

CMS Pro
Full-featured Enterprise Class Surveillance Solution

User`s Manual



6. CMS Pro

6.1 CMS Pro Features

6.1.1 Introduction

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

6.1.2 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 connecting to 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 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.

WARNING

DUE TO A LIMITATION OF A PC, CONNECTING MORE THAN 16 HD-SDI (FULL HD) CAMERAS MAY RESULT IN MALFUNCTIONING OF THE SOFTWARE. TO CONNECT MORE THAN 16 HD-SDI (FULL HD) CAMERAS, PLEASE ENABLE DUAL STREAMING OPTION ON THE DVR.

6.1.3 System Requirements

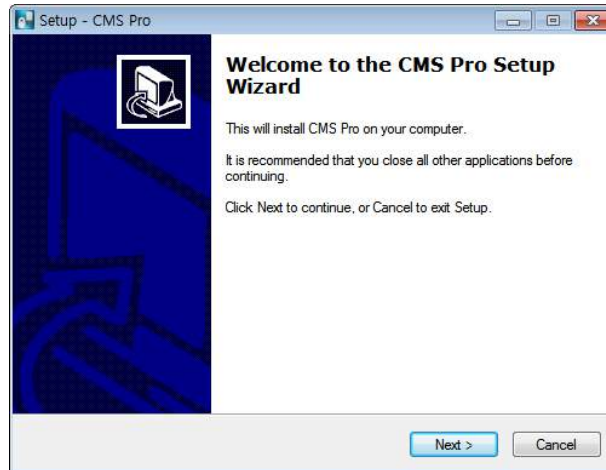
- CMS Pro may not run properly if the PC does not meet minimum requirements. Other programs should not run on the same PC where this is running. Otherwise, CMS Pro software may not perform as designed.

	Minimum	Recommended
CPU	Intel Core i5	Intel Core i7
Main Memory	2GB	4GB or higher
Video Memory	1GB	2GB 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 (32/64) / Windows 8 (32/64)	
Others	DirectX 9.0 C or higher	

6.2 Installation

6.2.1 Software Installation

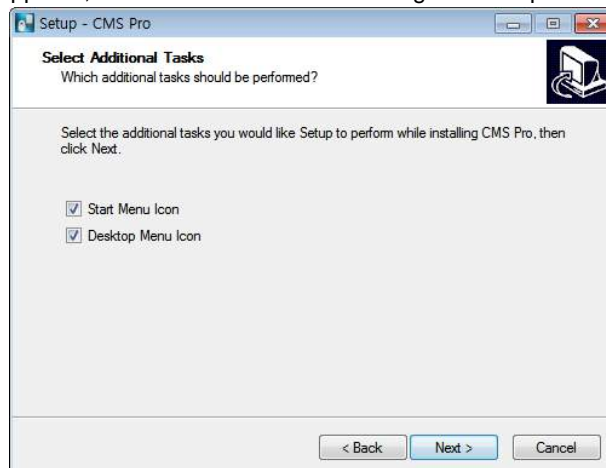
- Please follow the program installation procedures below.
 - ① If an old version of CMS Pro program was installed, it is recommended to completely uninstall or delete the old version.
 - ② Insert the provided CD in a PC.
 - ③ Run the CMS Pro Setup.exe file.
 - ④ When the following screen appears, click “Next.”



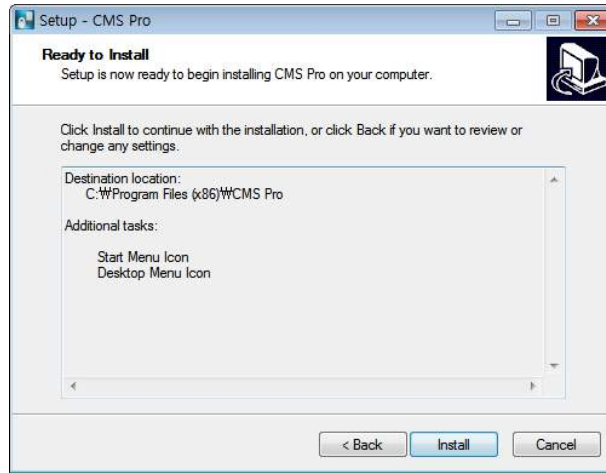
- ⑤ When the following screen appears, select folder and click “Next.”



- 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.



NOTE

If the PC has a previously installed CMS Pro, the installer may ask whether to overwrite the existing DB or not. The DB contains setting values on the program. If desired to maintain the existing values, click 'No' button.

6.2.2 Login

6.2.2.1 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 desktop.
- 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 'Admin' ID is '1111'. Administrator may change the password in the program.



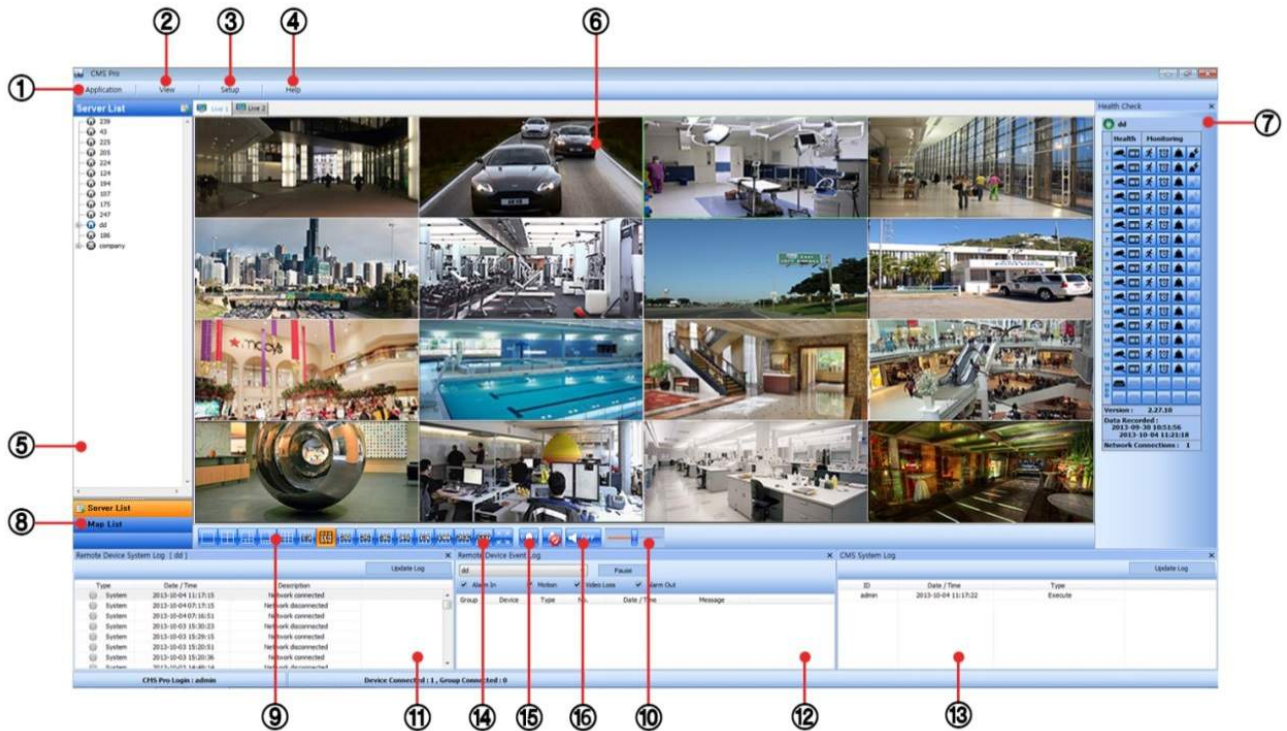
NOTE

Users may change the password in [Setup] – [Change Password] menu. For the detailed information, please refer to the 'Chapter 6.4.7 Change Password' page.

The CMS Pro saves settings and layouts on the program of the current user when the program is closed.

6.3 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
16	Audio Status icon

6.4 Setup

6.4.1 Local Setup - Device

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

6.4.1.1 Remote Site Connection Setup

- Click Setup – Local Setup – Device to enter the setup and a dialog will pop up as below picture.



6.4.1.2 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. A 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**
 - **Web Port:** Input Web number among port numbers set in DVR (check from the **SETUP>DEVICES>Network** in DVR). Default port number is **80**.
 - **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:** A user can set both video and text-in pop up or beep on corresponding channel when event occurs.

Camera

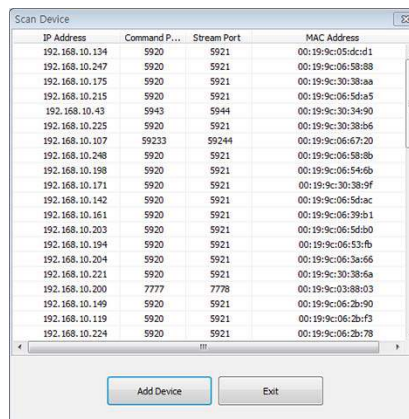
- Choose a camera name between DVR and CMS setting or both.
 - Device Camera Name: Display camera name of DVR.
 - CMS Camera Name: Display Camera name of CMS.
 - Both (Device-CMS) Camera Name: Display both as [DVR name]-[CMS name].
- If users mark the “Display to Server List”, camera name is displayed 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 in 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”.
- If users mark the “Re-connect when abnormal disconnected”, CMS Pro will automatically verifies the network condition, then tries reconnecting to the site.

Alarm In

- Alarm In name setting on CMS, when Alarm In event occurs.
 - If users check “Display to Event Log” registered name shows on event log.
 - “Clear all Text” : remove all registered name

Scan Device

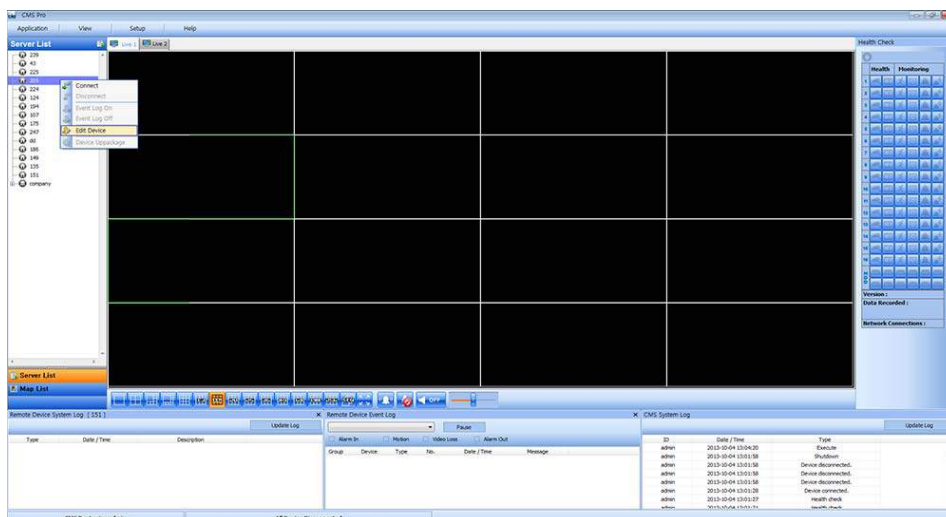
- This function automatically detects and DVRs/Servers which are connected under the same local router as the PC.
- Click “Scan Device”, then following will pop up. Selected desired DVR and click ‘Add Device’, and then type a password accordingly.



IP Address	Command P...	Stream Port	MAC Address
192.168.10.134	5920	5921	00:19:9c:05:dcd:1
192.168.10.247	5920	5921	00:19:9c:06:58:88
192.168.10.175	5920	5921	00:19:9c:30:38:aa
192.168.10.215	5920	5921	00:19:9c:06:5d:a5
192.168.10.43	5943	5944	00:19:9c:30:34:99
192.168.10.225	5920	5921	00:19:9c:30:38:b5
192.168.10.107	59233	59244	00:19:9c:06:67:20
192.168.10.248	5920	5921	00:19:9c:06:58:8b
192.168.10.198	5920	5921	00:19:9c:06:54:6b
192.168.10.171	5920	5921	00:19:9c:06:58:9f
192.168.10.142	5920	5921	00:19:9c:06:5d:ac
192.168.10.161	5920	5921	00:19:9c:06:39:b1
192.168.10.203	5920	5921	00:19:9c:06:5d:b0
192.168.10.194	5920	5921	00:19:9c:06:53:fb
192.168.10.204	5920	5921	00:19:9c:06:3a:66
192.168.10.221	5920	5921	00:19:9c:30:38:6a
192.168.10.200	7777	7778	00:19:9c:03:88:03
192.168.10.149	5920	5921	00:19:9c:06:2a:90
192.168.10.119	5920	5921	00:19:9c:06:2a:f3
192.168.10.224	5920	5921	00:19:9c:06:2b:78

6.4.1.3 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.

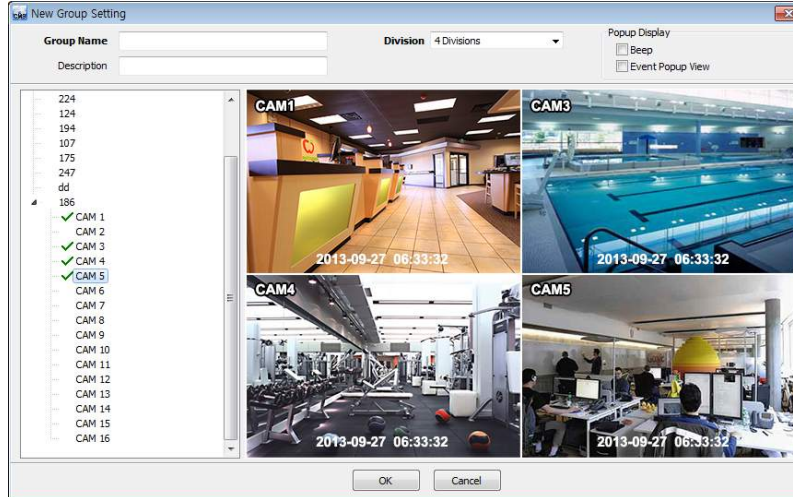


6.4.1.4 Remove Registered Site

- Select a site to delete on local setup window and click “Remove”
- The site will be removed on the local setup window.

6.4.2 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 registered DVRs to make own group of display.

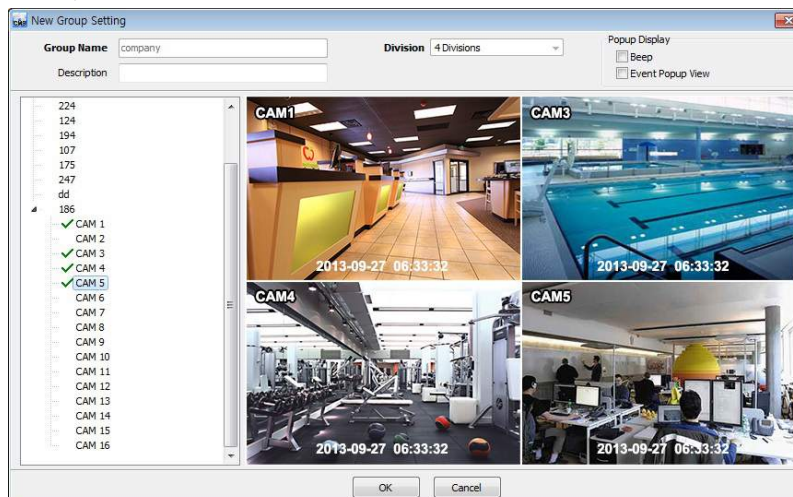


6.4.2.1 New Grouping Setting

- Click Setup – Local Setup Device – Device Group List to add/edit a group
- 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.
- Click “OK” to save and exit.
- Users are able to set the pop up display function.
- The newly added group will be displayed under ‘Server List’ when you go back to live screen.

6.4.2.2 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

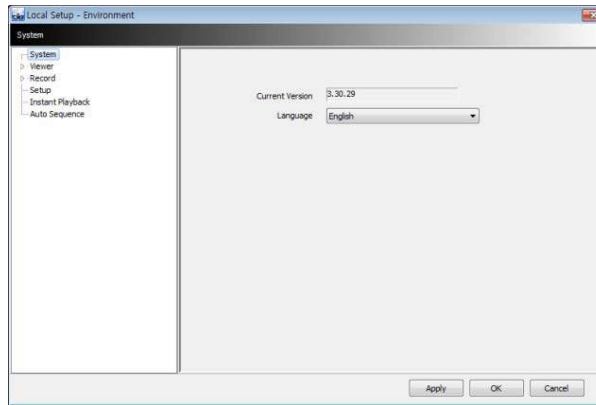


6.4.2.3 Remove Group Setting

- Select a group to delete on Group Setting window then click “remove”
- The group will be removed on the local setup window.

6.4.3 Local Setup - Environment

- This enables users to adjust the default setting of CMS Pro software for user’s convenience.



6.4.3.1 System

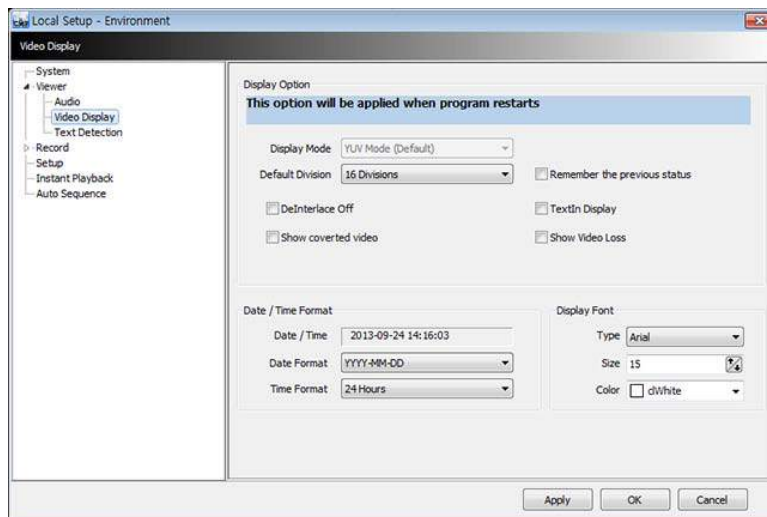
- Users are able to check the current version of the software.
- Users are able to select the language among English, Korean, Japanese, Russian, Turkish, Finnish, German and French.

6.4.3.2 Viewer

• Audio

- Users are able to control the Audio volume.

• Video Display



- 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.
 - Deinterlace Off: This function changes playback display into Progressive Scan or Interlace Scan. Uncheck () Deinterlace Off, then box will display as the Progressive Scan and shows the better picture quality.
 - Show converted video: if this box is checked, covert cameras from DVR will show up.
 - Text-In display: Text data will be overlaid on live and playback.
 - Show Video Loss: Popup window will display, if video loss occurs on the connected DVR.

NOTE

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

NOTE

All changes made above 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 and Courier.
 - Size: select the size of the font from 10 to 20 and the default is 15.
 - Color: select the color among 16 different colors.

• Text Detection

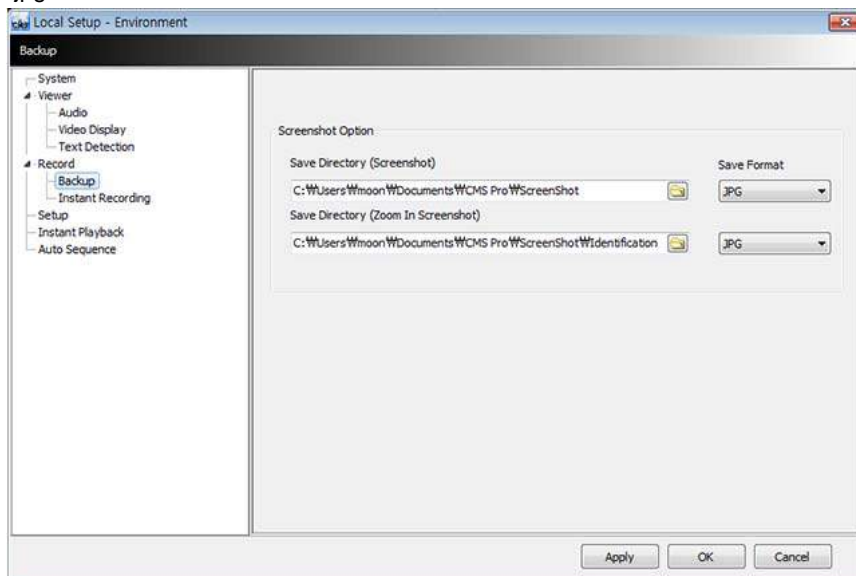
When the software can pop-up a notice windows when a certain text is detected from a DVR that has an attached Text/POS device.

- Device: choose a device
- Message: add message like 'VOID'. (When added message – 'VOID' – occurs from DVR, window will pop up.)

6.4.3.3 Record**• Backup**

Users can customize the storage path of the image file of Screenshot or Zoom in Screenshot by typing the path or clicking the folder icon.

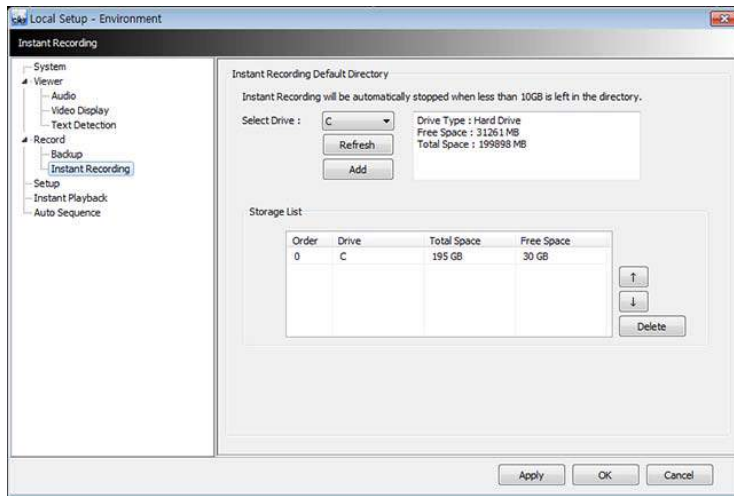
- Save Directory (Screenshot): Select the save directory by designating the folder in the PC and save format between bmp and jpg.
- Save Directory (Zoom in Screenshot): Select the save directory by designating the folder in the PC and save format between bmp and jpg.



- Instant Recording

Users can customize the storage path of the instant recording file by selecting HDD installed in PC.

- Select Drive: Select PC's HDD where instant recording file should be saved from the drop down menu and click "Add". It will show Drive type, Free Space and Total Space of selected HDD.
- Storage List: Added HDDs can be prioritized or deleted. Use Up and Down arrow to prioritize and "Delete" to remove HDD from the list.



NOTE

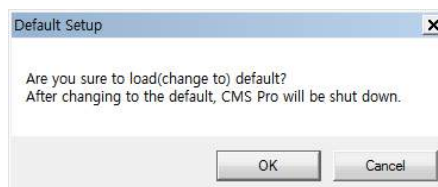
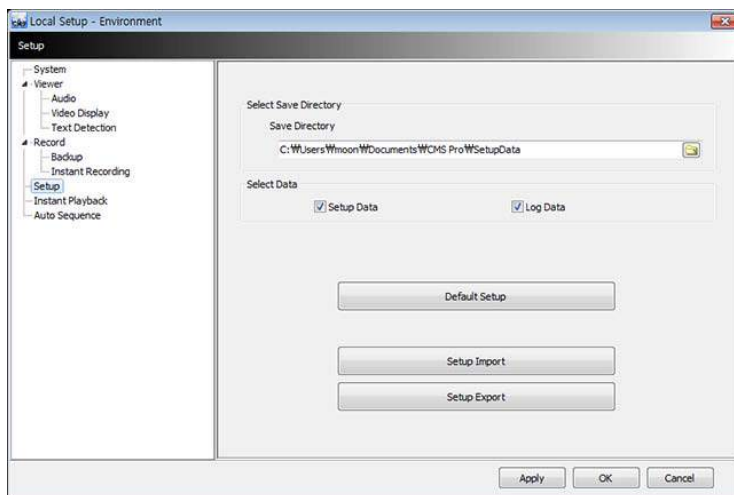
Instant Recording will be automatically stopped when less than 10GB is left in the directory.

NOTE

Please refer to Chapter 6.7.2.9 Instant Recording.

6.4.3.4 Setup

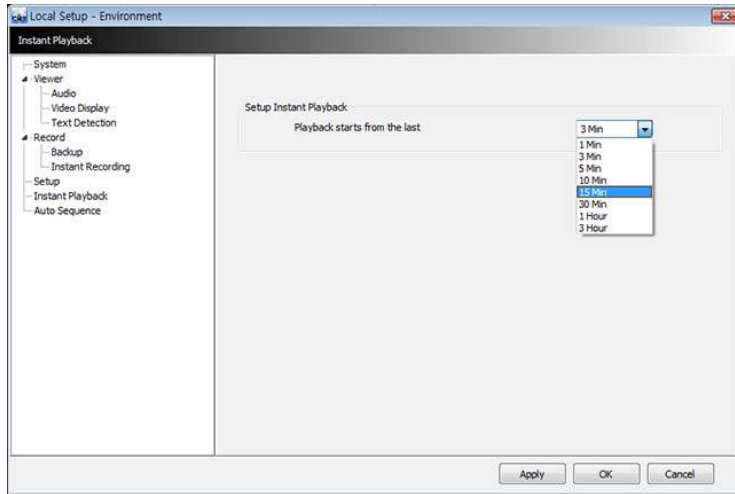
- Users may save the current CMS Pro configuration data as a file and import it later to the same PC or another one.
- Select Save Directory: Users can select the save directory of setup data or log data by designating the folder in the PC or other storage device and the change of the directory will 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.

6.4.3.5 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 starts 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.
- To activate the Instant Playback, just right click on a live screen and select ‘Instant Playback’.

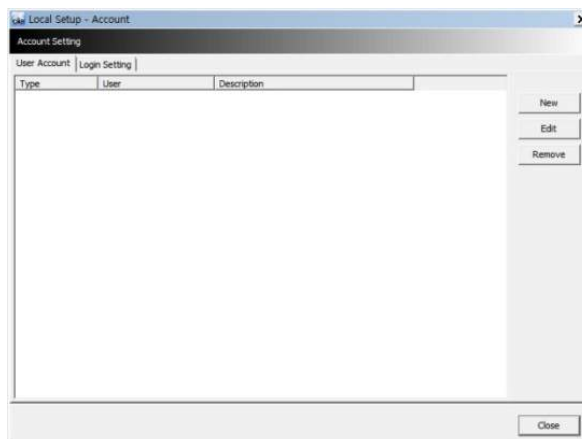


6.4.3.6 Auto Sequence

- Auto Sequence: Users are able to switching the camera view and setup the dwelling time.
- Set the dwelling time by clicking the  to increase and decrease duration. (3 to 60 seconds).

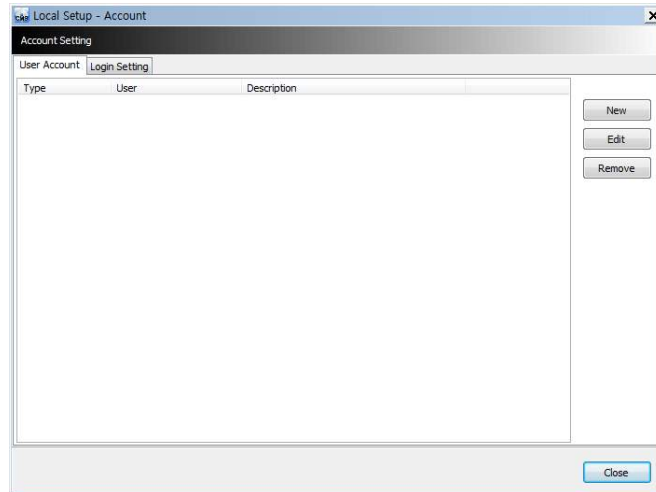
6.4.4 Local Setup - Account

- When more than 2 users need to access CMS Pro, multiple User Accounts and its authorization can be set in this menu.
- This setup is only permitted to Admin account holder.



6.4.4.1 Add User Account

- Click “New” button and the following will display.



- 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 E-map 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.

6.4.4.2 Edit User Account

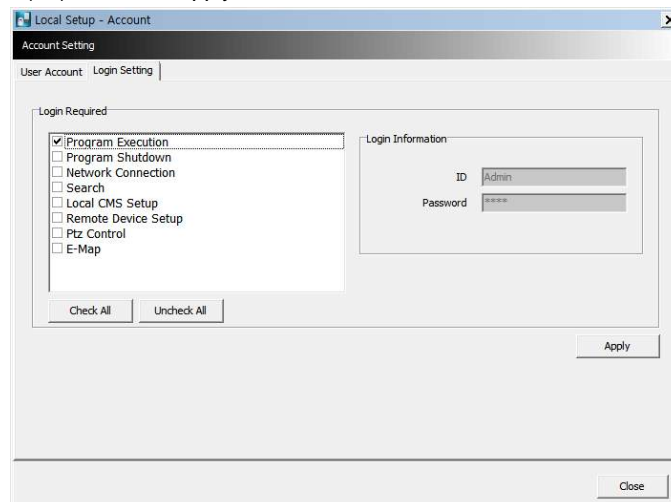
- Users are able to adjust its Authorization and Password from EDIT button.
- All the procedures are same as Add User Account.

6.4.4.3 Remove User Account

- Users are able to remove the existing account.
- Select an account to delete then click “REMOVE” button.

6.4.4.4 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.



6.4.5 Local Setup – E-map

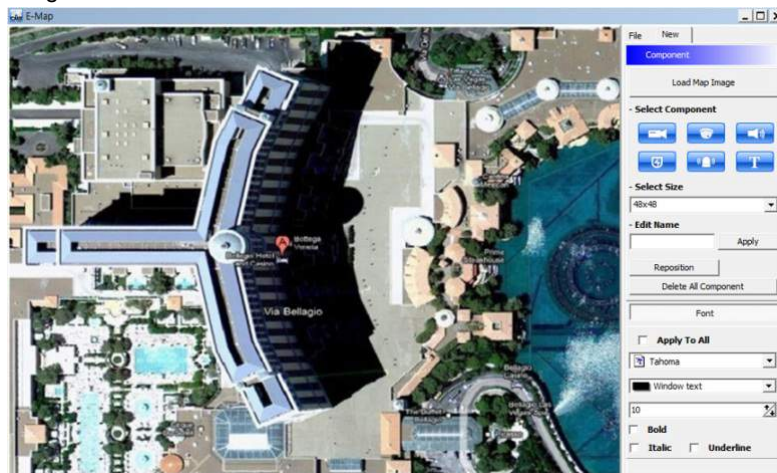
- Users are able to create various E-maps and it enables monitoring both Live and Playback screen.

6.4.5.1 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.

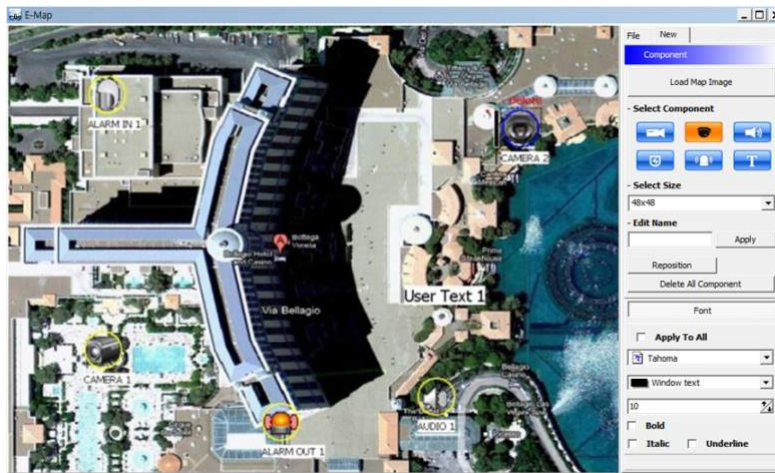


- Place the icon of cameras, audios and alarms on the map. Each icon’s detail is as below.

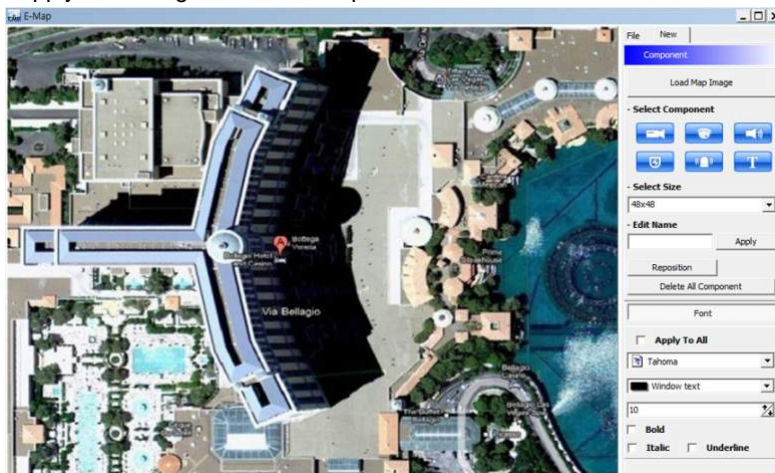
-  Box Camera: Generally indicates as Outdoor camera.
-  Dome Camera: Generally indicates as Indoor camera.
-  Alarm/Sensor: The icon is blinking on when the alarm in is activated.
-  Audio: Users can hear the audio in the site by clicking the icon after setting the E-map.
-  Relay: If users click the icon, the light is on the icon and the attached device on Relay such as siren and buzzer will be activated in the site.
-  Insert text box: Users are able to put description in the map using the Text Box.

- Select component

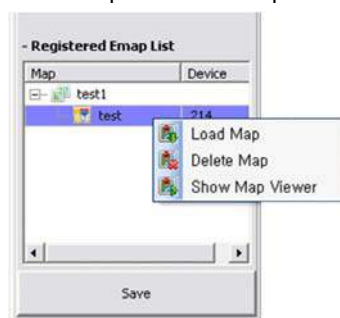
-       Click the icon you want (then the icon turns to orange color) and click again on the place you’d like to locate on the loaded image.
- Users can rotate the icon to the direction that they want and move to other places by dragging.



- 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 display.
 - 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, if necessary.
 - 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.

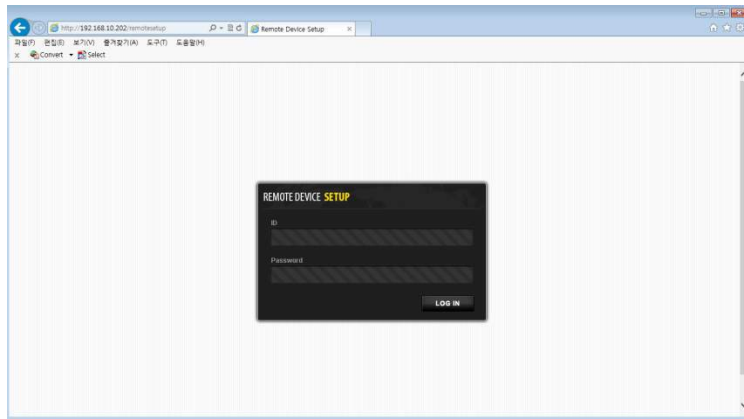
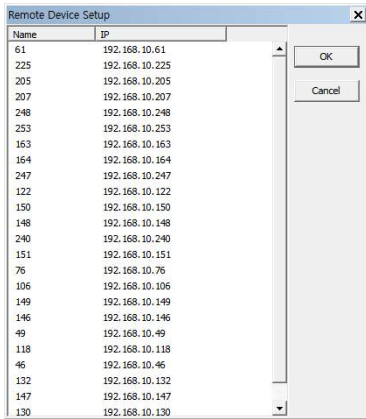


- Click “Save” to save and exit.

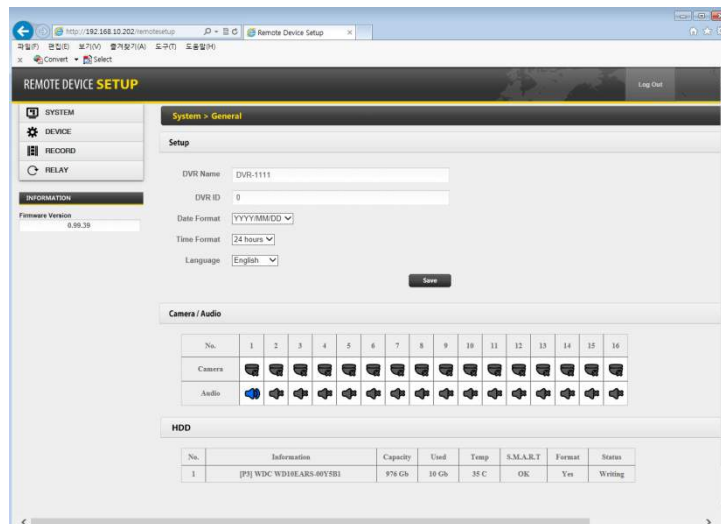


6.4.6 Remote Device Setup

- Select a device to enter device’s configuration and Click “OK” then the web browser will pop up as below.



- Enter ID and Password to open Remote Device Setup page and following page will display.
- Web server port (default, 80) should be port forwarded to use remote device configurations.



NOTE

Remote Device Setup menu shows the same menu interface as the DVR’s local menu. Please refer to **Chapter 4. Setup** for detailed information.

6.4.6.1 System

- Refer to **4.2 System** for more detail.

6.4.6.2 Device

- Refer to **4.3 Device** for more detail.

6.4.6.3 Record

- Refer to **4.4 Record** for more detail.

6.4.6.4 Relay

- Refer to **4.5 Relay** for more detail.

NOTE

Some settings cannot be modified remotely.

NOTE

The changed password cannot be restored. Please keep and remember not to lose!

6.4.7 Change Password

- Users are able to change the using password of the ID, when they open the software. This is not related to any DVR's login password.
 - Password: input the current password.
 - New Password: input the new password.
 - Confirm Password: confirm the new password.



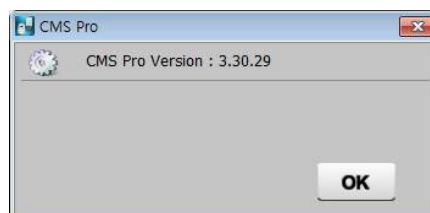
NOTE

User "ID" cannot be modified.

6.4.8 Help

6.4.8.1 About

- The version of CMS Pro can be checked here.

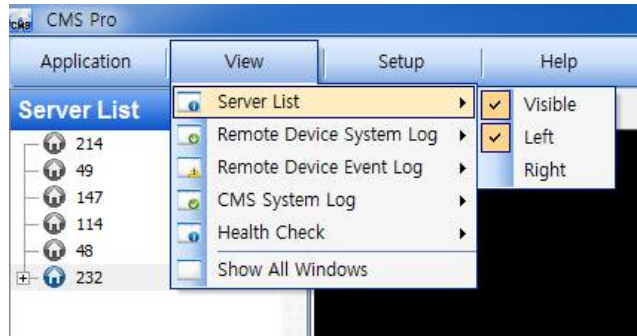


6.5 View

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

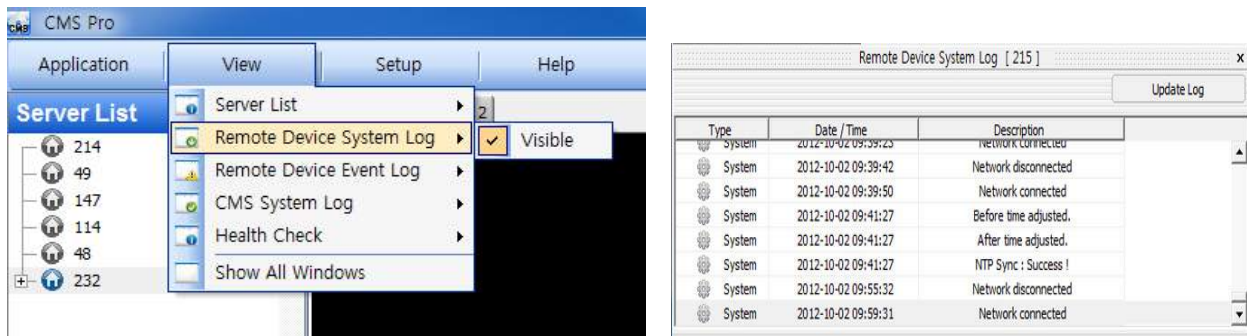
6.5.1 Server List

- 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.



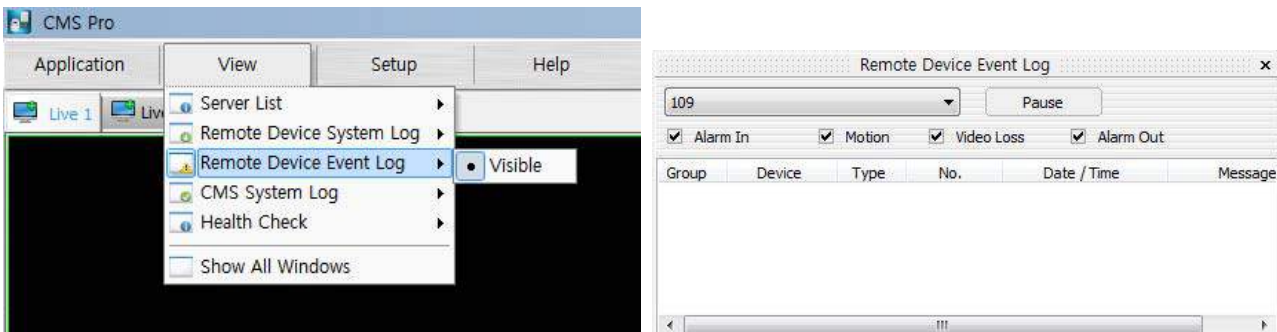
6.5.2 Remote Device System Log

- 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.
- Click the “Update Log” button to update the log.



6.5.3 Remote Device Event Log

- User can check the event log of the device in this menu.
- 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

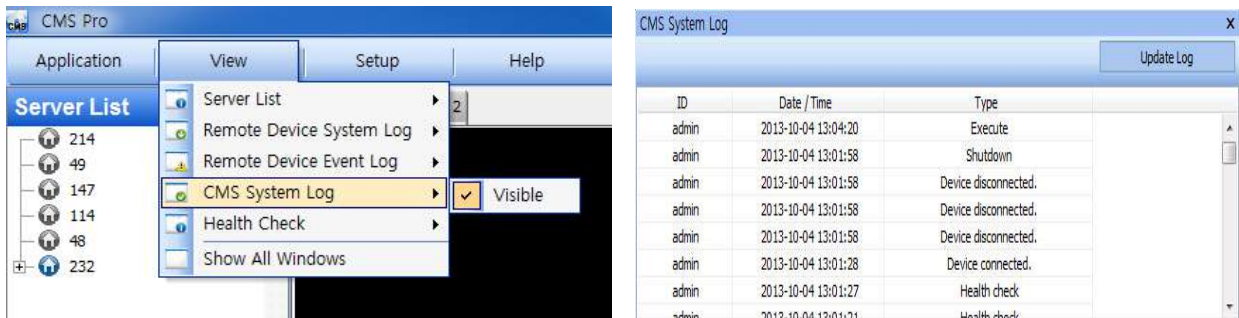
The Remote Device Event Log is on when the “pause” is shown while the log is stopped when the “resume” is shown in the menu.

- 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.
- A user selects “Event Log Off”; all event logs will be unchecked on Remote Device Event Log panel.



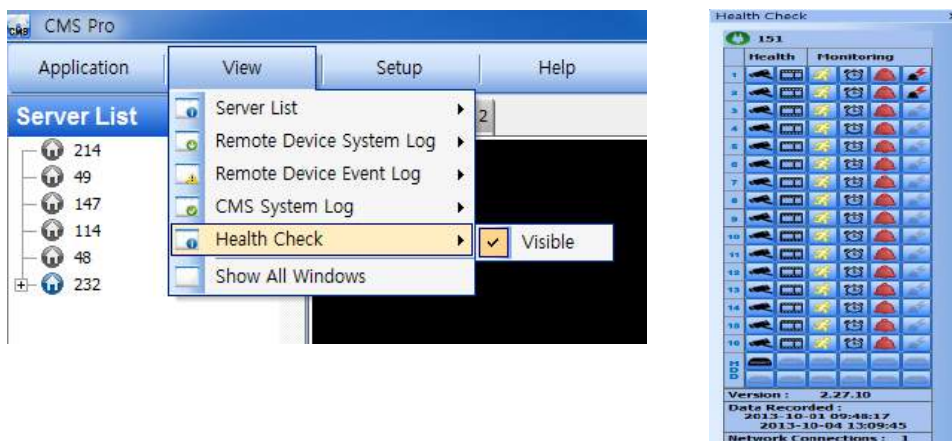
6.5.4 CMS System Log
























- 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.
- User can classify the Manager and User by checking the ID and get the information of connect/disconnect and shutdown of the user.



6.5.5 Health Check

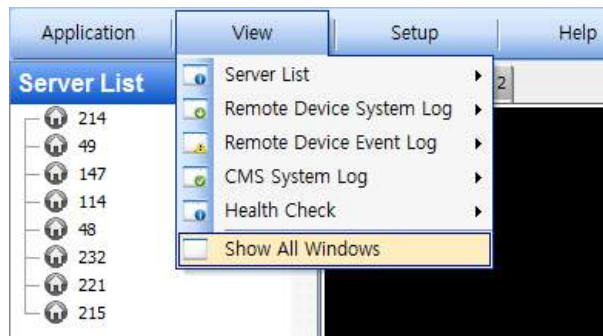
- This is the menu where users can easily check the overall status of a device.



- 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.
- Motion Status
 -  Motion is not activated and supported.
 -  Motion is being activated.
 -  Motion is not activated but can be activated later.
- Alarm In Status
 -  Alarm In is not activated and cannot be added.
 -  Alarm In is being activated.
 -  Alarm In is not activated currently but can be added later.
- Alarm Out Status
 -  Alarm Out is not activated and cannot be added.
 -  Alarm Out is being activated.
 -  Alarm Out is not being activated but can be added later.
- Relay Out Status
 -  Relay Out is not activated and cannot be added.
 -  Relay Out is being activated.
 -  Relay Out is not being activated but can be added later.

6.5.6 Show All Windows

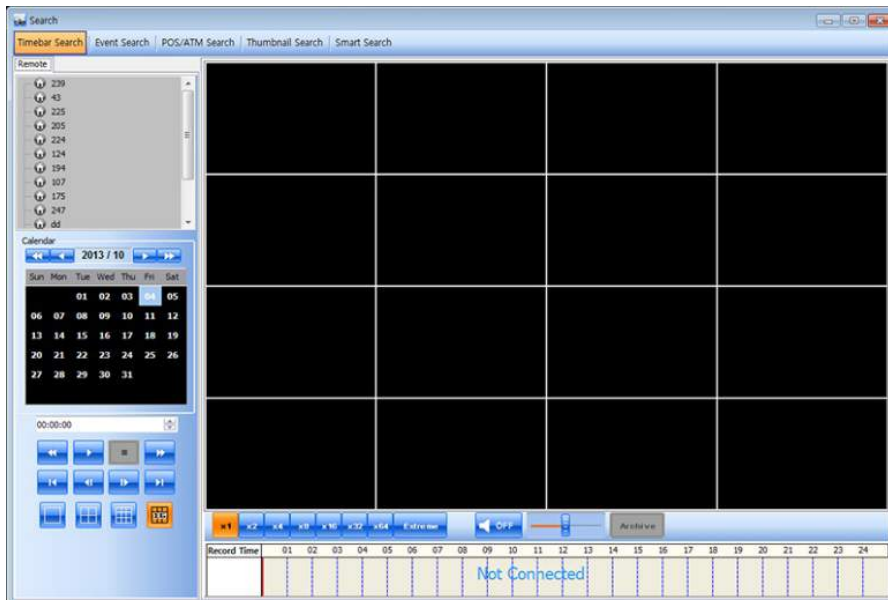
- This function will make visible all the invisible window panes.



6.6 Application

6.6.1 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 6.8**.



6.6.2 Exit

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



6.7 Live (Live Video Monitoring System)

6.7.1 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.

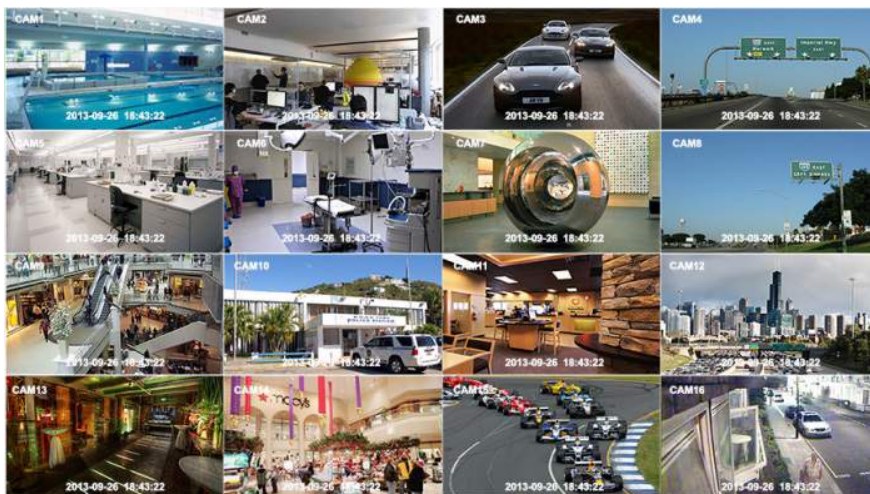
6.7.2 Live Monitor Menu

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



6.7.2.1 Full Screen On

- Click "Full Screen On" to make selected channel into a full screen.
- Click "Full Screen Off" to exit the full screen.

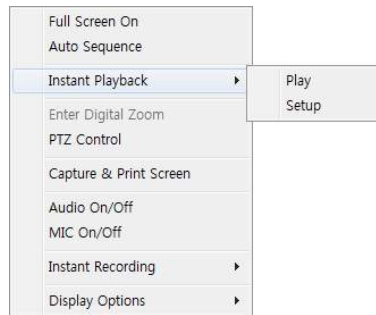


6.7.2.2 Auto Sequence

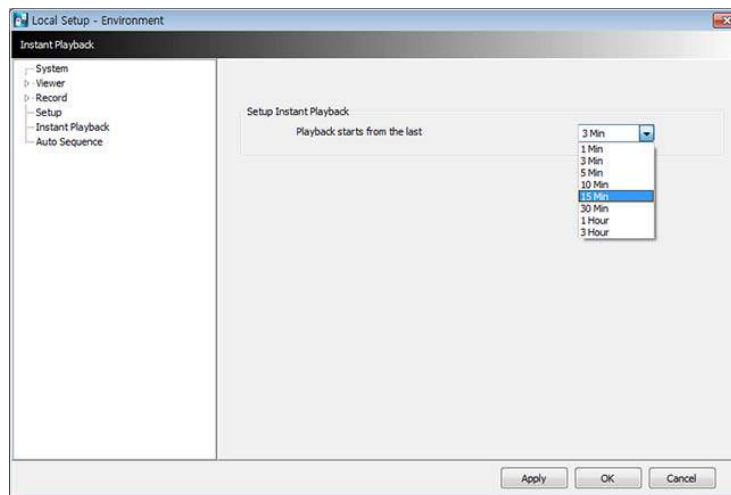
- Users are able to set the auto sequence.
- When users set the "Auto Sequence" display mode, screen will change to 1 channel display mode and channel will be changed by user's setup. For more information Please refer **chapter 6.4.3.6**.

6.7.2.3 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 display.
 - 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”.

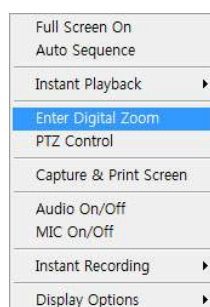
- The image capture is supported in the instant playback viewer by clicking right mouse button on “Capture Image.”

NOTE

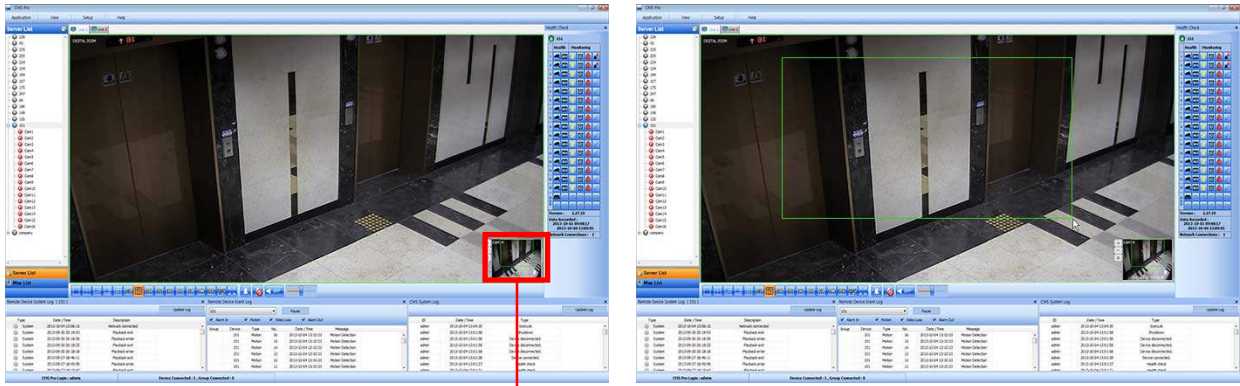
For more detailed information of captured image, please refer to the Chapter 6.7.2.6 “Screen capture & Image”.

6.7.2.4 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 or click and drag the area wish to zoom in.
- Zoom area can be moved by dragging the position from the corner box.



Zoom in / out function



Zoom In



Zoom Out



Zoom Area: The Screen will revert to x4 digital zoom screen.



Zoom Area

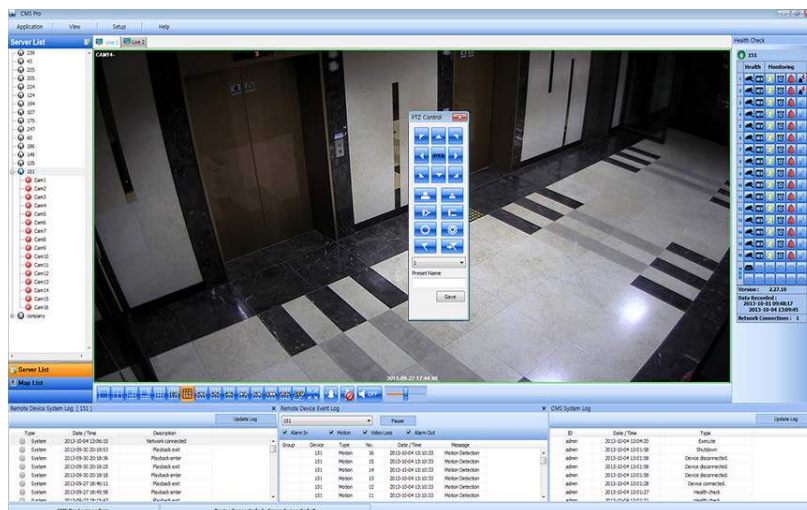
NOTE

Digital Zoom function can be only used when the display is on 1Ch mode.



The digital zoom function is able to zooming approximately x32.

6.7.2.5 PTZ Control

- After right mouse click on the channel that PTZ camera is connected, select "PTZ control".
- Users can designate the certain position 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

-  Set Preset
-  Go to Preset



- Drop down menu: Select a preset number which is set in the camera.
- Preset Name: Save the selected preset name.

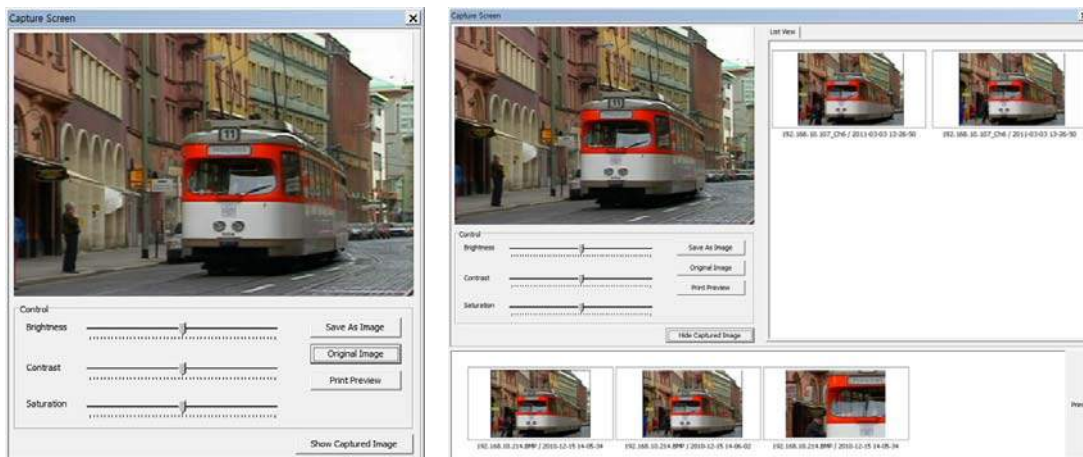
6.7.2.6 Screen Capture & Print

- After right mouse click, select “Capture & Print Screen”
- The brightness, contrast and saturation can be adjusted to store and can be printed directly.

NOTE

Image adjustment is only possible on the last captured image.

- Users are able to save the captured image by clicking “Save as Image”.
- Create a name of captured image and select the image type as BMP or JPG
- Users are able to choose the folder where they wish to store the image.





- 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.

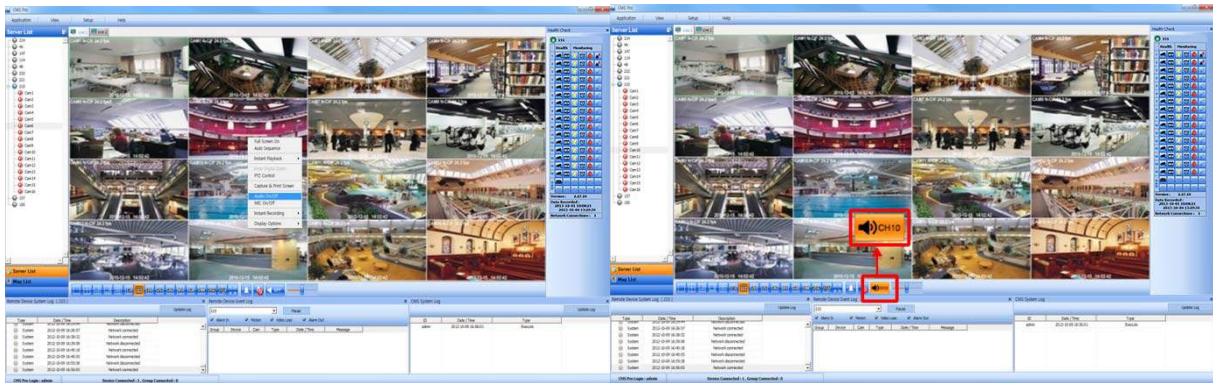
- Click “Hide Captured Image” to hide the captured images.



6.7.2.7 Audio On/Off

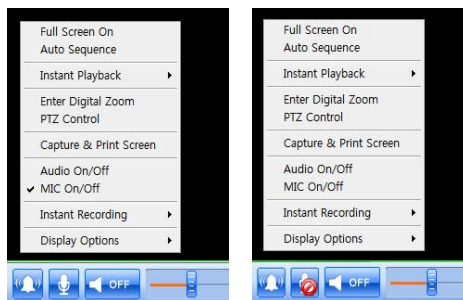
- Right click and select Audio On/Off to turn on/off audio from the channel.
- Audio On/Off function is applied to only one channel out of all connected channels.

– Once audio is on  will be changed to show connected audio channel. 



6.7.2.8 MIC On/Off

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



6.7.2.9 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 user wants.



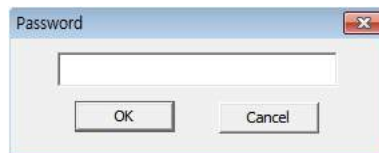
- If a user wants to have password for the archiving file, please click 'Use Password' and type the password that users want to use.




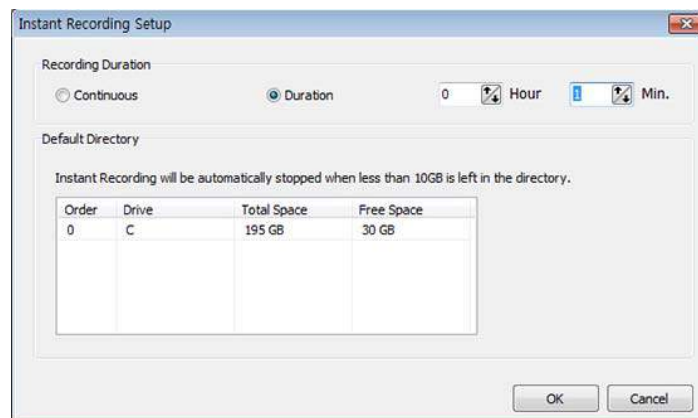
- If users click 'OK', it will start recording of that specific channel.
- When users want to view the archived file, please choose "Open Folder"



- 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



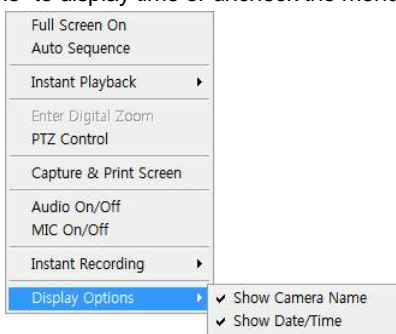
- When Users want to "stop recording", click right mouse again and select Instant Recording and choose "stop recording".
- Choose "Setup" in the Instant Recording to set up the recording duration and default directory.
- In the recording duration, users can setup the hours and minutes by clicking the "upside down arrows" 



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

6.7.2.10 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.



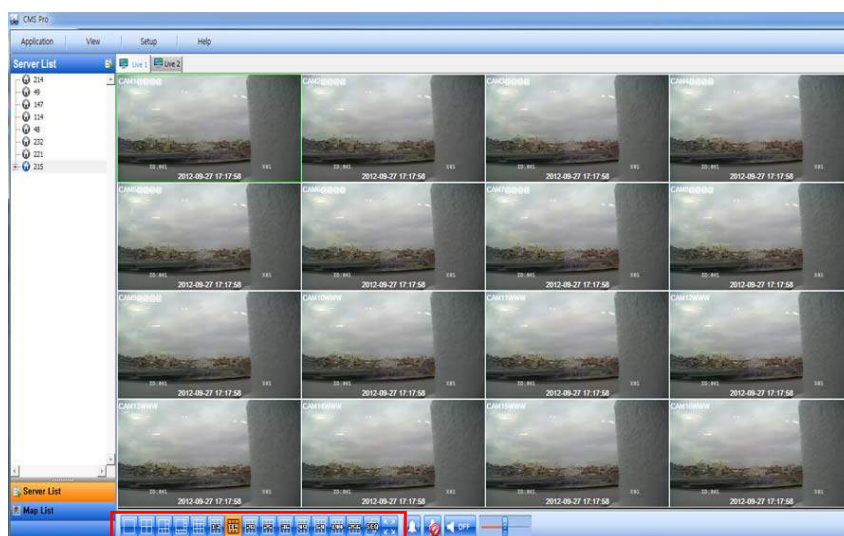
6.7.3 Screen Layout Control

- Every menu pane can be relocated by drag and drop.




6.7.4 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.

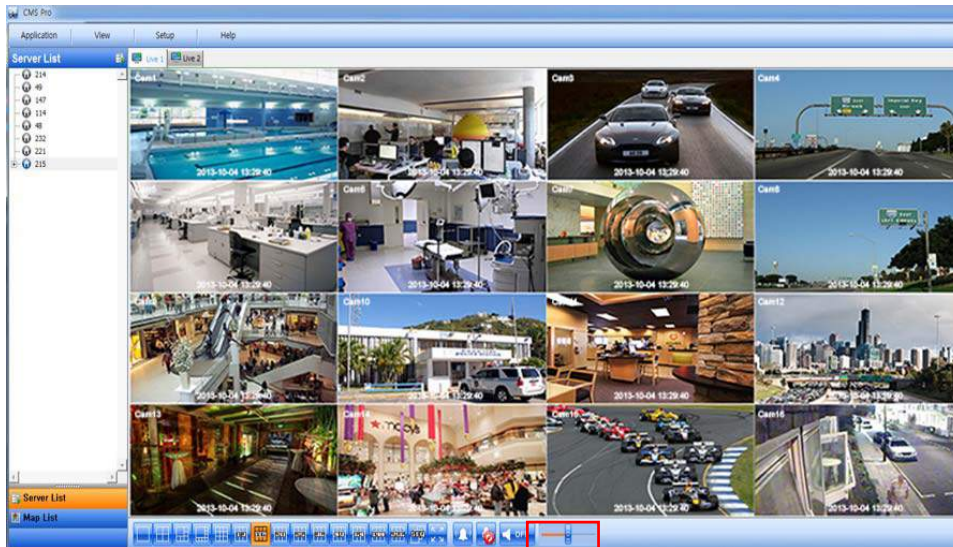


6.7.5 Sequencing

-  Click the icon to switch the channel according to setup made in auto sequence in Local setup – Environment.
- It is only supported one channel.

6.7.6 Audio Volume Control

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



6.8 Search

6.8.1 Overview

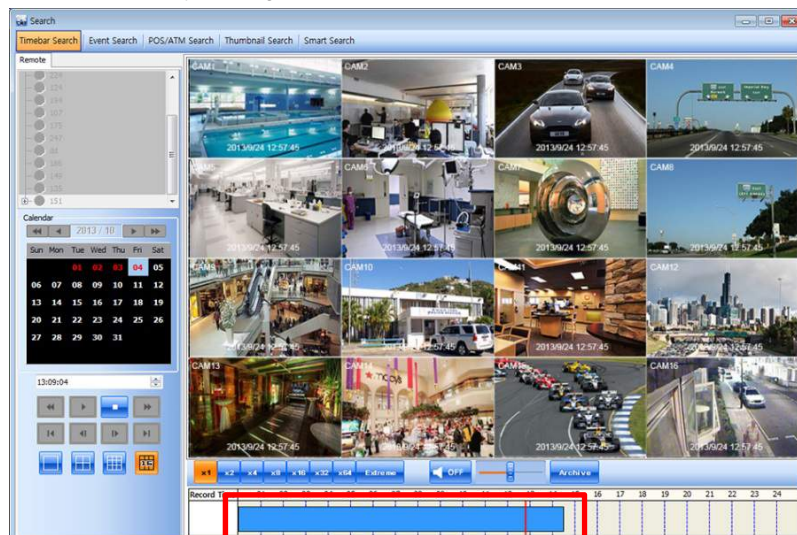
- 5 ways of Search are available. (Time Bar Search, Event Search, POS/ATM (keyword) Search, Thumbnail Search, and Smart Search).

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.

6.8.2 Time Bar Search

- 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.



- Users can change the speed of rewind and fast forward from x1 to Extreme. The actual speed may be limited by DVR's network uploading bandwidth.



- Users can use Right click to access Audio On/Off, Digital Zoom and Capture and Print Screen.
 - Audio On/Off: A user can enable audio function. If Audio is connected Audio Status will change.
 - Enter Digital Zoom: A user can use Digital zoom. Please refer **6.7.2.4 Digital Zoom**.
 - Capture and Print Screen: A user can capture image. Please refer **6.7.2.6 Screen Capture and Image**.

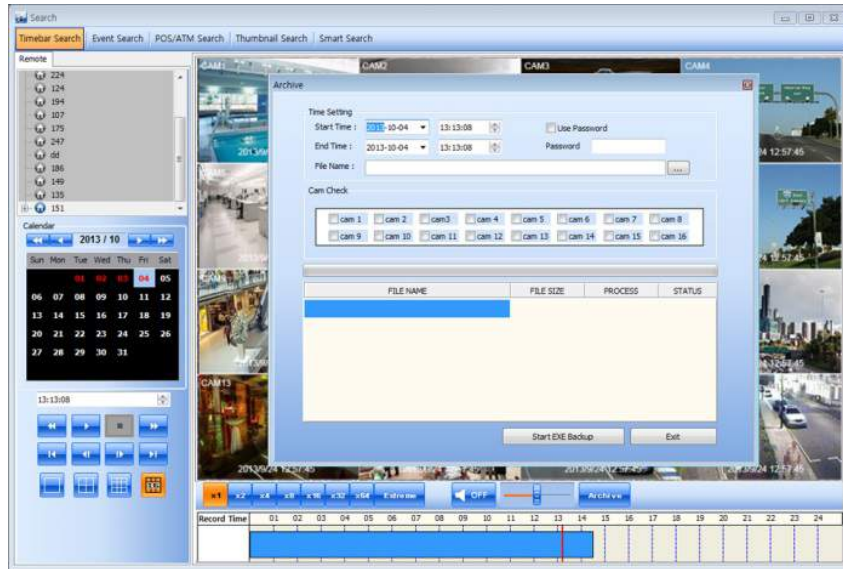
NOTE

Audio and Digital Zoom are supported only in 1CH display mode.

- In the playback menu, users are able 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 save certain channels as a video file.



- Select a start time, end time, file name, the location of the file, password and the cameras to store.
- Click “Start EXE Backup” to start archiving.

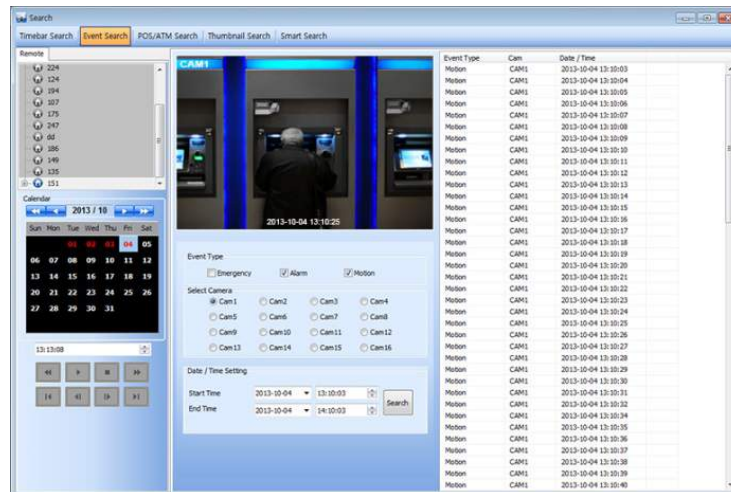


NOTE

Archiving function can be initiated only in time bar search.


6.8.3 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.)
- Specify the start time and end time in Date/Time setting and click “Search” button.

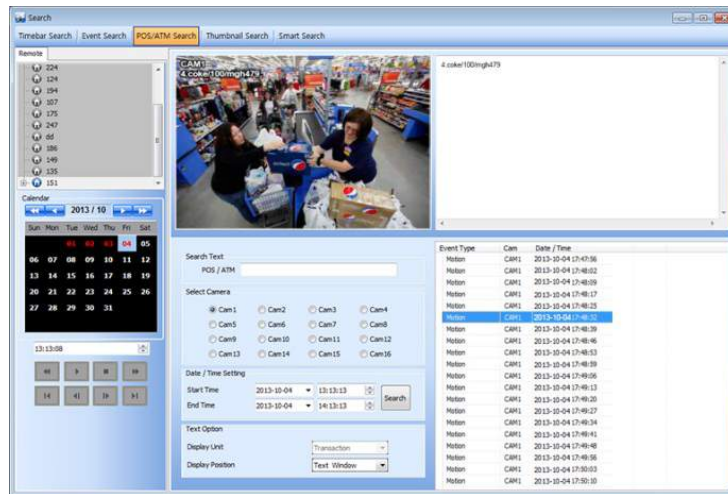


- To check the event that is detected on the right side of the search window, double click the event that users want.

6.8.4 POS/ATM Search

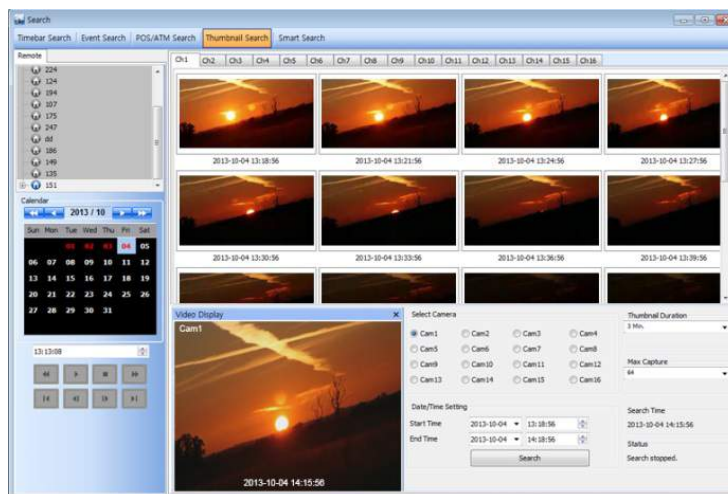
- Click the “connect” after right mouse clicking on the device and select the “POS/ATM Search”.
- Type the actual keyword that users want to find in the “POS / ATM” text box.
- Select a camera to search. (Only 1 camera can be selected in this search.)
- Specify the start time and end time in Date/Time 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.

- Display Position – Users are able to select the text 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.



6.8.5 Thumbnail Search

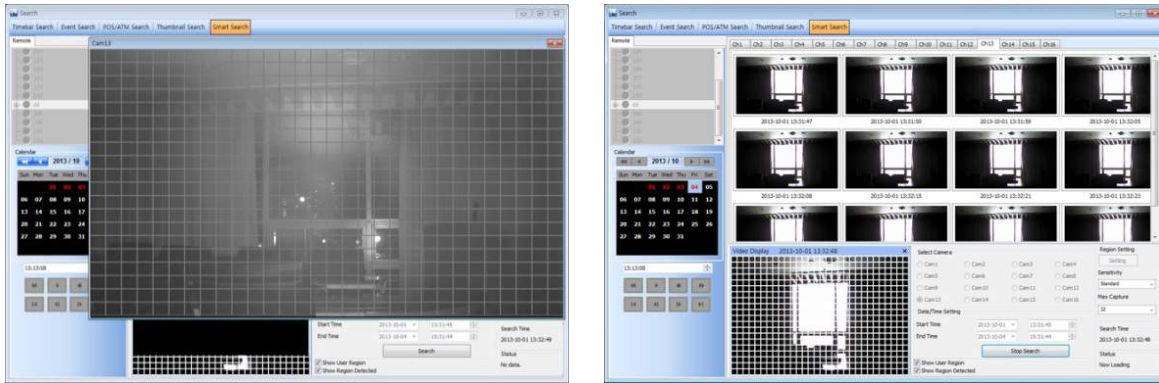
- Click the “connect” after right mouse clicking on the device and select the “Thumbnail Search”.
- This search function provides the users with the snapshots of the recorded video by user’s definition.
- Users are able to choose the duration of the playback in “Thumbnail Duration” from 1Min to 60Min. (1, 3, 5, 10, 20, 30 and 60Min)
- The number of “Max Capture Count” can be setup as 32, 64, 128 and 256.
- Specify the start time and end time in Date/Time setting and click “Search” button.
- Double click the listed snapshot images 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.



6.8.6 Smart Search

- Click the “connect” after right mouse clicking on the device and select the “Smart Search”.
- Choose a camera to use for Smart Search
- 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.)
- Specify the start time and end time in Date/Time setting and click “Search” button
- If the movement is detected in the area, it will automatically display the snapshots in the search window.
- Double click the listed snapshot images to check and play the video.

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



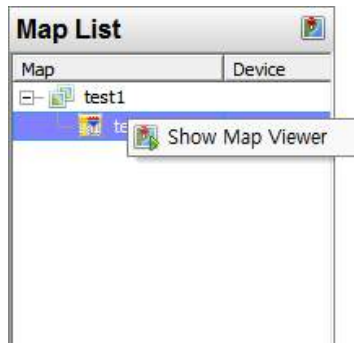
6.9 E-Map

6.9.1 Overview

- The 'Map Viewer' program is to display event signals over map images so that users may acknowledge event status more easily.
- Users may recognize event occurrence 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 6.4.5)

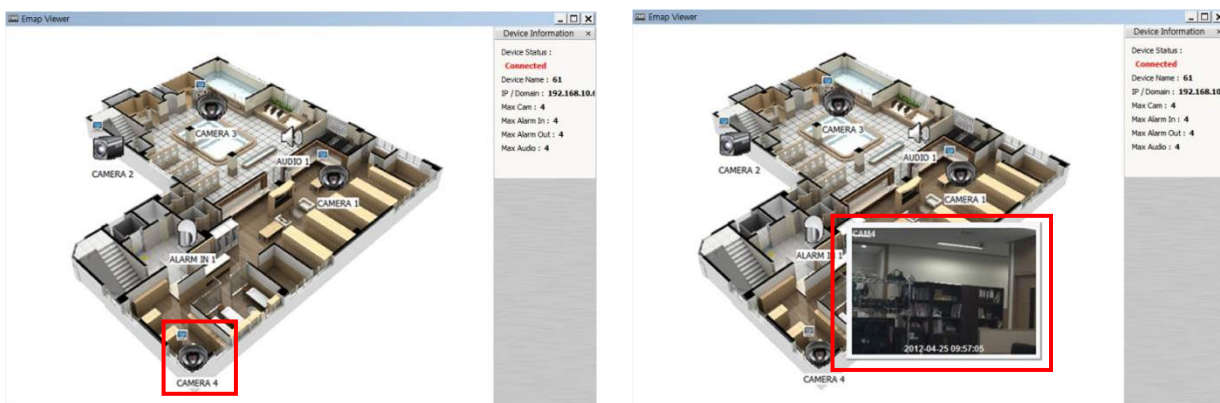
6.9.2 Controls

- 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.



6.9.3 E-map Camera – Instant Playback

- Users are able to load the instant viewer by clicking the camera icon on the map.



- Full screen mode is available by clicking right mouse button and select “Full screen”.
- Click audio icon to listen to the audio of the channel, if audio input connected.
- Click the alarm out icon to release a manual relay signal to the site such as siren or buzzer

6.9.4 Alarm In/Out Control

- The Alarm In icon on the map is blinking when the Alarm In equipment like sensor or detector is activated.
- Click the alarm out icon to release a manual relay signal to the site such as siren or buzzer.

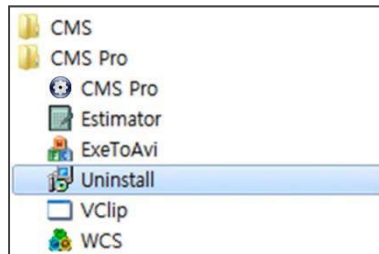
6.9.5 Audio

- Click audio icon to listen to the audio of the channel, if audio input connected.

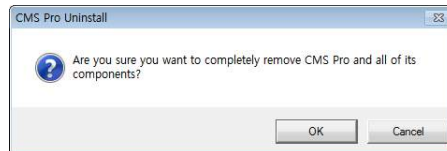


6.10 Uninstalling CMS Pro

- 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 uninstall is complete successfully, the following message will pop up.

