



PIVOT CMS CLIENT SOFTWARE USER MANUAL

1 CMS USER GUIDE

1.1 PC REQUIREMENT

Recommended PC Requirement

OS	Windows Vista, 7 or higher
CPU	Intel Core2Quad Q9400 or higher
VGA	1024X768, 256MB supporting DirectX
RAM	4GB or Higher
HDD	20MB for installation, 10GB for Remote Backup
Graphics Card	AMD 5000 Series or higher, Ge-Force GTS240 or higher

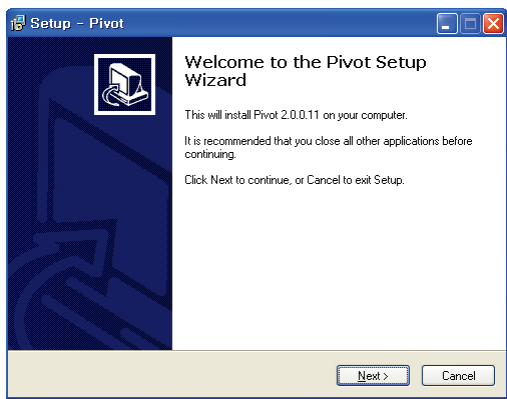
Minimum PC Requirement


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

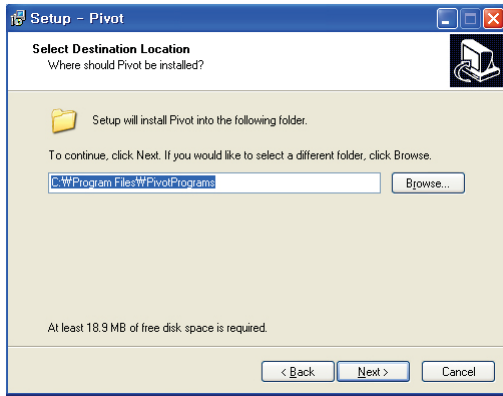
1.2 INSTALL

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

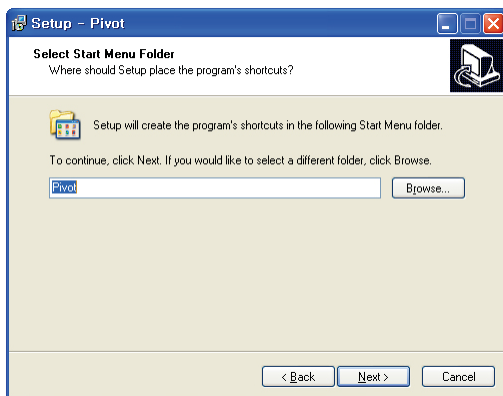
When clicked, the Setup Menu will appear. Follow the setup instructions to complete the installation.



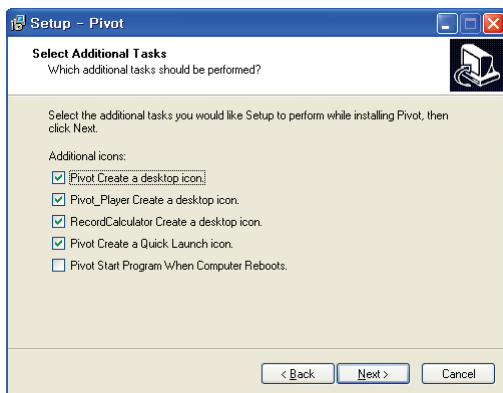
Press  to install the program in a different directory.



Press  to move to the next screen.

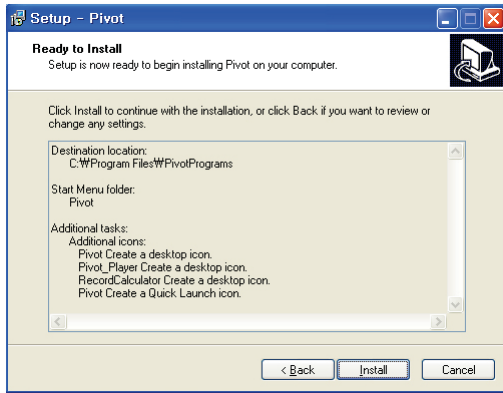


Press  to move to the next screen.



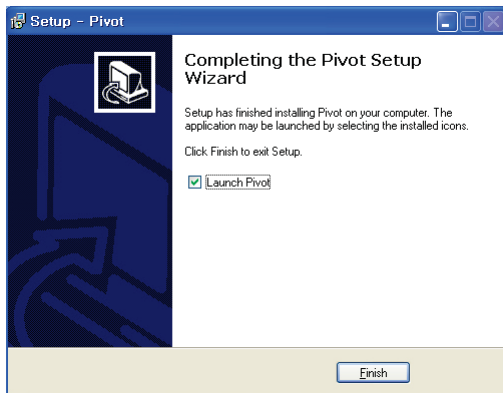
Select what Icons and shortcuts you wish to install on your desktop.

Press  to move to the next screen.

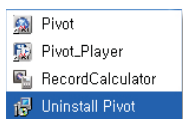


Select **Install** to begin installation. When the installation is complete, the below message will appear.

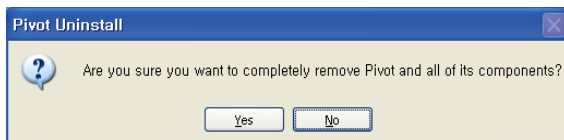
Select whether you want to launch the software and select “finish”.



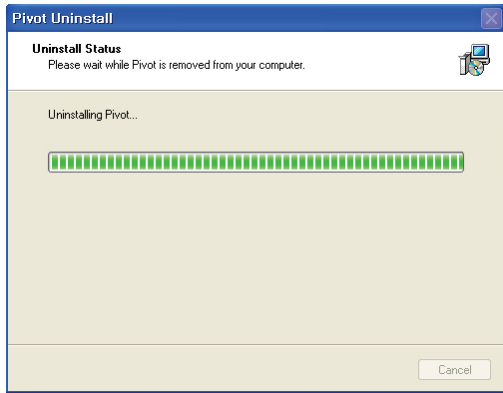
1.3 UNINSTALL



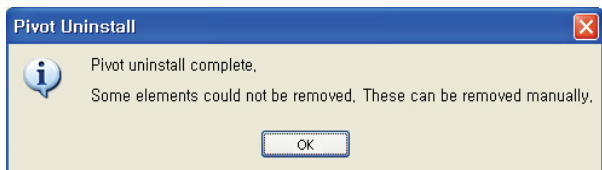
To uninstall CMS, press **UNINSTALL CMS** from the Start Menu of your PC.



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



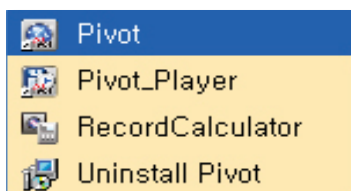
When the process is complete, the below message will appear.



1.4 BASIC OPERATION

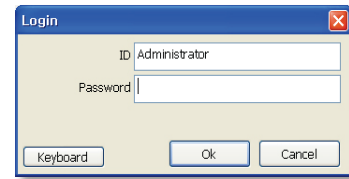


Click on the **CMS** icon on the Desktop or click **START** on Windows PC and go to the CMS Folder.



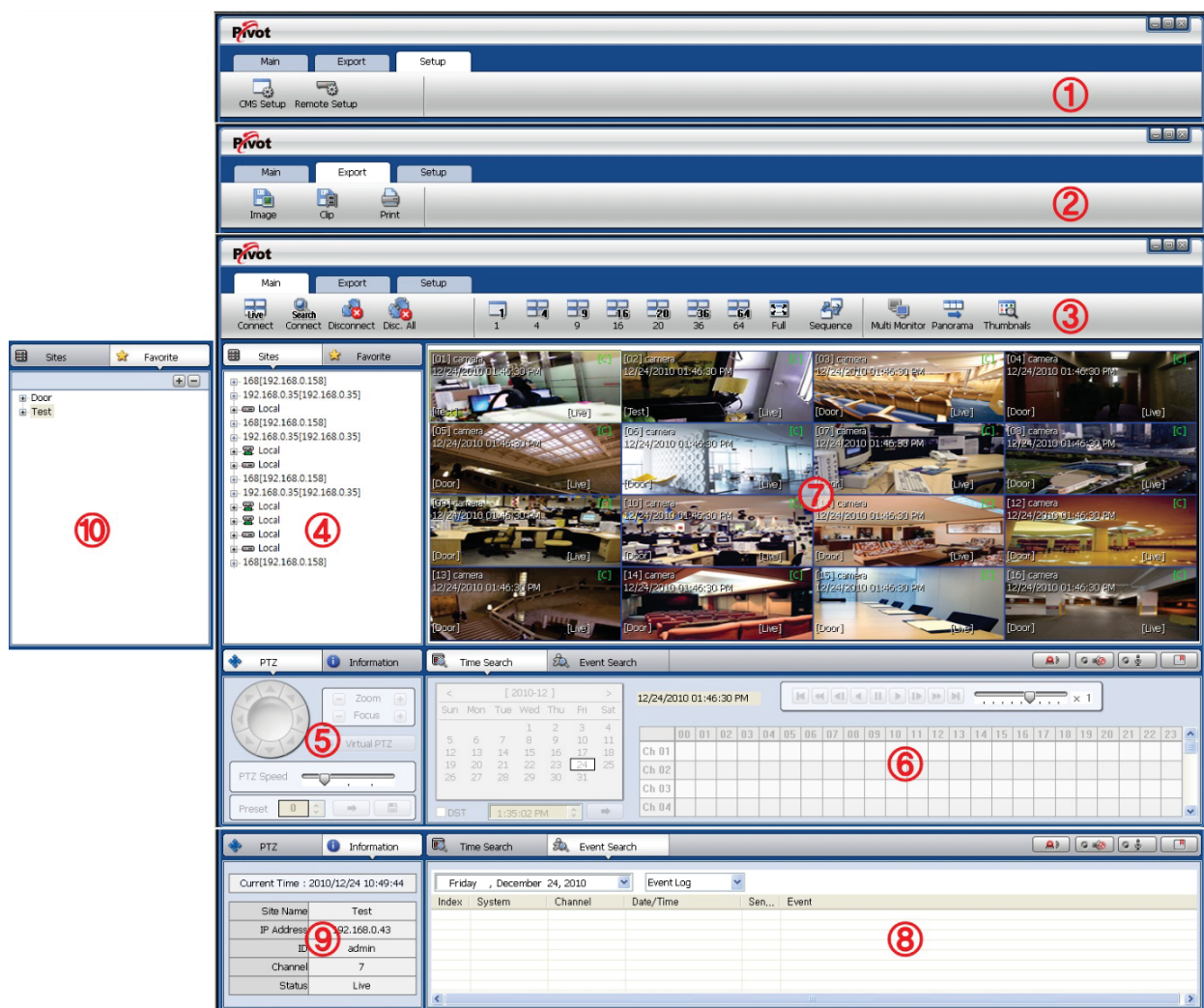
1.4.1 LOG IN

The default ID is Administrator, and there is no default password. The administrator account has the highest level of authority on the CMS.



A login dialog box titled "Login" with a close button (X) in the top right corner. It contains two input fields: "ID" with the text "Administrator" and "Password" which is empty. Below the fields are three buttons: "Keyboard", "Ok", and "Cancel".

1.4.2 SCREEN LAYOUT



The main interface of the CMS is divided into several sections, each labeled with a red circle number:

- 1**: Top menu bar with "Main", "Export", and "Setup" tabs. Below "Main" are icons for "CMS Setup" and "Remote Setup".
- 2**: Second menu bar with "Main", "Export", and "Setup" tabs. Below "Main" are icons for "Image", "Clip", and "Print".
- 3**: Third menu bar with "Main", "Export", and "Setup" tabs. Below "Main" are icons for "Live", "Search", "Connect", "Disconnect", "Disc. All", and a row of view icons (1, 4, 9, 16, 20, 36, 64, Full, Sequence, Multi Monitor, Panorama, Thumbnails).
- 4**: Left sidebar menu with "Sites" and "Favorite" tabs. Under "Sites", there is a list of camera addresses and names, including "Door" and "Test".
- 5**: PTZ (Pan/Tilt/Zoom) control panel with a virtual PTZ joystick, zoom/focus buttons, and a PTZ speed slider.
- 6**: Time Search and Event Search panels. The Time Search panel shows a calendar for December 2010 and a time range selector. The Event Search panel shows a table with columns for Index, System, Channel, Date/Time, Sen..., and Event.
- 7**: Main video display area showing a grid of 16 camera feeds. Each feed is labeled with a camera ID and name, and a "Live" status indicator.
- 8**: Bottom status bar showing the current time (2010/12/24 10:49:44) and a table with columns for Site Name, IP Address, ID, Channel, and Status.
- 9**: Information panel showing details for the selected site (Test), including IP Address (192.168.0.43), ID (admin), Channel (7), and Status (Live).
- 10**: A separate window showing a list of sites and favorites.

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, users can save JPEG, AVI and Print images of selected video.
3	Main Toolbar (Main Tab)	In the Main tab, users can connect to Live and Search views, 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	Enables users to control a PTZ camera, in Live mode.
6	Search Panel	In the Search mode, the recording information for each channel will be displayed, based on a selection of a specific date in the calendar.
7	Display Panel	This is the area where live view and search view are displayed.
8	Event Search Panel	CMS can display all the events setup on each individual DEVICE. These events will be 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.

1.4.3 MAIN TOOLBAR (SETUP)



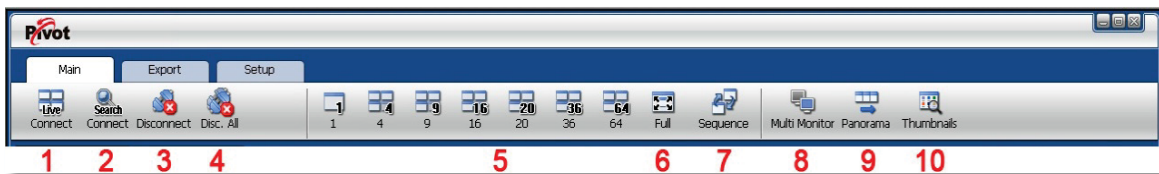
No	Item	Description
1	CMS Setup	Register sites, setup user authority, and setup other CMS properties.
2	Remote Setup	Access the setup menu of the DEVICE remotely and change the settings.
3	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

1.4.4 MAIN TOOLBAR (EXPORT)



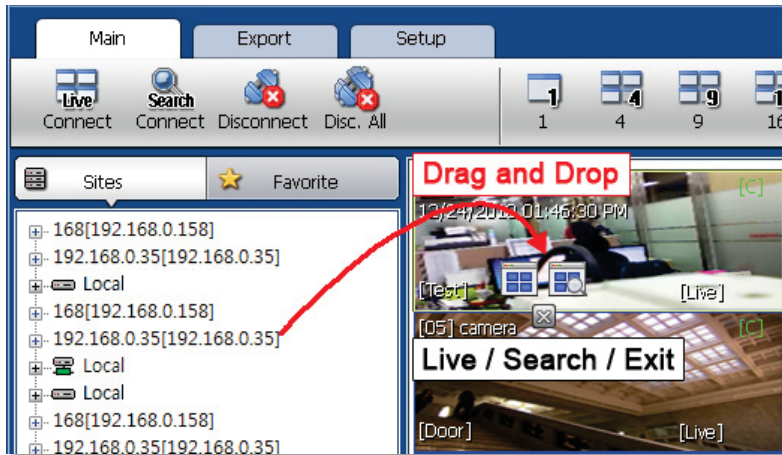
No	Item	Description
1	Image	Capture an image of the selected (focused) channel.
2	Movie	Save the selected channel in ASF format movie file.
3	Print	Print the selected channel.

1.4.5 MAIN TOOLBAR (MAIN)





No	Item	Description
1	Live	Connect to the selected site in Live mode.
2	Search	Connect to the selected site in Search mode.
3	Disconnect	Disconnect the single channel selected.
4	Disconnect All	Disconnect all of the connected sites and channels.
5	Display Mode	Choose the display mode from 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	Dual Monitor	Create an additional display window.
9	Panorama	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.

1.4.6 SITE LIST



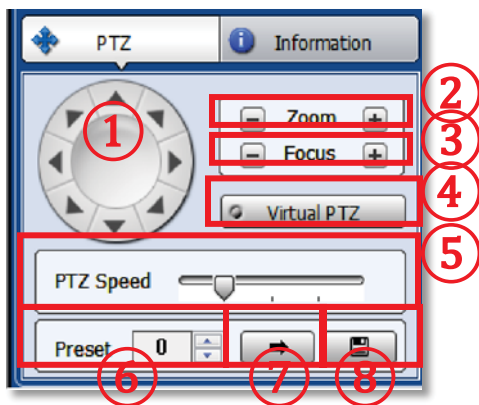
The Site List displays all of the DEVICES that are currently setup for remote connection with the CMS application.



To select and view a desired camera or device, simply drag it from the site list panel onto the viewing area. Then, select the options Live or Search ( ).

If a DEVICE site is dragged onto the viewable area, then the selected DEVICE or all cameras from the DEVICE will be displayed.

1.4.7 PTZ CONTROL

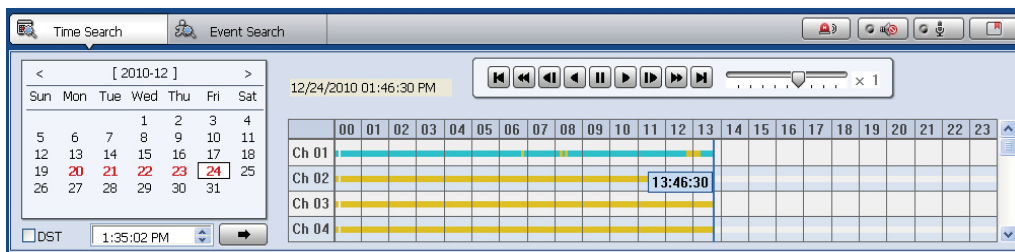
PTZ camera control is only available in Live mode.




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 the mouse button is released.
2	Zoom	Zoom In and Zoom Out.
3	Focus	Adjust the focus of the PTZ camera.
4	Virtual PTZ	If Virtual PTZ is activated, it enables users to control the PTZ camera's movement, Zoom and Focus. PTZ can be controlled with the mouse on the channel screen directly.
5	PTZ Speed	Adjust the PTZ camera response speed. Getting Faster as moves to the right.
6	Preset	Set PTZ presets on current view.
7		Go to the preset location.
8		Save the preset location..

1.4.8 SEARCH

The Search panel is activated only in Search Mode.



When you connect to a site in Search Mode, dates with recorded data will be highlighted in red. Select a specific date in the calendar and then the recording information will be shown in the table.

Press  (Go button) to start playback from a selected time.

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

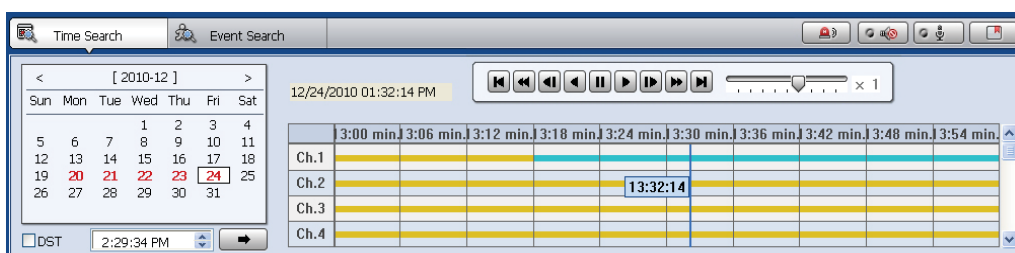
Recording Modes:

No Record	White
Continuous (Yellow Color)	
Panic (Red Color)	
Alarm (Orange Color)	
Motion (Green Color)	

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










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

Detailed search is available on a 6 minute basis as shown 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.

1.4.9 Audio control



(Audio On/Off): Turn On or Off the Audio channel.

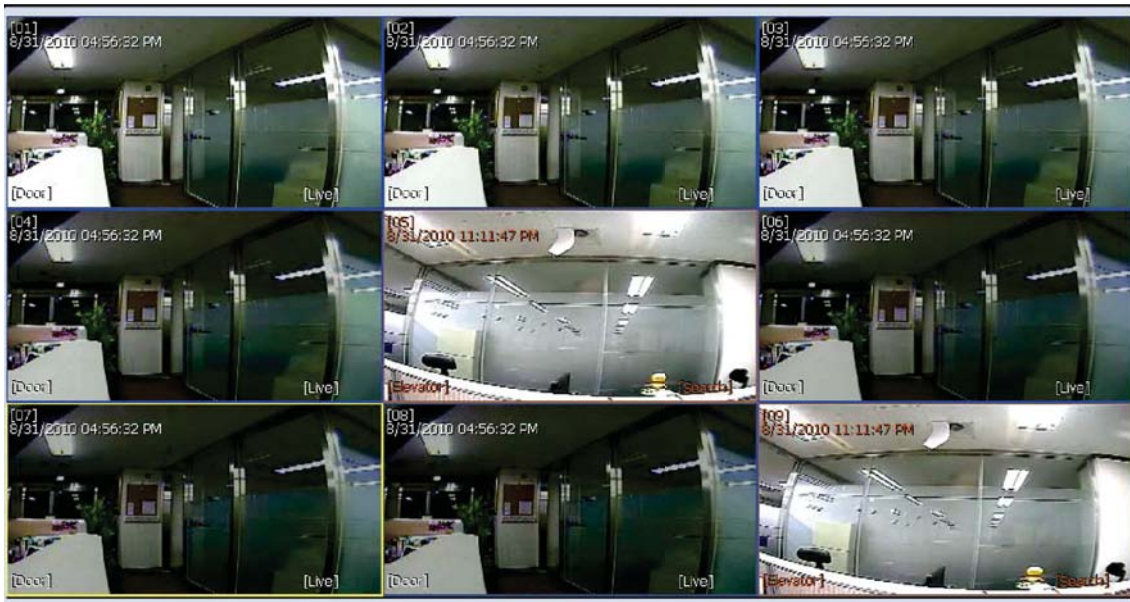


Two-way Audio: Two-Audio between the CMS and DEVICE.



Bookmark: Add the selected channel to your bookmark list.

1.4.10 DISPLAY



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.

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

1.4.11 EVENT SEARCH

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/Mi...	1	2010/12/24 (14:31:51)		Motion Detection
20	192.168.0.141:554/Mi...	1	2010/12/24 (14:31:48)		Motion Detection
19	192.168.0.140:554/Mi...	1	2010/12/24 (14:32:25)		Motion Detection
18	192.168.0.141:554/Mi...	1	2010/12/24 (14:31:45)		Motion Detection
17	192.168.0.141:554/Mi...	1	2010/12/24 (14:31:42)		Motion Detection

No	Date/Time	Log
14	12/24/2010 02:33:00 PM	[Search Connected] : LAB
13	12/24/2010 02:32:57 PM	[Live Connected] : LAB
12	12/24/2010 02:32:52 PM	[Search Connected] : LAB
11	12/24/2010 02:32:37 PM	[Search Connected] : LAB
10	12/24/2010 02:32:18 PM	Execute Option
9	12/24/2010 02:32:16 PM	[Execute Remote Setup] : http://192.168.0.140:554/VideoInput/1/h264/1:80
8	12/24/2010 02:32:12 PM	[Live Connected] : IP2
7	12/24/2010 02:32:09 PM	[Live Connected] : IP_CAMERA
6	12/24/2010 02:32:07 PM	[Live Connected] : LAB
5	12/24/2010 02:29:34 PM	Start CMS Program

You can select a desired date to view the event list for the selected date.

You can choose either event log or system log.

Start the playback by double-clicking the Index number of each even list.

The system log will show CMS start/end, live/search, option, remote setup, image/movie export etc.

1.4.12 INFORMATION

PTZ		Information	
Current Time : 2010/12/24 10:43:03			
Site Name	LAB		
Ip Address	192.168.0.157		
ID	admin		
Channel	8		
Status	Live		

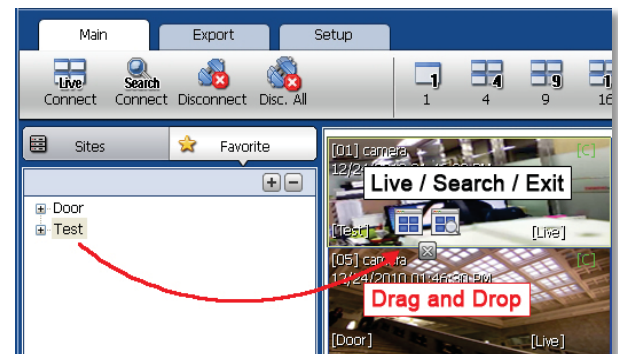
PTZ		Information	
Current Time : 2010/12/24 10:44:11			
Site Name	36		
Ip Address	192.168.0.36		
ID	admin		
Channel	2		
Status	Search		

The current date/time, site name, IP address, ID, channel and Live/Search status will be shown for a selected channel.

1.4.13 FAVORITE

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 a favorite site, click **-**.

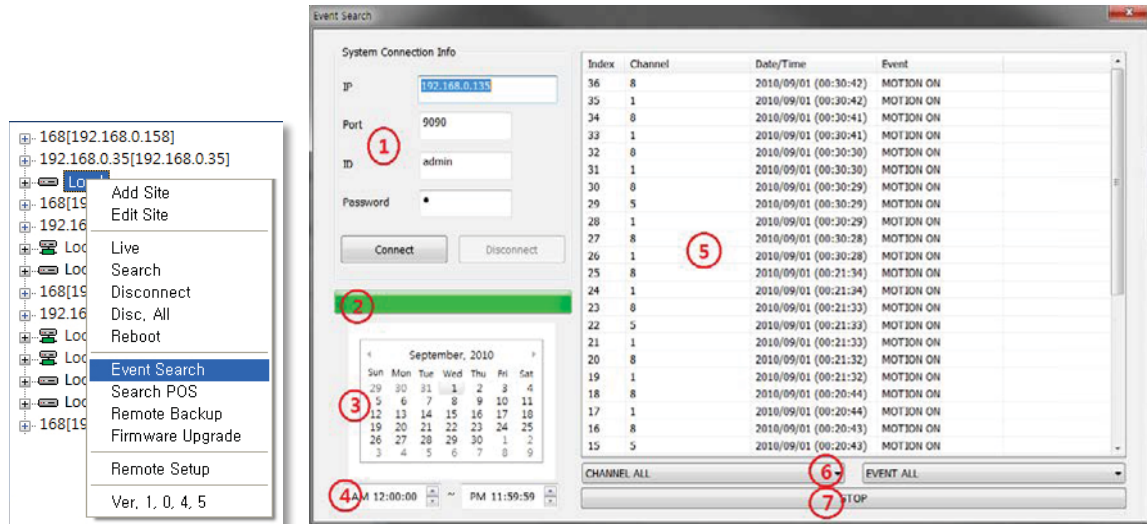


1.5 CMS FUNCTIONS

1.5.1 EVENT SEARCH

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

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

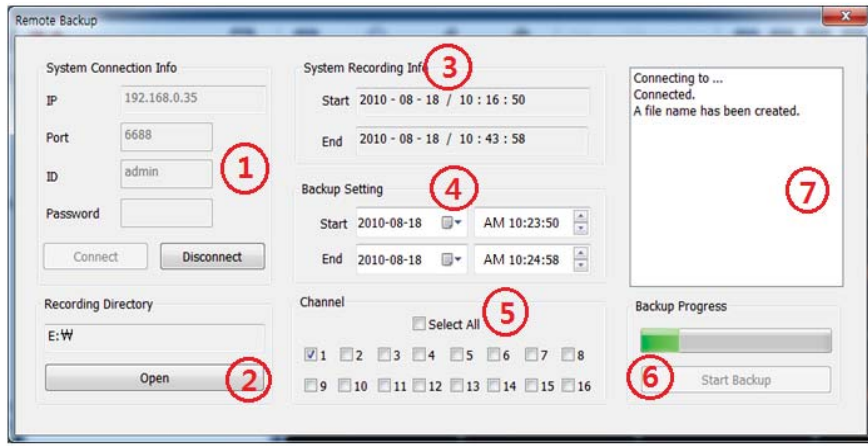


No	Item	Description
1	System Connection Info	The information of the DEVICE you are connected to will be filled out automatically.
2	Event Download Status	Right after connecting to the DEVICE, event information will be downloaded automatically. The download progress bar will be shown.
3	Calendar Search	If there is an event in the selected date, the date will be highlighted. Select a specific date to start event search.
4	Interval Setup	Set the start time and the end time to Search events.
5	Event List	When a 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.

1.5.2 REMOTE BACKUP

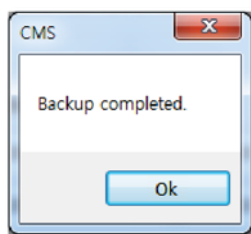
When you right click on a site in the site list, the quick access menu will appear.

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



No	Item	Description
1	System Connection Info	The information of the DEVICE you are connected to will be filled out automatically.
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 channels to backup.
6	Backup Progress	Backup Progress bar indicates the backup process status.
7	Backup Status Window	Displays the backup status in text message.

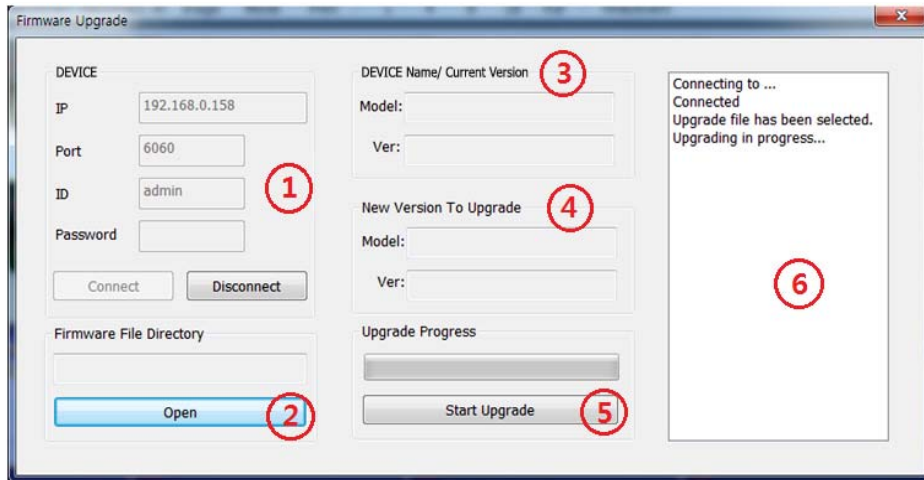
When the backup process is completed, "Backup Completed" message will appear.



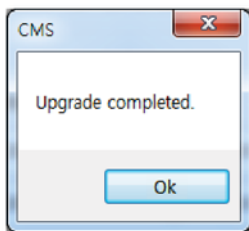
1.5.3 FIRMWARE UPGRADE

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

Select **FIRMWARE UPGRADE** to run Firmware Upgrade.



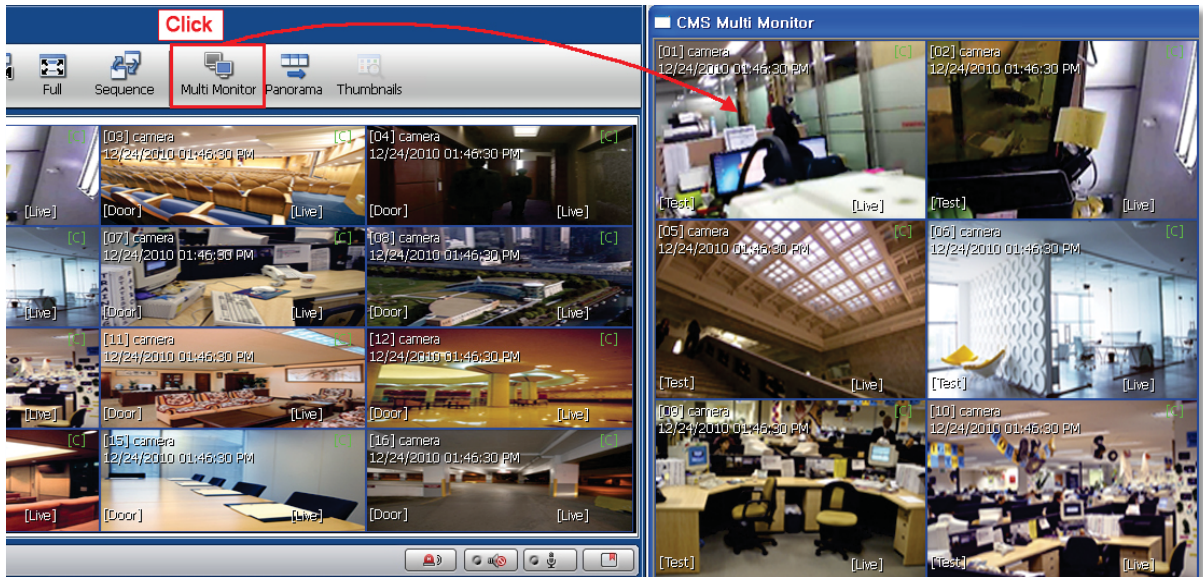
No	Item	Description
1	DEVICE Connection Info	Input the information of DEVICE you are connected to.
2	Firmware File Directory	Select the firmware file directory to upgrade.
3	DEVICE Name/ Current Version	Displays the current DEVICE Name and Firmware Version.
4	New Version to upgrade	Displays the new DEVICE 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.

1.5.4 MULTI MONITOR

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



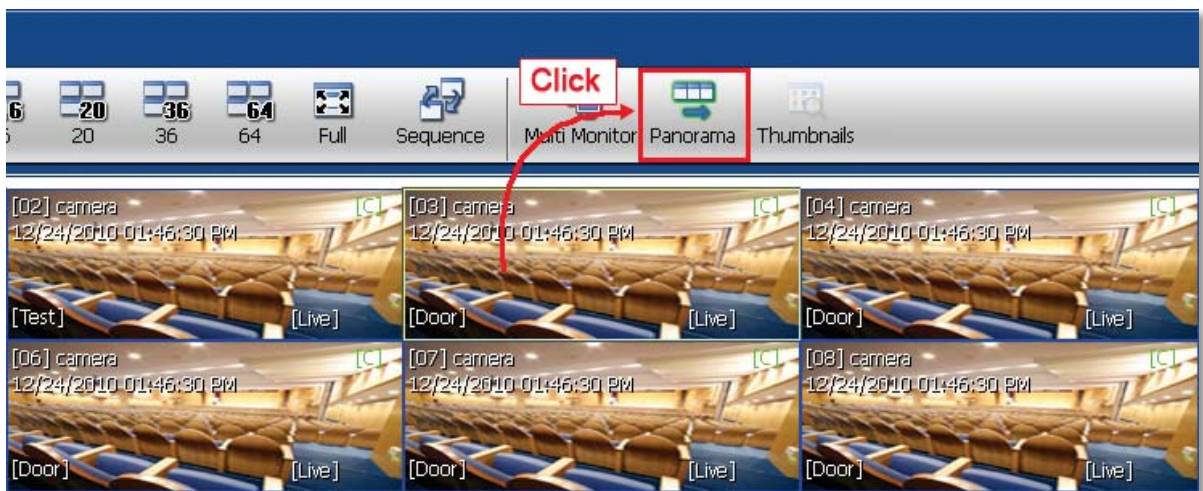
When you select **MULTI MONITOR**, you will see an additional window with the same split display as the main window. This setup is useful if your monitor center has more than one monitor screen.

1.5.5 PANORAMA SEARCH

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

In Live mode or Search mode, the panorama view will show frame by frame display of the selected channel.

The Panorama view is available for one selected channel at a time.

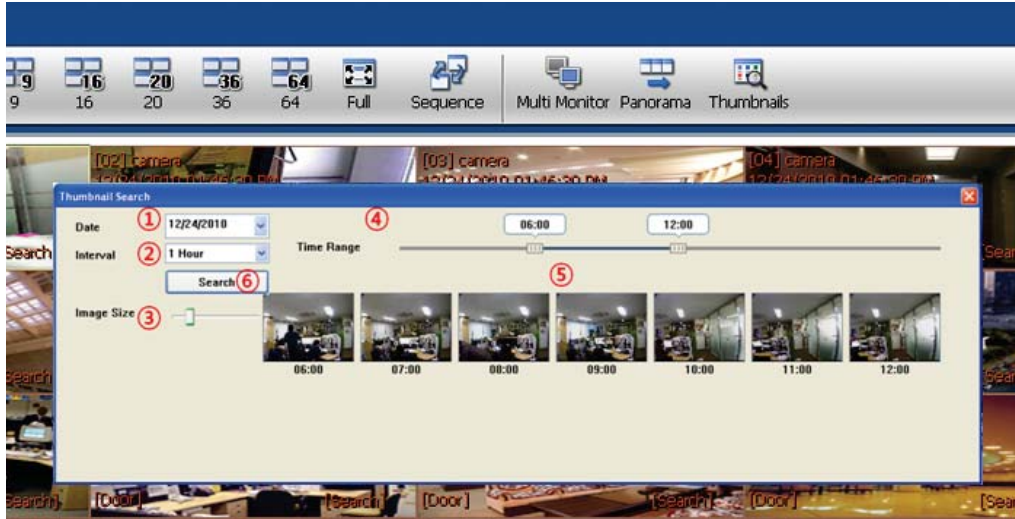


To return to normal view, click **PANORAMA** again.

1.5.6 THUMBNAIL SEARCH

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


First, select a channel and click **THUMBNAIL**. The Thumbnail Search Pop-up window will come up.



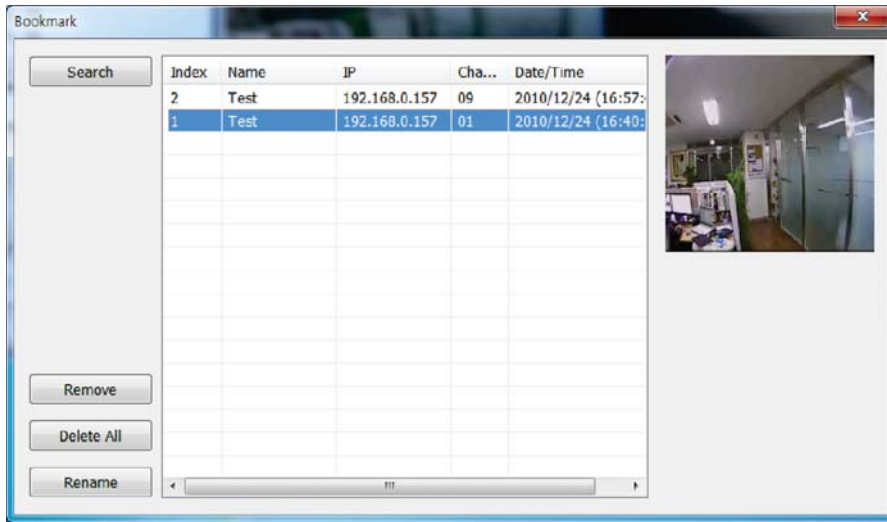
No	Item	Description
1	Date	Use the Calendar to select a desired date.
2	Time Interval	Select the (time interval) to display still shots by a specified time. You may choose 1min, 3min, 5min, 10min, 30min, and 1hour (ex. 1min. means 1 still shot per 1 minute of recorded video data.)
3	Image Size	Adjust 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 (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.

1.5.7 BOOKMARK

Click  icon in the bottom right corner under the video display screen to bookmark a 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 it to search the bookmarked data.

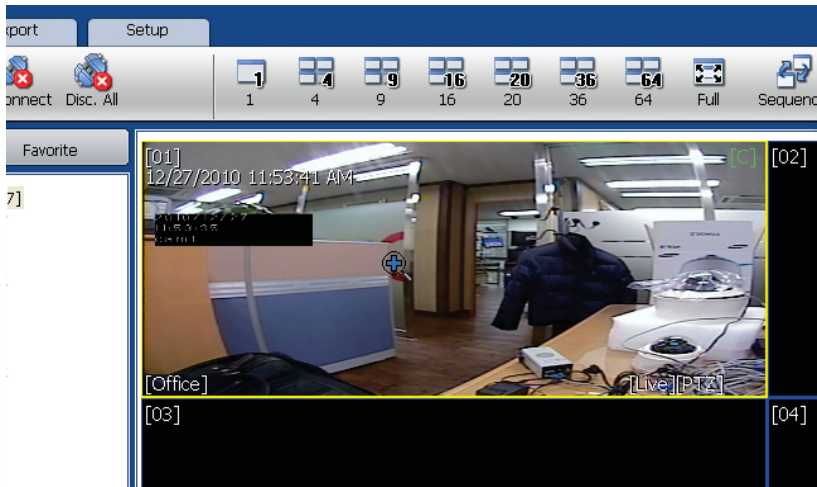
Click **REMOVE** to remove a selected bookmark from the list and click **DELETE ALL** to delete the entire bookmark list.

Click **RENAME** to change the name of a selected bookmark.

1.5.8 VIRTUAL PTZ

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

This allows users to control a PTZ camera by using the mouse controls. For example, place the mouse cursor over the PTZ channel and left-click the left, right, top or bottom of the screen to move camera left, right, up or down, respectively.



1.5.9 DIGITAL ZOOM IN/OUT

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

Scroll up the mouse wheel, to zoom in. Scroll down the mouse wheel to zoom out on selected channel.

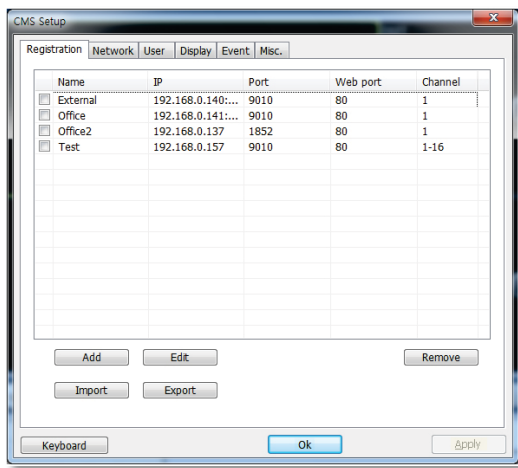


1.6 CMS SETUP

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

1.6.1 REGISTRATION

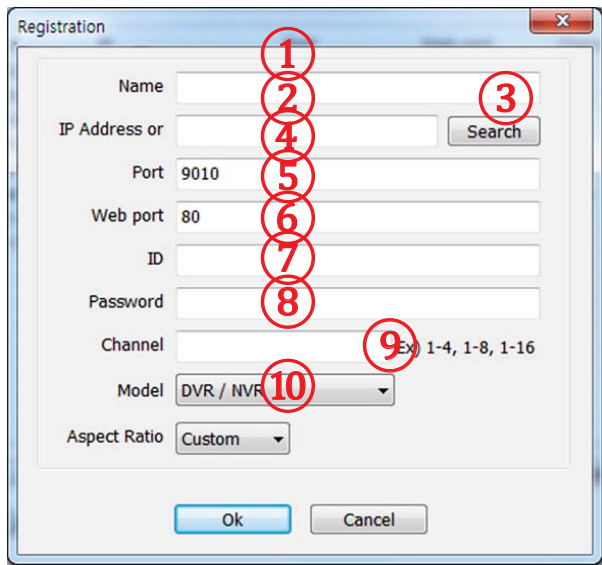
Add, Modify, Import, Export or Remove DEVICE site information.



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

Click Export to save the current site list and as a file. Click Import to import the file to the site list.

Ex) Adding a new DEVICE site



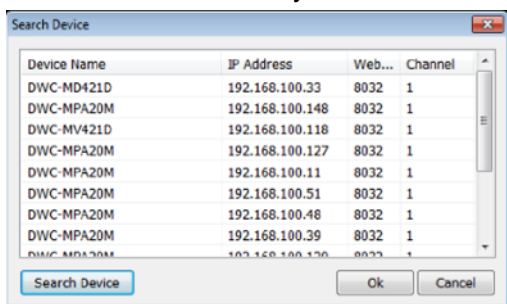
No	Item	Description
1	Name	The name of the site.
2	IP	The site's IP Address.
3	Search	Search all DEVICE sites in the same local network. (UPnP function)
4	Port	Port of the site. (Default: 9010)
5	Web port	Web Port of the site. (Default: 80)
6	ID	User ID to access the site.
7	Password	Password to access 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)

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

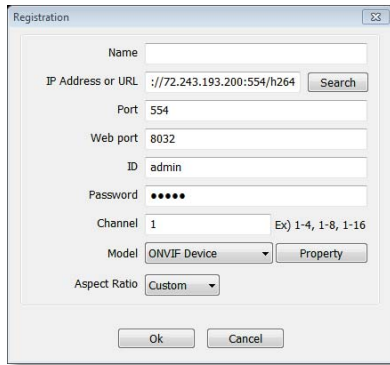
1.6.2 ADDING IP CAMERAS

The Pivot V5.5 supports live video from leading IP Camera models and OnVIF compatible IP Cameras. To add cameras using the **ONVIF** option from the DEVICE drop-down menu:

1. Right-click on the Sites List and select 'Add Site'
2. From the Model Drop-down Options, select ONVIF Device
3. Enter the camera's IP address, or use the 'Search' button to automatically detect all ONVIF conformant cameras in your network.



4. Select which camera you want to add and click ok. Review any of the network settings if necessary and click ok to add the camera.
5. If you are adding a Digital Watchdog MEGApix camera manually under ONVIF:
 - a. Enter the IP address as follows: rtsp://ipaddress:554/h264 (for example: rtsp://72.243.193.200:554/h264)
 - b. Make sure the web port is 8032

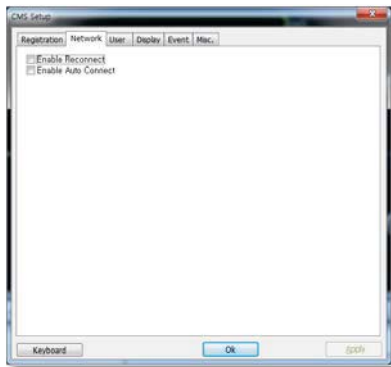
A screenshot of a 'Registration' dialog box. It contains several input fields: 'Name' (empty), 'IP Address or URL' (containing 'rtsp://72.243.193.200:554/h264' with a 'Search' button), 'Port' (554), 'Web port' (8032), 'ID' (admin), 'Password' (masked with dots), 'Channel' (1, with a hint 'Ex) 1-4, 1-8, 1-16'), 'Model' (a dropdown menu showing 'ONVIF Device' and a 'Property' button), and 'Aspect Ratio' (a dropdown menu showing 'Custom'). At the bottom are 'Ok' and 'Cancel' buttons.

To add cameras using the **DWC-MP** option from the DEVICE drop-down menu:

1. Right-click on the Sites List and select 'Add Site'
2. From the Model Drop-down Options, select 'DWC-MP'
3. Enter the camera's IP address, web port, user and password.

1.6.3 NETWORK

Enables users to setup RECONNECT and AUTO CONNECT to the network.

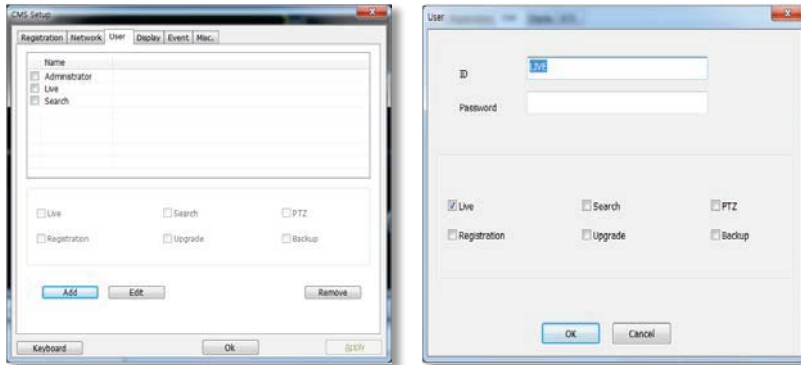
A screenshot of the 'CMS Setup' window with the 'Network' tab selected. The window has tabs for 'Registration', 'Network', 'User', 'Display', 'Event', and 'Misc.'. Under the 'Network' tab, there are two checkboxes: 'Enable Reconnect' and 'Enable Auto Connect', both of which are currently unchecked. At the bottom are 'Keyboard', 'Ok', and 'Apply' buttons.

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, it will reconnect to the last sites seen before logging off.

1.6.4 USER

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

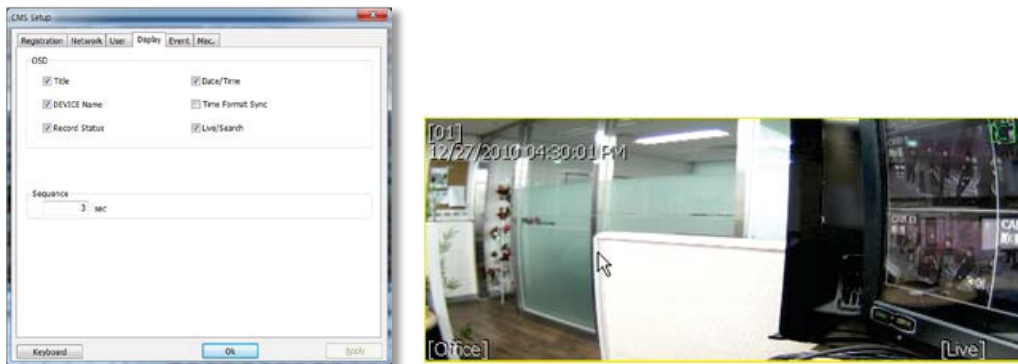


Add and change User authorities.

User authority can be changed by Administrator. Click Add button to create a new user ID and edit the user authority.

1.6.5 DISPLAY

Options for OSD setting. Users can modify what information will be displayed on the video screens.



Title: Turn on/off the DEVICE title and channel number.

Date/Time: Turn on/off the Date/Time of the site.

DEVICE Name: Turn on/off the name of the site.

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

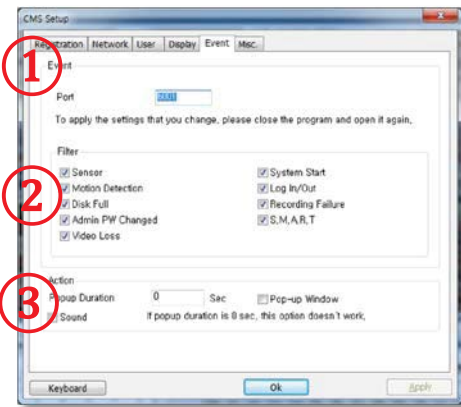
Record Status: Able to turn on/off the Record Status of the site.

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

Sequence: Able to set Sequence interval.

1.6.6 EVENT

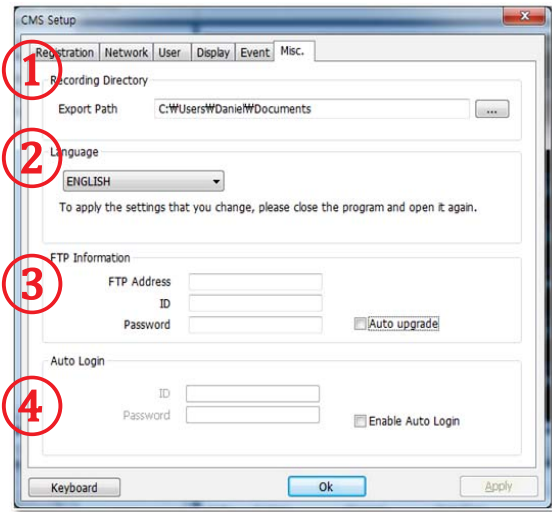
Setup the event port, event type, and popup settings for an event.



No	Item	Description
1	Port	Input same event port from the 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.

1.6.7 MISC.

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



No	Item	Description
1	Recording Directory	Decide the recording directory to save 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 you login, you don't need to type in the ID and Password again.