

IP Surveillance System

CMS

**Central
Management
System**

User's Manual ver.1.00

**Total Central Monitoring Solution
for DVR, NVR and IP Camera**

Value-added Surveillance Features

Contents

CMS USER GUIDE

1 SYSTEM REQUIREMENT	3
2 INSTALL	3
3 UNINSTALL	6
4 BASIC OPERATION	7
4.1 Log In	8
4.2 Screen Layout	8
4.3 Main Toolbar (Setup)	9
4.4 Main Toolbar (Export)	10
4.5 Main Toolbar (Main)	10
4.6 Site List Panel	11
4.7 PTZ control panel	11
4.8 Search Panel	12
4.9 Display Panel	15
4.10 Event Search Panel	15
4.11 Information Panel	16
4.12 Favorite Panel	17
5 CMS FUNCTIONS	17
5.1 Event Search	17
5.2 Remote Backup	18
5.3 Firmware Upgrade	20
5.4 Multi Monitor	21
5.5 Panorama	21
5.6 Thumbnail Search	22
5.7 Bookmark	23
5.8 Virtual PTZ	23
5.9 Digital Zoom In/Out	24
6 CMS SETUP	25
6.1 Registration	25
6.2 Network	27
6.3 User	28
6.4 Display	29
6.5 Event	30
6.6 Misc.	31



CENTRAL MANAGEMENT SYSTEM

The CMS (Total Central Monitoring Solution) software is compatible with DVR, NVR and IP Camera (described as Devices on the manual).

CMS User Guide

1 PC REQUIREMENT

Recommended PC Requirement

OS	Windows XP, Vista, 7
CPU	Pentium Dual core 1.8Ghz or higher
VGA	1024X768, 256MB supporting DirectX
RAM	1GB
HDD	20MB for installation, 10GB for Remote Backup

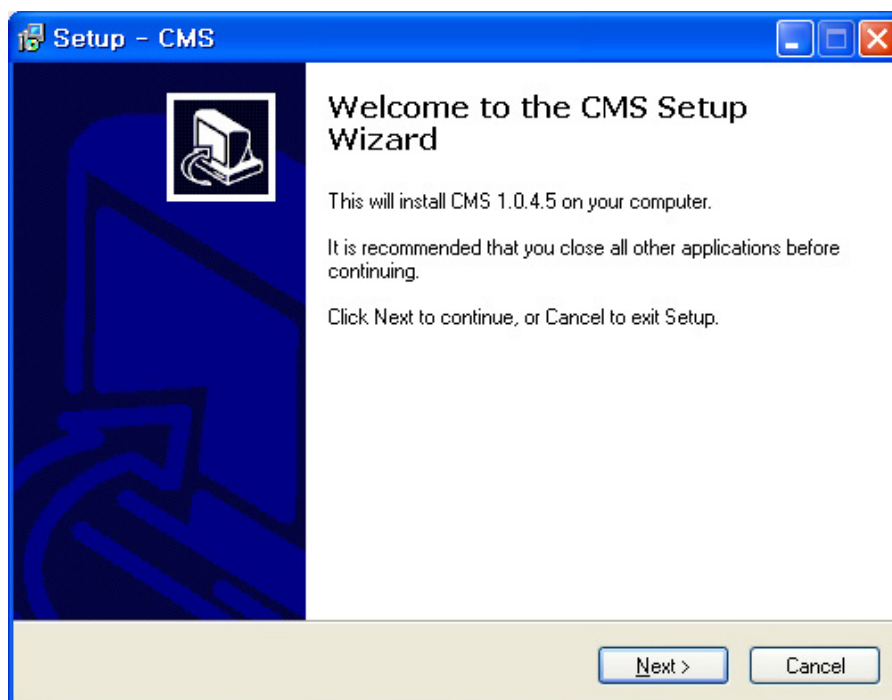
Minimum PC Requirement.

OS	Windows XP, Vista
CPU	Pentium 4, 2Ghz
VGA	1024X768, 64MB 24bit color graphic card
RAM	1GB
HDD	20MB Free Space

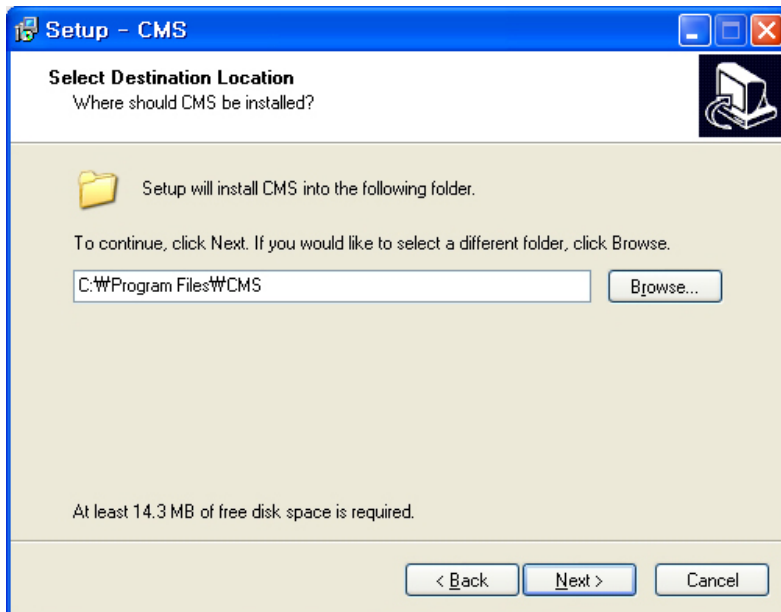
2 INSTALL

Run **Central Management Software Setup.exe** saved on the included CD.

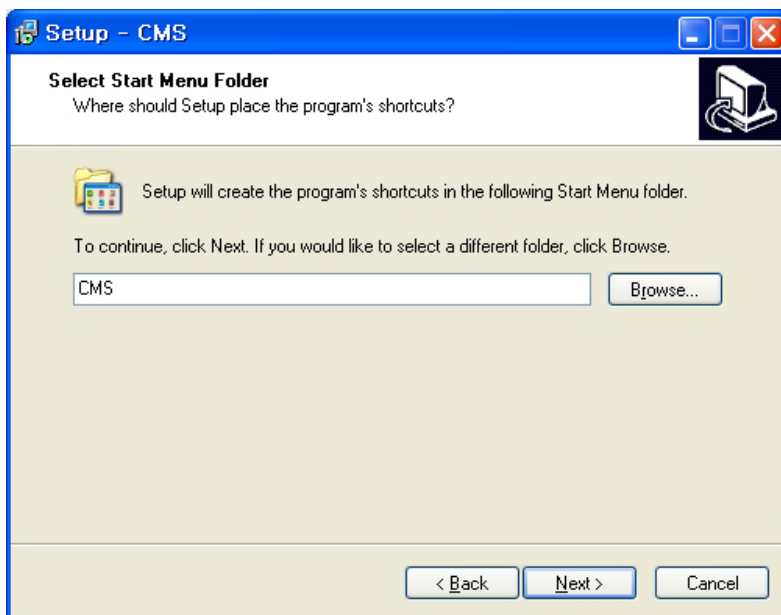
When clicked, the Setup Menu will appear.



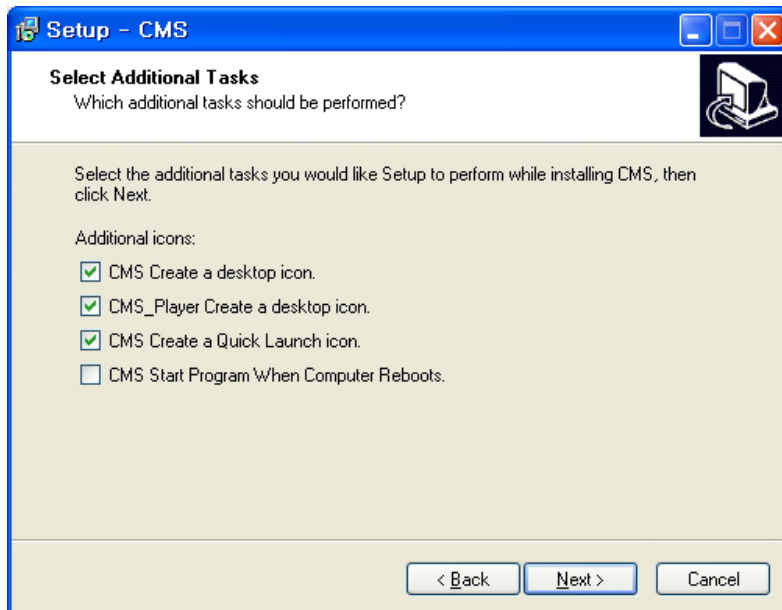
Press  if you want to install the program in a different directory.



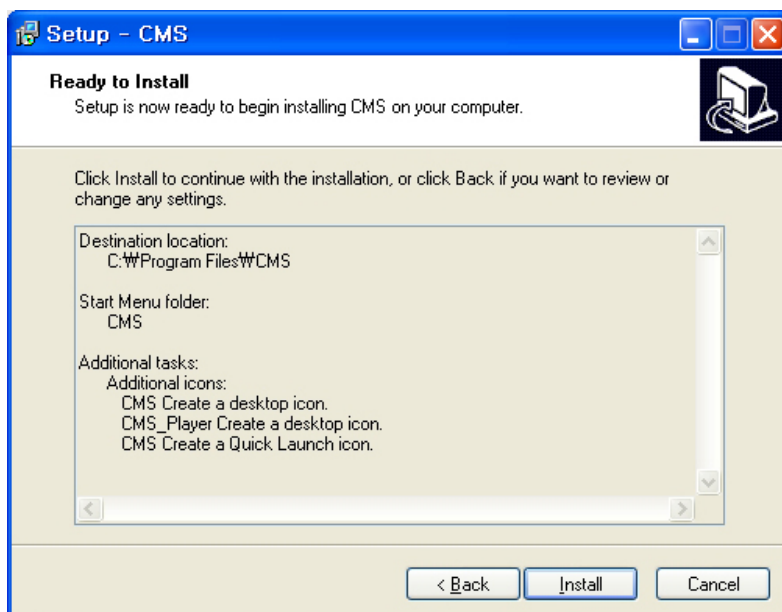
Press  to move to the next screen.

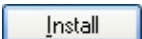


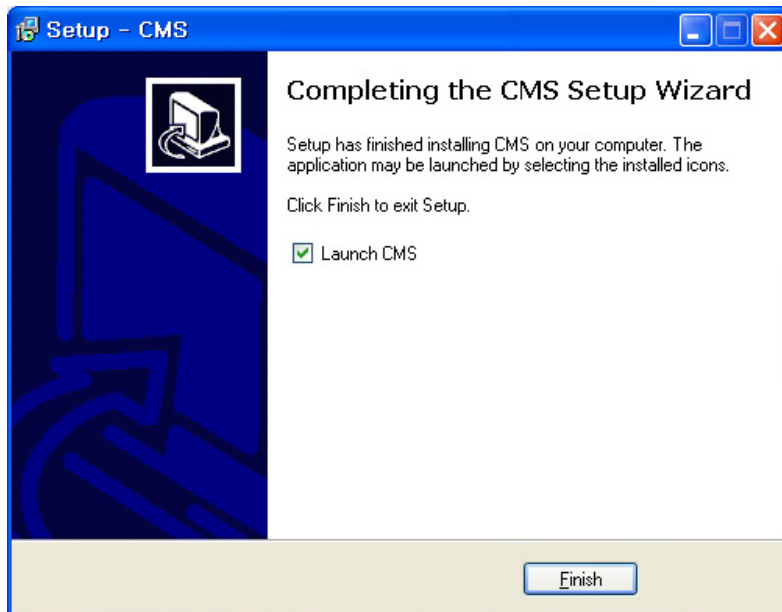
Press  to move to the next screen.



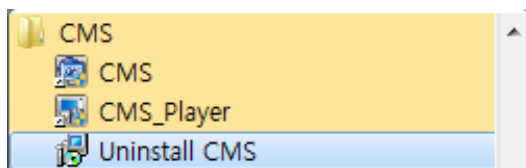
Press  to move to the next screen.



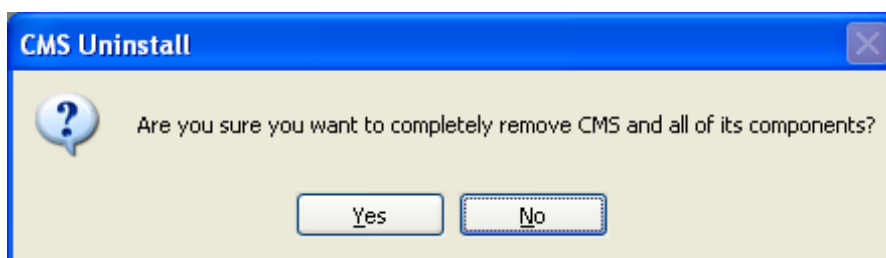
Click  to begin installation. When the installation is complete, the below message will appear.



3 UNINSTALL

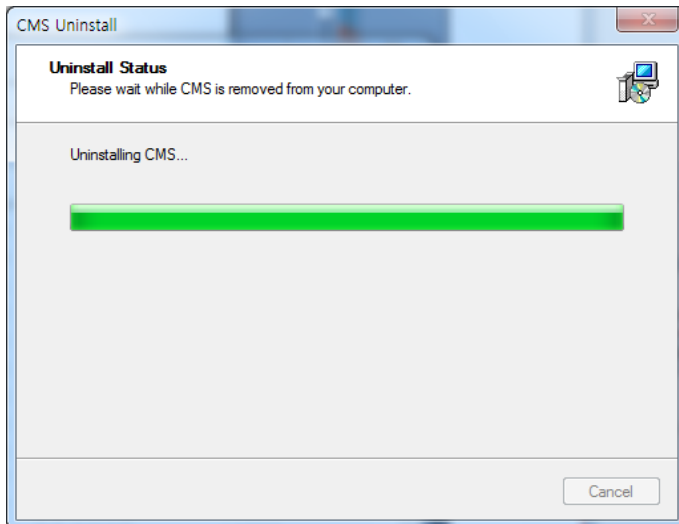


To uninstall CMS, press **UNINSTALL CMS** from Start Menu of your PC.

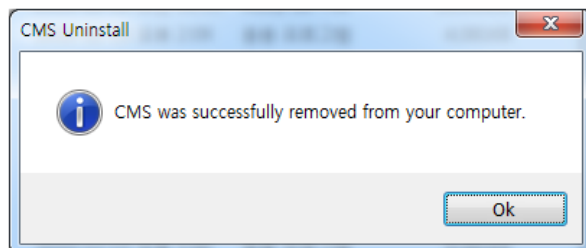


A window will appear in Windows7 or Windows Vista. Press **YES** to begin the process. The following window will appear.

7 | Central Management System



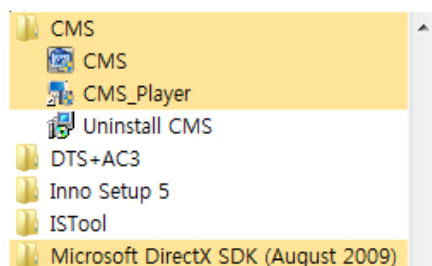
When the process is complete, the below message will appear.



4 BASIC OPERATION



Click on **CMS** icon on Desktop or click **START** on Windows PC and go to CMS Folder.



No	Item	Description
1	Main Toolbar (Setup Tab)	The Main Toolbar has three (3) selectable tabs named "Main", "Export" and "Setup". In the Setup tab, there are CMS setup and Remote setup.
2	Main Toolbar (Export Tab)	In the Export tab, able to save JPEG, AVI and Print the images.
3	Main Toolbar (Main Tab)	In the Main tab, able to connect Live and Search, disconnect, change display mode and sequence, Panorama Search and Thumbnail Search.
4	Site List Panel	All of the registered sites in the setup tab are shown in the site list. Simply drag and drop the desired site to the display screen to connect to the site.
5	PTZ Panel	Able to control a PTZ camera, in Live mode.
6	Search Panel	In the Search mode, the recording information per each channel will be displayed, when a specific date is selected in the calendar.
7	Display Panel	This is the area where live view and search view are displayed.
8	Event Search Panel	CMS also can receive all of events from DEVICE, and they are listed in this panel. An event data can be searched by double-clicking on an event.
9	Information Panel	Shows the current time and site information of the selected channel.
10	Favorite Panel	Create favorite site for quick access to the sites frequently viewed.

4.3 Main Toolbar (Setup)



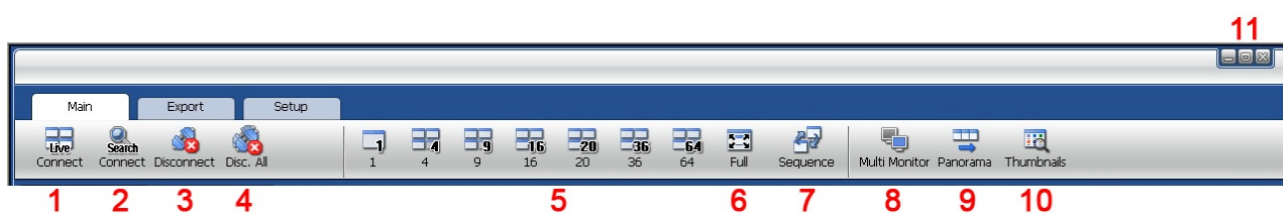
No	Item	Description
1	CMS Setup	Register sites, setup for user authority, and setup other CMS properties.
2	Remote Setup	Access the setup menu of DEVICE remotely and change the settings.
3	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

4.4 Main Toolbar (Export)



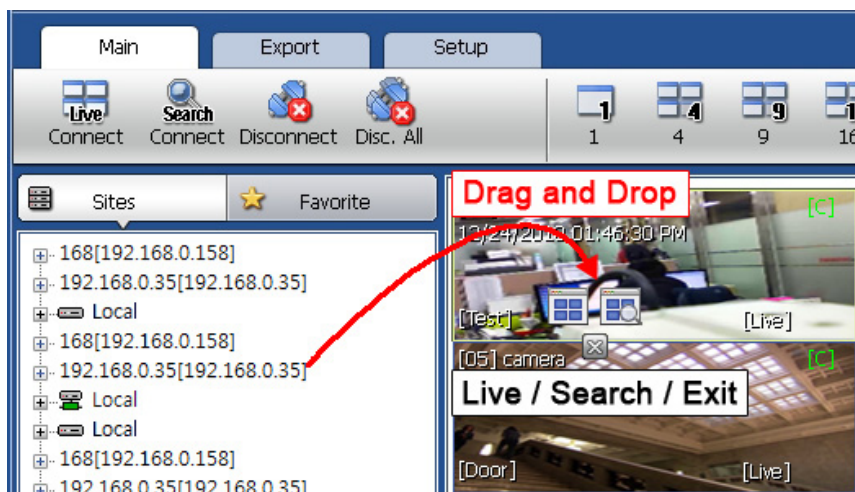
No	Item	Description
1	Image	Capture the image of the selected (focused) channel.
2	Movie	Save the selected channel in ASF format movie file.
3	Print	Print the selected channel.
4	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

4.5 Main Toolbar (Main)





No	Item	Description
1	Live	Connect to the selected site in the site list in Live mode.
2	Search	Connect to the selected site in the site list in Search mode.
3	Disconnect	Disconnect the selected single channel.
4	Disconnect All	Disconnect all of the connected sites and channels.
5	Display Mode	Change the display mode in single, 4 split, 9 split, 16 split, 20 split, 36 split, 64 split.
6	Full	Shows Full screen display.
7	Sequence	Sequences the different channel displays.
8	Multi Monitor	Create an additional display window.
9	Panorama	Able to show frame by frame display for a selected single channel in Search mode.
10	Thumbnails	Thumbnail search for a selected single channel in Search mode.
11	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

4.6 Site List Panel



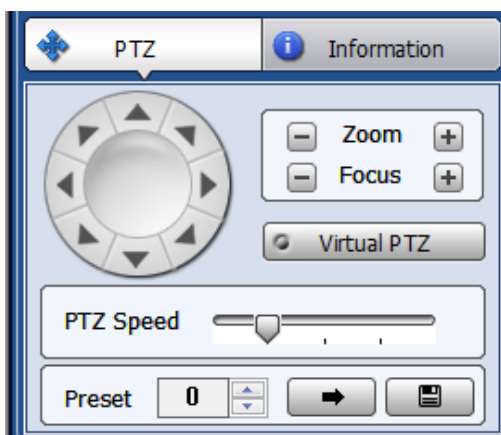
The Site List displays all of the DEVICE that are currently setup for remote connection with the CMS application, and its cameras are available for view.



From the Site List Panel, select the desired camera and drag it on to the viewing area. Then, select the options Live or Search ( ).

If an DEVICE site is dragged onto the viewable area, then the selected Device or all cameras from the DEVICE will display.

4.7 PTZ control panel

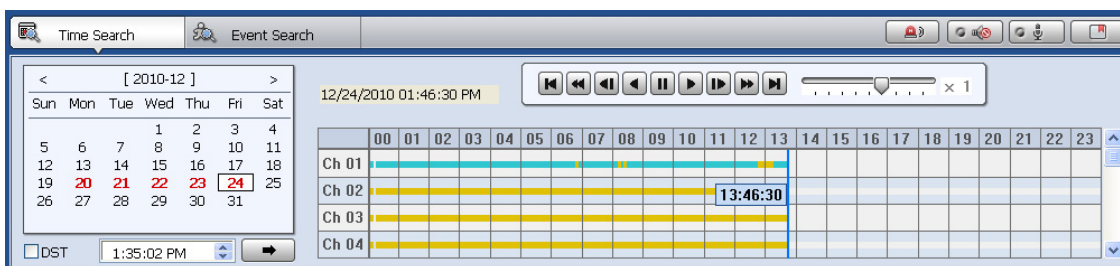
PTZ camera control is only available in Live mode.



No.	Button	Description
1	Navigation Key	8 directional arrows allow the user to move the PTZ camera. The PTZ Camera is moved when one of these arrows are pressed to the direction desired, and stops the movement if mouse button is released.
2	Zoom	Zoom In and Zoom Out.
3	Focus	Adjust the focus of PTZ camera.
4	Virtual PTZ	If Virtual PTZ is activated, able to control PTZ camera such as movement, Zoom and Focus. PTZ can be controlled by clicking mouse on channel screen directly.
5	PTZ Speed	Adjust PTZ camera response speed. Getting Slower as moves to the right.
6	Preset	Set PTZ presets on current view.
7		Go to the preset location.
8		Save the preset location.

4.8 Search Panel

The Search panel is activated only in Search mode.



When you connect to a site in Search mode, the date is highlighted in Red color in the calendar, if the recorded data exist. Select a specific date in the calendar and then recording information will be shown in the table.



(Go button) should be pressed to start playback from the selected time.

If DST is enabled, the earlier one-hour overlapped video will be shown first.

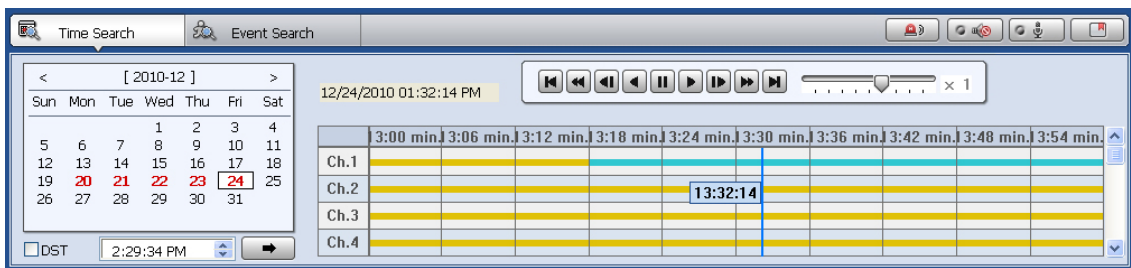
Each record mode is similar to below.

No Record	White
Continuous (Yellow Color)	<div></div>
Panic (Red Color)	<div></div>
Alarm (Orange Color)	<div></div>
Motion (Green Color)	<div></div>

Click the time or move the time bar to the time you want to playback in the search panel.

For a more detailed search like below, double-click the time that you want to jump into.

Detailed search is available on a 6 minute basis like below.



Playback Control Panel



No.	Button	Description
1		Go to First.
2		Forward Playback : Decrease the speed / Reverse Playback : Increase the speed.
3		Step Forward.
4		Reverse Playback.
5		Pause.
6		Forward Playback.
7		Step Backward.
8		Forward Playback : Increase the speed / Reverse Playback : Decrease the speed.
9		Go to Last.

Audio control



Relay: Turn On or Off for Relay.



Audio On/Off: Turn On or Off for Audio channel.



Two-way Audio: Two-Audio between CMS and DEVICE.



Bookmark: Bookmark the selected channel to the bookmark list.

4.9 Display Panel



In live mode, the text LIVE will be displayed in white, and the channel will be bordered in blue.

In search mode, the text SEARCH will be displayed in red, and the channel will be bordered in red.

The selected channel will be bordered in yellow. The site name will be shown at the lower left hand corner of the screen.

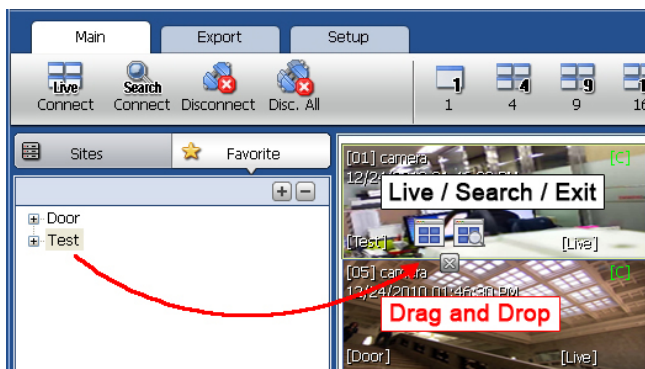
4.10 Event Search Panel

CMS can receive any event data from the DEVICE as shown below.

Index	System	Channel	Date/Time	Sensor	Event
24	192.168.0.157	1, 9	2010/12/24 (14:34:03)		Motion Detection
23	192.168.0.157	9	2010/12/24 (14:33:16)		Motion Detection
22	192.168.0.157	1, 9	2010/12/24 (14:33:10)		Motion Detection
21	192.168.0.141:554/Wi...	1	2010/12/24 (14:31:51)		Motion Detection
20	192.168.0.141:554/Wi...	1	2010/12/24 (14:31:48)		Motion Detection
19	192.168.0.140:554/Wi...	1	2010/12/24 (14:32:25)		Motion Detection
18	192.168.0.141:554/Wi...	1	2010/12/24 (14:31:45)		Motion Detection
17	192.168.0.141:554/Wi...	1	2010/12/24 (14:31:42)		Motion Detection

4.12 Favorite Panel

Cameras currently displayed on the screen can be added, deleted and edited as a favorite site group.



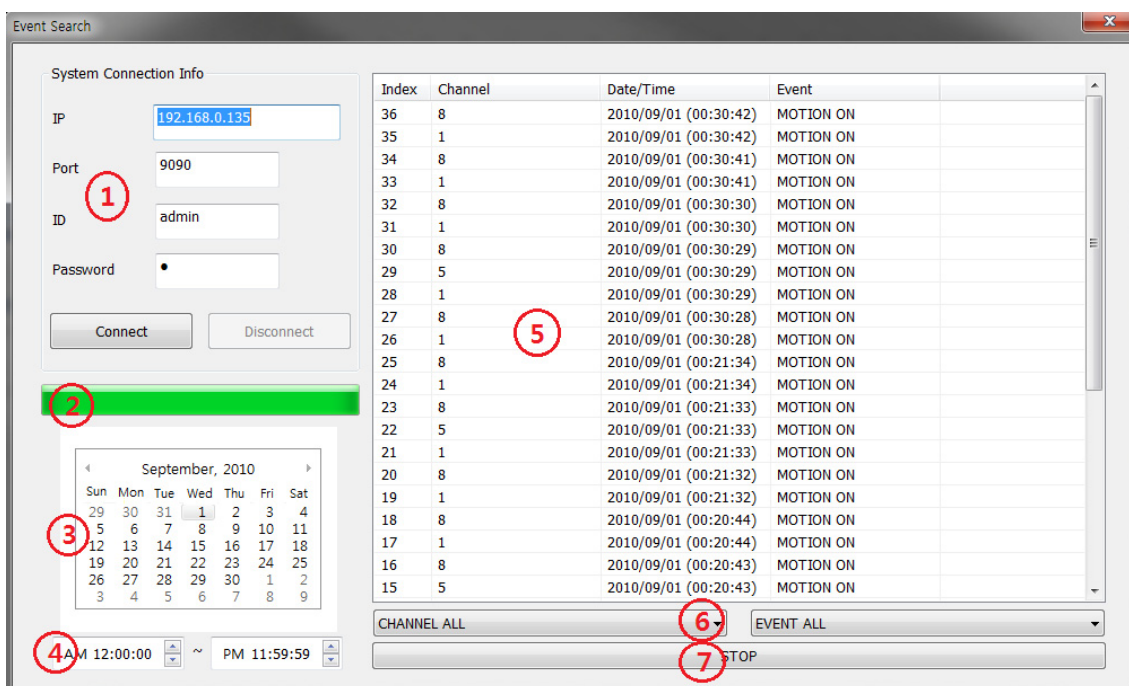
Place cameras of DEVICE site into a desired channel location of the screen and then click **+** to create a new favorite site group. Then, you can simply place those cameras on the same channel location by drag & drop as shown below. In order to delete the favorite site, click **-** to delete it.

5 CMS FUNCTIONS

5.1 Event Search

When you right click on a site in the site list, the quick access menu will be shown.

Select **EVENT SEARCH** to run Event Search.

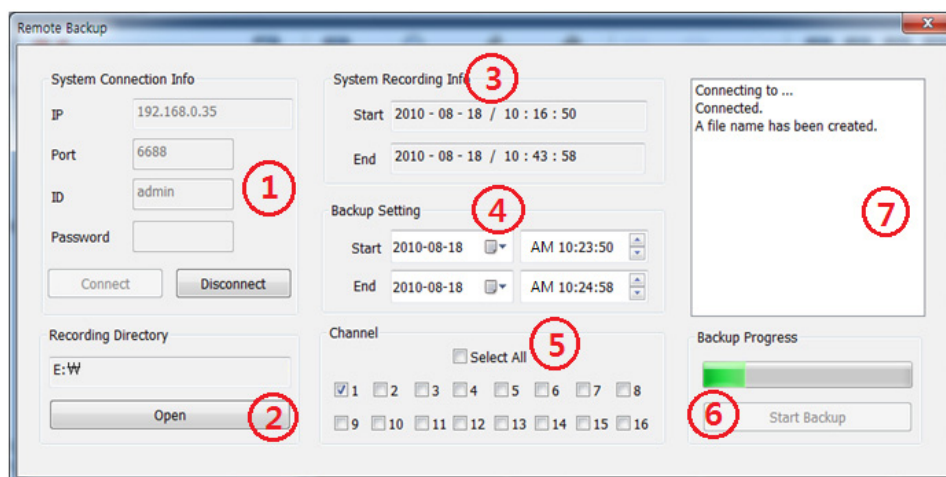


No	Item	Description
1	System Connection Info	Input the information of DEVICE to connect.
2	Event Download Status	Right after connecting to DEVICE, event information will be downloaded automatically. The download progress bar will be shown.
3	Calendar Search	If there is an event in the selected date, the date is highlighted. Select a specific date to start event search.
4	Interval Setup	Set the interval for event search.
5	Event List	The desired date is chosen, the event list of the desired date will be shown on the list.
6	Channel/Event Filter	Event information can be sorted by a channel or event type.
7	Start/Stop Search	Start/Stop Search button.

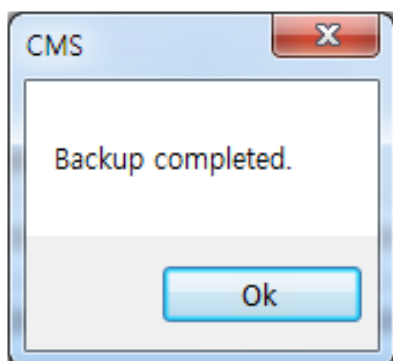
5.2 Remote Backup

When you right click on a site in the site list, the quick access menu will be shown.

Select **REMOTE BACKUP** to run Remote Backup.



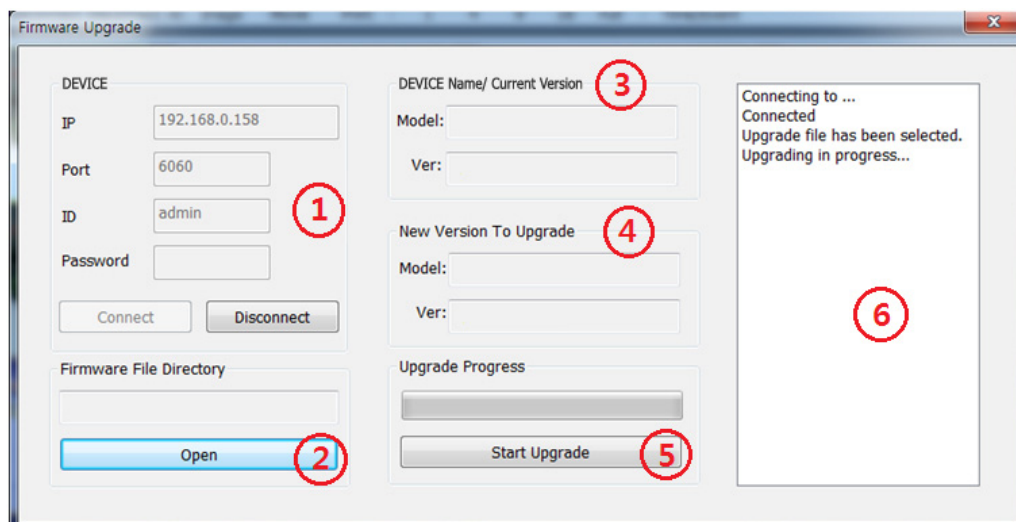
No	Item	Description
1	System Connection Info	Input the information of DEVICE to connect.
2	Recording Directory	Decide the recording directory to backup.
3	System Recording Info	Displays the start and end time of the recorded data in the system.
4	Backup Setting	Setup the start and end time of the data to backup.
5	Channel	Select the channel to backup.
6	Backup Progress	Backup Progress bar indicates the backup process status.
7	Backup Status Window	Displays the backup status in text message.



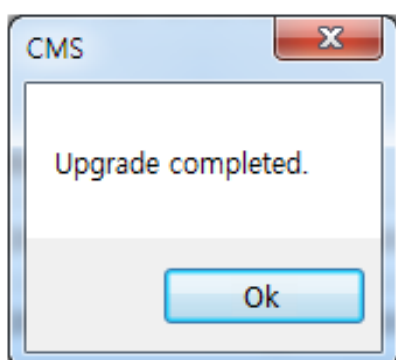
When the backup process is completed, “Backup Completed” message will appear.

5.3 Firmware Upgrade

When you right click on a site in the site list, the quick access menu will be shown. Select **FIRMWARE UPGRADE** to run Firmware Upgrade.



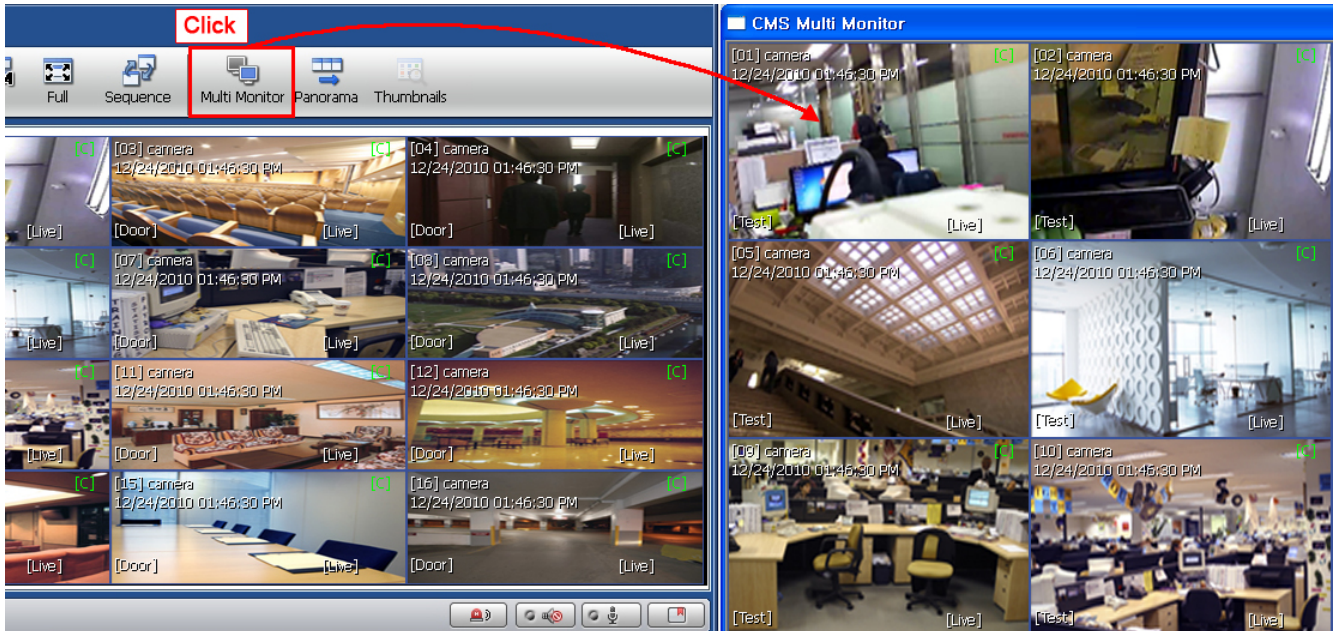
No	Item	Description
1	DEVICE Connection Info	Input the information of DEVICE to connect.
2	Firmware File Directory	Decide the firmware file directory to upgrade.
3	DEVICE Name/ Current Version	Displays the current DEVICE Name and Firmware Version.
4	New Version to upgrade	Displays the new DEVICE Name and Firmware Version.
5	Upgrade Progress	Start Upgrade and upgrade progress bar shows the upgrade progress status.
6	Upgrade Status Window	Displays the upgrade status in text message.



When the backup process is completed, "Backup Completed" message will appear.

5.4 Multi Monitor

Click **MULTI MONITOR** in the Main Toolbar to run the Multi Monitor function.

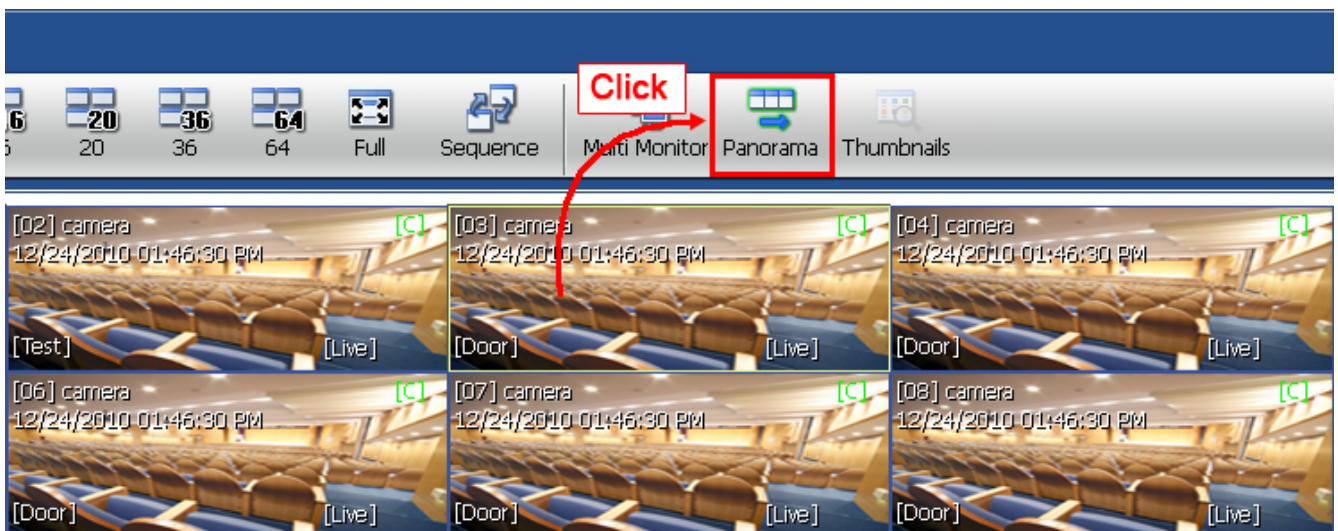


When you click **MULTI MONITOR**, you will see another separate window with the same split display as the main window.

5.5 Panorama

Click **PANORAMA** in the main tool bar to run Panorama View.

In Live mode or Search mode, the panorama shows frame by frame display of the selected single channel.

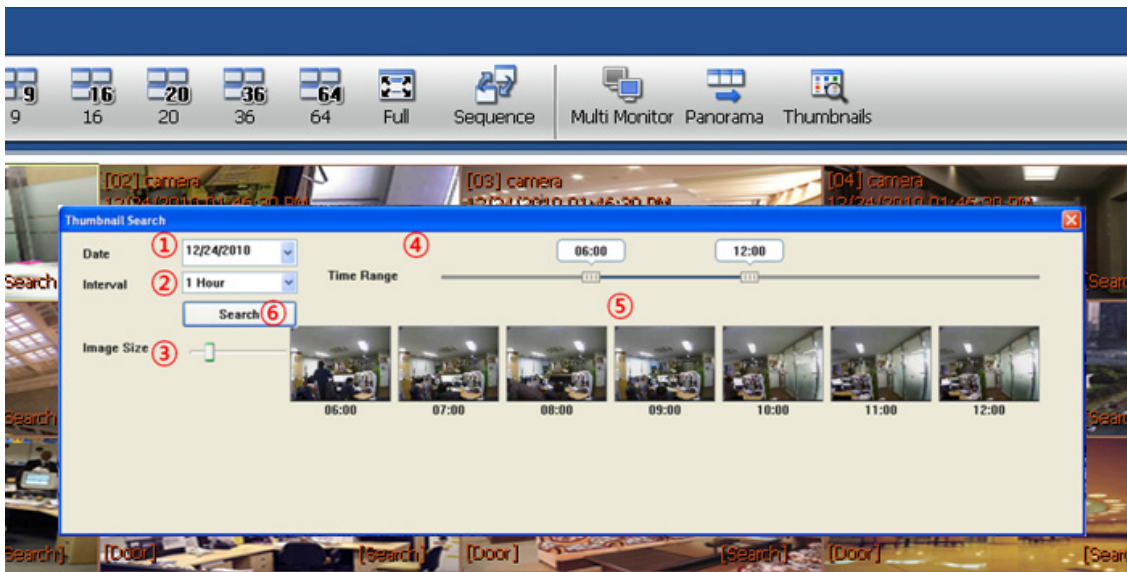


To return to normal view, click **PANORAMA** again.

5.6 Thumbnail Search

Click **THUMBNAIL** in the main toolbar to run Thumbnail Search. This feature is only available in Search mode.


First select a channel and click **THUMBNAIL** then, you will see the Thumbnail Search window as shown below.



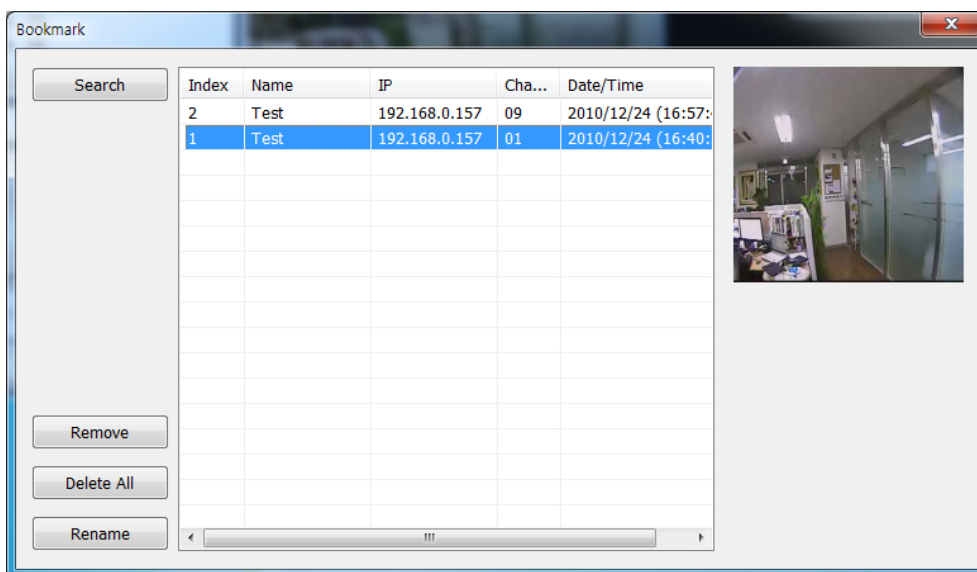
No	Item	Description
1	Date	Use the Calendar to select a desired date.
2	Time Interval	Select the Interval (time interval) which displays still shots by a specified time. You may choose 1min, 3min, 5min, 10min, 30min, and 1hour (ex. 1min. means 1 still shot per 1 minute of recorded video data.)
3	Image Size	Adjust the Thumbnail Image size by using the slide bar. Moving the slide bar to the right will increase the image size, and moving it to the left will decrease image size.
4	Time Range	Select the Time range (start time and end time) by using the slide bar.
5	Thumbnail images	Thumbnail images will be shown.
6	Search	Search button.

If you click each thumbnail image, you can search the selected data directly.

5.7 Bookmark

Click  icon to bookmark the selected one channel search data.

Once the selected search data is bookmarked, the bookmark data is listed with an image in the bookmark list as shown below.



Select a bookmark list and click search or double click the bookmark list to search the bookmarked data.

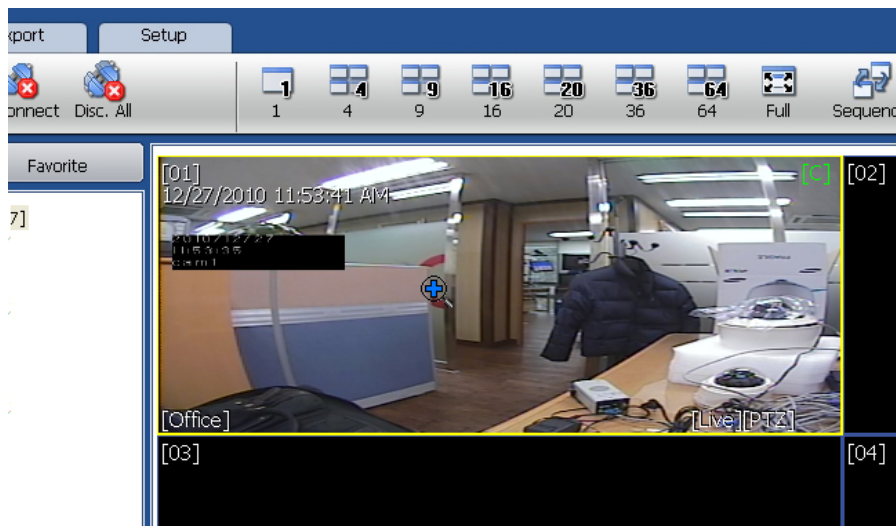
Click **REMOVE** button to remove a selected bookmark list and click **DELETE ALL** to delete all of bookmark list.

Click **RENAME** to rename the selected bookmark list.

5.8 Virtual PTZ

If a PTZ camera is selected, click 'Virtual PTZ' button to activate 'Virtual PTZ' function.

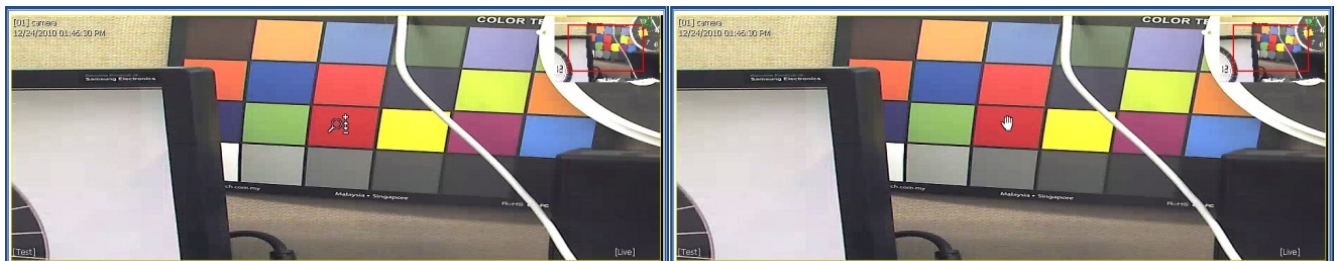
Then, you can control a PTZ camera by using mouse controls. For example, place the mouse cursor over the PTZ channel and left-click to the desired directions, then it moves to the directions.



5.9 Digital Zoom In/Out

In Live/Search mode, digital zoom can be activated in a single full screen mode by using a mouse wheel.

Scroll up the mouse wheel, and then you can zoom in. Scroll down the mouse wheel, and then you can zoom out the selected channel.



Options for DEVICE Registration, Network, User, Display, Event and other options.

6.1 Registration

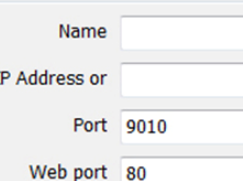
Add, Modify, Import, Export or Remove DEVICE site information.

The screenshot shows the 'CMS Setup' dialog box with the 'Registration' tab selected. The dialog has a title bar with a close button. Below the title bar are five tabs: 'Registration', 'Network', 'User', 'Display', and 'Misc.'. The 'Registration' tab contains a table with five columns: 'Name', 'IP', 'Port', 'Web port', and 'Channel'. There are four rows of data, each with a checkbox in the first column. The data is as follows:

	Name	IP	Port	Web port	Channel
<input type="checkbox"/>	External	192.168.0.140...	9010	80	1
<input type="checkbox"/>	Office	192.168.0.141...	9010	80	1
<input type="checkbox"/>	Office2	192.168.0.137	1852	80	1
<input type="checkbox"/>	Test	192.168.0.157	9010	80	1-16

Below the table are four buttons: 'Add', 'Edit', 'Import', and 'Export'. To the right of these buttons is a 'Remove' button. At the bottom of the dialog are three buttons: 'Keyboard', 'Ok', and 'Apply'.

Ex) Adding a new DEVICE site.



The Registration dialog box contains the following fields and controls:

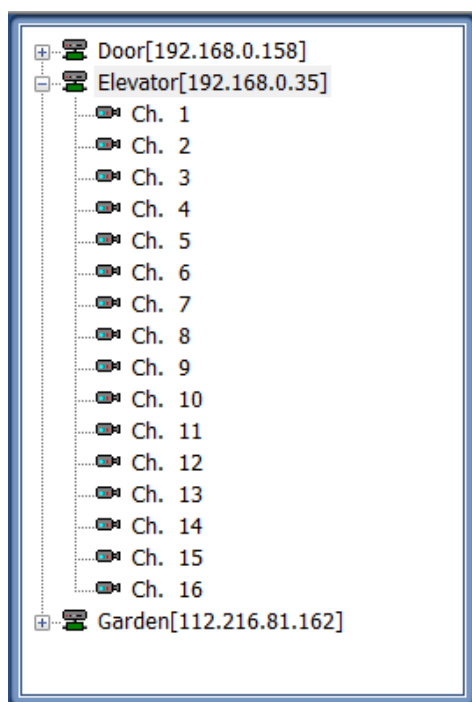
- Name:** A text input field.
- IP Address or:** A text input field with a **Search** button to its right.
- Port:** A text input field containing the value **9010**.
- Web port:** A text input field containing the value **80**.
- ID:** A text input field.
- Password:** A text input field.
- Channel:** A text input field with a dropdown arrow, containing the example text **Ex) 1-4, 1-8, 1-16**.
- Model:** A dropdown menu with the selected option **DVR / NVR**.
- Aspect Ratio:** A dropdown menu with the selected option **Custom**.
- Buttons:** **Ok** and **Cancel** buttons at the bottom.

No	Item	Description
1	Name	The name of the site.
2	IP	IP Address.
3	Search	Search the DEVICE sites in the same local network. (UPnP function)
4	Port	Port of the site. (Default: 9010)
5	Web port	Web Port of the site. (Default: 80)
6	ID	User ID of the site.
7	Password	Password of the site.
8	Channel	Number of channel of the site. (for example: 16ch DEVICE: 1-16 or specifically: 1,3,5,7,9)
9	Model	Select a DEVICE or Device's model name.
10	Aspect Ratio	Select the displayed Aspect Ratio (Custom, 1:1, 4:3, 16:9)

To modify and/ or remove DEVICE information, click ADD or REMOVE to amend DEVICE site information.

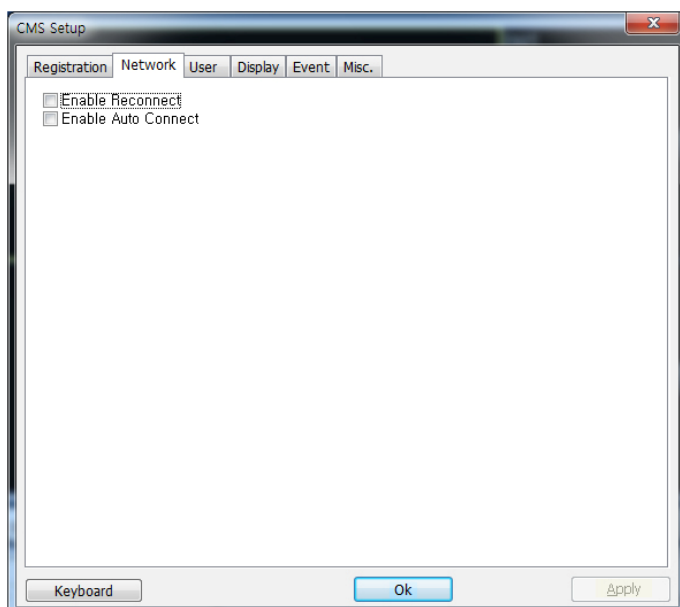
Able to export the current site list and save as a file or import the file to the site list.

Once the new DEVICE site is added, the new DEVICE information will be displayed at DEVICE site panel as shown below.



6.2 Network

Able to setup RECONNECT and AUTO CONNECT in this tab.

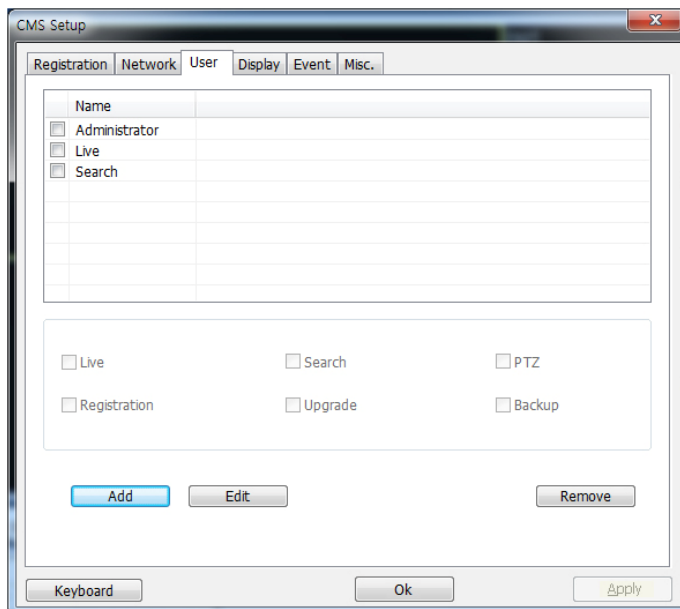


Enable Reconnect: When the network is unstable or disconnected, it will try to reconnect periodically. When the network gets stable again, it's reconnected.

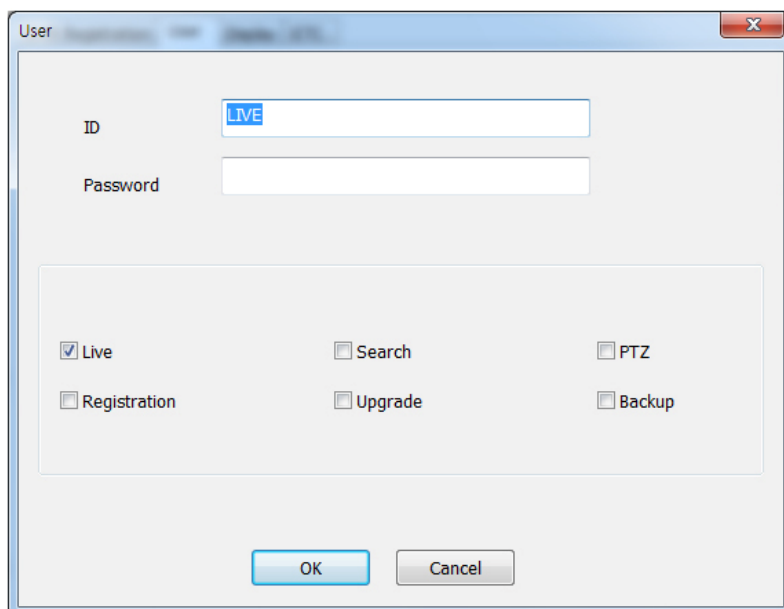
Enable Auto Connect: When you restart the CMS program again, after CMS is closed, it will reconnect to the sites just as before.

6.3 User

User authority can be changed by Administrator. “admin” is the built-in account for administrating the DEVICE and CMS program.



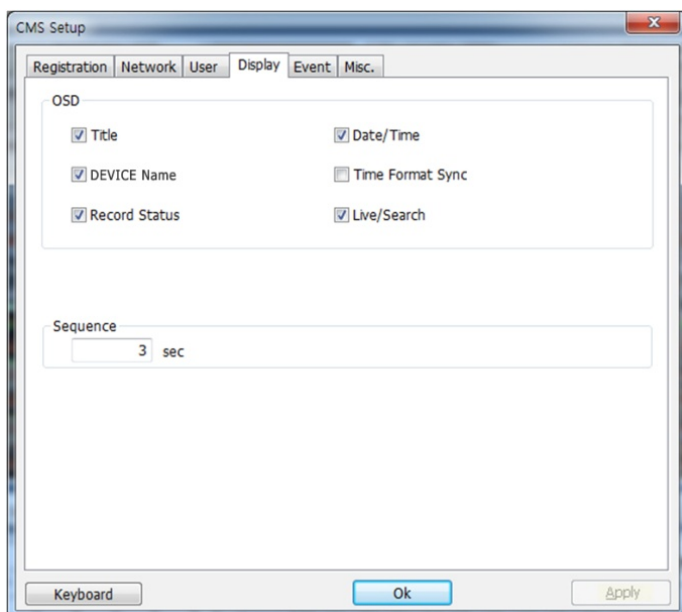
Ex) User authority change



User authority can be changed by Administrator. ID cannot be changed but should be removed.

6.4 Display

Options for OSD setting



Title: Able to turn on/off the DEVICE title with the channel number.

Date/Time: Able to turn on/off the Date/Time of the site.

DEVICE Name: Able to turn on/off the name of the site.

Time Format Sync: Synchronize the DEVICE time format to CMS.

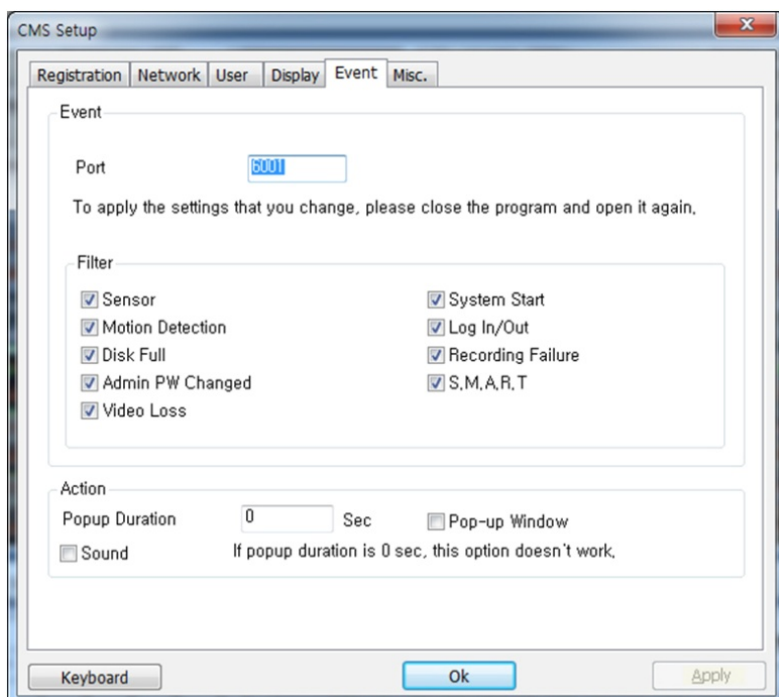
Record Status: Able to turn on/off the Record Status of the site.

Live/Search: Able to turn on/off the Live/Search of the site.

Sequence: Able to set Sequence interval.

6.5 Event

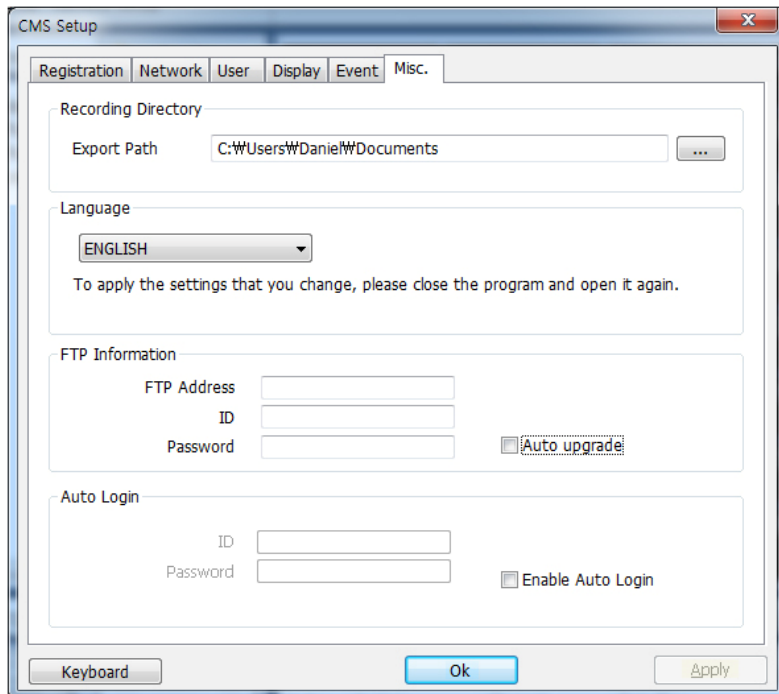
Setup the event port, event type and popup settings for event.



No	Item	Description
1	Port	Input the same event port number of DEVICE setting to receive event notification from the DEVICE.
2	Filter	Select the type of event to receive.
3	Action	Setup the popup duration and enable beep sound.

6.6 Misc.

Setup the Recording Directory, Language, Auto Upgrade, and Auto Login.



No	Item	Description
1	Recording Directory	Decide the recording directory to save images and moving images.
2	Language	Select a desired language.
3	FTP Information	In order to have Auto Upgrade, input FTP information. Once the FTP setup is done, CMS will detect the latest firmware is in the FTP and start upgrading automatically.
4	Auto Login	If you enable the auto login after inputting ID and Password, next time when you login, you don't need to type in the ID and Password again.