Professional Central Monitoring Software

CMS Pro
Full-featured Enterprise Class Surveillance Solution

User`s Manual

1. CMS Pro

1.1 CMS Pro Features

1.1.1 Introduction

• The CMS Pro is a central surveillance system solution that monitors multiple sites with video, audio and event signals from DVR over networks.
• The software supports different windows of live viewer, playback player, interactive map viewer, various search panes and event signal monitoring panes.

1.1.2 Features

• This program does not limit the number of units to register and monitor. The program displays up to 512 live videos; up to 256 channels on one screen and 256 channels on the other screen. The program supports as many monitors as a PC supports. Users may open windows or panes of live video displaying, data playing, event signal monitoring, map displaying, etc. Users can compose the central management system by choosing required widows or panes.
• The software supports different windows of live viewer, interactive map viewer, and event signal monitoring panes.
• The program displays event signals in real-time by receiving from devices over the network.
• On the program, users may control PTZ cameras and relay outputs on the server or DVR. By attaching microphone and speaker system to devices on site, users may make bi-directional audio communication over the network.
• The main Search window provides users with various ways of searching data on DVR.
• The map supports multi-layer structure, so that each map on different layers can respond interactively. On the map, users may lay out icons of each device. Event signal triggers the icons on the map to blink, so that users may monitor event signals on the map. And Users can check the live view of individual camera on the map by clicking the video icon.
• With 5 different types of search function, users can search the recorded data according to user's needs.

1.1.3 System Requirements

• CMS Pro may not run properly if the PC does not meet minimum requirements. Other programs should not run on the same PC where this is running. Otherwise, CMS Pro software may not perform as designed.

	Minimum	Recommended
CPU	Dual Core 2.0GHz	Quad Core 2.5GHz or higher
Main Memory	1GB	2GB or higher
Video Memory	512B	1GB or higher
Display Resolution	1024 x 768 (with 32bit color) or higher	
HDD Storage Space	160GB or higher	
Network	100~1000 Mbps Fast Ethernet	
Operating System	Windows XP Professional SP3 / Windows 7 Home edition(32/64) / Windows 7 ultimate K(32/64)	
Others	DirectX 9.0 C or higher	

1.2   Installation

1.2.1   Software Installation

• Please follow the program installation procedures below.
① If an old version of CMS Pro program was installed, completely uninstall or delete the old version.

CAUTION

USERS SHOULD COMPLETELY REMOVE CMS PRO PROGRAM OF AN OLD VERSION BEFORE INSTALLING NEW VERSION IN ORDER TO REDUCE COLLISION.
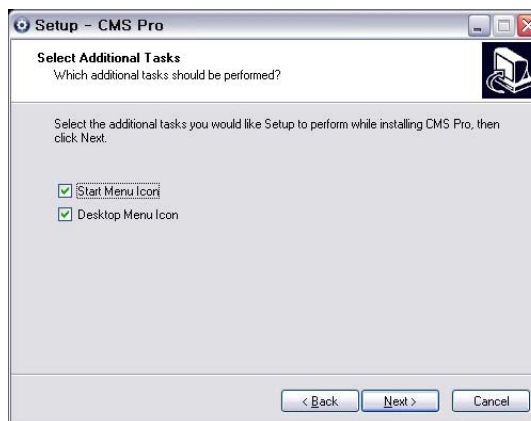
---

② Insert the provided CD in a PC.
③ Run the CMS Pro Setup.exe file.
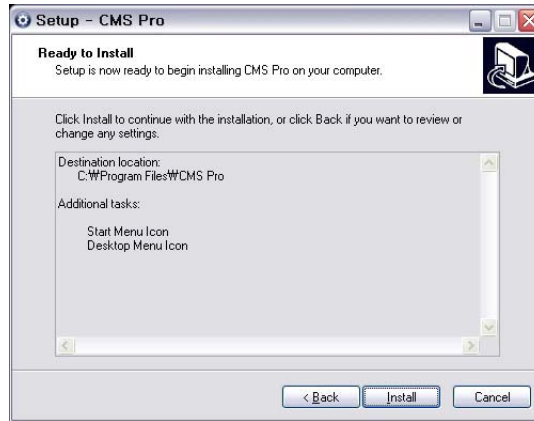④ When the following screen appears, click "Next."

⑤ When the following screen appears, select folder and click "Next."

⑥ When the following screen appears, select the check box according to user's preference and click "Next."

⑦ When the following screen appears, click "Install."

⑧ When the following screen appears, click "Finish" to complete the installation.

CAUTION

• If the PC has a previously installed CMS Pro, the installer detects existing DB and user won't lose the previous DB. The DB contains setting values on the program. If user desired to start over the installation of CMS Pro, User should completely delete the previous CMS Pro.

• If the Os is Windows 7, then users have to run the program as "Run as an administrator."

• Or you can change the property of the program from the menu, properties(right mouse click on the CMS pro icon) > Compatibility > check " Run this program as an administrator"

1.2.2　Login

1.2.2.1 Login Process

- Open the CMS Pro. Users may open it by selecting the execution file through 'Start' menu [Start] – [CMS Pro] or by double-clicking the execution icon on the background.
- Select a user ID in the 'Login' window. Users may see the entire list of IDs that are registered into the program by clicking on the drop-down menu in the right-side. Initially, only the Administrator is registered as default.

- Enter the corresponding password with the selected ID. The default password of the '**Administrator**' ID is '**1111**'. Administrator may change the password in the program.
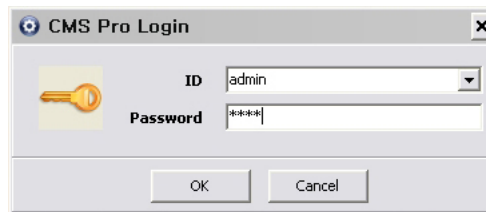
NOTE

Users may change the password in [Setup] – [Change Password] menu. For the detailed information, please refer to the 'Chapter 7.4.4.3 Change Password' page.
The CMS Pro archives settings and layouts on the program of the current user when the program is closed.

1.3   Menu

• Below shows the brief explanation of each part on the screen.
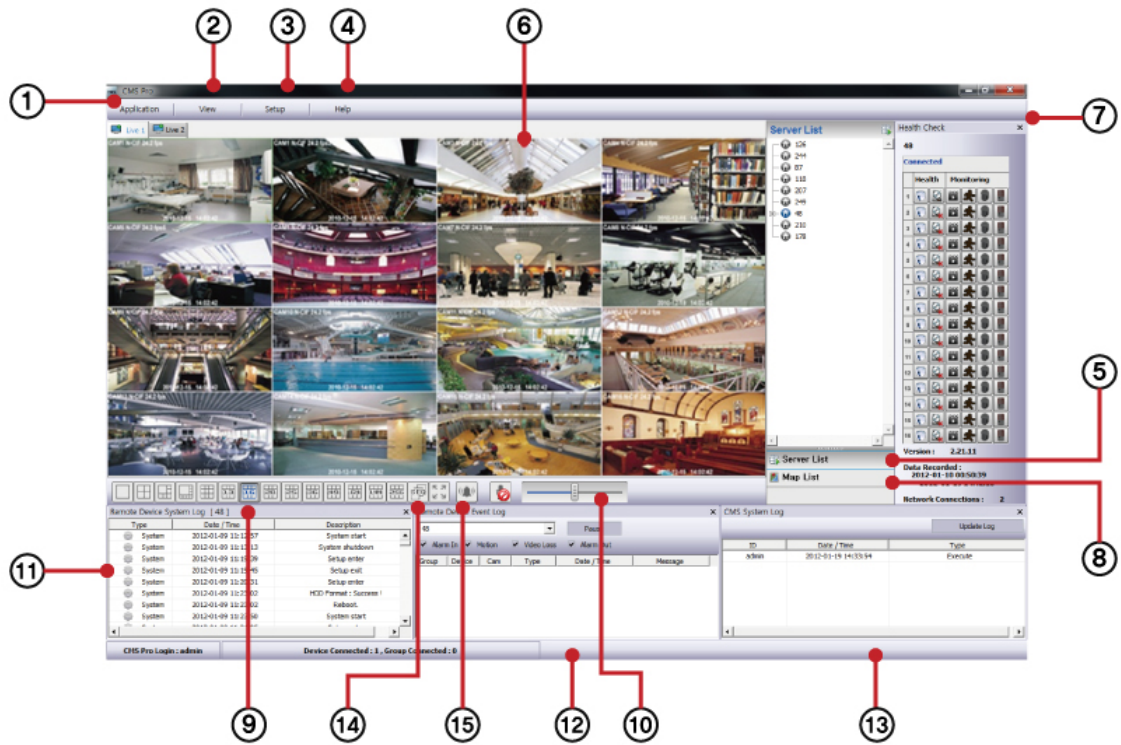
1	Application
2	View set
3	Setup menu
4	Help menu
5	Server list pane
6	Display windows
7	Health check pane
8	Map list pane
9	Screen split selection icons
10	Audio control bar
11	Remote device system log pane
12	Remote device event log pane
13	CMS system log pane
14	Sequencing
15	Event Beep On / Off

.

1.4 Setup

1.4.1 Local Setup - Device

• Please make sure the network setting of DVR has been done properly prior to the remote connection setting.

1.4.1.1 Remote Site Connection Setup

• Click Setup – Local Setup – Device to enter the setup and a dialog will pop up as below picture.
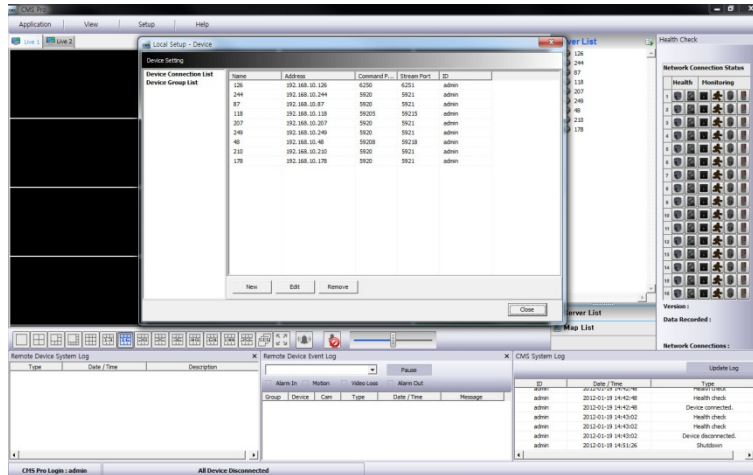
1.4.1.1.1. New Device Register

```
Device
```

• Select "Device Connection List" on left-hand side and click [New] to register new devices.
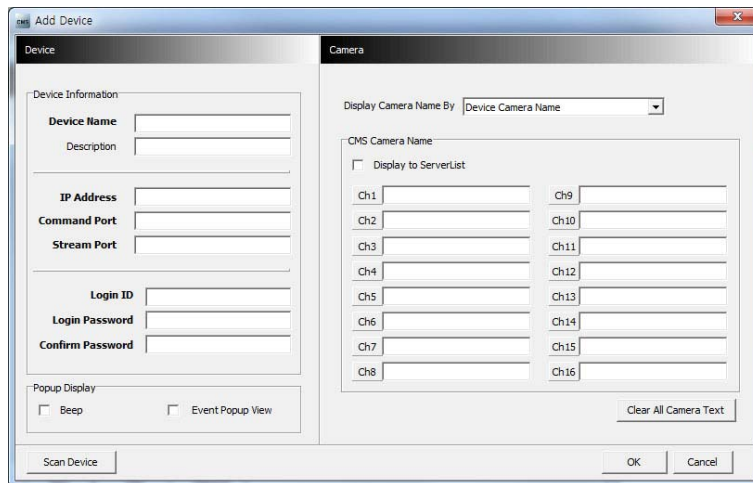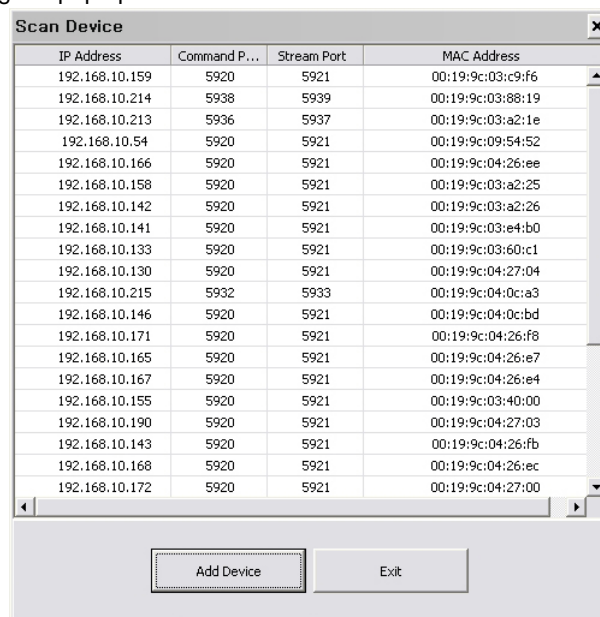
• Describe the connection information as below. User must fill in where information requested in **bold**.

- **Device Name**: Type the DVR name to be displayed in the server list pane. Please note that this name has no relation to the ID registered in DVR. Users may create a name to be easily distinguished.
- Description: Type brief description of the site
- **IP Address**: Input IP address or Domain Name of DVR (check from the SETUP>DEVICES>Network in DVR)
- **Command Port**: Input Administrator's number among port numbers set in DVR (check from the SETUP>DEVICES>Network in DVR). Default port number is **5920**
- **Stream Port**: Input Video/Audio number among port numbers set in DVR (check from the SETUP>DEVICES>Network in DVR). Default port number is **5921**
- **Login ID**: Type authorized ID of the DVR. Default ID is **admin**.
- **Login Password**: Type correspond password of the ID. Default Password is **1111**
- **Confirm Password**: Retype the password to confirm
- **Pop up Display:** User can setting either video pop up or beep on corresponding channel when event occurs.

7

Camera

- Choose a camera name between DVR and CMS setting or both.
  - By DVR setting: Display camera name of DVR.
  - By CMS setting: Display Camera name of CMS.
  - Both: Display both as [DVR name]-[CMS name].
- If user mark the "Display to Server List", camera name is displayed in the server list.
- Type the name of each camera in "Camera Name" item.
- Users will be able to type not only in English but also their own languages.
- It is possible to erase all names by clicking "Clear all names".
- Save and close the setting panel by clicking "OK".
- If users wish to exit without saving, then click "Cancel".

Scan DVR

- This function automatically detects and registers units where currently connected to local networks.
- Click "Scan DVR", then following will pop up.

1.4.1.1.2. Edit Registered Site
- Select a site to adjust on local setup window and click "Edit"
- Change the setting then click "OK" to save and exit.
- Alternately, users can also edit the site by right clicking the mouse on the server name in the Server List
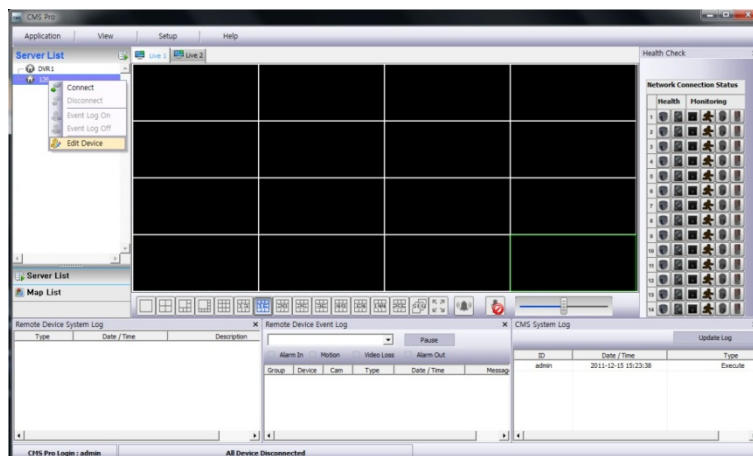
1.4.1.1.3. Remove Registered Site
- Select a site to delete on local setup window and click "remove"
- The site will be removed on the local setup window.

1.4.1.2 Device Group Setup

- It is possible to make a group of multi-devices for user's convenience.
  - Users are able to combine multiple devices as one group of connection for easy control.
 - Users are able to extract the cameras from different registered DVRs to make own group of channel.

1.4.1.2.1. New Grouping Setting
- Please click "New" to set up the Group Name, select Division (from 4 to 144), and type the Description.
- Select the site from the server list in the left-hand side of the window.
- Right mouse click and click "connect" on the site or double clicking the device will show the tree of cameras and here users can extract the channel they want.
- To add the channels into new group, drag & drop or double click on the camera.
- Users are able to continue to extract and add the channel by connecting other DVRs to the program.
- Click "OK" to save and exit.
- Users are able to set the pop up display function.

1.4.1.2.2. Edit Group Setting
- Select a group to adjust on Group Setting window then click "Edit"
- Change the setting then click "OK" to save and exit.
- Right click on server list and select the "Edit Device", and then following pop up window will show up. Users are able to set the "description" and Popup Display.
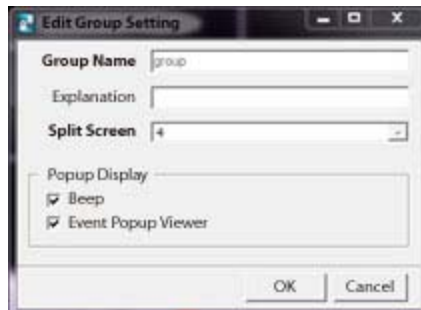
1.4.1.2.3. Remove Group Setting
- Select a group to delete on Group Setting window then click "remove"
- The group will be removed on the local setup window.

1.4.2   Local Setup - Environment

• This enables users to adjust the default setting for user's convenience.
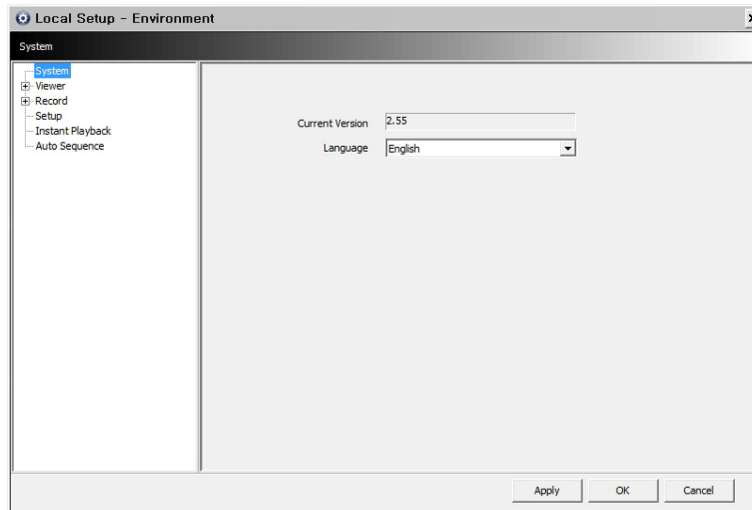
1.4.2.1 System

• Users are able to check the current version of the software.
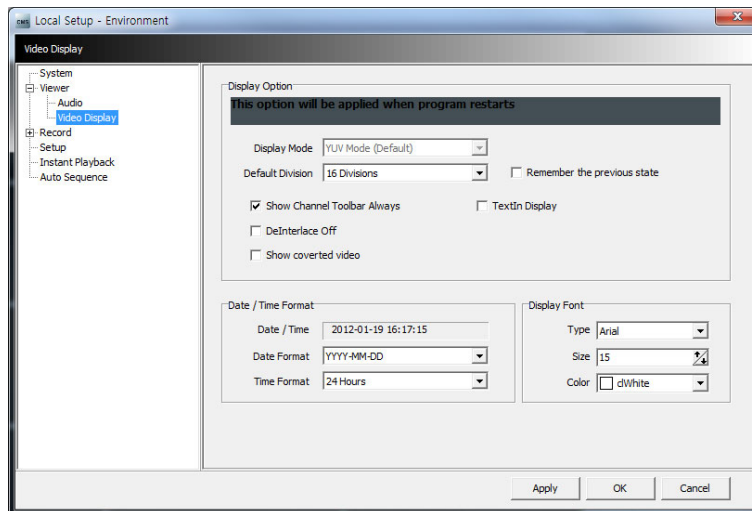• Users are able to select the language between English and Korean.

1.4.2.2 Viewer

1.4.2.2.1. Audio
• Users are able to control the Audio volume.

1.4.2.2.2. Video Display
• Users are able to control the Audio volume.

• Users can adjust and set the environment of the Display window.
• The Display option will be applied after program restarts and the contents are as below.
  – Display Mode: It shows the format of display and YUV Mode is the default and it is not adjustable.
  – Default Division: Users can select the number of division of display channels when the program initially displays the screen. (from 1 to 144 division)
  – Users are able to save division of display by marking the "Remember the pervious state" check box.
  – Show Channel Toolbar Always: If this box is checked, the toolbar which enables to control the audio and snapshot of the each channel appears all the time. But if users move the mouse cursor around the top of the each channel in playback mode, the hidden toolbar appears.
  – Deinterlace Off: This function changes playback display into Progressive Scan or Interlace Scan. Uncheck (☐) Deinterlace Off, then frame will display as the Progressive Scan and shows the better picture quality.

- Show coverted video: if this box is checked, all the coverted displays from DVR will show up.
- Text-In display: Text data will be overlay on live and playback.

NOTE

If users check "Show coverted video" box, this setting will be applied to playback as well.

NOTE

This option will be applied after program restarts.

- Date / Time format: Users can adjust and set the mode of date / time display in accordance with the location.
    - Date/Time: show current time.
    - Date Format: select the date format among YYYY-MM-DD/MM-DD-YYYY/DD-MM-YYYY.
    - Time Format: select the time format between 24Hours/ 12 Hours AM/PM.
- Display Font: Users can change the font of the name and display time of each channel.
    - Type: select the type of font between Arial / Curier.
    - Size: select the size of the font from 10 to 20and the default is 15.
    - Color: select the color among 16 different colors.

1.4.2.3 Record

- Users can set the storage path of the image file of Screenshot or Zoom In Screenshot by typing the path or clicking the folder icon.
    - Save Directory: Select the save directory by designating the folder in the PC and save format between bmp and jpg.
    - Save Directory (Zoom In Screenshot): Select the save directory by designating the folder in the PC and save format between bmp and jpg.
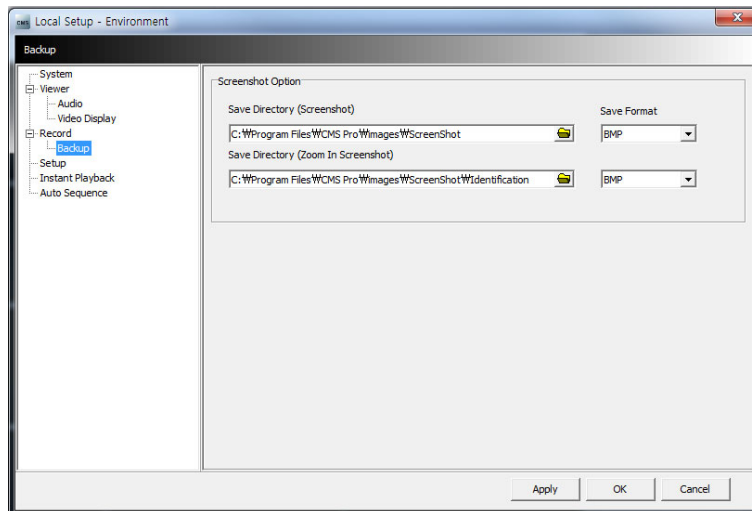
NOTE

Please refer to Chapter 7.7.2.3 for Zoom In Screenshot

1.4.2.4 Setup

- Select save directory: Users can select the save directory of setup data or log data by designating the folder in the PC or other storage device and the change of the directory will be applied only after clicking "OK" button and exit.
- Select Data: Select data which users would like to save in the storage devices.
- Default setup: Initialize the setup to factory default. Click "OK" to exit the program.
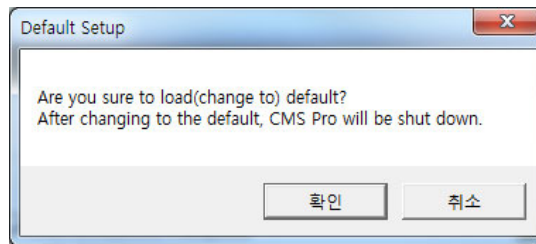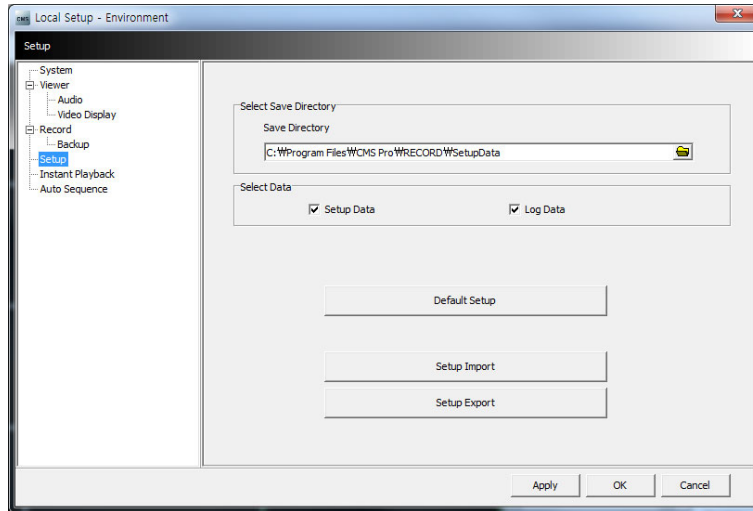
• Setup Import: Copy the Menu setup stored in USB memory stick(or PC HDD) into DVR. Please plug in the memory stick and then click (↵) Import.

• Setup Export: Store the Menu setup of DVR in USB memory stick(or PC HDD). Please plug in the memory stick and then click (↵) Export.

• Apply: Click the "Apply" button to apply the settings.

1.4.2.5 Instant Playback

• Instant Playback: Users are able to see the recorded data easily by using instant playback function.

• Set the time from which the recorded data is displayed.

• Instant Playback is displayed from the last preset time. (1, 3, 5, 10, 15, 30Min, 1, 3Hour, Default is 3Min)

• For example, if 5 Min is set as a playback period, then users are able to see the last 5 minute's data from the current time.
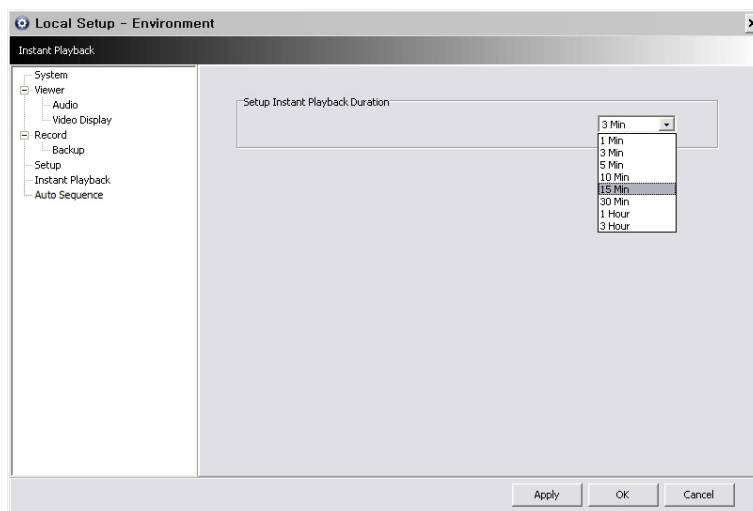
1.4.2.6 Auto Sequence

• Auto Sequence: Users are able to switching the camera view and setup the dwelling time between the different camera views.

• Set the dwelling time by clicking the to increase and decrease the seconds. Note that it is only limited from 3~60seconds.

1.4.3   Local Setup - Account

• When more than 2 users control this program, multiple users ID and authorization is able to set in this menu.

• This setup is only permitted to access by Admin account.
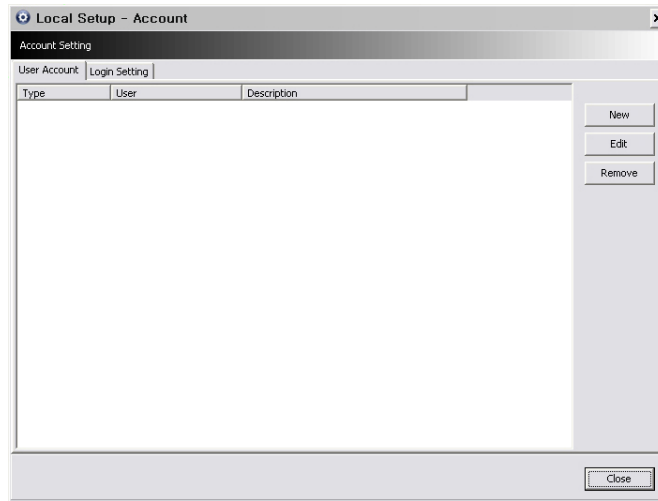
1.4.3.1 Add User Account

• Click "New" button and the following will appear.

• Type: Select one of the two types of user account, Manager and User from the drop-down menu.

• While Manager Account allows all of the authorization to be controlled, User Account is permitted to set only Search, PTZ control, and Emap functions.

• Create a User name and Password and then type Description of the account.

• Mark the authorization check boxes (☐) to allow.

• It is possible to give an authorization selectively to the individual user account.

• "Check All" grants all the authorizations and "Uncheck All" deprives all the authorizations.

• Click "OK" to save and exit.

1.4.3.2 Edit User Account

• Users are able to adjust its authorization and Password from EDIT button.

• All the procedures are same as Add User Account.

1.4.3.3 Remove User Account

• Users are able to remove the existing account.

• Select an account to delete then click "REMOVE" button.

1.4.3.4 Login Setting

- This function protects any activities of all Manager/User accounts by asking ID and Password prior to the fulfillments.
- Select the activities from the list ( ) and click "Apply" to save.
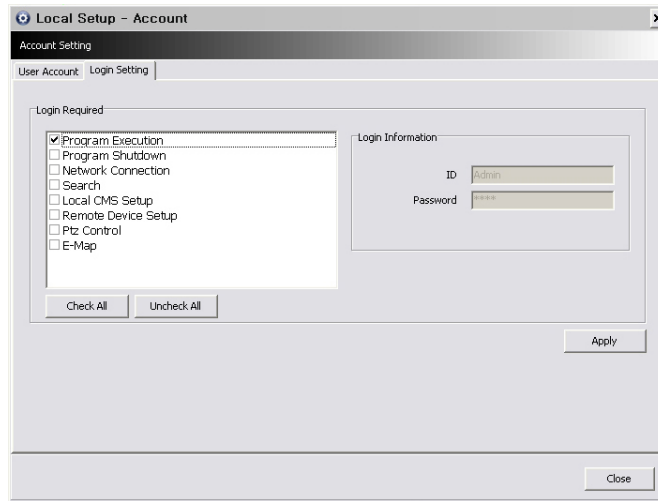
1.4.4   Local Setup – E-map

- Users are able to create various E-maps and it enables monitoring both Live and Playback screen.

1.4.4.1 Registering a New E-map

- Click "New" Tab to set up the E-Map.

- In order to load an image of the map, click "Load Map Image" that users would like to use as an E-Map.
- Users should select the image format between BMP and JPG.
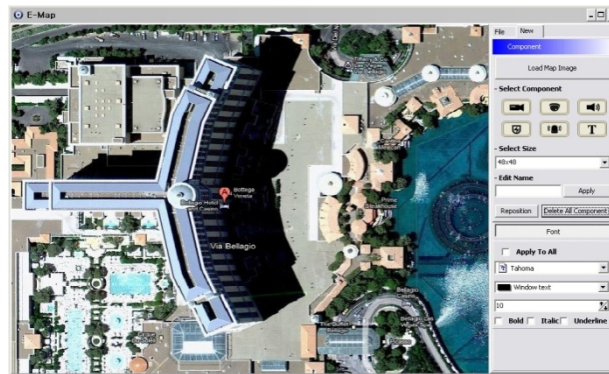
- Place the icon of cameras, audios and alarms on the map. Each icon's detail is as below.

    – Box Camera. Generally indicates as Outdoor camera.

    – Dome Camera. Generally indicates as Indoor camera.

- Users can hear the audio in the site by clicking the icon after setting the Emap.

- The icon will be light on when the alarm in is activated.

- If users click the icon, the light is on the icon and the alarm equipment such as siren and buzzer will be activated in the site.

- Users are able to put description in the map using the Text Box.

• Select component

- , , , , , Click the icon you want(then the icon turns to orange color) and click again on the place you'd like to locate on the loaded image.

- Users can rotate the icon to the direction that they want and move to other places by dragging.

• Select Size: Size of the icon varies from 24*24, 32*32 to 48*48.
• Edit Name: Type the name of the icon and click the "Apply" to change the name.
• Reposition: The icons which are set up on the map can be repositioned into the right place even if the map size is changed (enlarged/reduced).
• Delete All Components: By clicking this button, users can delete all the components in the map at once.
• Font: Change the font of the text of the icon.
  - Click "font", then submenu will appear.
  - Users can select the font style, color, size, and other effects.
  - Check "Apply to All" to apply the change to all the components.
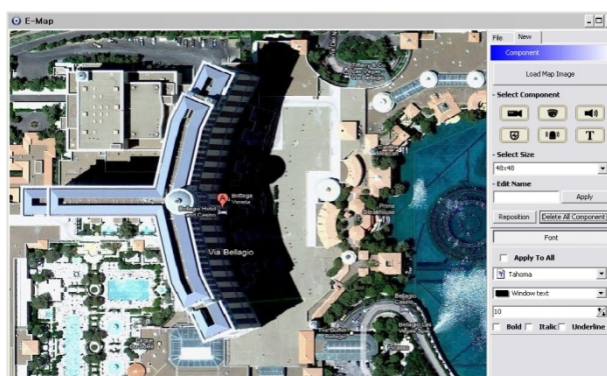
• Click "File" Tab to continue to set up the E-map.
• Type a name of E-map when you finish map setting in "New" menu.
• Click "new" to add a new location in Location list. If the other location is already saved, then select the location from the list.
• Select type among Outdoor, Floor, and Room.
  - Users can set up the hierarchical E-map in their taste.
  - For example, after setting up the floor map, room maps are added under the floor map.
• DVR Name: Select the specific DVR from the list to connect E-map.
• Users are able to check the E-map and its hierarchical structure from the "Registered E-map list".
  - Here, users are able to load the map, delete the map and show map viewer by clicking mouse right button on the map list.
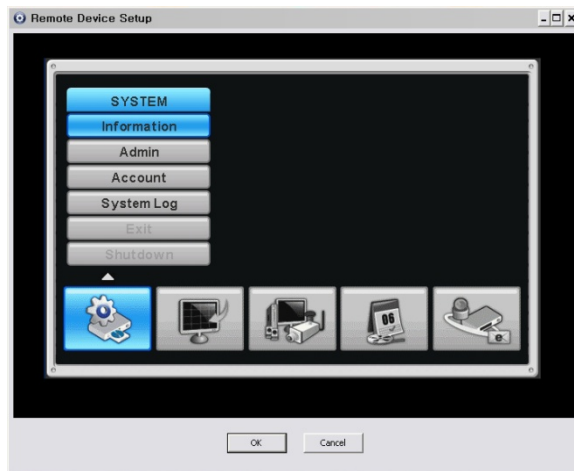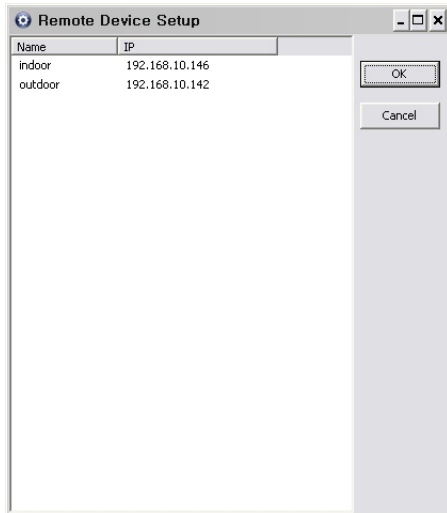
- Registered Emap List

Map	Device
test1	
test	214

Load Map
Delete Map
Show Map Viewer
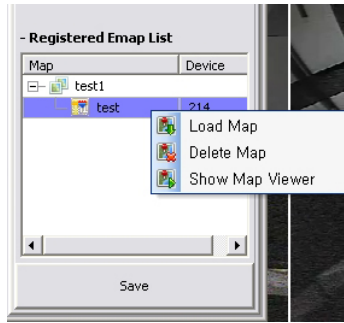
Save

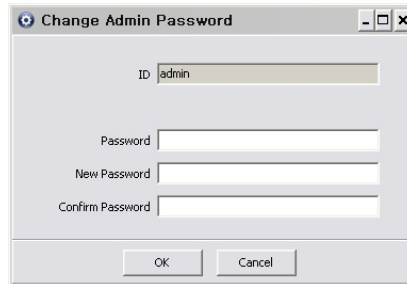• Click "Save" to save and exit.

1.4.4.2 Remote Device Setup

• Select one among the connected devices and click "OK".
• Then the setup window appears same as the one in the DVR.

• Click "OK" to save and exit

1.4.4.3 Change Password

• Users are able to change the password of the ID.
  – Password: input the current password.
  – New Password: input the new password.
  – Confirm Password: confirm the new password.

NOTE

User "ID" cannot be modified.

1.4.5   Help

1.4.5.1 About

• The version of CMS Pro can be checked here.
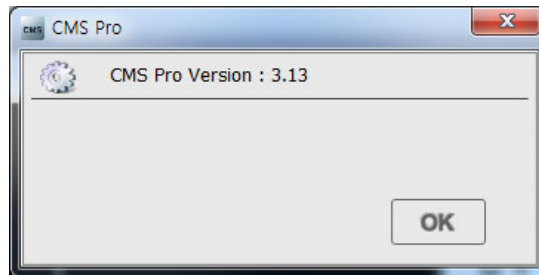
1.5   View

- The viewer of this program is composed with 5types of different panes.
  - Server List, Remote Device System Log, Remote Device Event Log, CMS System Log and Health Check.

1.5.1   Server List

- When the device is registered, then it is displayed on the Server List.
- If uncheck "Visible" in the server list menu, then the list will not be shown.
- Check "Left" or "Right" to move the list to left or right side of the screen.

1.5.2   Remote Device System Log
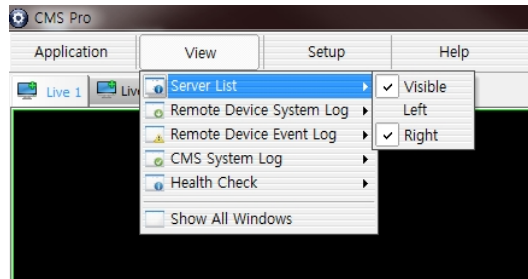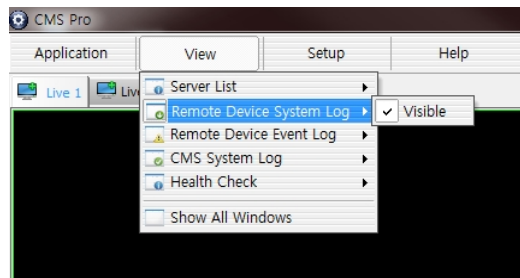
- User can check the system log of the device in this menu.
- Type, Date/Time/Description can be checked.
- The contents in the parenthesis show the name of the device. Ex) [Demo]
- Check "Visible" in the Remote Device System Log menu to see the menu or uncheck "Visible" in order not to see the menu.

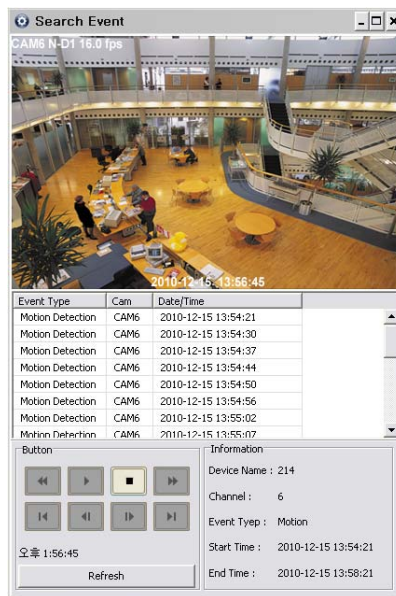## 1.5.3   Remote Device Event Log

- Check "Visible" in the Remote Device Event Log menu to see the menu or uncheck "Visible" in order not to see the menu.
- Users can select the registered device from the drop down box menu.
- Alarm In / Motion / Video Loss / Alarm Out can be selected separately as Event. (More than 2 events can be selected at the same time.)
- And by clicking "Event log On/Off" after right mouse click on the device in the server list, users can check/uncheck all the events at once.
- When the event operates, the event log will show the information of the event in the list.
- If click the pause button in the menu, then event log will be stopped.
- Click the resume button to resume the system event log. (The log data will be lost during the pause.)
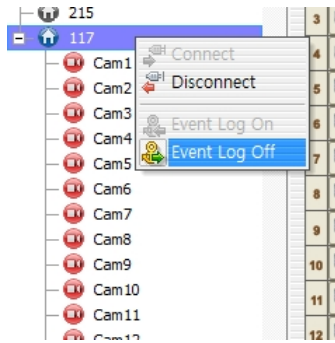

NOTE

The Remote Device Event Log is on when the "pause" is shown while the log is stopped when the "resume" is shown in the menu.

- Double click the detected " Alarm In" or "Motion" event in the remote device event log to check the video of the event.
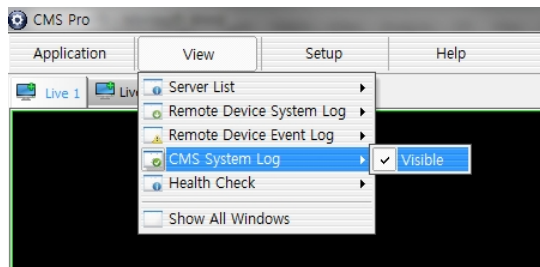
• Click the "Refresh" button to refresh the data.

• Click the right mouse button on the registered device to on/off Event Log in the Server List.
• If user selects "Event Log Off", all event logs will be unchecked on Remote Device Event Log panel.
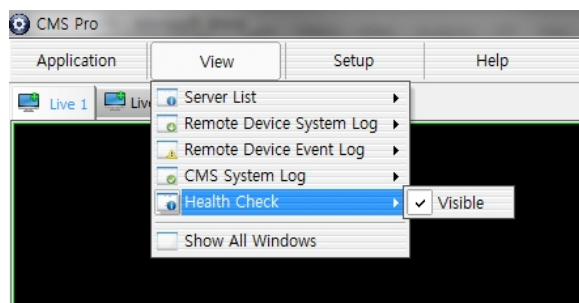
1.5.4   CMS System Log

• This is the log menu where users can check the log information of the CMS program.
• Check "Visible" in the CMS System Log menu to see the menu or uncheck "Visible" in order not to see the menu.
• Click the "Update Log" button to update the log.
• Users can classify the Manager and User by checking the ID and get the information of connect/disconnect and shutdown of the user.

1.5.5   Health Check

• This is the menu where users can easily check the overall status of the device.

Health Check	×

182

Connected

	Health		Monitoring			
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

Version :

Data Recorded :
  1970-01-01 00:00:00 ~
    1995-08-16 17:43:14

Network Connections :   1

• Check "Visible" in the Health Check to see the menu or uncheck "Visible" in order not to see the menu.

• Left mouse click on the device in the server list to see the information of health check.

• HDD Status

  – HDD is not connected and cannot be added.

  – HDD is connected.

  – HDD is not connected currently but can be added.

  – An error occurred in HDD.

• Camera Status

  – Camera is in covert mode.

  – Camera is connected.

  – Camera is not connected currently but can be added.

  – Camera is not connected and cannot be added.

• Recording Data Status

  – The channel is not being recorded because it's not supported.

  – The channel is being recorded.

  – The channel is not being recorded currently but can be recorded later.

• Alarm In Status

  – Alarm In is not activated and cannot be added.

  – Alarm In is being activated.

21

– ![icon] Alarm In is not activated currently but can be added later.

• Alarm Out Status

– ![icon] Alarm Out is not activated and cannot be added.

– ![icon] Alarm Out is being activated.

– ![icon] Alarm Out is not being activated but can be added later.

• Motion Status

– ![icon] Motion is not activated and supported.

– ![icon] Motion is being activated.

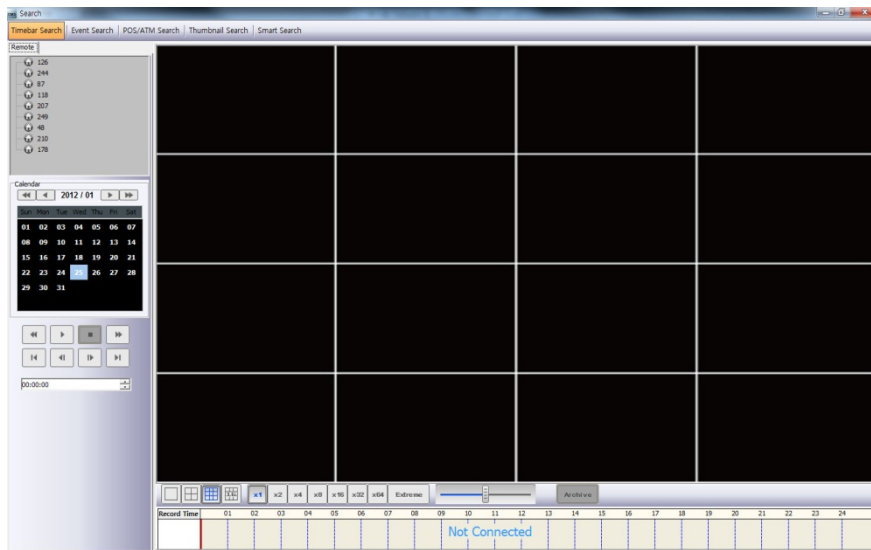– ![icon] Motion cannot be activated but can be activated later.

1.5.6   Show All Windows

• This function will make visible all the invisible window panes.
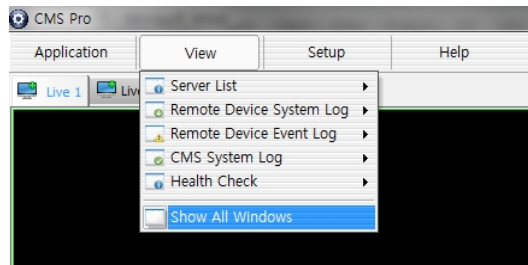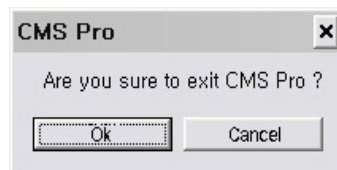
1.6   Application

1.6.1   Search

- There are five different types of search menu; Timebar, Event, POS/ATM, Thumbnail and Smart Search
- The detailed information and directions is described in chapter 8.

1.6.2   Exit

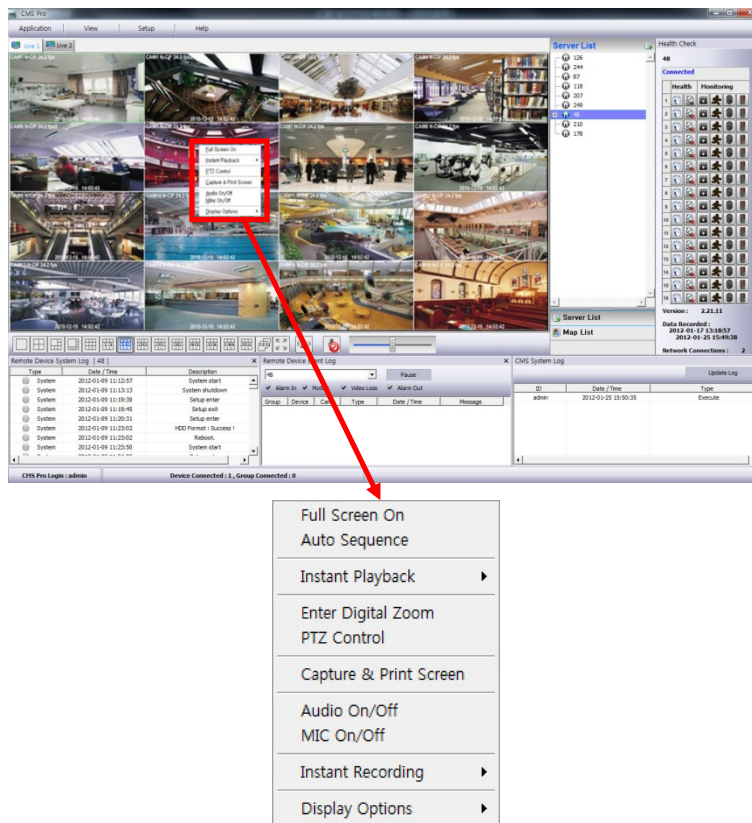- If users wish to exit the program, then click the "Exit" in the Application menu.

1.7   Live (Live Video Monitoring System)

1.7.1   Overview

- This program is to display live video from multiple channels in customized screen format.
- The program is based on user friendly interface. Users may configure the entire program and open or close the panes and screens in the program.
- The information of the device can be checked and monitored in real time.
- The overall information of recording/live view can be checked.
- 'Login Display' pane is to display the current user ID, authority group, data and time information.
- Dual, Triple monitor can be available and the quadruple monitor can be available by using splitter.
- Two live panes. 256 channels for each pane.

1.7.2   Live Monitor Menu

- The following functions are operated when the right mouse button is clicked on the screen.

| Full Screen On |
| Auto Sequence |
| Instant Playback ▶ |
| Enter Digital Zoom |
| PTZ Control |
| Capture & Print Screen |
| Audio On/Off |
| MIC On/Off |
| Instant Recording ▶ |
| Display Options ▶ |

1.7.2.1   Full Screen On

- Click "Full Screen On" to make selected channel into a full screen after right mouse click on the screen.
- Click "Full Screen Off" to exit the full screen after right mouse click on the full screen mode.
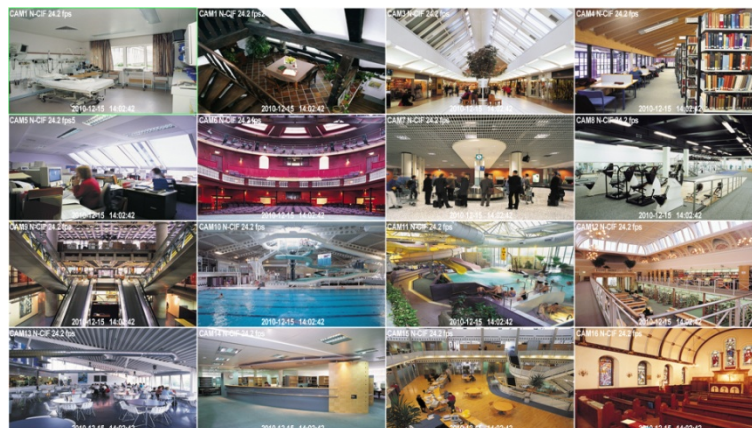
1.7.2.2 Auto Sequence

• User are able to set the auto sequence.
• When user set the "Auto Sequence" display mode, screen will change to 1 channel display mode and channel will be changed by user's setup. For more information Please refer chapter 7.4.2.6.

1.7.2.3 Instant Playback

• Instant playback is available in both Live1 and Live2 pane, but screen capture is available in either live1 or live2.
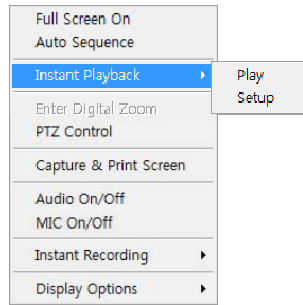
• After right mouse click, move the mouse cursor to "Instant Playback". Then, play and setup menu will appear.
  – Play: The recorded video of the pre-setup time will be displayed in the playback viewer.
  – Setup: The time of instant playback can be setup in this menu, from 1minute to 3hours.
   (1Min, 3Min, 5Min, 10Min, 15Min, 30Min, 1Hour, 3Hour. The default time is 3Min.)
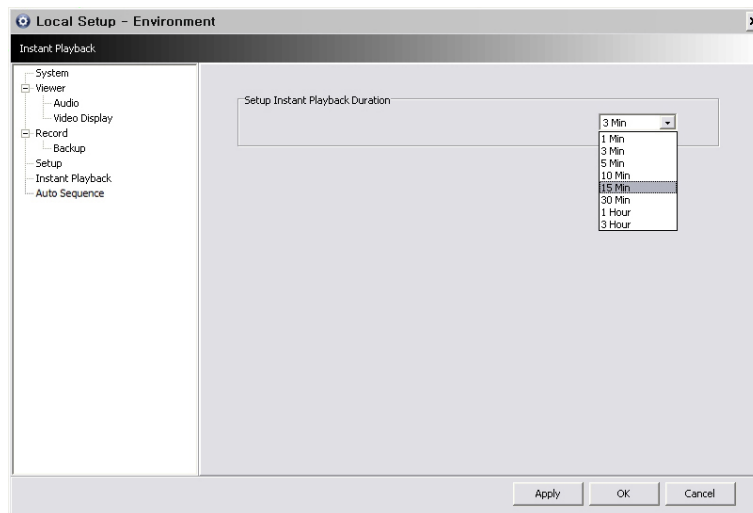
NOTE

Users can also set up the Instant playback in the menu, "Local Setup – Environment".

• The image capture is supported in the instant playback viewer by clicking right mouse button on "Capture Image."
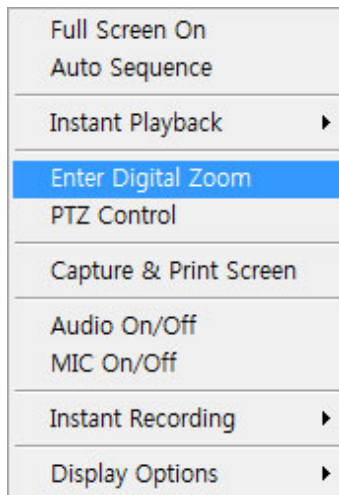

NOTE

For more detailed information of captured image, please refer to the Chapter 7.7.2.5 "Screen capture & Image".
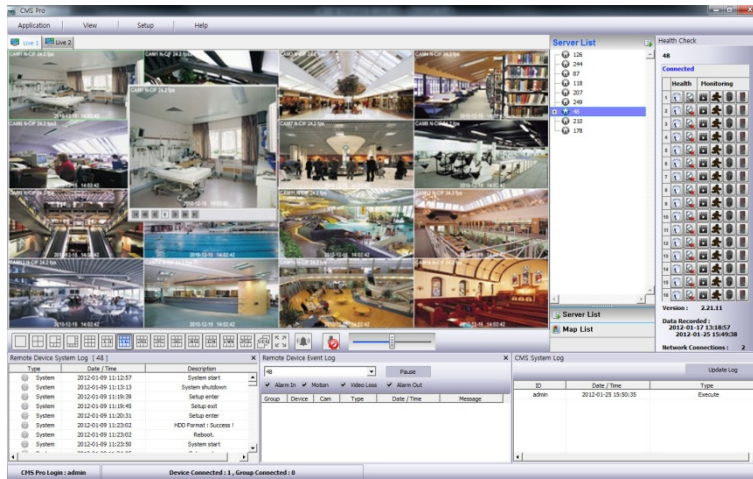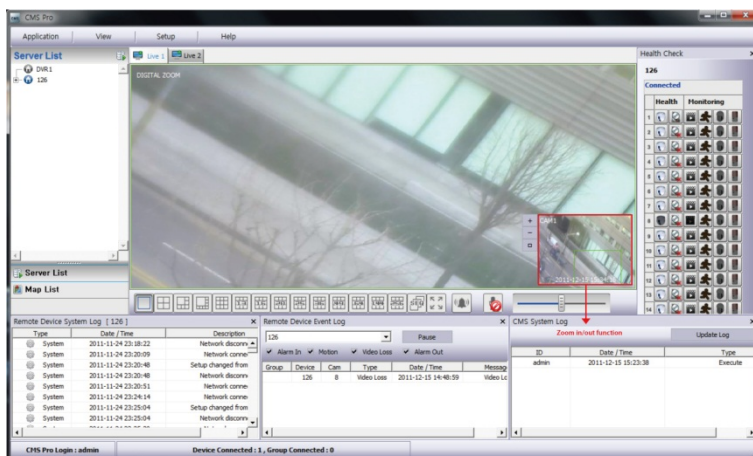

1.7.2.4 Digital Zoom

- To use digital Zoom, please make the display as 1CH.
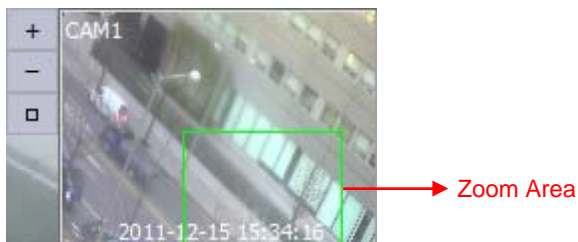- Right click on the mouse and select Enter Digital Zoom

- To Zoom in and out, please use the display function at the corner of the channel Display.
- Digital zoom feature is enabled with drag and drop.

[+]   Zoom In

[−]   Zoom out

[□]   Zoom Area

- After right mouse click on the channel that PTZ camera is connected, select "PTZ control".

Zoom Area

NOTE

Digital Zoom function can be only used when the display is adjusted as 1 CH.

The digital zoom function is able to zooming approximately x32.

1.7.2.5 PTZ Control

- After right mouse click on the channel that PTZ camera is connected, select "PTZ control".
- Users can designate the certain area and set the name by using "Preset" function.
- Up to 255 presets can be designated.
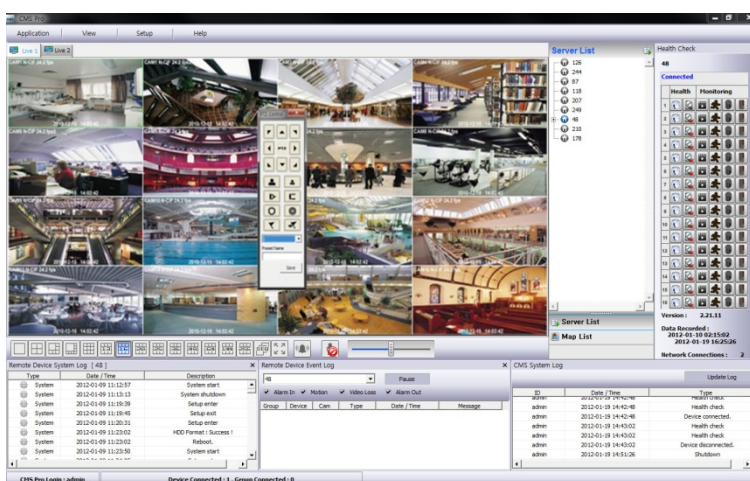
- Zoom

  - Zoom in

  - Zoom out

- Focus

  - Near Focus

  - Far Focus

- Iris

  - Iris Open

  - Iris Close

- Preset

  - Preset setup

  - Go to Preset

  - Drop down menu: Select a preset number which is set in the camera.

  - Preset Name: Save the selected preset name.

1.7.2.6 Screen Capture & Print

• After right mouse click, select "Capture & Print Screen"

• The brightness, contrast and saturation can be adjusted to store in users' taste and can be printed directly in the menu.

NOTE

Image adjustment is possible on the last captured image.

• Creat a name of captured image and select the image type between BMP and JPG

• Users are able to choose the folder in which they wish to store the image by clicking and then click "Save" button.


28
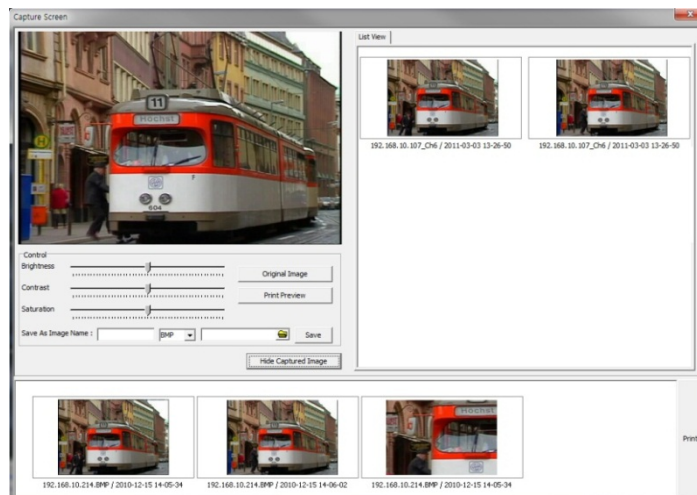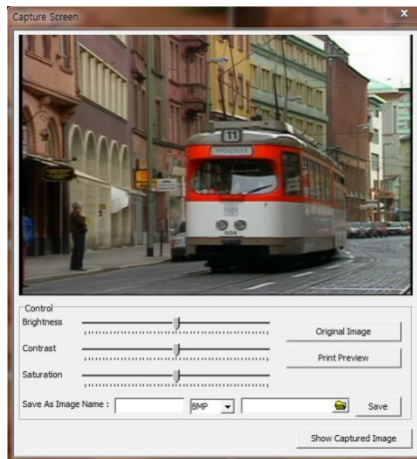
- Click "Show Captured Image" to show the captured images.
- Users can even **recapture** the part of the captured image by dragging the place users want.
- Click "Print" button to print all the captured images at once.
- If users want to print the image one by one, then click the "Print Preview" button.
  - Users can type the title in the text box on the top
  - Add Text: Users can add the description in the text box on the bottom.
  - Delete Text: Delete the last written text at once.
  - Delete all: Delete the all the text in the captured image.

- Click "Hide Captured Image" to hide the captured images.
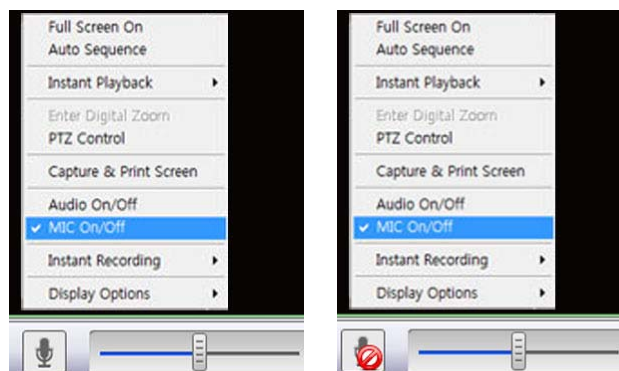

1.7.2.7 Audio On/Off

- Click right mouse button to on/off audio in the channel.
- Audio On/Off function is applied to only one channel out of all connected channels.
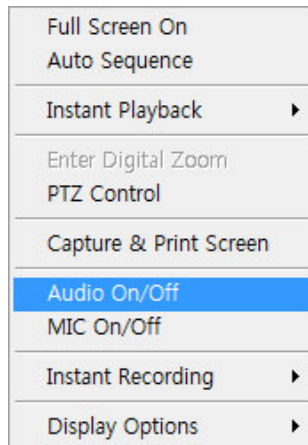
1.7.2.8 Mike On/Off

- Click right mouse button to on/off Mike.
- Users can deliver the audio through the speaker connected to DVR by sending the audio from PC where CMS Pro is activated.

1.7.2.9 Instant Recording

- Click right mouse button to activate the Instant Recording.
- In the Instant Recording, there are three choices of start recording, setup and open folder.
- Click start recording to record the particular channel that users want.
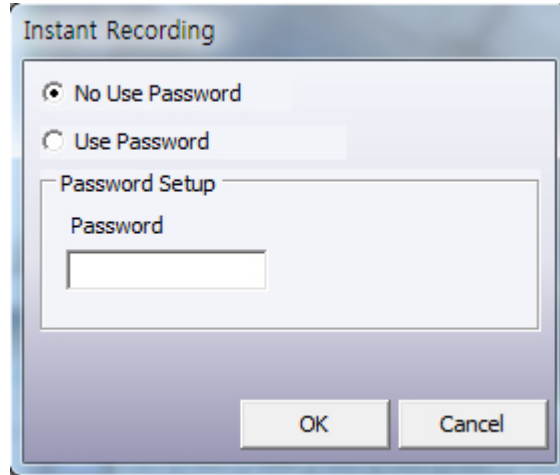

- If users want to have password for the archiving file, please click 'Use Password' and type the password that users want to use.
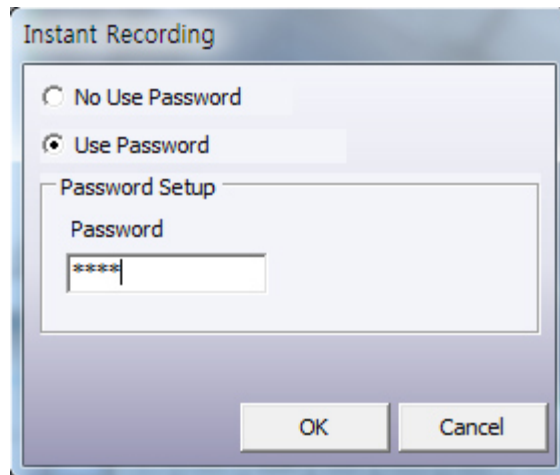

- If users click 'OK', It will start recording of particular chosen channel.
- When users want to view the archived file, please choose "Open Folder"
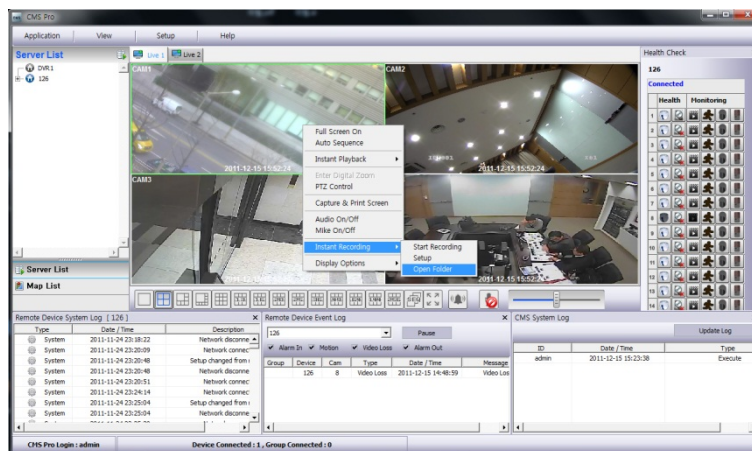
- It will open the saved directory of the file.
- When users double click the created file, password window will pop –up.
- Please type the previous password that users entered in Password setup
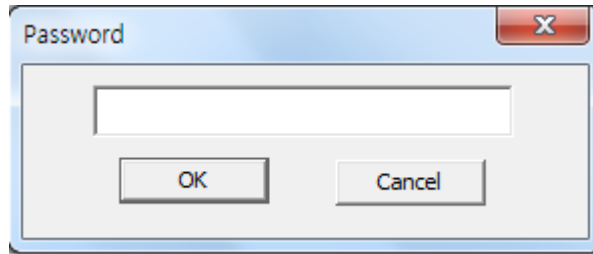
- When Users want to "stop recording", click right mouse again and select Instant Recording and choose "stop recording".
- Choose "Setup" in the Instant Recording to set up the recording duration and default directory.
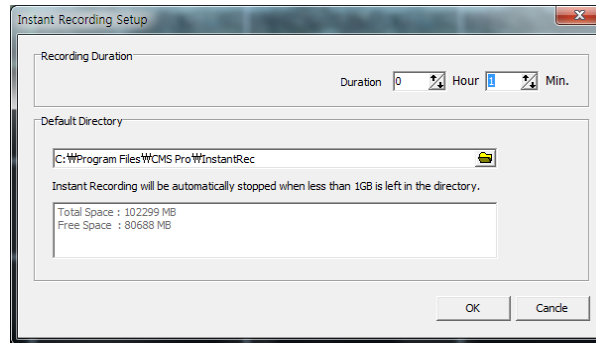
- In the recording duration, users can setup the hours and minutes by clicking the "upside down arrows"

- In the Default Directory, users can choose the directory to save the recorded file by clicking the.

- "Open folder" will allow users to select the recorded files and play them.

1.7.2.10 Display Option

- Users can set up the display of camera name and time in "Display Option".
- After right mouse click, check the "Show Camera Name" to display the camera name or uncheck the menu to hide it.
- After right mouse click, check the "Show Time" to display time or uncheck the menu to hide it.
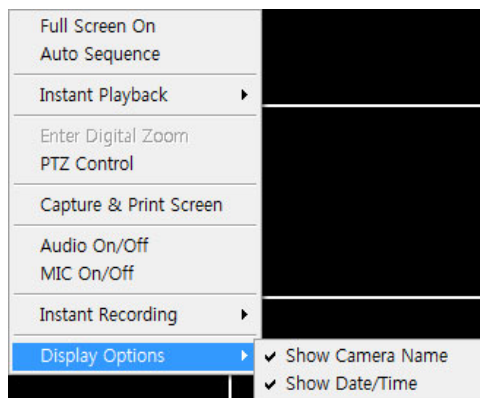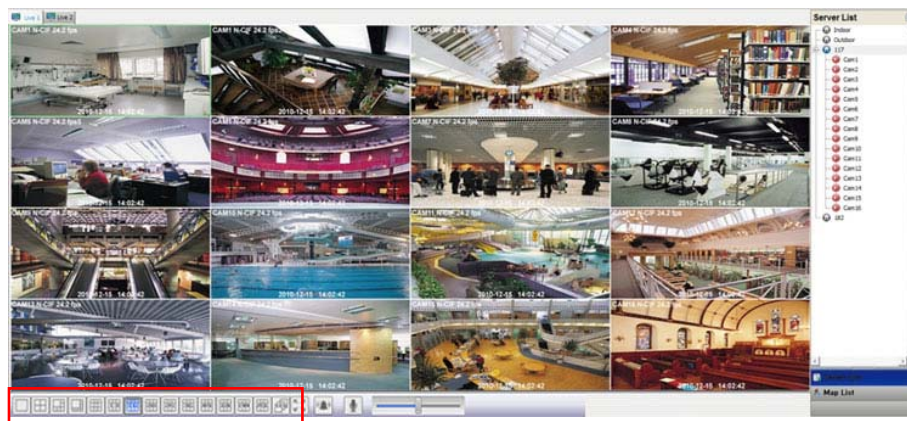
1.7.3   Screen Layout Control

• Since every menu can be relocated by drag and drop, it is easy to customize the lay out in users' taste.
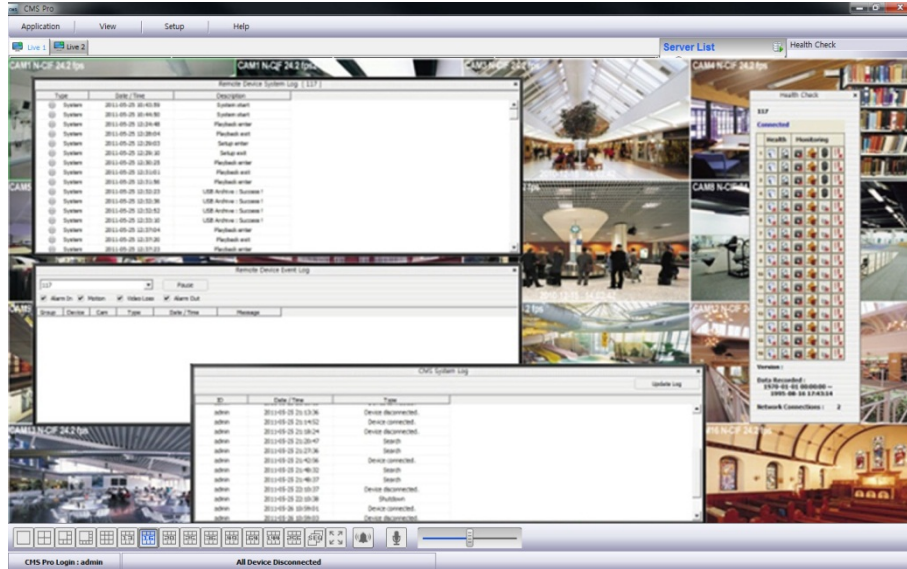
1.7.4   Change Division Display

• From a single full screen to 256 channels, various combination of channel display is provided by clicking the icon at the bottom of the screen.
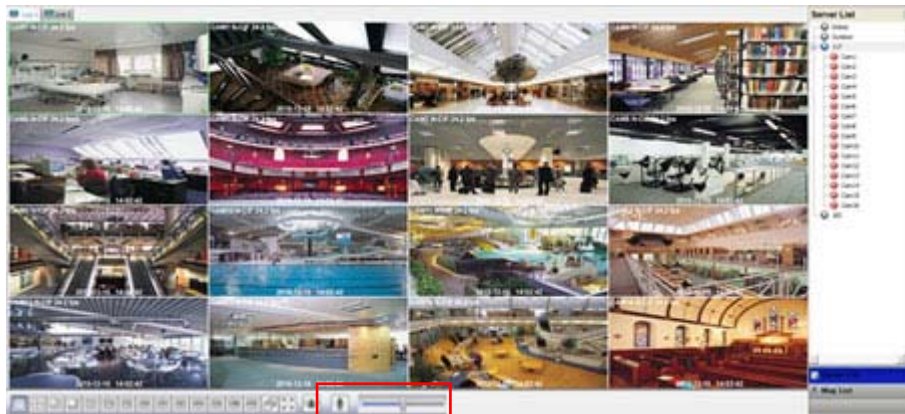

1.7.5   Sequencing

• Click the [SEQ] to switch the channel according to setup made in auto sequence in Local setup – Environment.

• It is only supported one channel

1.7.6   Audio Volume Control

• Users can control the audio volume using the bar controller at the bottom of the screen.

1.8 Search

1.8.1 Overview

- There are five different types of search function and users are able to search the recorded data by using a suitable search function of the five in accordance with their purpose.

> **NOTE**
> Search window cannot be closed during playback, also cannot be changed window size. Please close the window after stop.
> Playback more than 2 channels at the same time is available only in time bar search.

1.8.2 Time Bar Search

- First of all, open a search window by clicking the "search" in the application menu.
- Click the "connect" after right mouse clicking on the device list.
- Once it is connected to the program, date, month and year of the recorded data is highlighted in the calendar.
- The text box in the left-bottom side of the window shows the time of playback video.
- The recorded data of a day is displayed as a colored bar on the time line at the bottom.
- Users can easily search the recorded data by clicking on the time in the time bar.
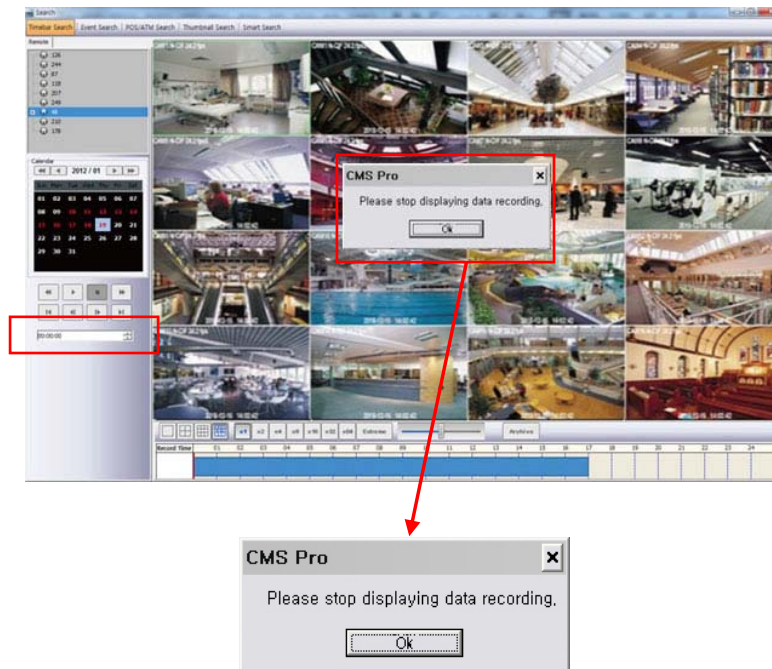
> **NOTE**
> Users can change the speed of rewind and fast forward from x1 to Extreme.
> It is speed of REW and FF, not the one of play.

- Toolbar – Audio On/Off and Snap Shot Save and Print
  - Move mouse cursor to the top of the each channel and click left mouse button, then Audio On/Off and Snapshot Save and Print icon will appear.
  - Audio On/Off function is available by clicking the [icon] icon.
  - And the capture of the image and print is available by clicking the [icon] icon.
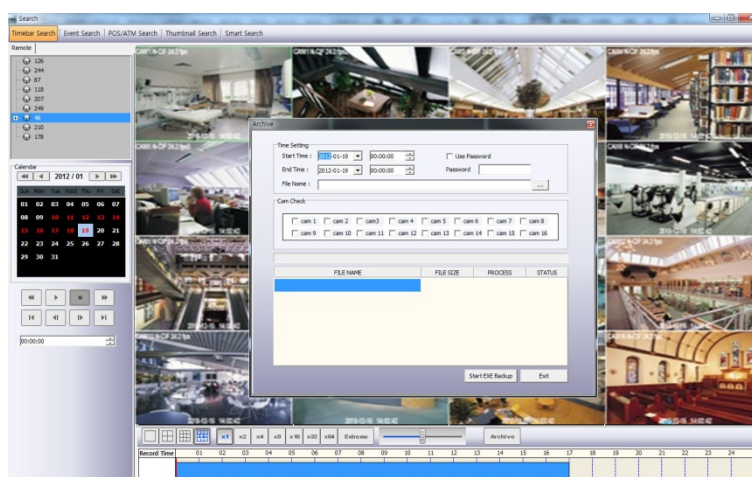
> **NOTE**
> Check the "Show Channel Toolbar Always" in the setup menu> Local setup – Environment > viewer > Video display > Display option
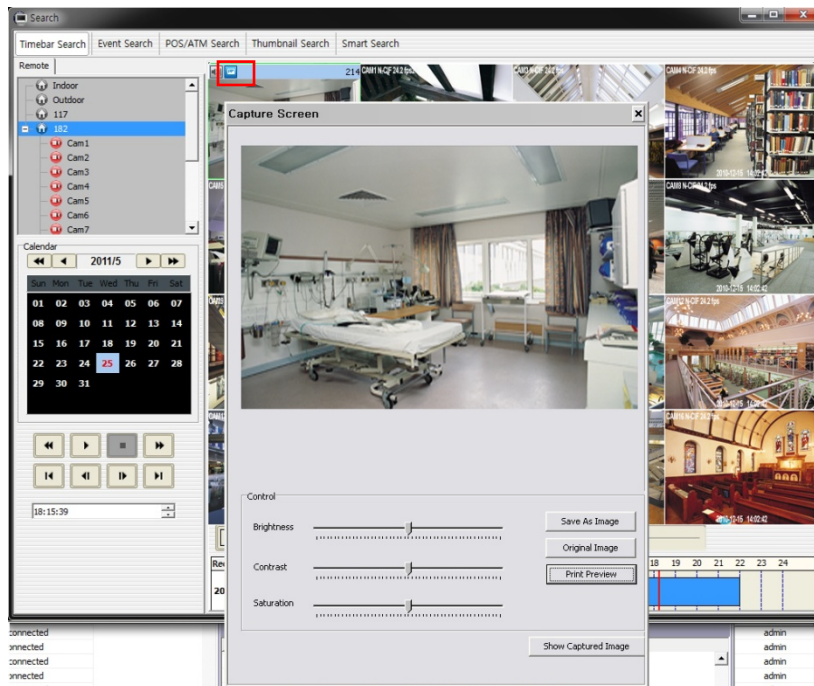
- "Playback" and "Archive" menu appears when right mouse click on the time bar.
- In the playback menu, users are able to decide to search the data from the beginning of the day or from the cursor position.

- Or just simply click on the time line users want, and then click " ▶ " button on the left.
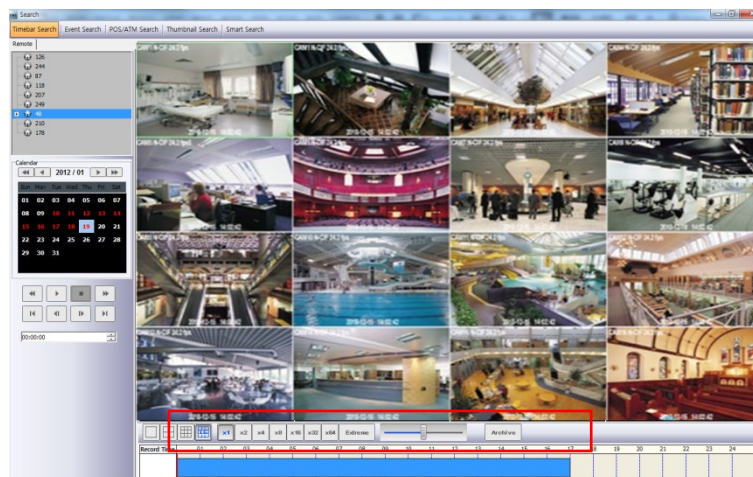
- Click "Archive" button to set up the archive.
- In this menu, it is available to set the start time, end time, file name, the location of the file, password and the cameras to store.
- After finishing setup, click "Start EXE Backup".

NOTE

Archiving function is available only in time bar search.

1.8.3   Event Search

- Click the "connect" after right mouse clicking on the device and select the "Event Search".
- Check the event type which users wish to search among "Emergency"," Alarm" and "Motion".
  (Users can select more than 2 event types at the same time)
- Select a camera to search. (Only 1 camera can be selected in event search.)
- Set up the start time and end time in Date/Time setting and click "Search" button.
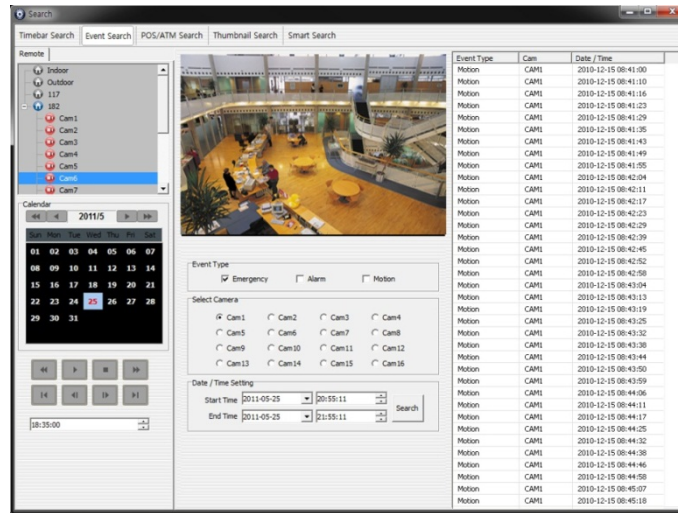
- To check the event that is detected on the right side of the search window, double click the event that users want.


1.8.4   POS/ATM Search

- Click the "connect" after right mouse clicking on the device and select the "POS/ATM Search".
- Type the text that users want to find in the "POS / ATM" text box.
- Select a camera to search. (Only 1 camera can be selected in this search.)
- Set up the start time and end time in Date/Time setting and click "Search" button.
- The detected text will be displayed in the right side of the search window.

- Double click or click on the event(Text In) and click the play button "▶" to check the playback..

- Text Option – Display unit is transaction (Database)
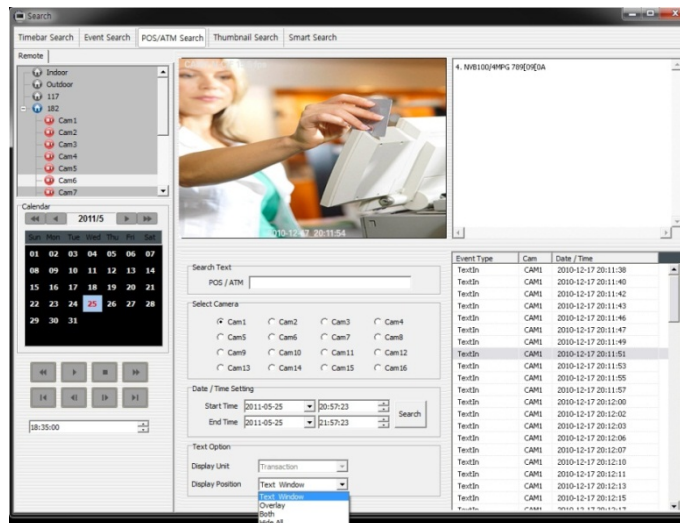
- Text Option – Users are able to select the display option of the playback.
  - Text Window: Only text will be displayed in the top right side of the search window during the playback.
  - Overlay: The text will be overlaid on the playback video.
  - Both: The text will be overlaid on the video and the text window as well.
  - Hide All: The text will not be displayed in both video and the text window.
- To check the event that is detected on the right side of the search window, double click the event that users want.
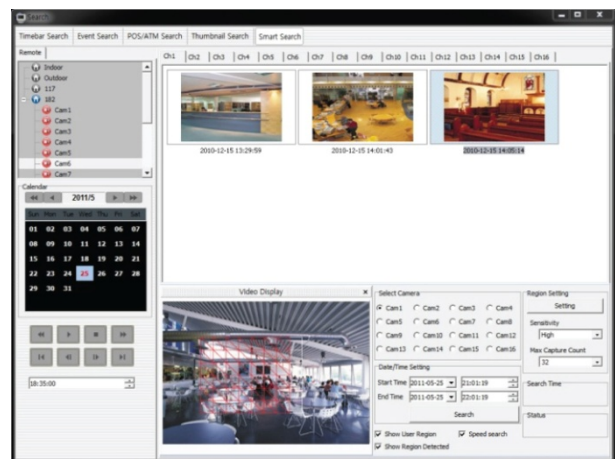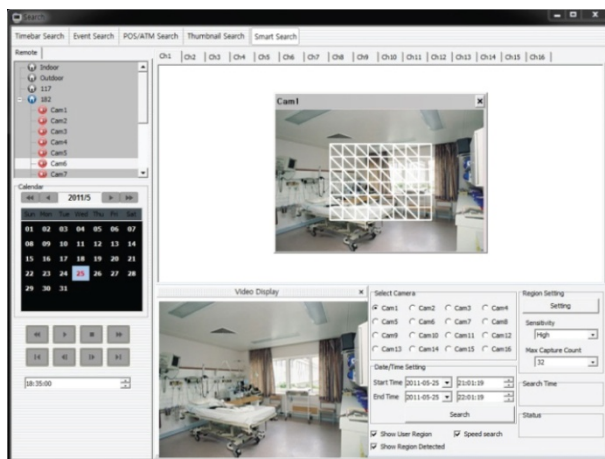
1.8.5   Thumbnail Search

• Click the "connect" after right mouse clicking on the device and select the "Thumbnail Search".

• This search function provides the users with the certain number of snapshots of the recorded video of the selected camera.

• It is very convenient and efficient in the aspect that it can save the time to search the data that users want to find by checking the snapshot of every pre-set time.

• Users are able to select the duration of the playback in "Thumbnail Duration" from 1Min to 60Min. (1, 3, 5, 10, 20, 30 and 60Min)

• The number of "Max Capture Count" can be setup as 32, 64, 128 and 256.

• Like other search functions, set up the start time and end time in Date/Time setting and click "Search" button.

• Double click the founded snapshot to check and play the video.

• Click "Stop Search" to stop the search and check the video to the stop time.

• The video will be displayed in the "video display" panel at the bottom of the search window.

• Users can move the panel around the screen and adjust the size of the panel as users want.
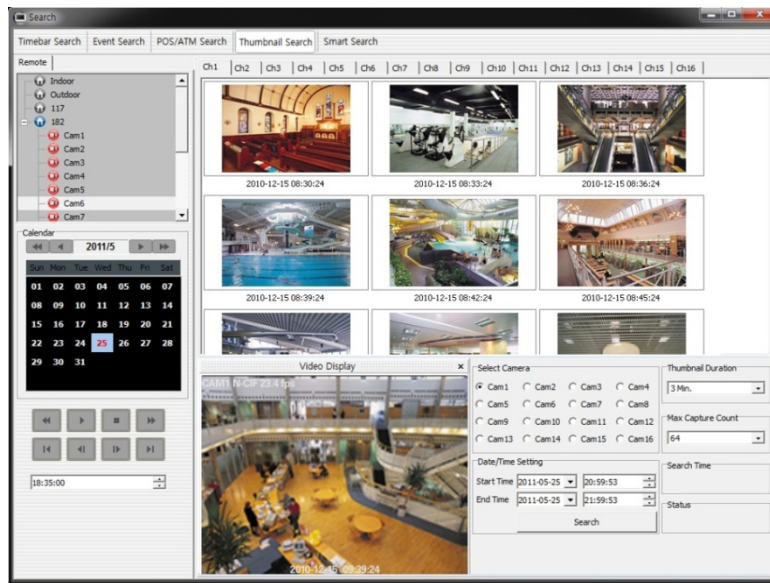
1.8.6   Smart Search

• Click the "connect" after right mouse clicking on the device and select the "Smart Search".

• This search function provides the users with the smart search option.

• Users can select the area in an individual channel by dragging the certain area in "setting" menu.
  (More than 2 areas can be designated in the setting pane.)

• If the movement is detected in the area, it will automatically display the video clip in the search window.

• Users are able to select the one from the 3 types of sensitivity level; Super, High and Standard.

1.8.6.1 Speed Search

- If user wants to have a faster-scan on "SMART Search", please select and mark "Speed Search"
- It may not catch a flash movement (or quick-moving image on the screen) while scanning on "Speed Search" mode
- In order to implement more specific scan, please mark off the "Speed Search"
- When the "Speed Search" is off, the scanning speed will go down.

1.9 E-Map

1.9.1   Overview

- The 'Map Viewer' program is to display event signals over map images so that users may acknowledge event status with geographical information.
- Users may perceive event occurrence status with visual notifications on icons over the map image and audible notifications on speaker system of a PC. By clicking on the camera icons on the map, users may launch 'Instant Viewer' window.
- To utilize 'Map Viewer' properly, users should configure map before running 'Map Viewer' program.
 (Please refer to Local setup – E-map in chapter 4.4)

1.9.2   Controls

- Users can load the Map Viewer which was set up "in Local Setup - E-Map" by clicking right mouse button on the map in the map list.
- Users can check the information of the device connected E-map in the right side of the Map viewer such as Device status, name, IP / Domain, the maximum number of Camera, Alarm in / out and Audio.
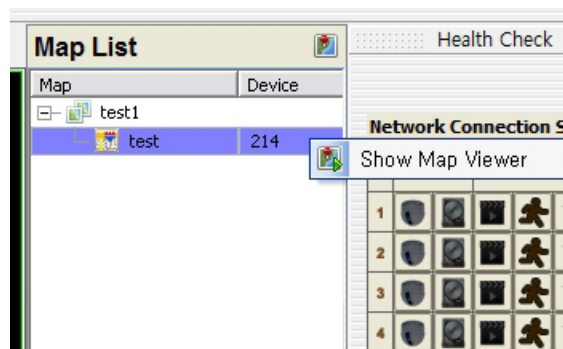
1.9.3   E-map Camera – Instant Playback

- Users are able to load the instant viewer by clicking the camera icon on the map, change the size of the video and move it around the screen.
- Full screen mode is available by clicking right mouse button and select "Full screen".
- Click audio icon to listen to the audio in the site where the audio input is connected.
- Click the alarm out icon to give the signal to the alarm equipment in the site such as siren or buzzer.
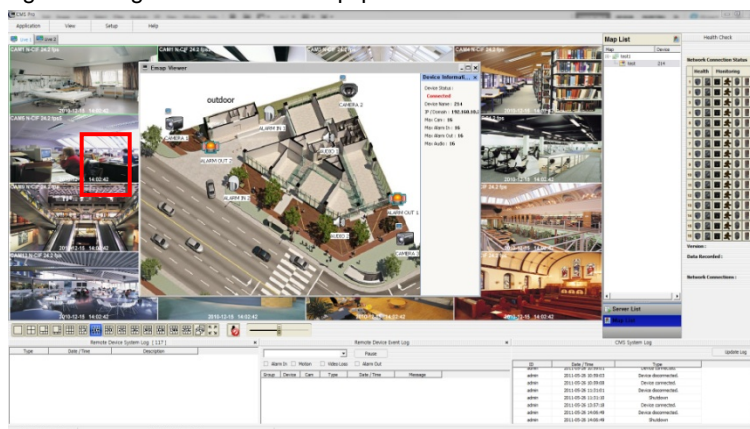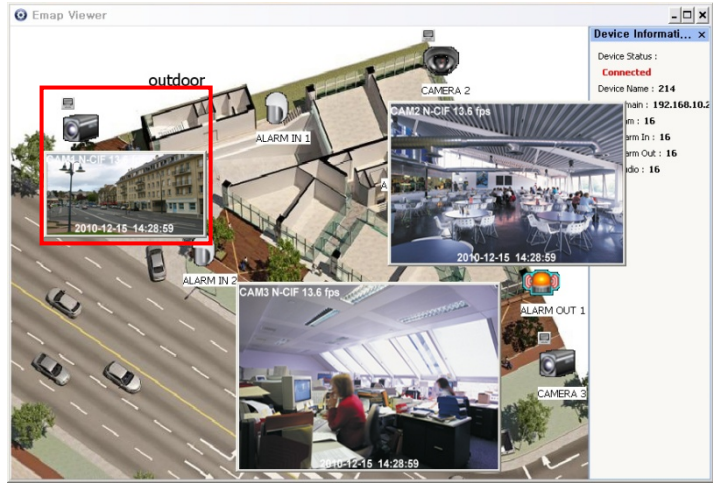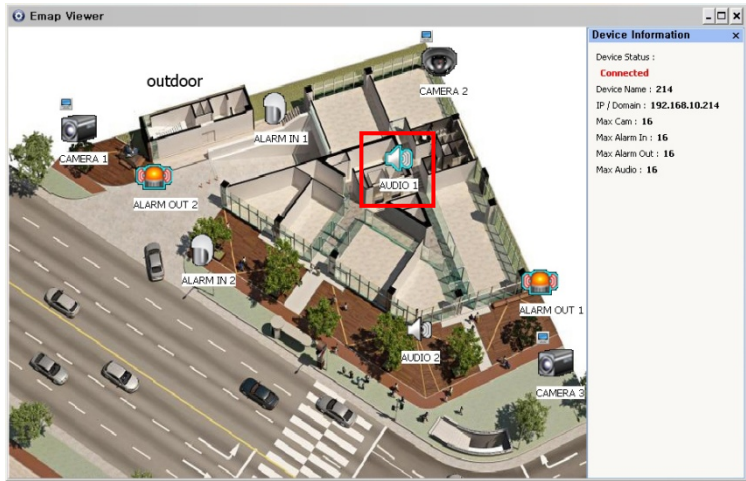
1.9.4   Alarm In/Out Control

• The Alarm In icon on the map will be light on when the Alarm In equipment like sensor or detector is activated in the site.

• If users click the Alarm Out icon, the light is on the icon and the alarm equipment such as siren and buzzer will be activated in the site.
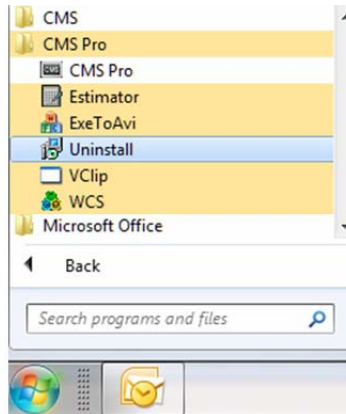
1.9.5   Audio

• Users can hear the audio in the site by clicking the icon on the map.

1.10 Uninstalling CMS Pro

• Please click the "Uninstall" file in the CMS Pro folder in the PC.

• Click the uninstall file and the following message box will pop up.
• Click "OK" to remove the program and its components.

• If an uninstallation is complete successfully, the following message will pop up.