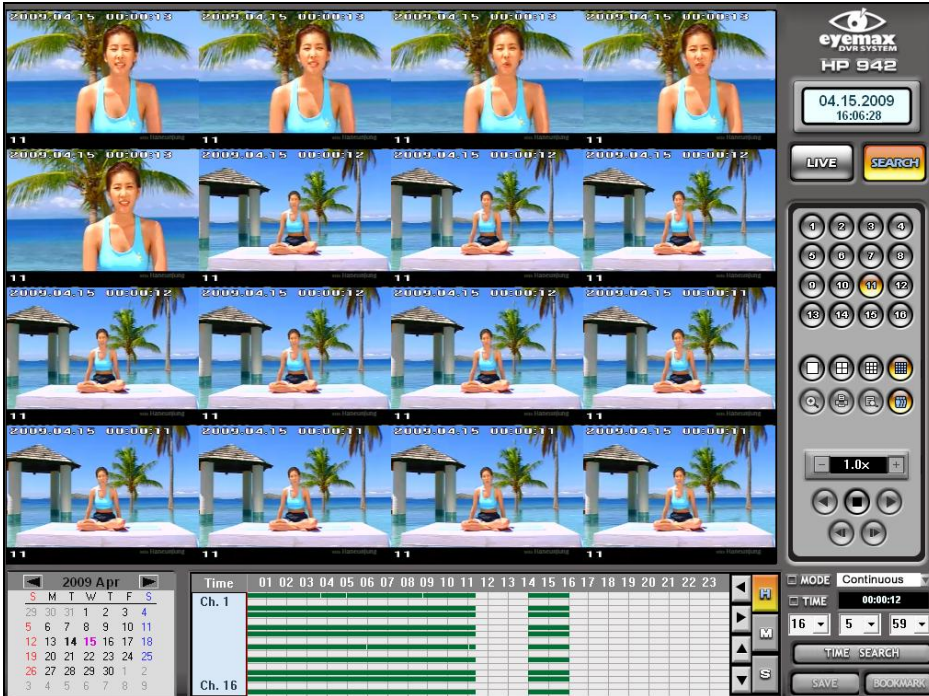
※Caution

If the resolution 720x240 or 720x480, this function doesn't apply.

6.   Recording Mode & Time Search

Hour — Minute — Second
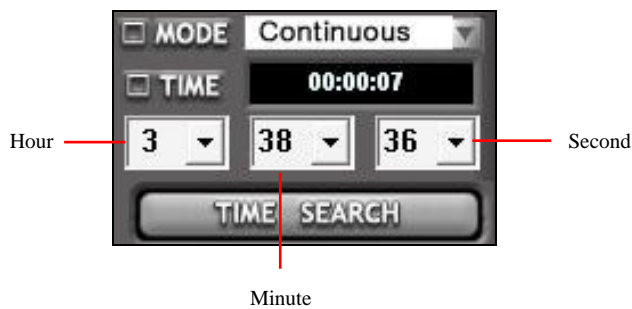
(1) Recording Mode
- Recording Mode comprises 3 modes – Continuous, Motion, Sensor.

(2) Time Search
- If you want to search specific time, you can use TIME SEARCH.

7. Save

(1) How to save still image
- After stop the video, and then select Save button.
- The image is saved in BMP or JPG format. The size of the image is saved as it is displayed.

(2) How to save AVI file
① Select second mode in the TimeLine.
② As you drag a mouse with pressing the right button of it in the TimeLine, a specific section is set as below.
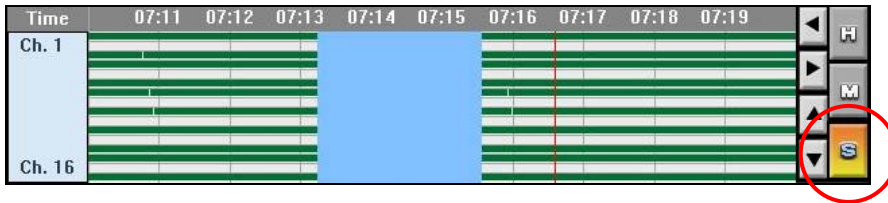
③ Select Save button, and the below window appears.
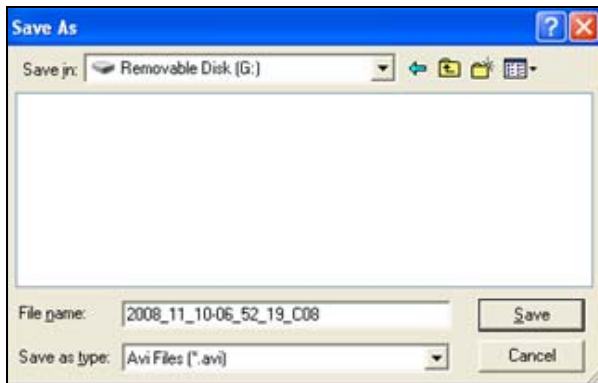
8. Bookmark

If you want to search specific data later with ease, you can use BOOKMARK.

REMOTE MONITORING SOFTWARE

Web viewer & CMS mini

Web Viewer

User can see DVR live & search mode without installing any S/W. Only need to type IP address in internet explorer.

1. Login & DVR Live mode

(1) Type DVR IP address or URL in internet explorer.

(2) There are 2buttons (DVR log in & Client Program Download).
Login button is for DVR live & search mode, Client Program Download button is for downloading CMS mini S/W into PC.
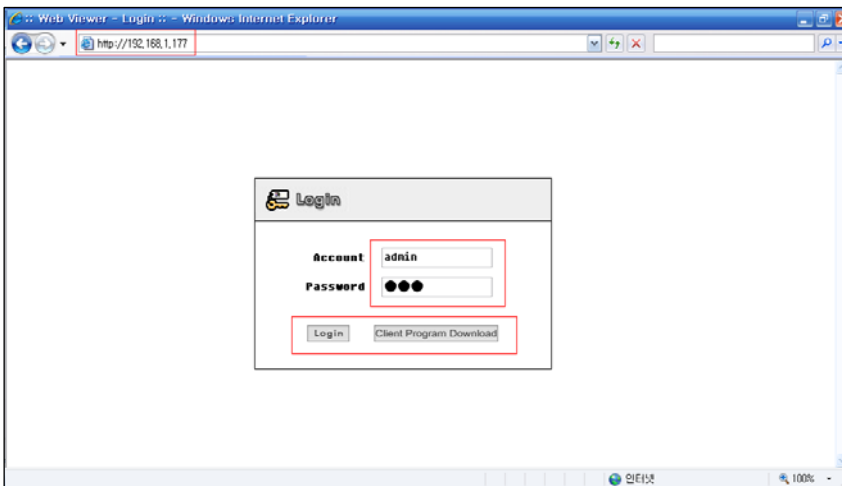
(3) Type DVR ID & password. (Default account : admin, password : 333)

(4) DVR Live & Search mode are selectable.
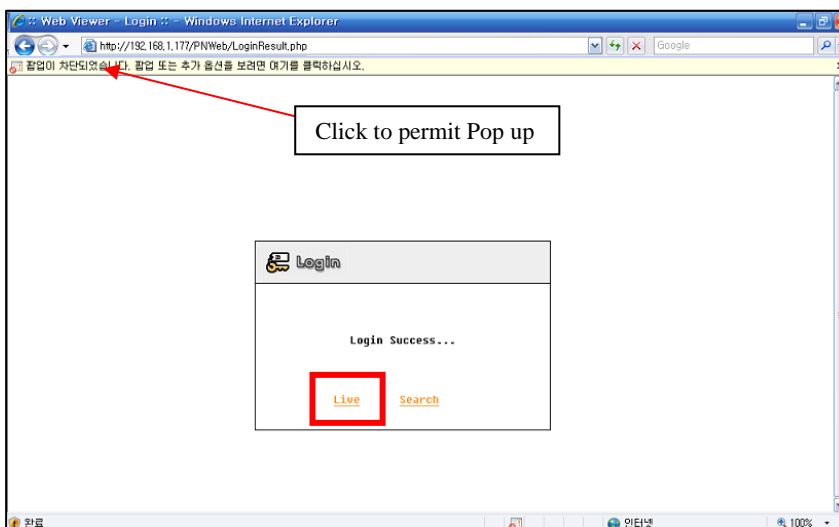
(5) Click 'live', and 'CONNECT'button to watch DVR live mode.
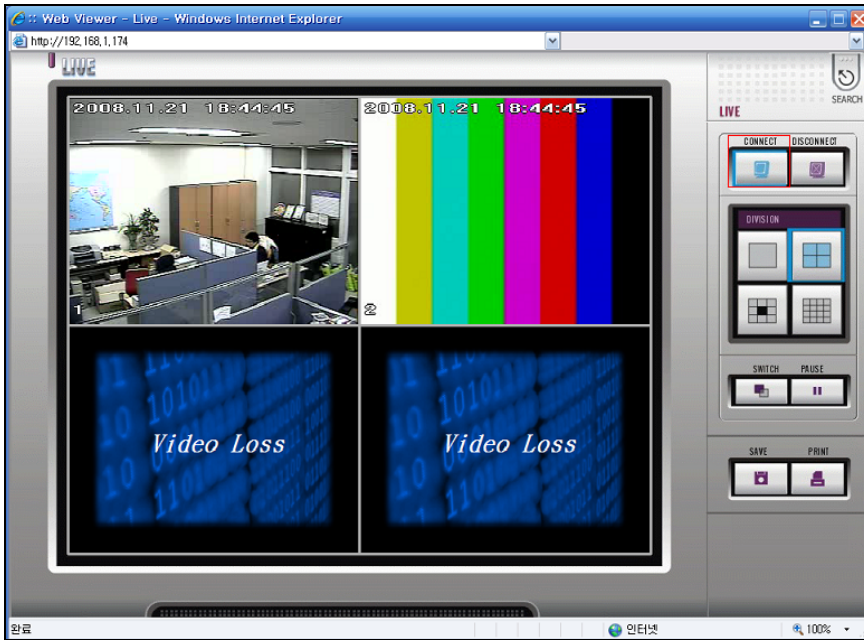
 : Click to switch live mode to search mode.
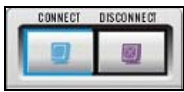
 : Click to connect or disconnect for live monitoring.

 : Click to select screen division among 1/4/8/16 division.

 : In 1,4,8 division, clicking this button switches to next channels in configurable time interval.

 : Click to see paused live image temperately.

 : Click to save or print paused live image.

(6) To save paused live image in PC click 'PAUSE' and 'SAVE' button.

(7) To print a paused live image out with a printer, click 'PAUSE' and 'PRINT' button.
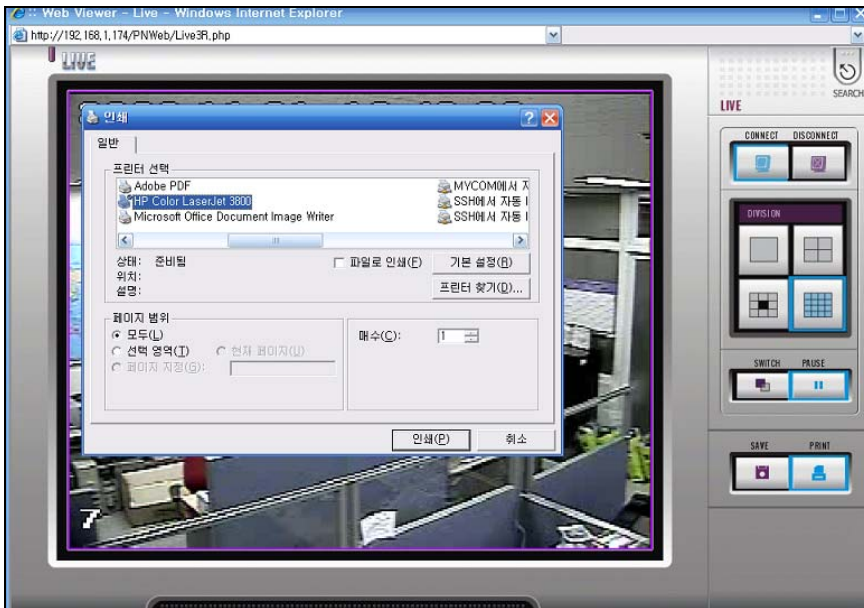
2. DVR search mode

(1) Click 'Search' button to enter DVR search mode.

Click to permit Pop up
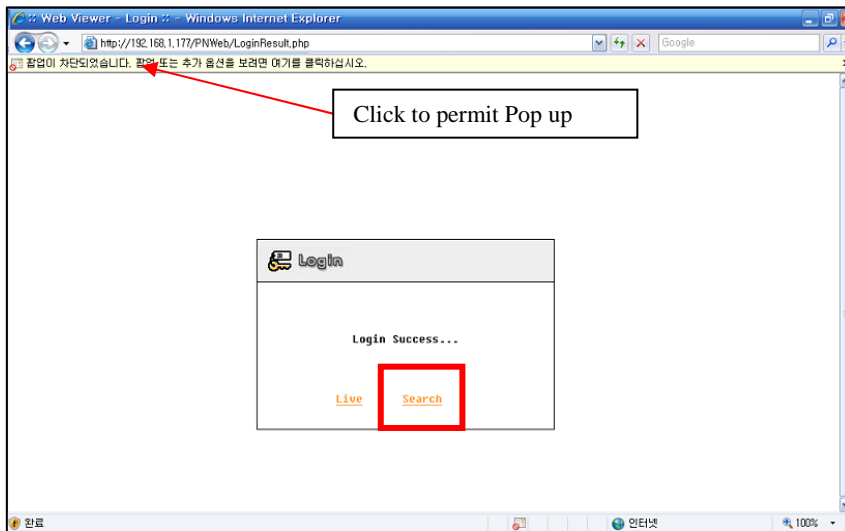
(2) Click & install ActiveX.
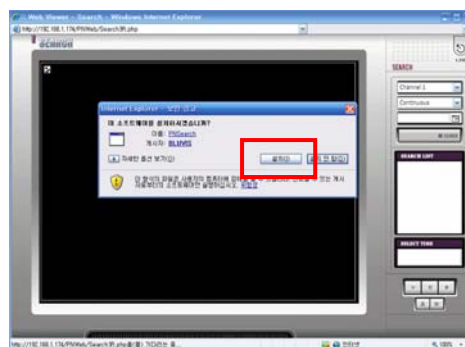
(3) How to control search mode

Go to live mode

① Select DVR channel

② Select Recording mode

③ Select Date

④ Execute search condition

Recording list

Selected recording time

Play/Pause/Stop
Print/Save
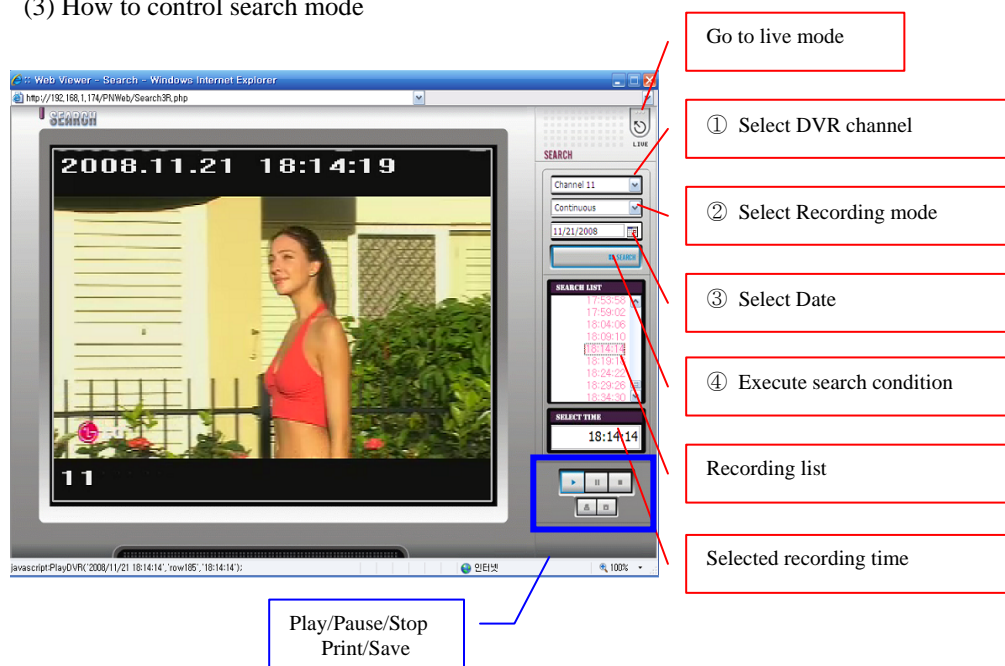
3. Client Program Download

(1) Click 'Client Program Download', and save it in PC.
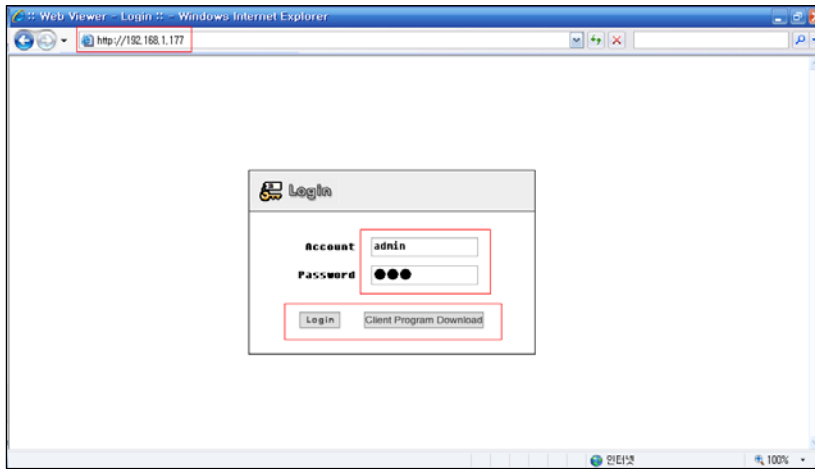
(2) Define the path to download CMS mini S/W.
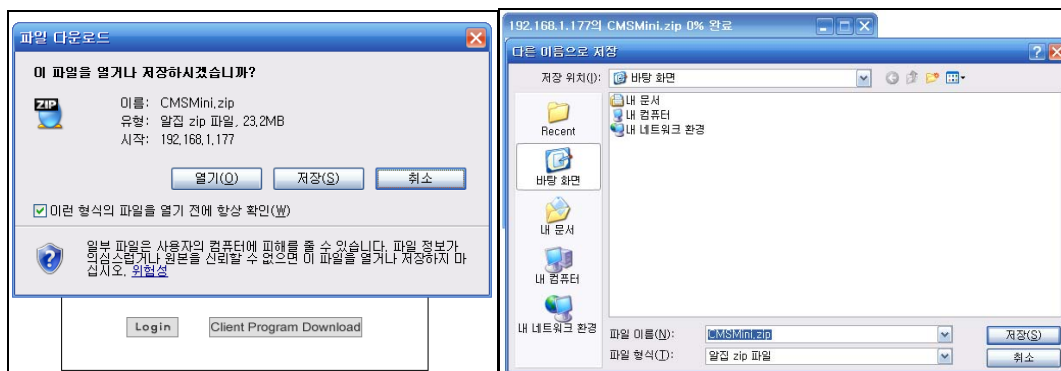
CMS(Central Monitoring System) MINI

I. CMS mini Server

1. HARDWARE SPECIFICATION FOR CMS mini

(1) O/S : Windows 2000, Windows XP, Windows Vista

(2) RAM : 512 MB and over

(3) CPU : Pentium IV 3.0 GHz and over

(4) Explorer : Version 6.0 and over

2. REMARKS

CMS mini server should be used for only Central Monitoring. Unauthorized software or utilities are probable to make CMS mini malfunctioned. Please note that unauthorized software or utilities should not be installed without the provider's confirmation.

Ⅱ. HOW TO USE CMS mini

1. OPEN THE CMS WOINDOW & LOG OUT

(1) Double click CMS mini icon on the desktop.
T
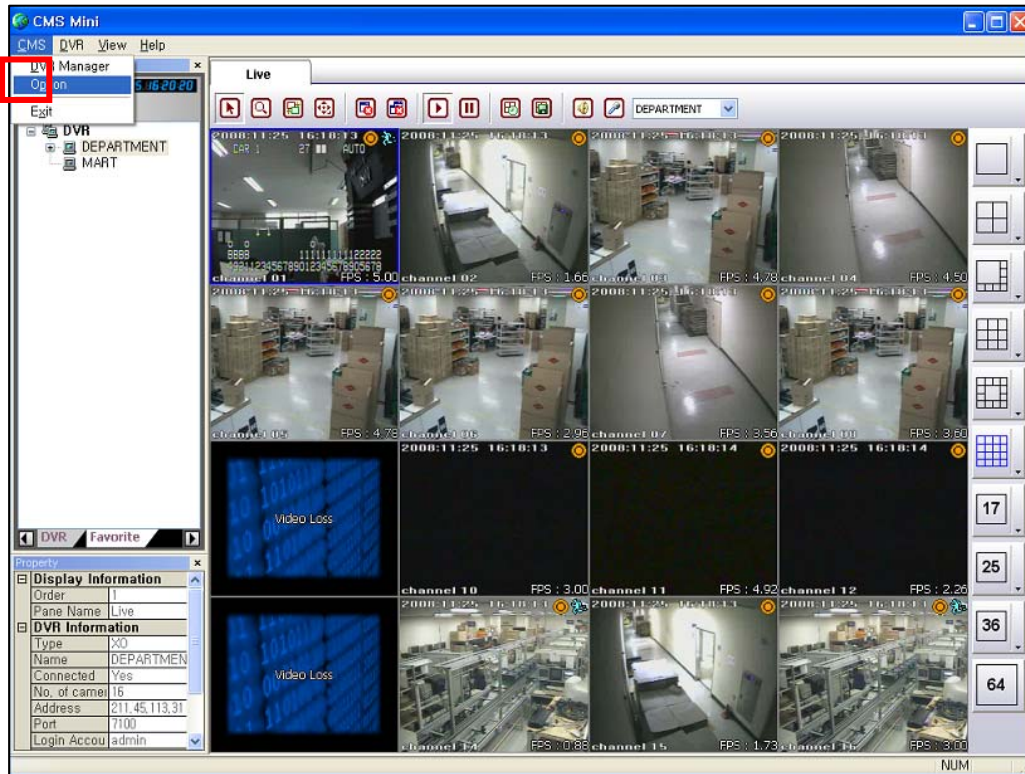
(2) Choose 'Exit' to close CMS mini as above.

2. HOW TO REGISTER DVR IN DVR MANAGER

(1) Select 'DVR Manager' in CMS menu, and the below window appears.
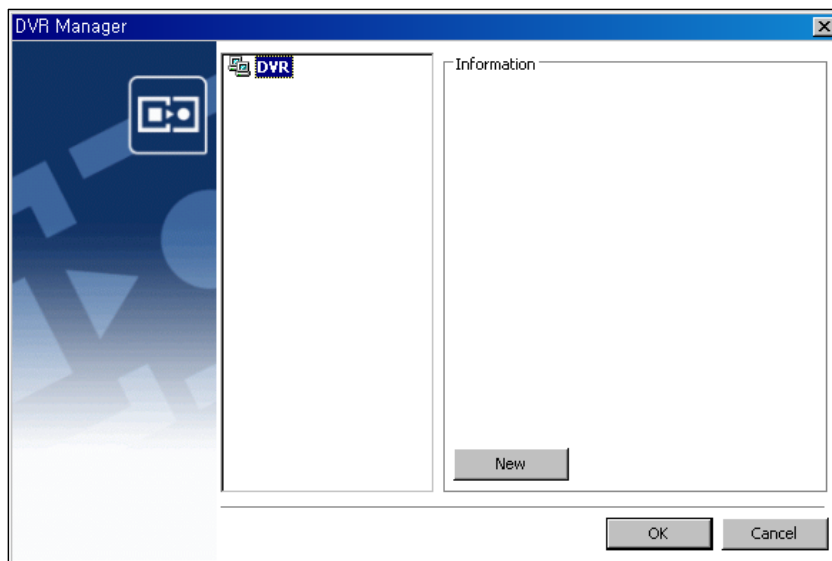
(2) Click 'New' in 'Information' to register a new DVR, and the below window appears.
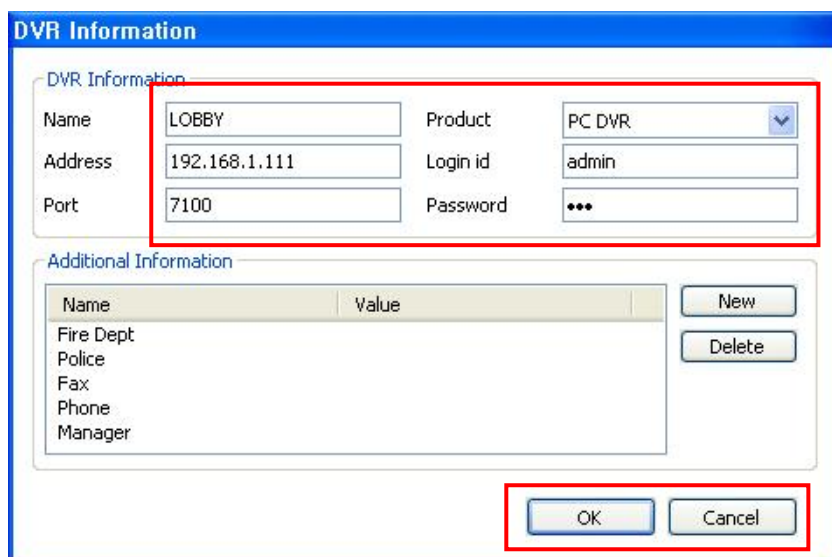
(3) Type Name, IP Address and Password of the DVR which you want to manage in CMS.

(4) And then, select 'OK', and the DVR are registered as below. You can register other DVRs by the same procedure.
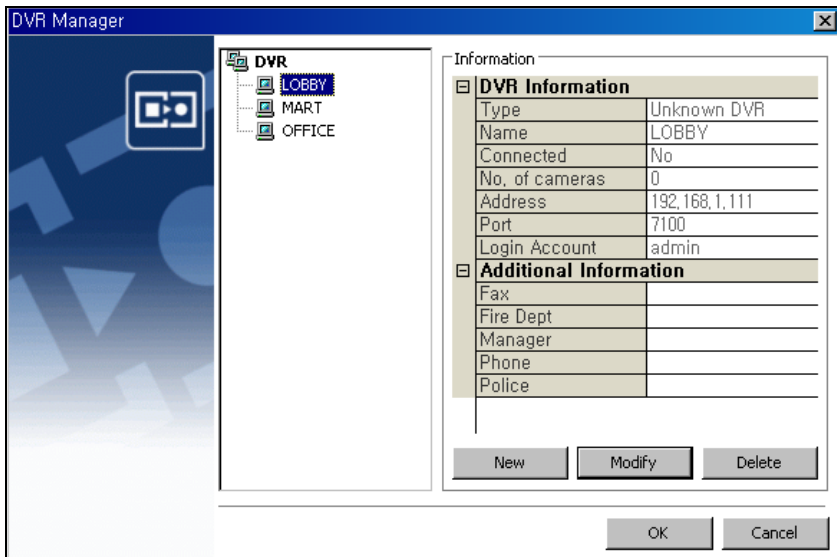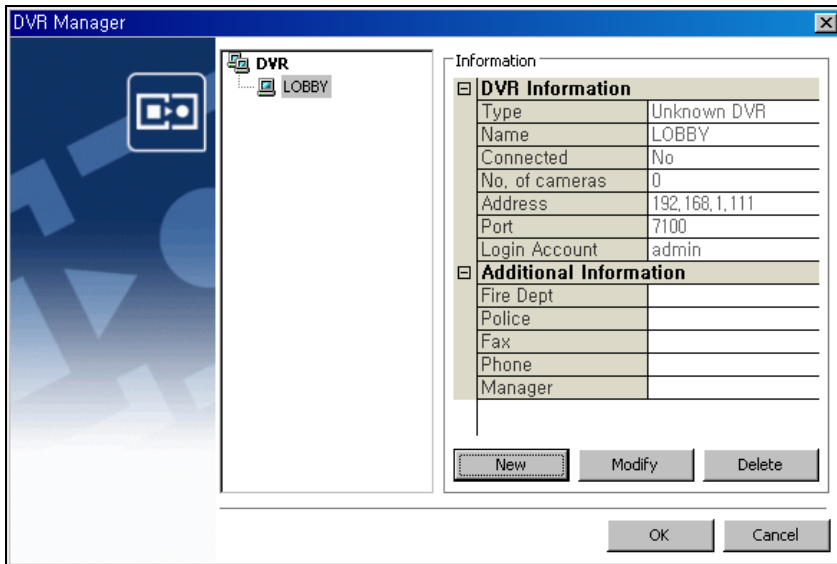
(5) If you need to modify the information of the registered DVR, select 'Modify' and then select 'OK'.

(6) If you need to delete a certain registered DVR, select 'Delete' and then select 'OK'.

3. HOW TO USE OPTION
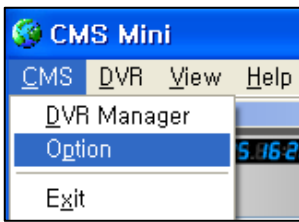
(1) Select 'Option' in CMS menu, and the below window appears.
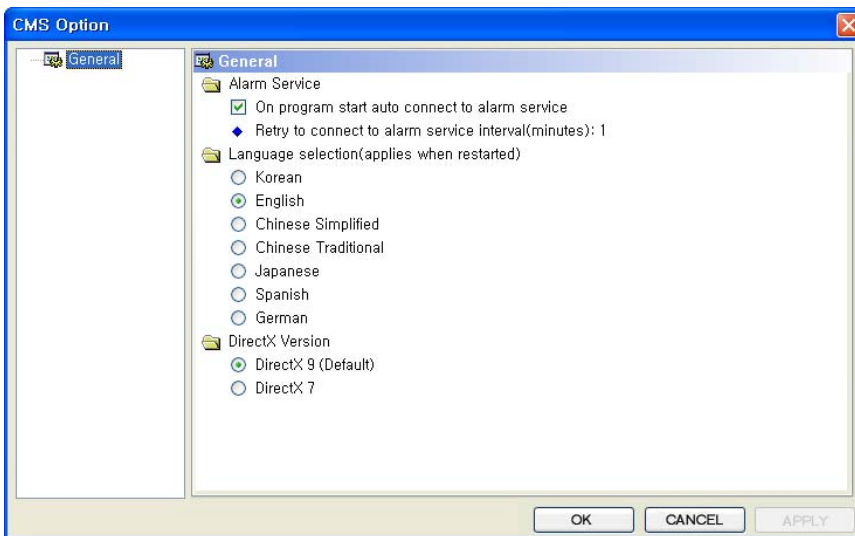
(2) Select 'General', and its relevant menu comes out in the right part.

(3) Check the check box in 'Alarm Service', and you can receive alarm data from the remote DVR without any additional setup, only if you start CMS program.

(4) Select language and click 'APPLY' and then click 'OK'

4. HOW TO USE LIVE PANE

[1] STRUCTURE OF LIVE SCREEN
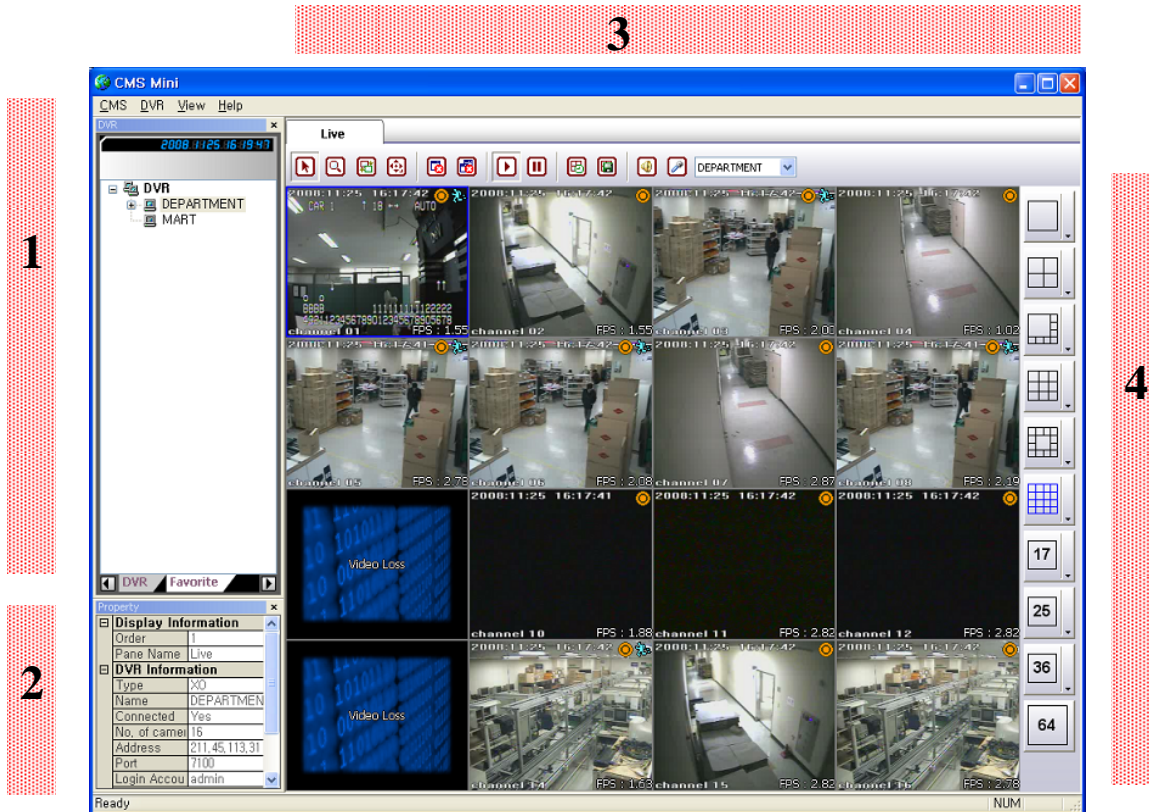
1	**: This part shows DVR List _ the registered DVRs and their cameras.**
2	**: This part shows Property List _ information on CMS version, DVR and cameras.**
3	**: This part shows Live Screen and function buttons for it.**
4	**: This part shows Division screen button.**

[2] HOW TO DISPLAY IMAGES IN LIVE SCREEN
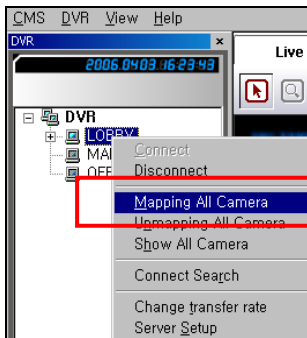
(1) Click the right button of mouse and select 'Connect' in the menu.

(2) And then select 'Mapping All Camera', and all camera images are displayed.
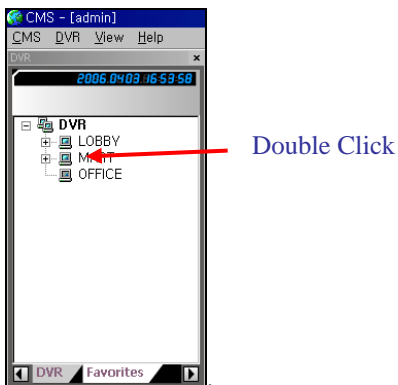
Double Click

(3) If you feel that this procedure is not convenient, you have only to double-click the name of the DVR in the list to display in the Live Screen.
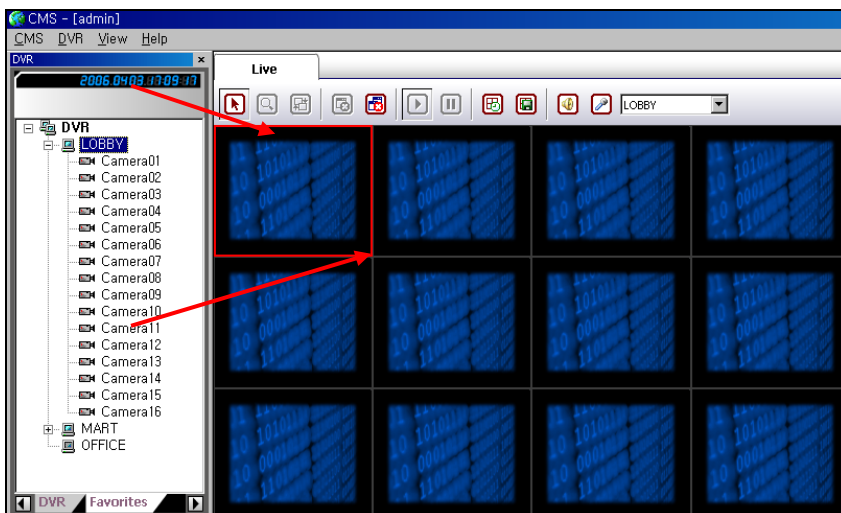
(4) You can display camera images by drag & drop. If you select a certain DVR and then drag & drop it into the live screen, all images belonging to the DVR are displayed. Besides, if you want to display only one camera, select the camera and then drag & drop it into the live screen.

[3] HOW TO USE FUNCTION BUTTONS IN LIVE SCREEN

 : Mouse Pointer

 : Zoom

(1) Select this button and then click a certain channel, and zoom icon appears.

(2) Put the icon on where you want to zoom in and roll a scroll button of mouse.

 : Exchange between camera channels

(1) Select this button and then select a certain channel.

(2) Drag the channel and then drop where you want, and the two channels are exchanged.

 : Control the Pan/Tilt/Zoom

(1) Select this button and then click a channel connected with Pan/tilt camera, and PTZ icon appears.

(2) Click the left button of mouse, and you can Pan or tilt camera by moving up/down/left/right in the directing of Mouse and zoom in/out it by rolling a scroll of mouse.

 : Turn-off of one channel

Select a certain channel and then click this button, and the image of the channel is turned off.

 : Turn-off of all channels in the Live Screen.

If you click this button, the images of all channels in the Live Screen are turned off.

 : Play

 : Stop

Select a certain channel and then click this button, and play of the channel is stopped.

 : Switch

For example, in case that you select '4 division screen button' and you select this button, CH.1 to CH.4, CH.5 to CH.8, CH.9 to CH.12 and the next 4 pieces of channels are displayed in turn.

: **Favorites**
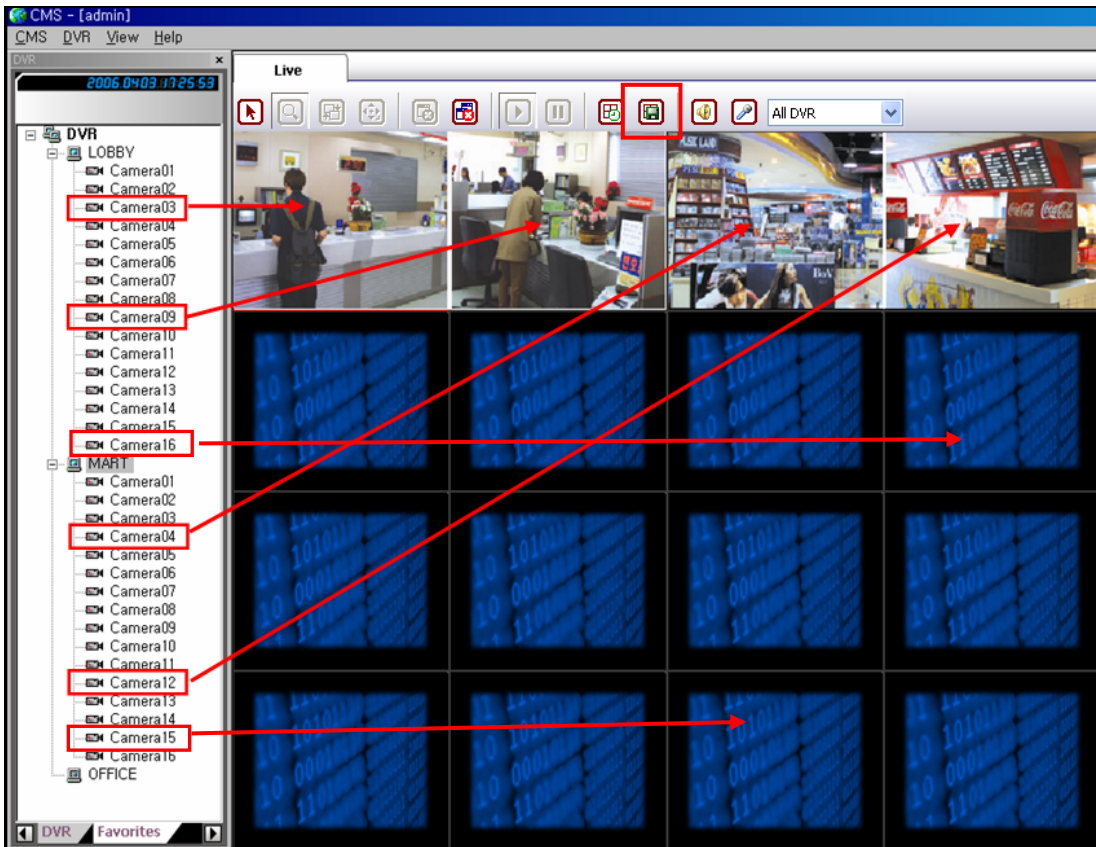
(1) Make combination of cameras which are necessary or effective to monitor together as a group with some common things by drag & drop and then click this button, and the below window appears.
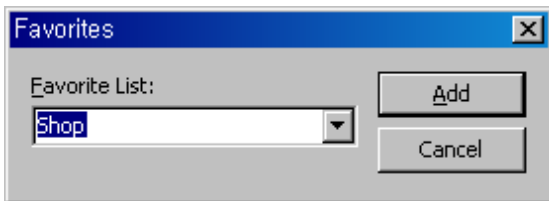
(2) Type a certain name for the group under Favorite List and click 'Add'.

(3) Select 'Favorites', and DVR List is changed into Favorites List. If you double-click one in Favorites List, the image group is displayed.

 : **Speaker**

Select a certain channel and then click this button, and you can hear audio coming from the speaker connected with the CMS Server.

 : **Microphone**

(1) Select a certain channel and click this button and then speak something through the microphone connected with the CMS Server, and your voice is transferred to the speaker connected with the DVR which the selected camera belongs to.

(2) If you want to transfer your voice to all speakers connected with each DVR at the same time, select 'All DVR'.

[4] HOW TO USE SCREEN DIVISION BUTTON

(1) Screen Division Button consists of D1 / D4 / D8 / D9 / D13 / D16 / D17 / D25 / D36 / D64
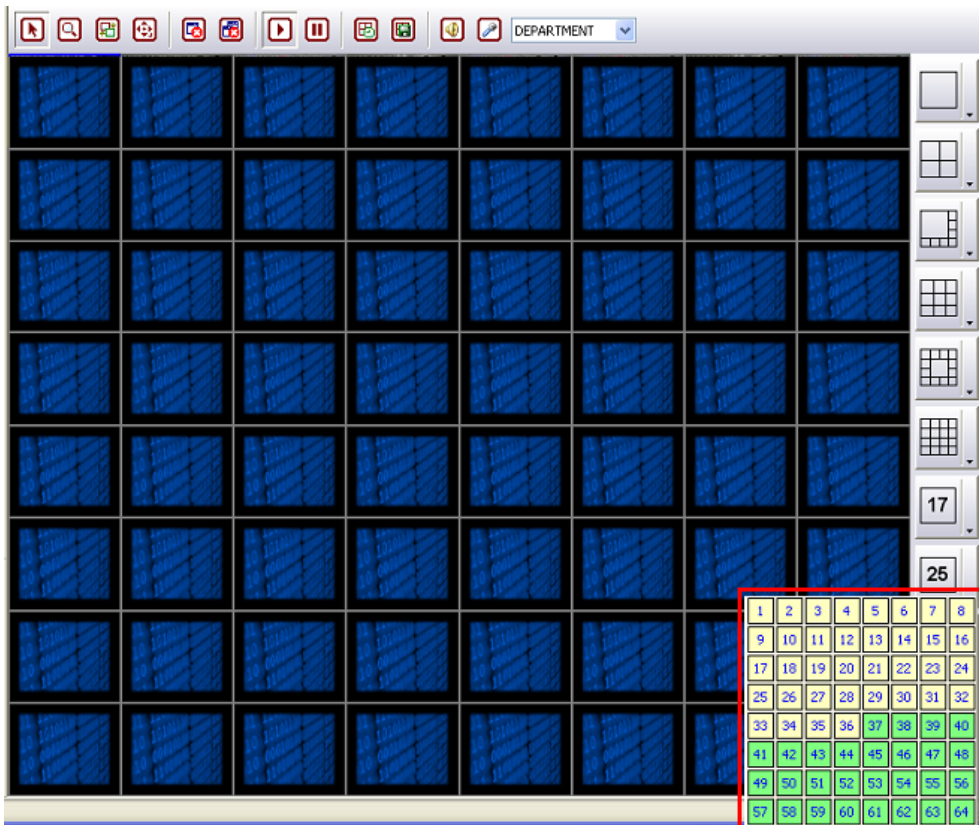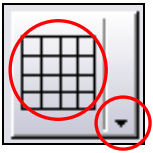
(2) Screen Division Button consists of two buttons. The left button is related to how many channels Live Screen is divided into and the right button is related to the numbers of the channels to be displayed in the Live Screen.
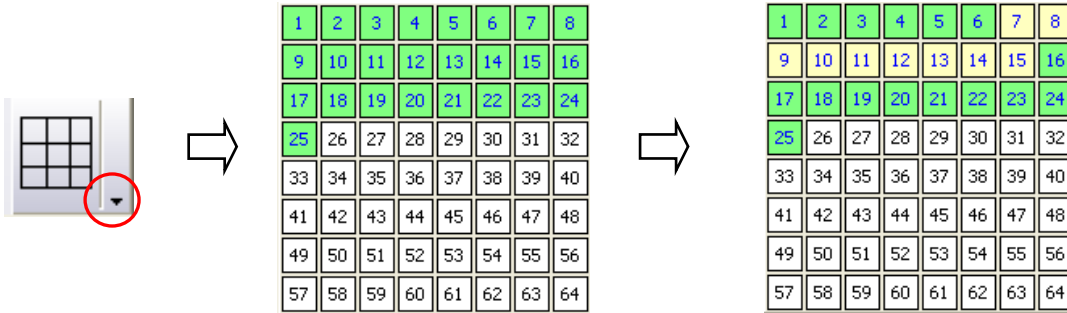
(3) For example, in case that D25 is displayed in the Live Screen, CH.1 to CH.25 in Camera Number Table are highlighted in green. In this case, if you click the right button of D9 and put mouse pointer on CH.7, CH.7 to CH.15 are highlighted in yellow. And then, if you click mouse, Live Screen is changed into D9 and CH.7 to CH.15 are displayed in the Live Screen.

[5] POP-UP
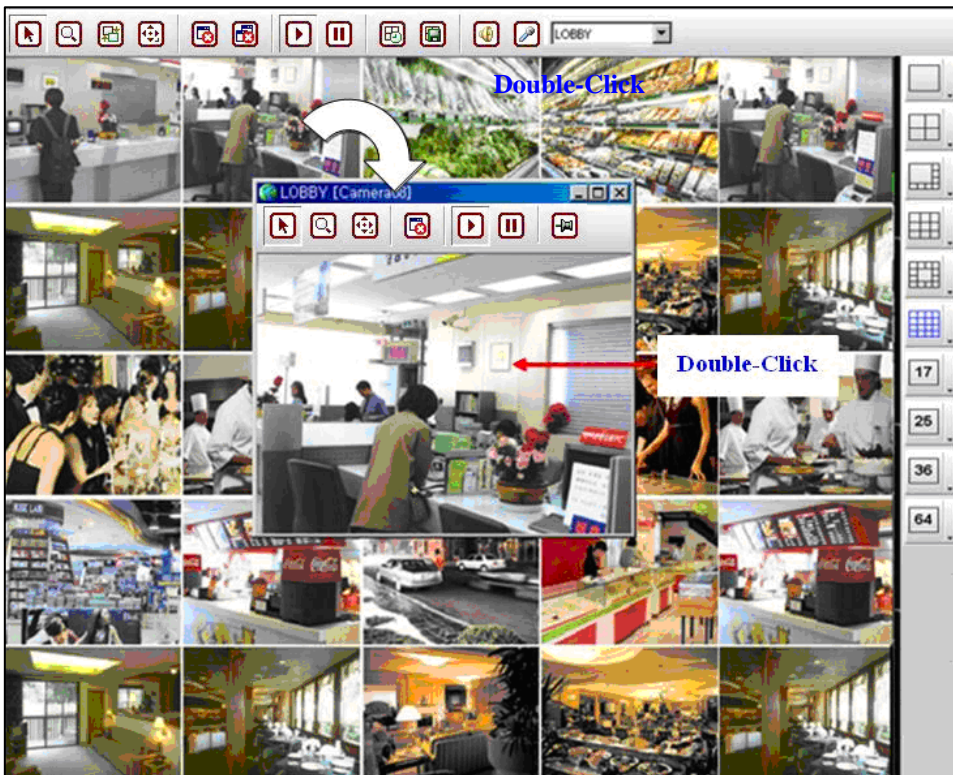
(1) Select a certain channel and double-click it, and the channel pops up as above.

(2) If you double-click the pop-up image, all the camera images of the DVR which the pop-up image belong to are displayed separately from Live Screen.

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[6] CHANGE TRANSFER RATE
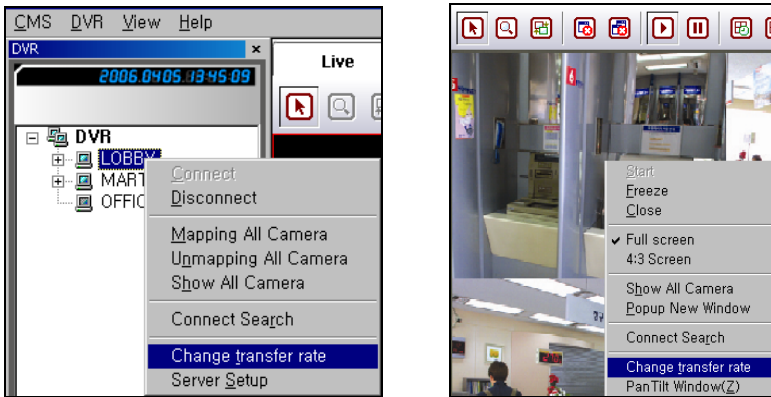
(1) Select one DVR or select one image and then click the right button of mouse, and the menu comes out.

(2) Select 'Change transfer rate' in the menu, and the below window appears.
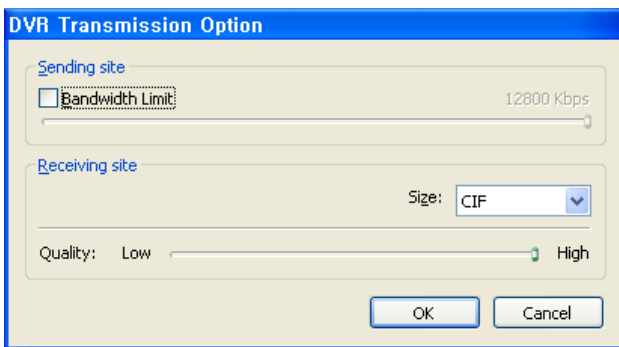
(3) You can optimize operation of CMS mini under the real network conditions by adjusting Bandwidth and Image Size.
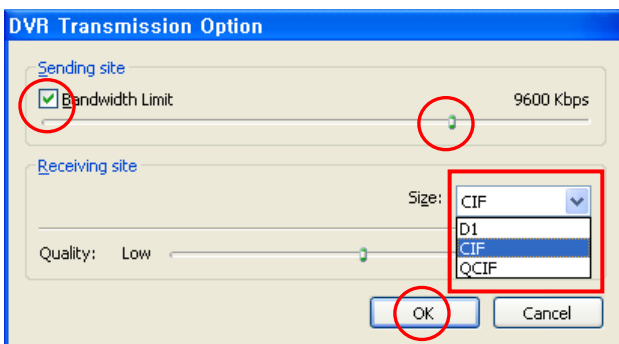
(4) You can adjust bandwidth of network connected with the DVR installed in remote site by adjusting 'Bandwidth Limit' in the above window.

(5) There are three kinds of image resolution, that is, D1, CIF, QCIF. Which resolution should be used depends on how big bandwidth is. The file size is like below.

   QCIF :   160 * 120 (NTSC) , 176 * 144 (PAL)
   CIF :   320 * 240 (NTSC) , 352 * 288 (PAL)
   D1 :   720 * 480 (NTSC) , 768 * 576 (PAL)

(6) Image quality can be adjusted by 'Quality' bar.

5. HOW TO USE SEARCH MODE
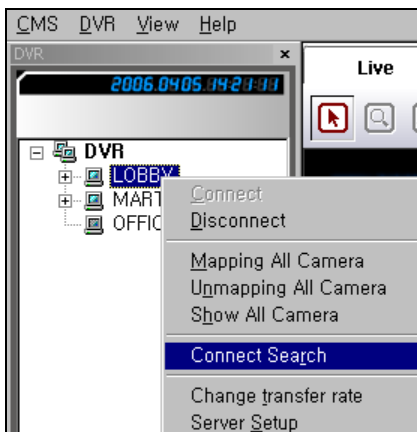
(1) Select one DVR and click the right button of mouse, and the above menu comes out.

(2) Select 'Connect Search', and Live Screen is changed into Search Screen as below.
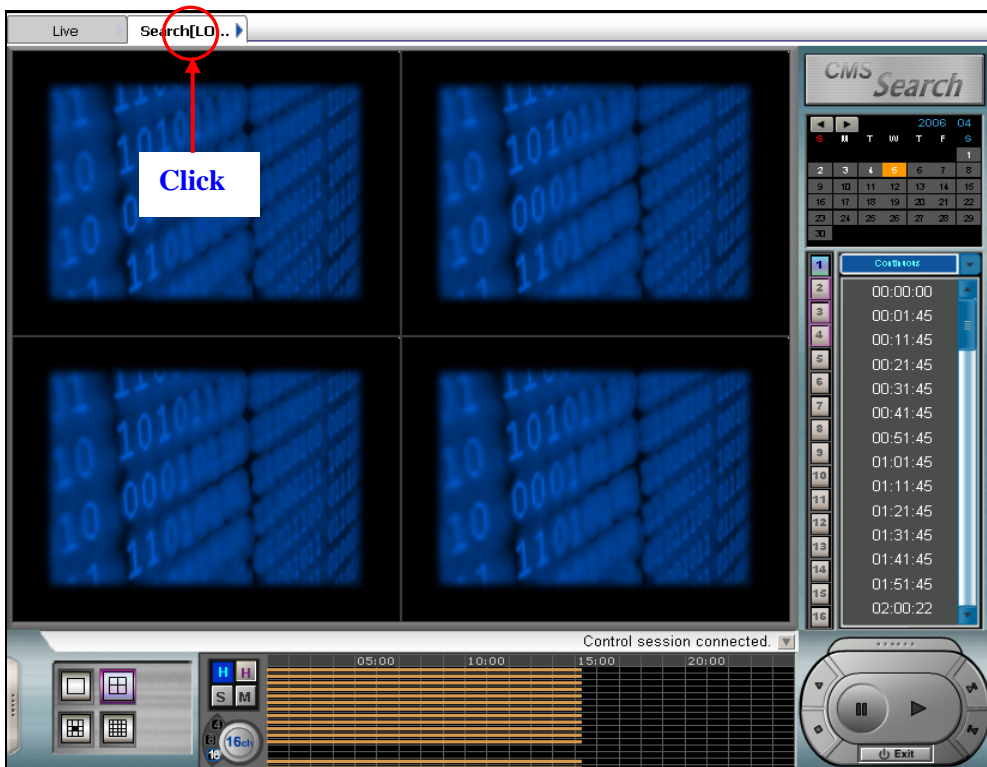
(3) How to use search mode in CMS is the same as how to use search mode in DVR.
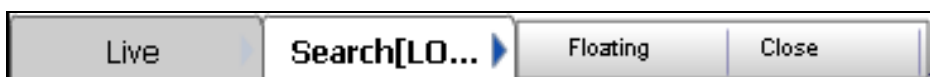
(4) Click 'Search', and two buttons (Floating & Close) come out.

(5) If you select 'Close', Search Screen is closed..

(6) If you select 'Floating', Search Screen is detached from the Main Screen as below.
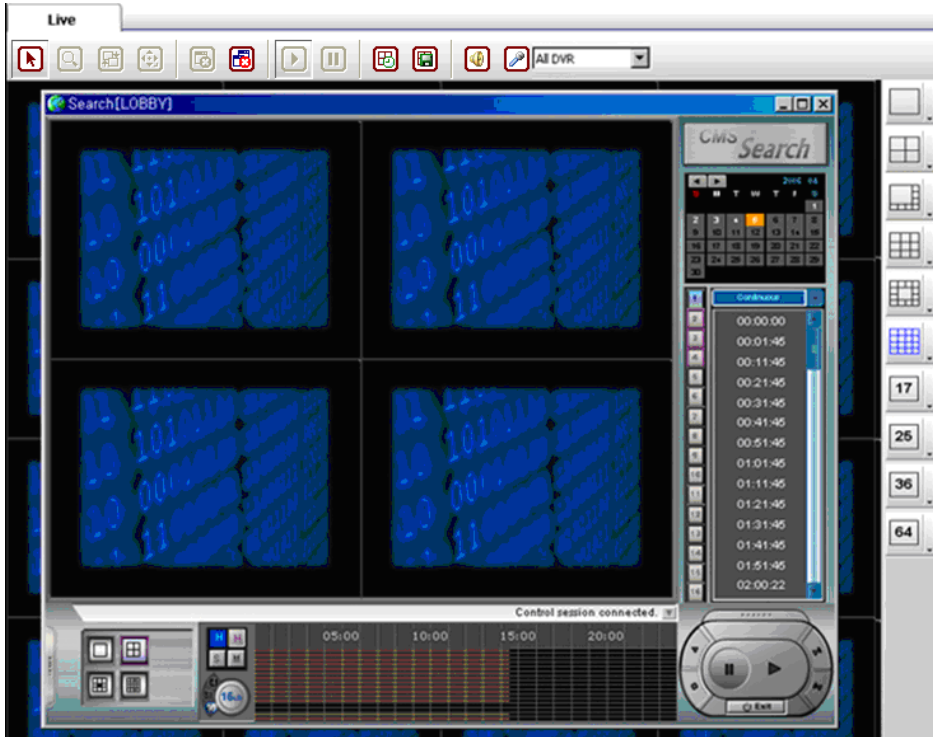
(7) If you set dual monitor, you can move the search screen to the other monitor by dragging as below.

Drag

< First Monitor >   < Second Monitor >
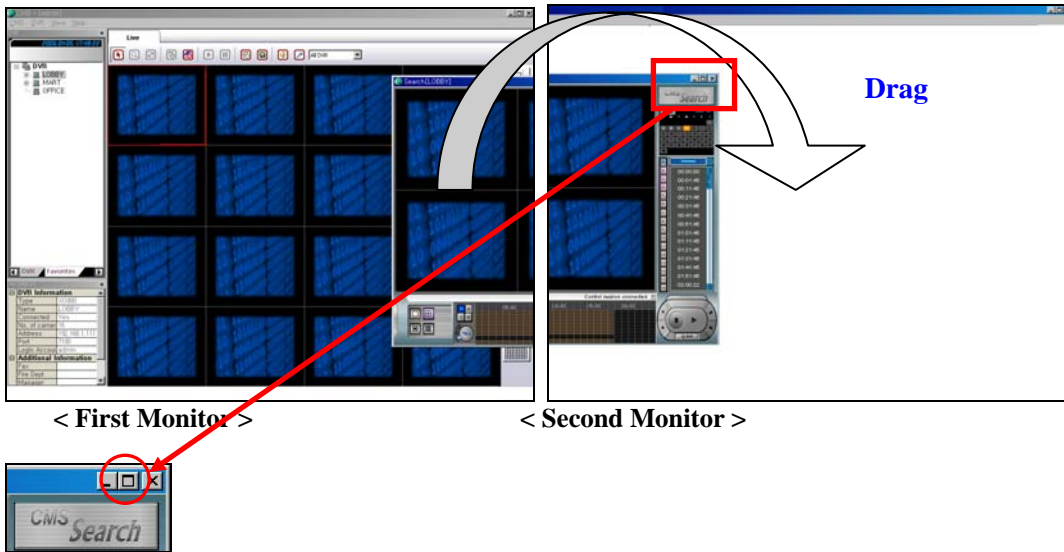
(8) If you click ▣ button, the size of the search screen becomes as big as the full screen as below.

< First Monitor >   < Second Monitor >
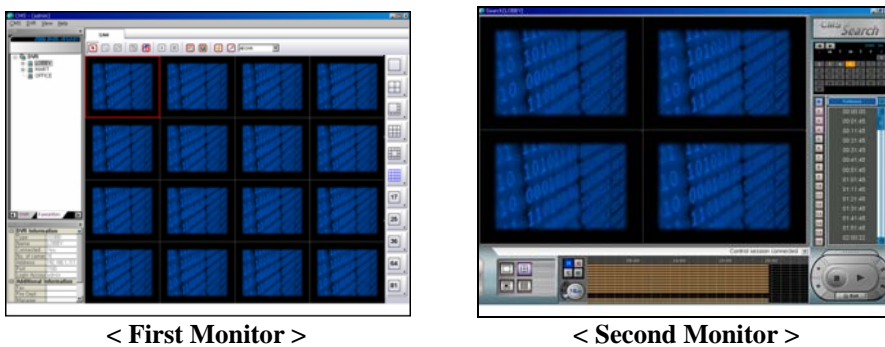
6. HOW TO USE EVENT PANE

[1] SERVER SETUP
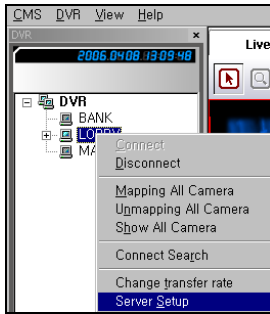
(1) Connect one DVR server and then select 'Server Setup', and the below window appears.
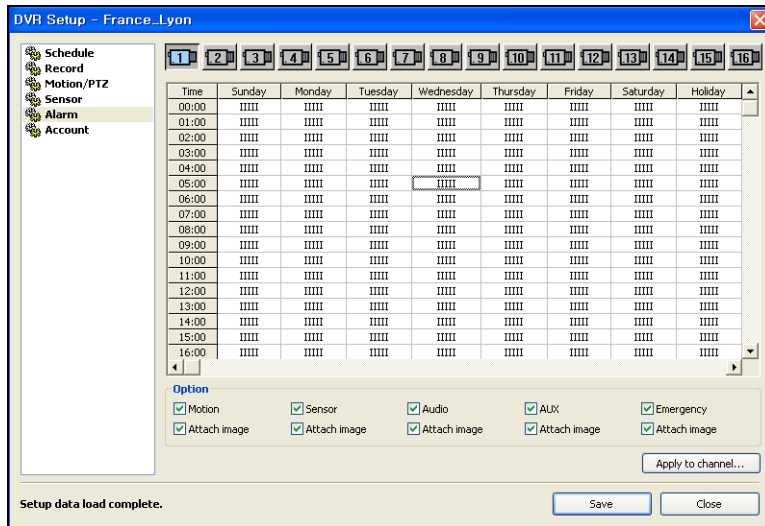
(2) Select 'Alarm' in the left part

(3) Select time and day. How to select time and day is as follows.

[a] As clicking 'Time', all time slots and day slots get selected as below.

[b] As clicking one time slot(02:00), the time slots of the same time get selected as below.

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Holiday
00:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
01:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
02:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
03:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
04:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII

[c] As clicking one day (Monday), all time slots of the day get selected as below.

Time	Sunday	Monday	Tuesday
00:00	IIIII	IIIII	IIIII
01:00	IIIII	IIIII	IIIII
02:00	IIIII	IIIII	IIIII
03:00	IIIII	IIIII	IIIII
04:00	IIIII	IIIII	IIIII
05:00	IIIII	IIIII	IIIII
06:00	IIIII	IIIII	IIIII
07:00	IIIII	IIIII	IIIII
08:00	IIIII	IIIII	IIIII
09:00	IIIII	IIIII	IIIII
10:00	IIIII	IIIII	IIIII
11:00	IIIII	IIIII	IIIII
12:00	IIIII	IIIII	IIIII
13:00	IIIII	IIIII	IIIII
14:00	IIIII	IIIII	IIIII
15:00	IIIII	IIIII	IIIII
16:00	IIIII	IIIII	IIIII

[d] You can select time and day as below by dragging mouse.

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Holiday
00:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
01:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
02:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
03:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
04:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
05:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
06:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
07:00	IIIII	IIIII	IIIII	IIIII	IIIII	II	II	II
08:00	IIIII	IIIII	IIIII	IIIII	IIIII	**Drag Mouse**	II	II
09:00	IIIII	IIIII	IIIII	IIIII	IIII		II	II
10:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
11:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
12:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
13:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
14:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
15:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII
16:00	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII	IIIII

Option

☑ Motion   ☑ Sensor   ☑ Audio   ☑ AUX   ☑ Emergency

☑ Attach image   ☑ Attach image   ☑ Attach image   ☑ Attach image   ☑ Attach image

[Apply to channel...]

(4) If you want to receive alarm signal, select types of alarms as you want in the above Option.

(5) In case that you select Motion & Attach Image, when some motion is detected, the text data and image data of motion event are transmitted into 'Event Pane'

(6) If you want to apply this setting value to other camera channels, click 'Apply to channel', and the below window appears.

Select Channel

☑ Channel 1   ☑ Channel 9
☐ Channel 2   ☑ Channel 10
☑ Channel 3   ☑ Channel 11
☑ Channel 4   ☐ Channel 12
☐ Channel 5   ☑ Channel 13
☐ Channel 6   ☐ Channel 14
☐ Channel 7   ☑ Channel 15
☐ Channel 8   ☐ Channel 16

[All setting]
[All clear]

[OK]
[Cancel]

(7) Select channels as you want and click 'OK'

(8) If you want to select all channels, click 'All setting'. While, if you want to remove all selections of channels, click 'All clear'

[2] ENTERING EVENT PANE
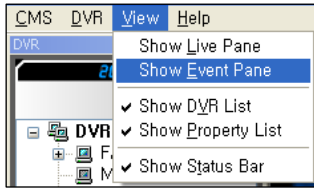
(1) Select 'Show Event Pane' in View menu, and Event Screen appears as below.

(2) Event Pane consists of Latest, Search, and Favorite.

[3] LATEST EVENT VIEWER

Latest Event list will be updated at real time.

Click once an event data from the list then still image appears.

Clicking this clears the latest list, but previous data can be searched from the search mode.

In case of uncheck (Default), all events (servers) data will be shown

(1) Latest event viewer may show defined Event & Server (DVR) only. Follow the instruction like below.

<Select event>   <Select server>
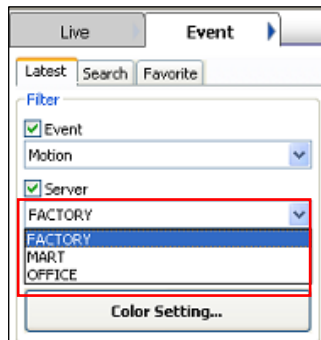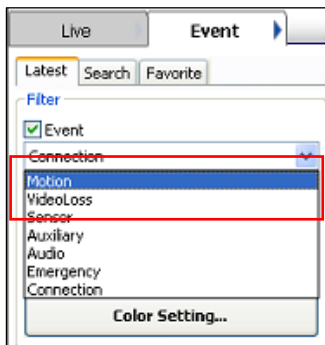
(2) Choose one type of events among Motion, Video Loss, Sensor, Auxiliary, Audio, Emergency and Connection.

(3) Choose one Server (DVR) from the server list.

(4) Click 'Apply' and the detailed list of the related event will be updated on the right at real time.

(5) Every event will be described by different color. Click 'Color Setting' and the below window appears.

(6) Select color for each event, and click 'Apply' & 'Close' button. All setting values will be adjusted like below.

<Color   Setting>   <Latest List>

(7) Click one data on the list and click the right of the mouse. 6 menus appear like below.

① **Edit** : To write and revise the contents of Flag and Memo.

[a] Choose None or one flag among Red, Yellow, Green, Violet.
[b] An important memo can be put.

② **Information** : To show DVR information which were already registered in DVR manager menu.

③**Link Playback** : DVR playback screen which is related in the event comes out as below.

④**Add favorite** :
   Save something suspicious event, and watch on it on the Favorite screen. If you register it on the screen, you can watch it any time repeatedly.

   [a] If click this button, another window appears as follows.
   [b] Click 'Yes', then all registered data will be shown on the favorite screen.
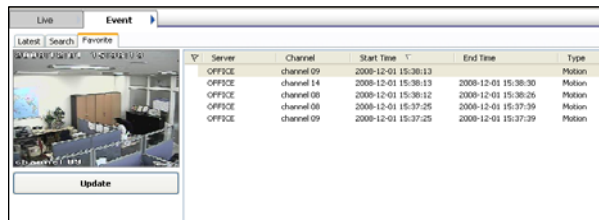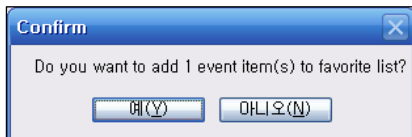
[4] EVENT SEARCH

All data will be sorted by search filter.

Same functions with the Latest Event Viewer's (Ref. P.73)

One click one from the list then still image appears.

In case of uncheck (Default), all events (server/flag/memo) data will be shown

(1) To search & playback images of the time when an event occurred, double-click a text data in the event list, and Search screen appears and the motion images relating to the event are playback as below.
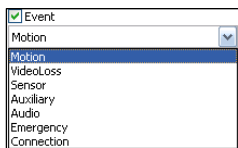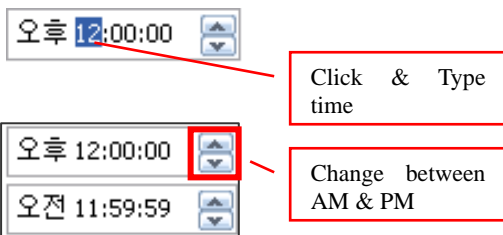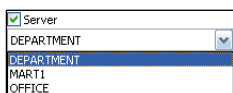
[5] FILTERING TEXT DATA
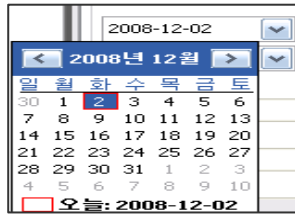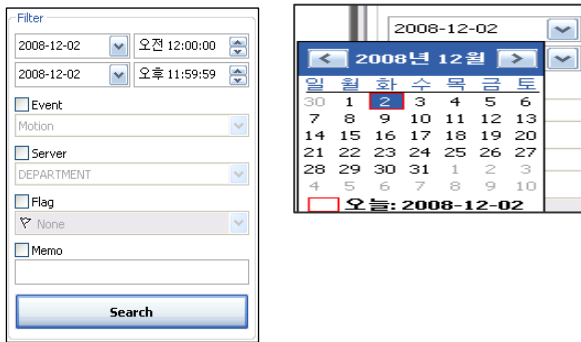
(1) Select date in the Calendar and then click 'Search', and text data made in the selected date are sorted out in the event list.

(2) Change time

Click & Type time

Change between AM & PM

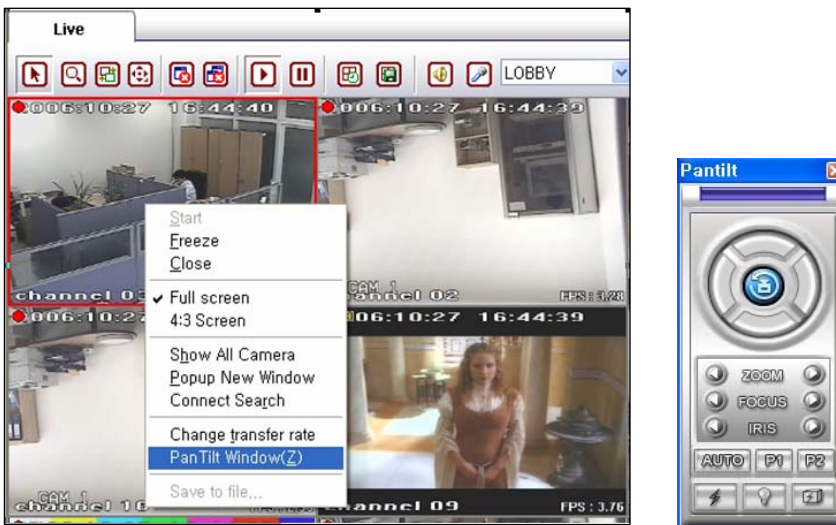(3) You can sort out text data by event type. Select event type and click 'Search'.

(4) You can sort out text data by server (DVR). Select a server and click 'Search'

(5) You can sort out text data by importance or priority. Select Flag type and click 'Search'

7. HOW TO CONTROL PTZ CAMERA

(1) Select the channel connected with PTZ camera in the Live Screen and then click the right button of mouse.

(2) Select 'Pan Tilt Window(Z)' in the menu, and PTZ controller appears as below.

(3) How to use this controller in CMS is the same as how to use it in DVR. You can find how to use it in DVR user manual.

8. HOW TO BACK UP

(1) Select the DVR you want to back up in the Live Screen and then click the right button of mouse.

(2) Select 'Connect Search' in the menu and the Search pane appears as below.

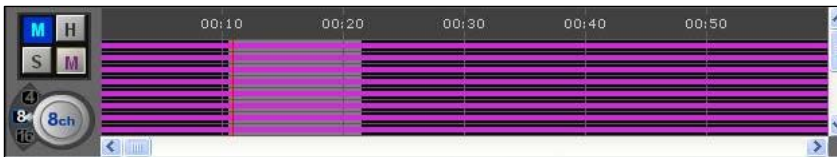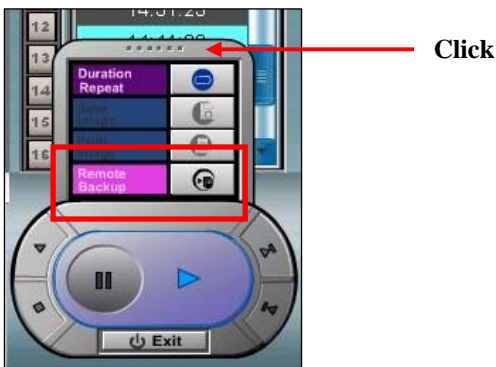(3) Select the Date you want to back up.

(4) Select the channel Number.

(5) Make the Range for backup by dragging mouse with pressing the right button of mouse.

(6) Select 'Remote Backup', and the below window appears.

Click

(7) Select 'Transmission(T)', and backup for the selected image files starts.

(8) When Progress is over, click 'Close(C)'.