CMS
User's Manual

Contents

Contents

Chapter 1. Program Installation

The CMS means "Central Monitoring System".

1.1 PC specifications

	Minimum Specifications	Recommended Specifications
CPU	Pentium IV 2.0GHz	Pentium IV 3.0GHz or More
Main Memory	128MB	512MB or More
O/S	Windows 2000, XP	Windows 2000, XP, Vista
Web Browser	I.E 6.0	I.E 6.0
Monitor Resolution	1024 x 768	1280 x 1024
Video Memory	128MB(16CH)	256MB(64CH)
Network	10 Base-T Ethernet	100 Base-T Ethernet

1.2 Program Installation

Double click "setup_cms.exe" file in the CD and start the installation.
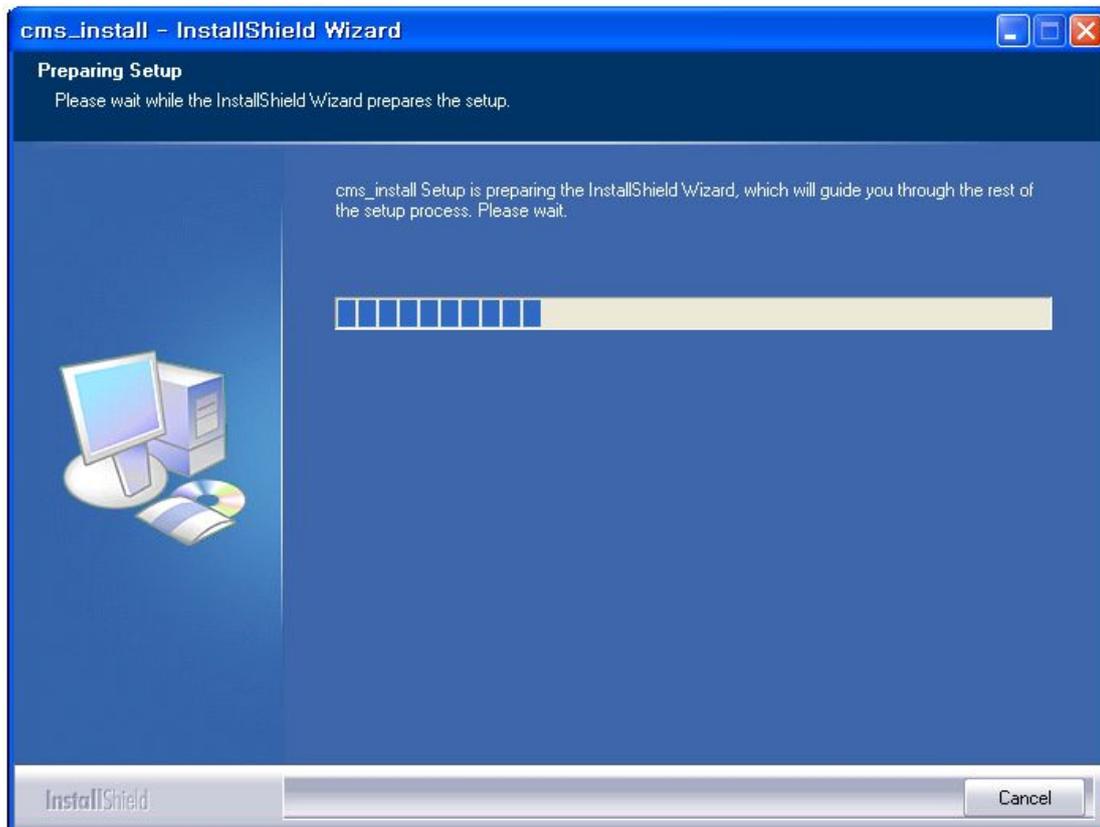
Chapter 2. For the start of CMS

Start the program by click of CMS icon on the desktop.

The below window appears afterwards.
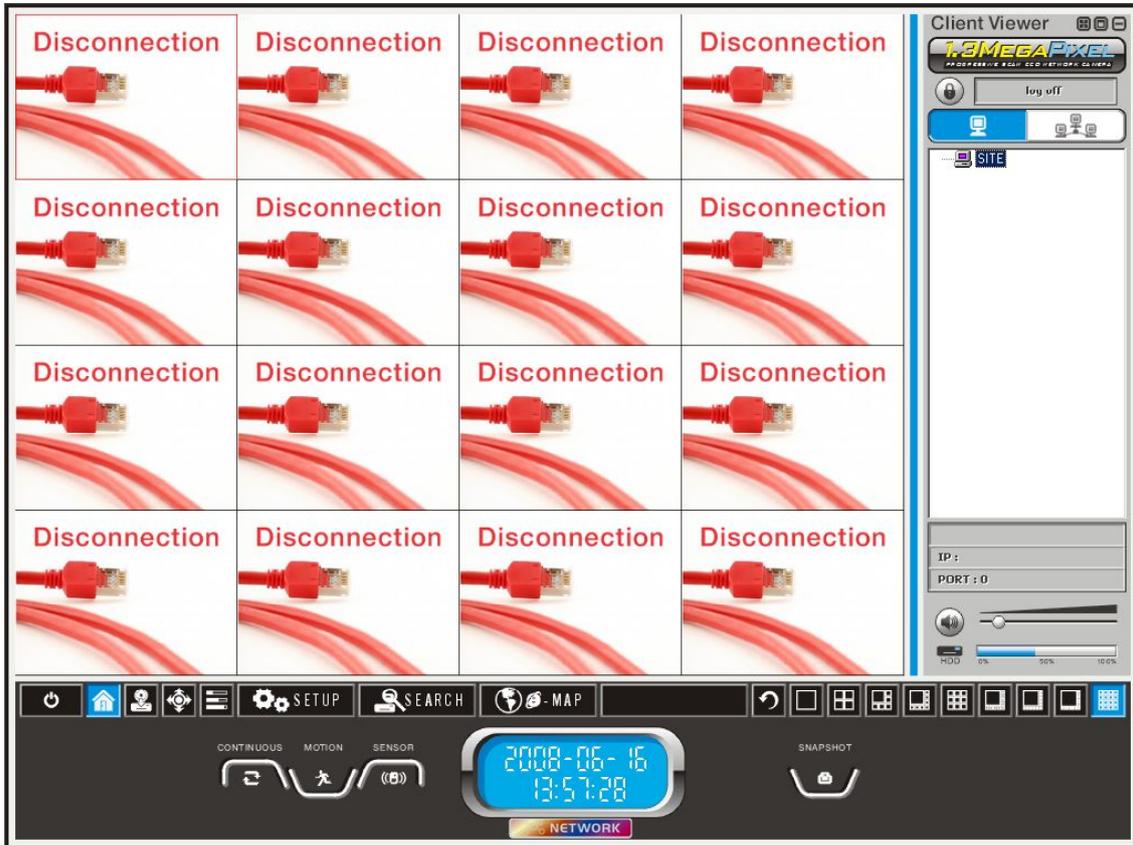
[Pic 2-1] Monitoring Screen

[Button explain]

	Full screen view	
⊞⊡⊟	Max. view	
	Screen minimize	
log off	Login button	
	log off	Login ID
🖥	(--- 🖥 SITE)	Site registration selection
🖧	(--- 🖥 GROUP)	Group registration selection
--- 🖥 SITE		Site registration (Network camera registration)
--- 🖥 GROUP		Group registration

Chapter 2. For the start of CMS

		PC speaker volume control No sound
		PC HDD Info
		CMS termination
		Information
		Storage function setting
		PTZ setting (At present Zoom function available only)
		Color setting
		Setup
		Recorded file search
		E-Map
		Refresh back to initial screen
		screen division (4 to 64 channel)
		Date and time synchronized with PC
		Network Hologram In network connected, the hologram will shine.

[Pic 2-2] Login window

<Login>
All functions can be performed only after login. In the setup menu, the operators can be created or added. The function may be limited by authorized ID and Password.
Ref : Factory default ID and password are admin / admin. Mind the letter in capital or minuscule when typing in the ID and Password.

Chapter 2. For the start of CMS

2.1 Site Registration Setup (Network Camera Registration)

By right-click, pop-up menu appears. Choose "Add Site" menu. Then site Information window appears.

[Pic 2-3] Pop-up menu site addition
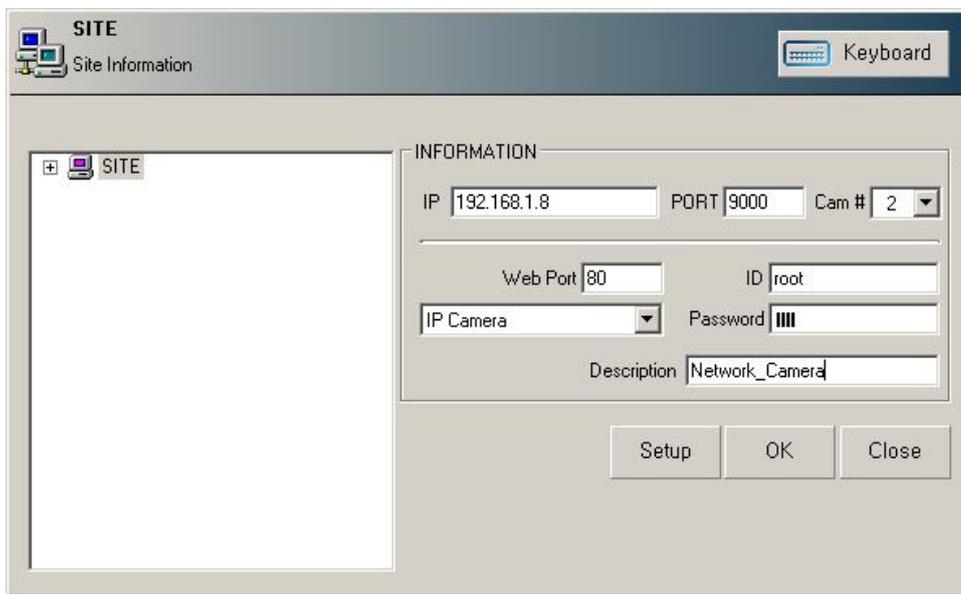
[Pic 2-4] Site information window

[Button explain]

SITE		Site address
Keyboard		Virtual keyboard
	IP 192.168.1.8	IP Address
	PORT 9000	Port number
IP 192.168.1.8 PORT 9000 Cam # 2	Cam # 2	# of channel setting in a site (If 2 channels are selected, one codec is MPEG4 and the other one is MJPEG. The codec may be change.

	Web Port 80	Web port number
Web Port 80 ID root IP Camera Password ‖‖‖ Description Network_Camera	IP Camera ⌄	Types of site (At present IP Camera only)
	ID root	Type in ID
	Password ‖‖‖	Type in Password
	Description Network_Camera	Site name (If you leave it blank, IP address will be shown.
Setup	Environmental setup of sites Refer "Pic 2-6"	
OK		Save and Exit
Close		Exit without save

[Virtual Keyboard]

[Pic 2-5] Virtual keyboard

Chapter 2. For the start of CMS
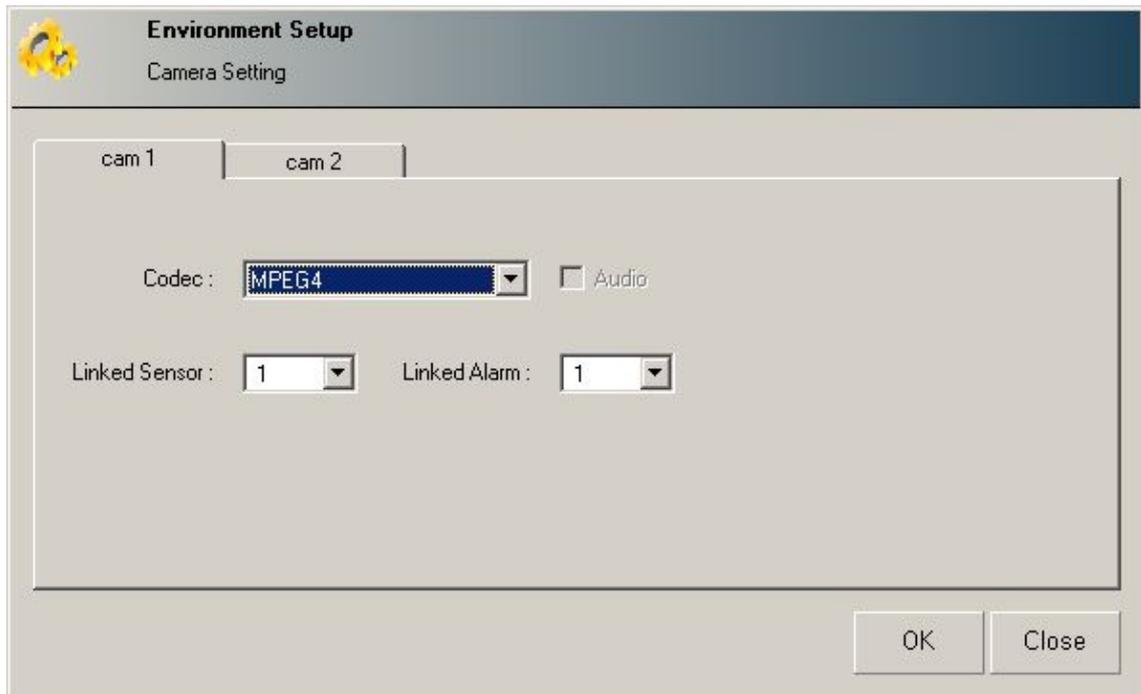
[Pic 2-6] Environment setup

	Site channel selection
Codec : MPEG4	Codec selection MPEG4 and MJPEG only possible If you select MPEG4 at Cam1, the other channel codec will be MJPEG.
Linked Sensor : 1	Sensor setting
Linked Alarm : 1	Alarm output setting

Chapter 2. For the start of CMS

[Site address pop-up menu]

1.

<Root>
By right-click onto "SITE", menu appears.

|	
Disconnect All	Disconnect all sites
Add Site	Site adding
Load Local E-map	Local E-Map can be shared with users. Under the local E-Map, it is inactive.

2.

<Site>
By right-click onto the registered site, the menu appears

Connect Site	Connect site
Disconnect Site	Disconnect site
Edit Site	Site editing Can not change IP address and port number
Delete Site	Site deletion
Load Site E-map	When camera is disconnected, it is activated.

3.
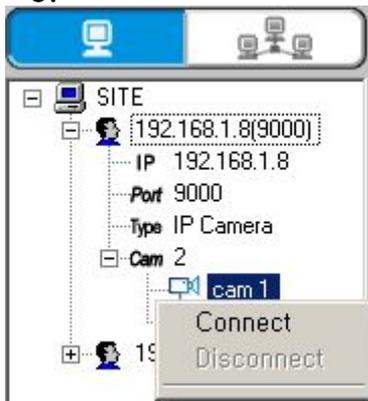
<CAMERA>
By right-click onto the registered site channel, menu appears

Connect	Site camera connection
Disconnect	Disconnection

[Ref]
In case of 1 channel in one site, you may have 64 sites.
'Load Site E-map' open the unique 16 E-maps of sites. It can connect a camera, sensor, and alarm existing within the side.
[Notice]
The actual sensor number can be shown in a event happening.
The actual alarm number can be shown in a event happening.
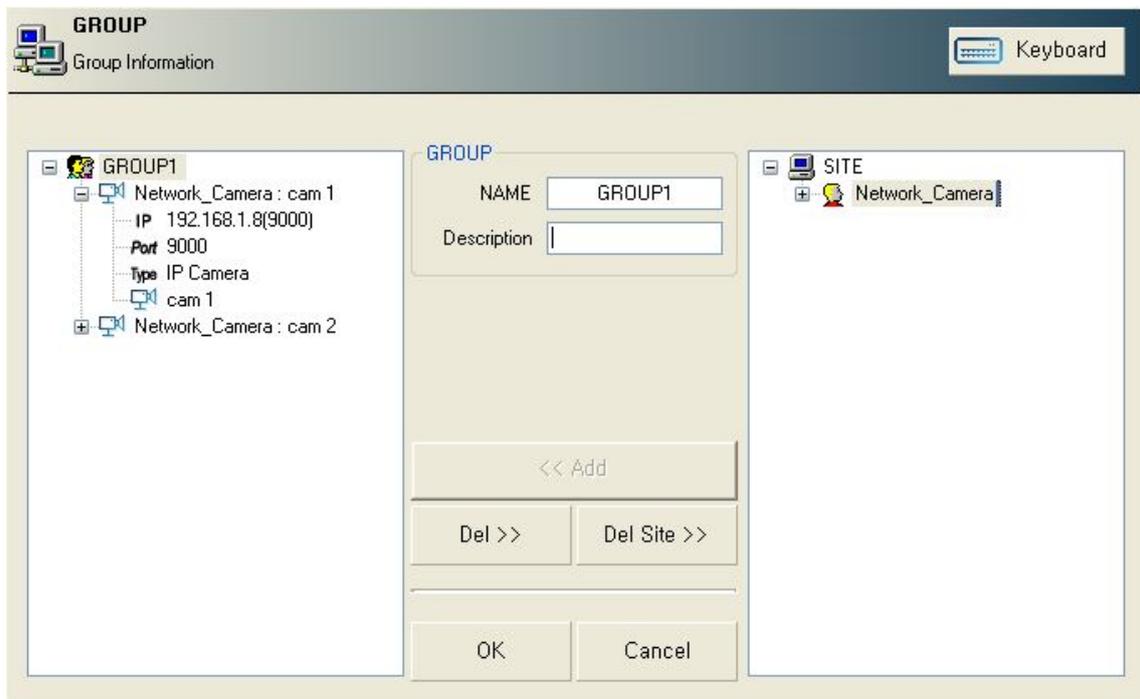In regardless of the selected sensor and alarm in "Pic 2-6 Network Camera Environment Setup",
the actual number of sensor and alarm indicate the event occurring.

2.2 Group Registration Setting

Click <GROUP>. Right-click onto the <Group>, you may select <Add Group> . Then <Group information> window appears.

[Pic 2-7] Add group pop-up menu

[Pic 2-8] Group addition

GROUP1 Network_Camera : cam 1		Select camera channel
GROUP NAME GROUP1 Description	NAME GROUP1 Description	Type in group name
		Type in the description of the group selected
SITE Network_Camera		Registered site (See site registration)
<< Add		Adding the selected site to the group
Del >> Del Site >>	Del >>	Camera Channel Deletion
	Del Site >>	Site Deletion
OK		Save above settings and close
Cancel		Cancel the settings and close

[Reference]
You may register 64 cameras in a group.

<How to register group>
Drag & drop the site and camera onto a group you wish to add. Or you may use "Add" button.

<How to delete group>
Drag & drop the site and camera onto site address.
Or you can use "Del" button or "Del Site".

Chapter 2. For the start of CMS

[Group address pop-up menu]

1.

<Root>
Right-click on to "Group", the menu appears

| Disconnect All	All groups disconnection
Add Group	Group addition
Save As...	Save the connected display in different group name
Load Local E-map	Local E-Map can be shared with users. Under the local E-Map condition, it is inactive.

2.

<Group>
Right-click on to sub-group like <Group1>, the menu appears

Connect Group	Group connection
Disconnect Group	Group disconnection
Edit Group	Group edition
Delete Group	Group deletion
Load Group E-map	When camera is disconnected, it is activated.

3.
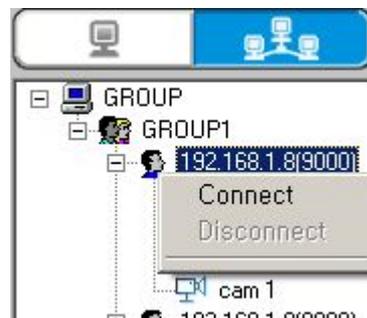
<Site>
Right-click onto the registered site and channel, menu appears

Connect	Site camera connection
Disconnect	Disconnection

[Reference]
Group E-map open : You can open your own unique 16 E-Maps per group. In this case, you can connect the cameras and sensors and alarms existing within the group.

[Notice]
The number of sensor # is shown in the event by sensor detection.
The number of alarm is shown in the event by alarm output.

There are 3 types of E-map.

1. Local E-map
Max. 64 channels can be stored. In regardless of sites and groups, 64 channels can be shown. One camera may have a specified sensor or alarm.

2. Group E-map
Max. 64 channels can be stored. It shows the specified group only. One camera may have a specified sensor or alarm.

3. Site E-map
It is 1-2 channel E-Map. It is only for a registered unique site. It shows a camera with its own sensors and alarms.

Chapter 3. Monitoring

[Pic 3-1] Picture of Monitoring screen

3.1 Connecting camera

1. By Drag & Drop

Using mouse, drag the site, group or camera from the site section and drop them to screen.

2. Using Pop-up menu

Clicking mouse right on site, group or camera in the site section, using connecting menu among pop-up menu.

● Connecting site showing as yellow icon and connecting camera showing as red icon. ' 📟 SITE ” is showing basic information of site, network hologram
 🔳 NETWORK is starting.

● Below picture showing that connecting the site.
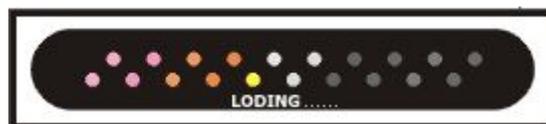
Chapter 3. Monitoring

[Pop-up menu on the monitoring screen]

\<Group\>
Showing the menu when clicking right button of mouse

Disconnect	Disconnecting the channel
Disconnect Site	Disconnecting the site
Rec. Continuous	Continuous recording
Rec. Motion	Motion recording
Rec. Sensor	Sensor recording
Quick Search	Searching the local data
PTZ Setting	PTZ, alarm control **Refer "PTZ Tap"**
Color Setting	Color setting **Refer "Color Tap"**
Remote Setup	Link to administrators page of remote site

\<Display Icon\>
If the site is connected below event icons are showing.
Each event icon means below.

	Continuous recording
	Motion setting and motion event
	Motion event
	Sensor setting and sensor event
	Sensor event
	Alarm event

Chapter 3. Monitoring

3.2 Information Tap

[Pic 3-2] Information Tap

	CONTINUOUS	Continuous recording setting
	MOTION	Motion recording setting
	SENSOR	Sensor recording setting
SNAPSHOT		Snapshot function Print or save current screen to BMP/JPG file. (see chapter **"SNAPSHOT"**)

● You have to setting the save folder for saving. See chapter **"Setting"**

3.3 Recording Tap

[Pic 3-3] Recording tap

	① ② ③ ④	Select channel to save
	∧	Showing previous 16 channels
	Continuous Recording	Select all current 16 channels If they already selected, cancel all channel. (It is valid only network connected channel)
	Motion Recording	
	Sensor Recording	
	∨	Showing next 16 channels

Chapter 3. Monitoring

3.4 PTZ Tap

[Pic 3-4] PTZ Tap

[Preset Function]

		Dial button/ Preset number
		Delete all preset
		Preset setting
		Move to preset

[PTZ Function]

		Pan, Tilt, Zoom and Focus setting
		Auto Pan setting

Example) <Preset 10 Setting >

Move the PTZ camera and push the dial button (   ) and push the Preset setting ( )

After press dial button (   ), press Preset move button ( ) . Camera goes to the preset point

[Notice] This function is only valid with PTZ camera

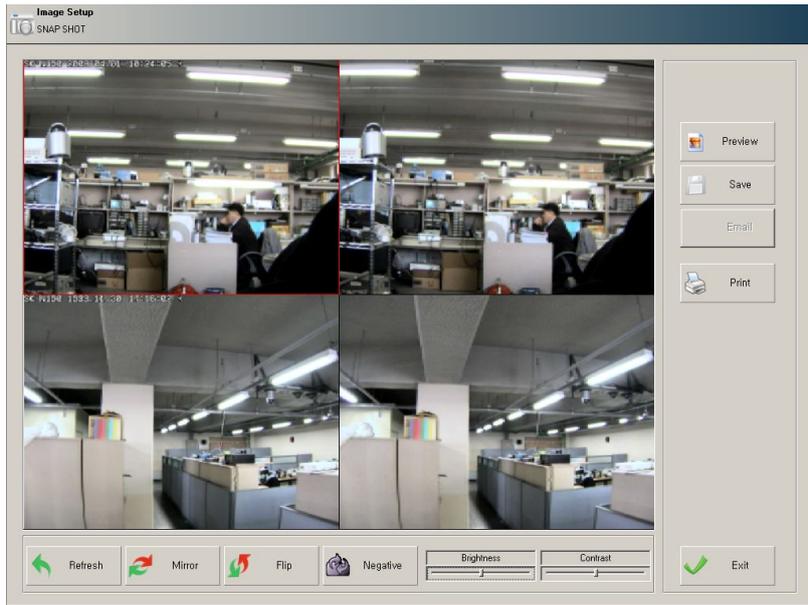# Chapter 3. Monitoring

3.5 Color Tap

[Pic 3-5] Color Tap

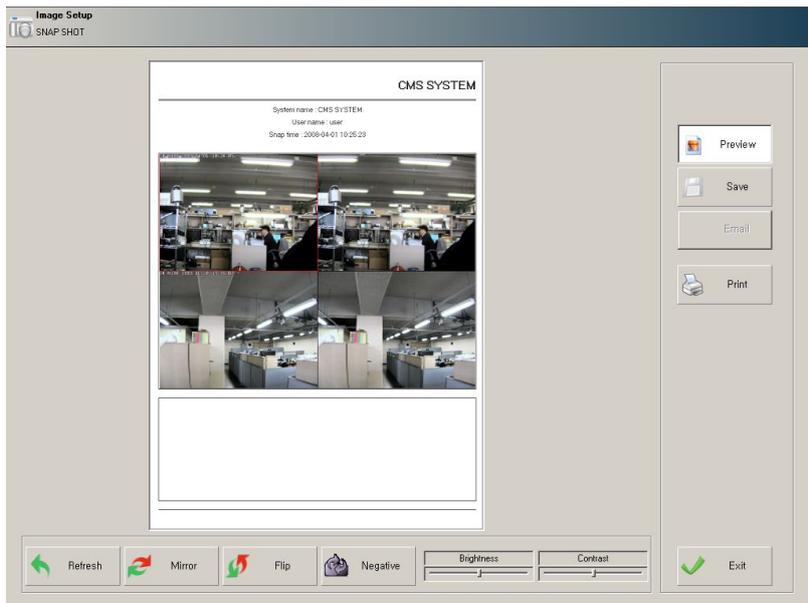|	
	Brightness setting
	Contrast setting
	Saturation setting
	Hue setting
	Setting each function (Brightness, Contrast, Saturation, Hue)

Chapter 3. Monitoring

3.6 Snapshot

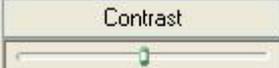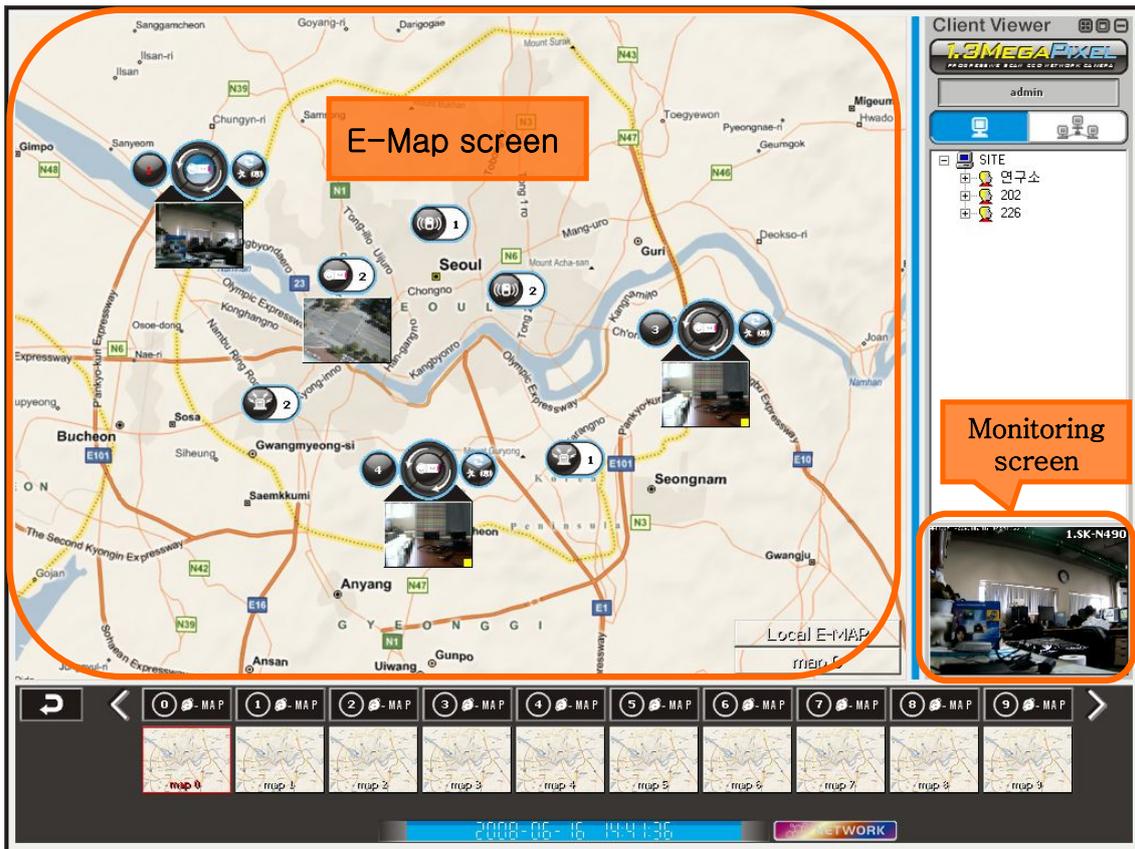Below picture is **Snapshot** button( )of **Information Tap**

[Pic 3-6] Snapshot screen

[Pic 3-7] Print screen of snapshot

Chapter 3. Monitoring

[Snapshot button]

	Preview	Preview
	Save	Saving
	Print	Print
	Refresh	Refresh
	Mirror	Mirroring
	Flip	Flip
	Negative	Negative image
	Brightness	Brightness control bar
	Contrast	Contrast control bar
	Exit	Exit

Chapter 4. E-Map Mode

[Pic 4-1] E-Map mode screen

[Button explain]

⊞ ▣ ⊟	⊞	E-Map full screen view
	▣	E-Map max. view
	⊟	E-Map minimize
admin		Log-in ID
🖥	🖥 SITE	Select SITE add
🖧	🖥 GROUP	Select GROUP add
🖥 SITE		SITE add (Network camera add)
🖥 GROUP		GROUP add
2008-03-05 10:58:53		TIME display
NETWORK		Network Hologram (Working once a SITE connected)
⏎		EXIT E-MAP
‹ ›		Previous, Next Map view

Chapter 4. E-Map Mode

		Open E-Map folder (Can add other E-Map file)
		Registered E-Map Select E-Map by mouse click (Max. 16 E-Map can be added)
		Alarm ON/OFF
		Sensor display
		Standard camera icon
		Spread camera icon

Like below picture, E-Map screen and monitoring screen can be cross change by double clicking. In mini E-Map screen, red dot is camera, yellow is sensor and green is alarm. Location change is also possible in mini E-Map.
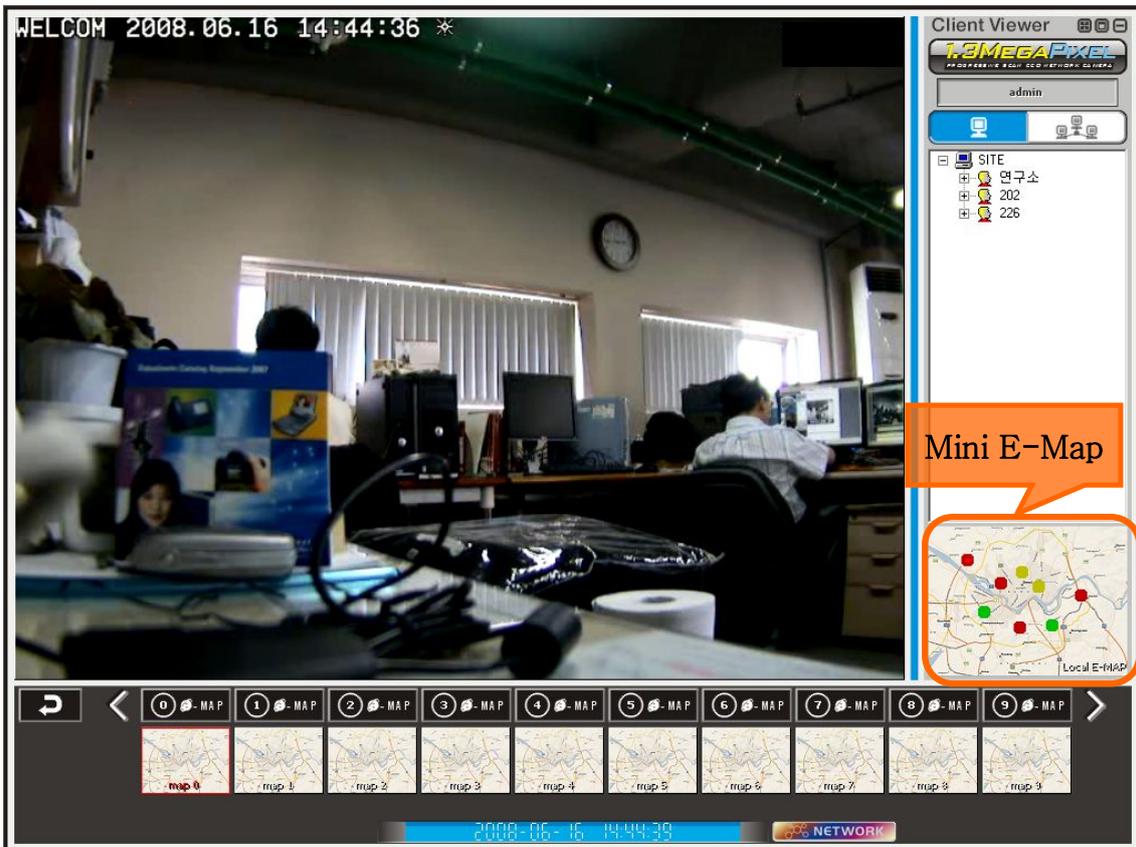
[Pic 4-2] Screen change between E-Map and Monitoring screen

Chapter 4. E-Map Mode

4.1 Camera Icon

1. Counterclockwise rotation

2. Channel No.

3. Camera selection

4. LED

5. Clockwise rotation

6. Preview screen

[Pic 4-3] Camera Icon

There are 4 types camera icon as like standard, spread, preview-standard and preview-spread. Click the right button in mouse. Then there is a Spread Mode which changes camera icon from standard camera icon into spread camera icon. There are 2 ways to use preview screen. One is choosing preview in pop-up menu and the other is double-clicking. All preview screen would be appear or disappear once clicking the E-Map one more time which already displaying in E-Map screen.

1. Counterclockwise rotation : Rotate the camera counterclockwise (Total 12 directions) .

2. Channel No. : Channel number of camera.

3. Camera selection : Show the channel in E-Map mode monitoring screen.

4. LED : Connection status / Motion / Sensor.

5. Clockwise rotation : Rotate the camera clockwise (Total 12 directions)

6. Preview screen : Show the camera picture.

4.2 Sensor / Alarm Icon

[Pic 4-4] Sensor icon

Choose the sensor which is set in "Pic 2-6 Environment setup"
[Reference] Real sensor number is displayed in SITE E-Map mode.

[Pic 4-5] Alarm icon

Choose the alarm which is set in "Pic 2-6 Environment setup"
[Reference] Real alarm number is displayed in SITE E-Map mode.

# Chapter 4. E-Map Mode

4.3 Local / Site / Group E-Map

There are 3 kinds of E-Map independently, Site E-Map, Group E-Map, Local E-Map.

Camera, Sensor, Alarm which connected in one site can be located in Site E-Map. And real sensor / alarm no. are displayed during sensor / alarm event.

Camera, Sensor, Alarm which listed site in group can be located in Group E-Map.
And the designated sensor / alarm in "Pic 2-6 Network Camera Environment Setup" are displayed accordingly.

All Camera, Sensor, Alarm can be located in Local E-Map.
And the designated sensor / alarm in "Pic 2-6 Network Camera Environment Setup" are displayed accordingly.

4.4 E-Map Pop-up Menu
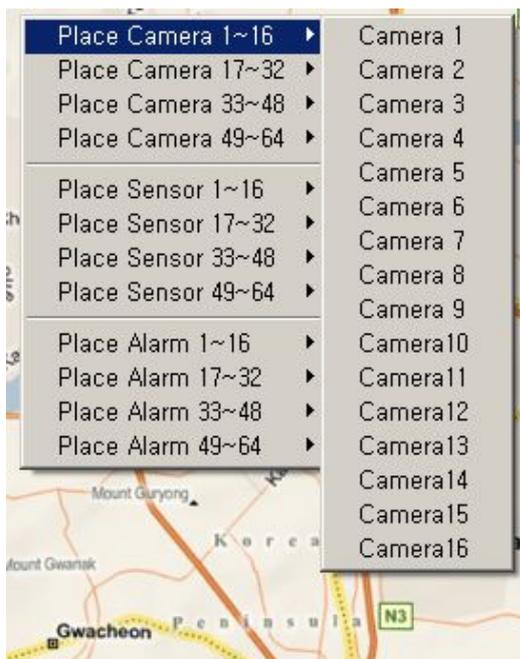
Listed menu when mouse right button is clicked in E-Map screen (supported in E-Map mode)

Place Camera XX	Place XX channel camera
Place Sensor XX	Place XX channel sensor
Place Alarm XX	Place XX channel alarm

* Designated channel / sensor / alarm icon is placed in mouse position.
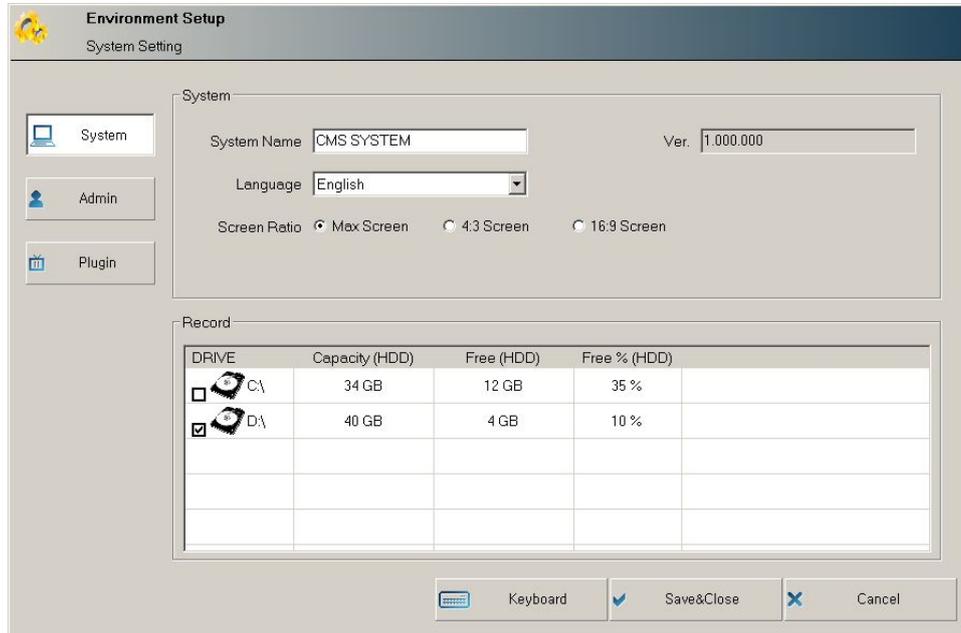
Chapter 4. E-Map Mode
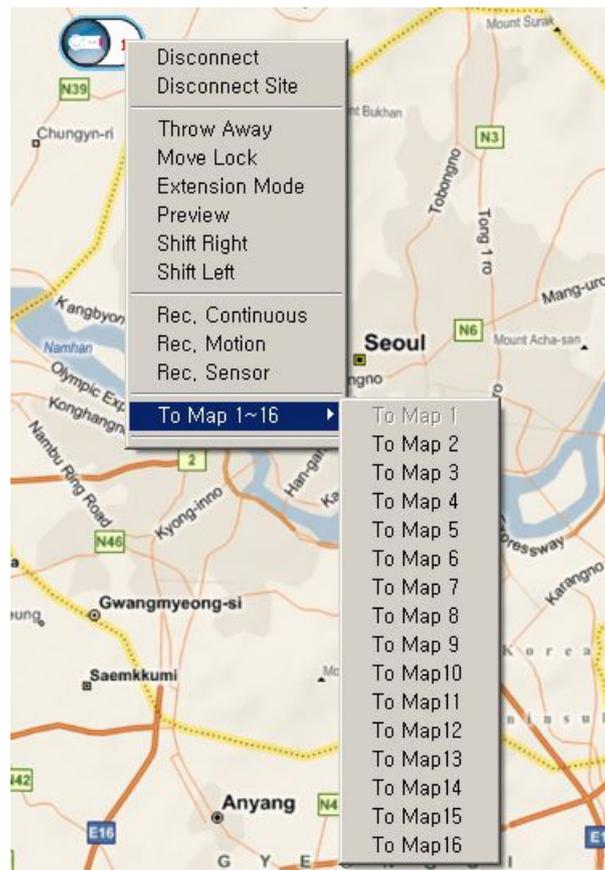
[Button explain]

Listed menu when icon is clicked with right mouse button in E-Map.
(supported in E-Map mode)

Disconnect	Disconnect the channel
Disconnect Site	Disconnect every channel which registered in same site.
Throw Away	Throw away
Move Lock	Lock the location of icon
Extension Mode	Change into extension mode icon. Only camera icon. Refer "CAMERA ICON"
Preview	Preview function. Only camera icon. Refer "CAMERA ICON"
Shift Right	Rotate camera clockwise. Only camera icon.
Shift Left	Rotate camera counterclockwise. Only camera icon.
Rec, Continuous	Continuous record setting for designated channel
Rec, Motion	Motion record setting for designated channel
Rec, Sensor	Sensor record setting for designated channel
To Map 1~16	Move to other channel in 16 channel

Chapter 5. Environment Setup

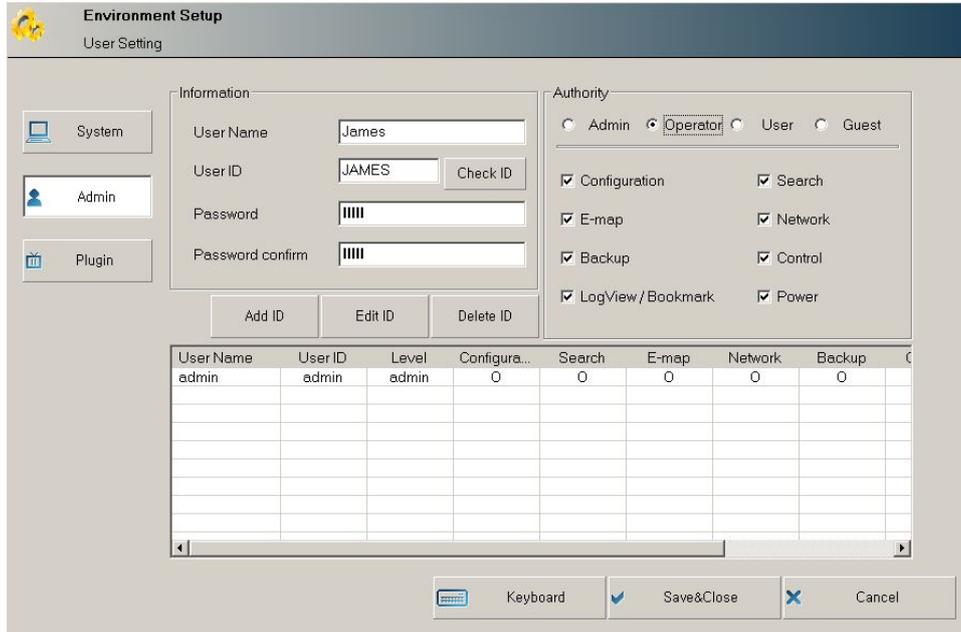## 5.1 System Setup

Click setup icon at the monitoring screen

[Pic 5-1] System setting window

System Name CMS SYSTEM	System same setting
Language English	Select language
Screen Ratio ⦿ Max Screen ○ 4:3 Screen ○ 16:9 Screen	Select screen ratio Max screen / 4:3 / 16:9
Ver. 1.000.000	System version
DRIVE Capacity (HDD) Free (HDD) Free % (HDD) ☐ C:\ 34 GB 12 GB 35 %	Recording drive setup Mark the drive for recording. The recording file would be saved on the superordinate drive and move to the subordinate drive if the capacity is filled up.
Keyboard	Opening for virtual keyboard
Save&Close	Save & Close
Cancel	Cancel & Close

Chapter 5. Environment Setup

5.2 User Setting

[Pic 5-2] User Setting window

[Button & Functions]

|	
User Name: James	User name setting
User ID: JAMES / Check ID	User ID Setting Check ID : ID Duplicate Check
Password	Password setting
Password confirm	Password confirmation
Authority: Admin / Operator / User / Guest	User authority setting
Add ID / Edit ID / Delete ID	Add ID/Edit ID/Delete ID
User Name / User ID / Level / Configura... / Search / E-map / Network / Backup admin / admin / admin / O / O / O / O / O	
Users List : Registered Users and authorities	

[Remark] The setting add/edit/cancel are available only by superior user.
Administrator can setup all the settings except adding the administrator.

Chapter 5. Environment Setup

[User Authority]

| administrator	Top and sole authority. The factory default ID/Password is admin/admin and has the authority of administrator.
Operator	Subordinate of administrator. Administrator enable to add/edit/cancel and allow the authority.
User	Subordinate of operator. User can be add/edit/canceled by administrator and operator. User is allowed authorities except environment setup and close CMS.
Guest	Lowest authority. Guest can be add/edit/canceled by superior users. Search & E-map are allowed.
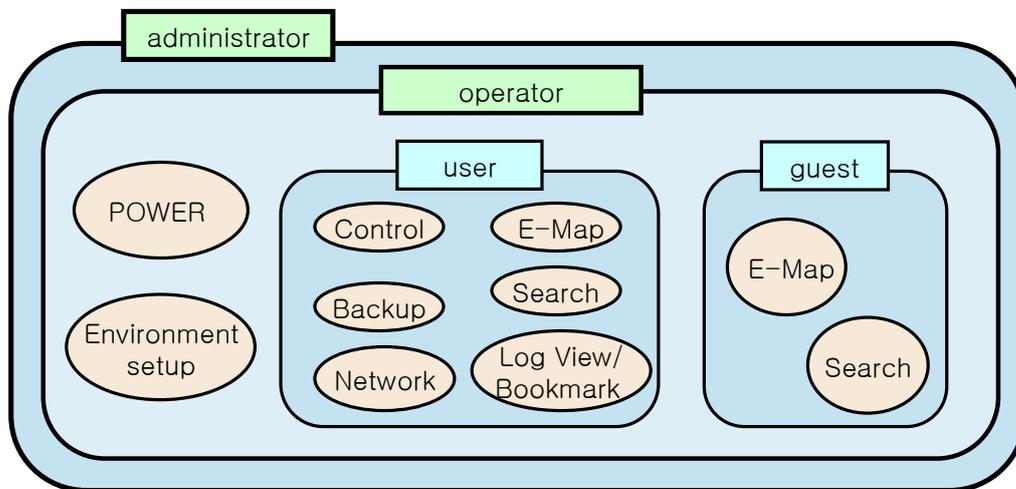
[Authority Description]

Environment Setting	-Environment setting window setup -Save -Site and group address add/edit/cancel
Search	-Search mode setting and control -Backup data search
E-Map	-E-map mode setting and control -Local/Site/Group E-Map Open
Network	-Network Connection -Network Disconnection
Backup	-INF Backup -AVI Backup
Control	-PTZ / Color settings -Alarm On/Off
Log view/ Bookmark	-Log view -Bookmark
Power	-Close CMS

Chapter 5. Environment Setup

## 5.3 Plug-In setting
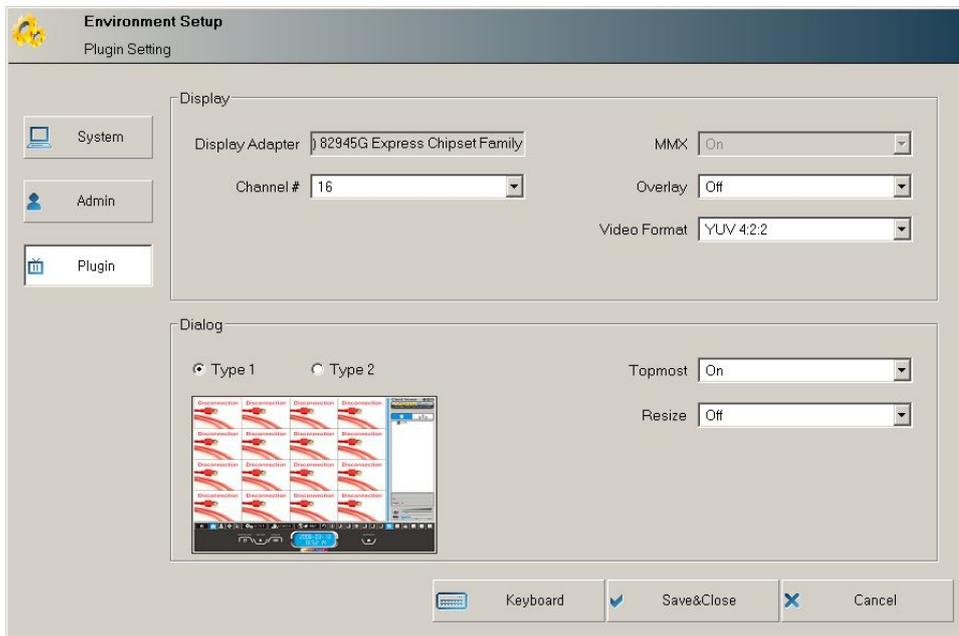
[Picture 5-3] Plug-in setting window

[Functions setting]

Display Adapter — Intel(R) 82945G Express Chipset	Graphic Card Adapter
Channel # — 64	Number of Channels (4 / 16 / 36 / 64)
MMX — On	MMX On/Off
Overlay — Off	Overlay On/Off
Video Format — YUV 4:2:2	Video Format (YUV4:2:2 / RGB32)
Type 1 Type 2	Dialog type Setting
Topmost — On	Dialog Topmost On/Off
Resize — Off	Dialog Resize On/Off

[Remark] Restart the CMS to reflect the revised Plug-In settings.
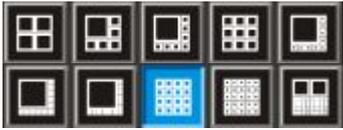
Chapter 6. Search Mode

6.1 Search
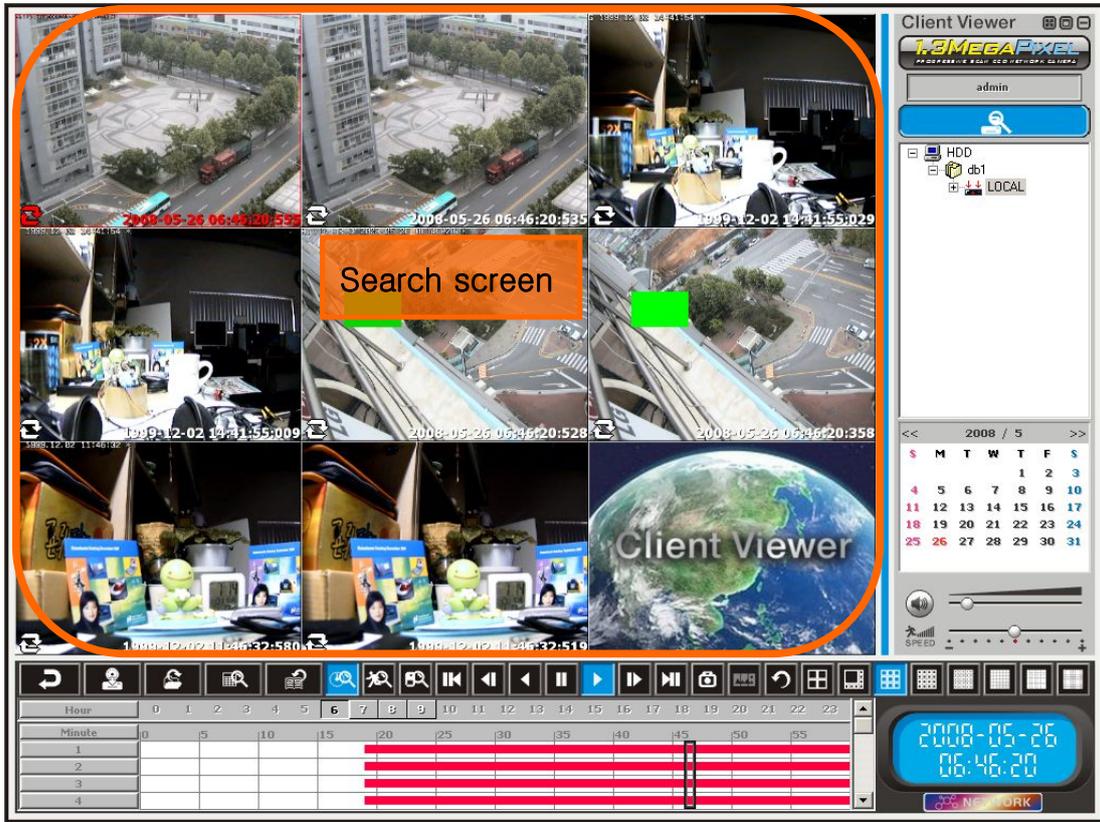
[Pic 6-1] Search mode screen

[Button explain]

⊞ ▣ ⊟		⊞	Search screen full view
		▣	Search screen Max. view
		⊟	Search screen minimize
admin			Log-in ID
🔍		↓↓ LOCAL	search registration
2008-05-26 06:46:20			searching time
NETWORK			network hologram (activated while searching)
⤺			Exit search mode

Chapter 6. Search Mode

|		
		Backup button
		Open INF file (backup data)
		Log view - Event list search
		Bookmark
		Search continuous recording
		Search motion recording
		Search sensor recording
		Move 1minute to reverse
		1frame play to reverse
		Reverse play
		Pause
		Play
		Play 1 frame
		Skip 1 minute
		Snapshot BMP/JPG file capture & print With reference to "snapshot" tap of the manual
		Panorama view (when 1channel is activated) Panorama is shown by 16 devided pictures.
		Refresh back to initial screen
		screen division (4 to 64 channel)

Chapter 6. Search Mode

		PC speaker volume control No sound
SPEED		Adjustment of searching speed
<< 2008 / 5 >> S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	<< 2008 / 5 >>	Calendar – Year / Month selection
	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Calendar – Day selection Green : There is a data Red : Now searching

Hour	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Minute	0 5 10 15 20 25 30 35 40 45 50 55
1	
2	
3	
4	

Time selection

1. Hour
   If there is a data, button is activated.
2. Minute
   If there is a data, it indicates by different color of graph according to continuous / motion / sensor recording.

Chapter 6. Search Mode
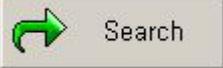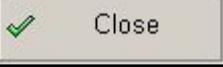
6.2 Log view

Click the log view button then window will be open. If log view is activated while searching, log search will be initialized. If search is not activated, log search will execute the present date. Search will execute while log view is on. Searching time can be changed using log view search button.
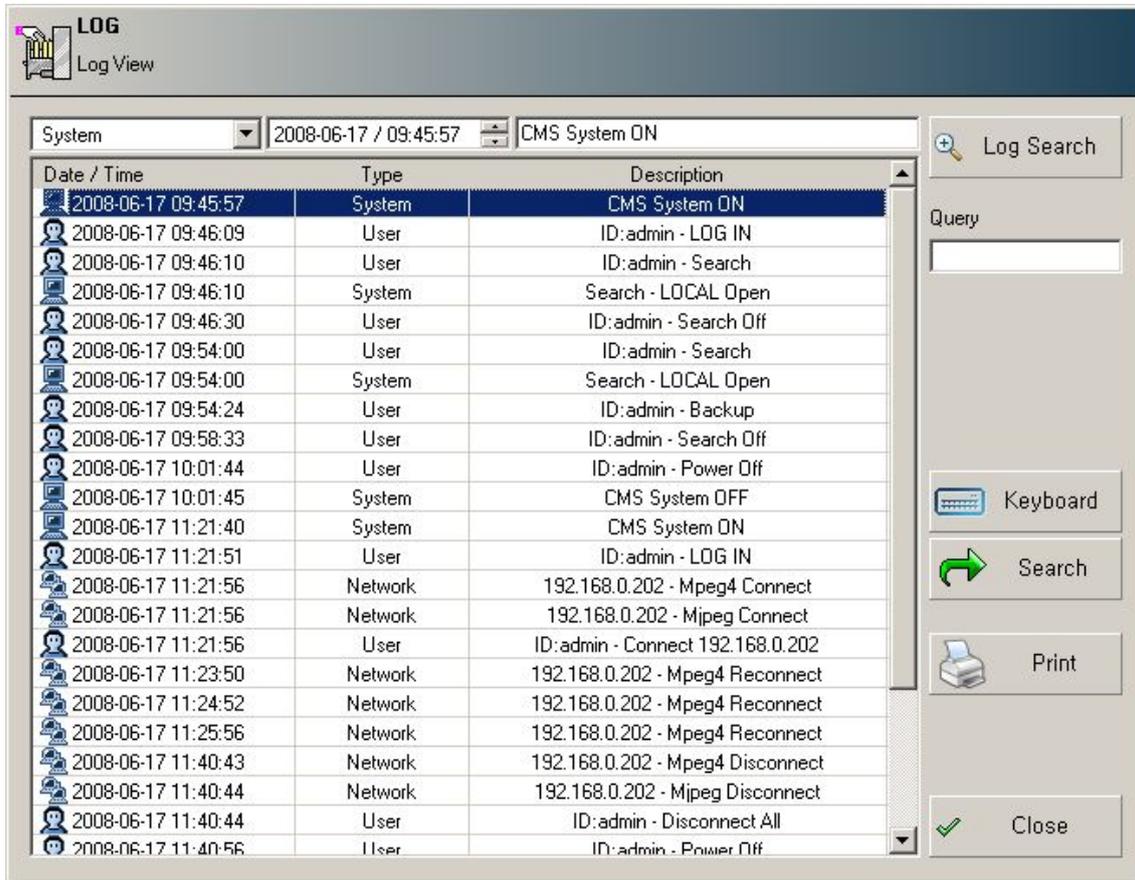
[Pic 6-2] Log view

		Log type selection
2008-06-17 / 09:45:57		Log time configuration & selected log time
CMS System ON		Contents of selected log
Date / Time		Date/time list
Type	System type log
	User type log
	Network type log
	Event type log
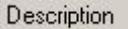
Description		Log contents list
Query		Log query configuration This function can search specific character of log contents.
Log Search		Log search using configured log type/log time/log query
Keyboard		Virtual keyboard
Search		Search selected time of log
Print		Print log list
Close		Close

Log type

    1. System type
        A. ON/OFF CMS
        B. system operation for recovering data
        C. save new & close
        D. configuration change
        E. backup
        F. open backup data

    2. user type : user's data

    3. network type : network connection status

    4. event type : motion, sensor, alarm event record

6.3 Bookmark

Window will open when the bookmark button is clicked at search menu.
Bookmark can be performed only while searching. Searching will not be stopped while bookmarking. Searching time can be changed using search button.
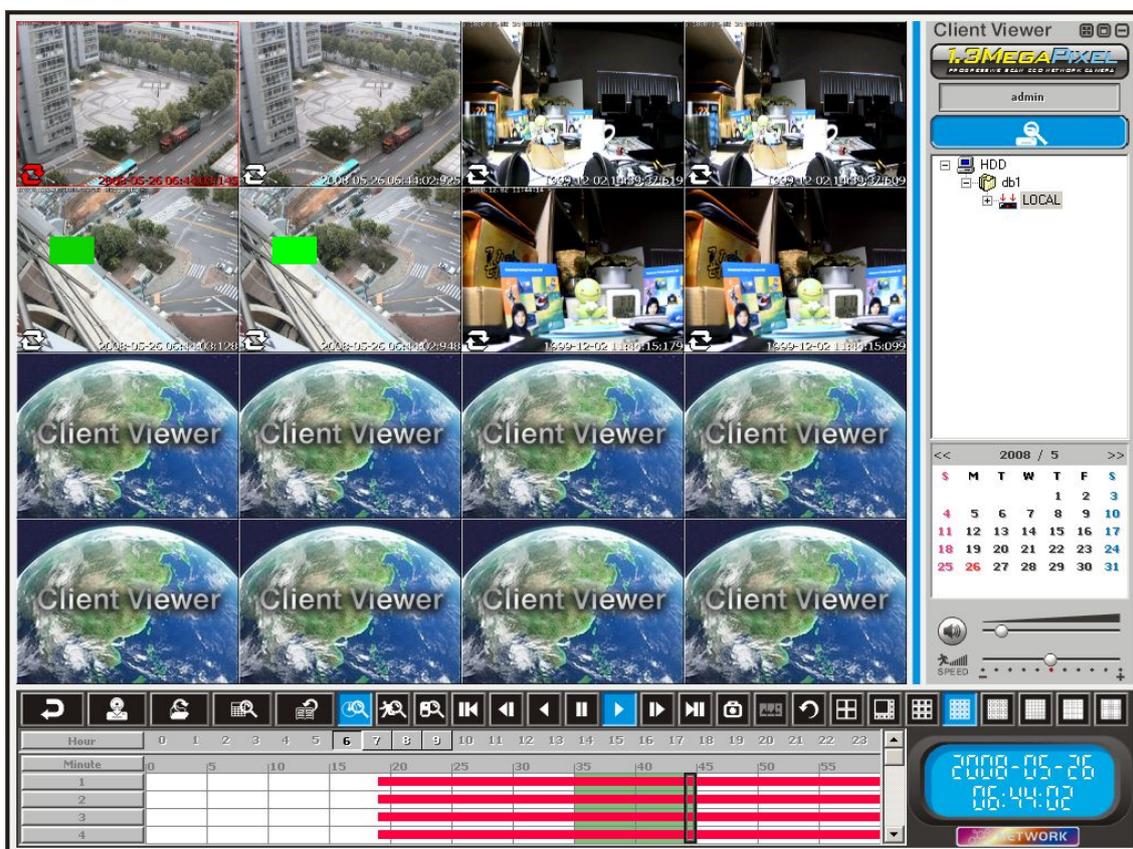Contents can be listed which log-in user bookmarked.
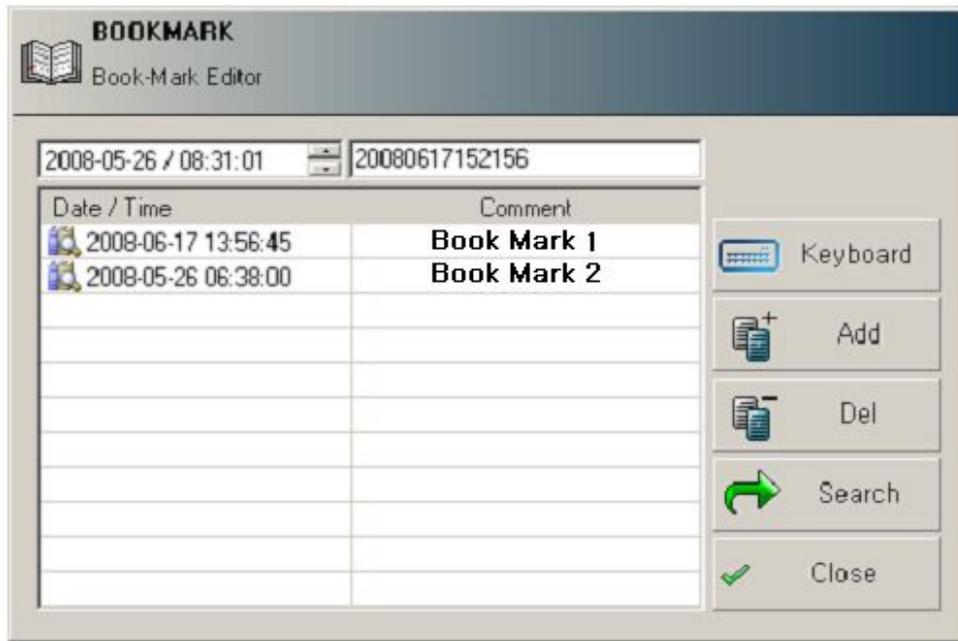
[Pic 6-3] Bookmark
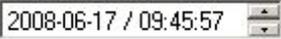
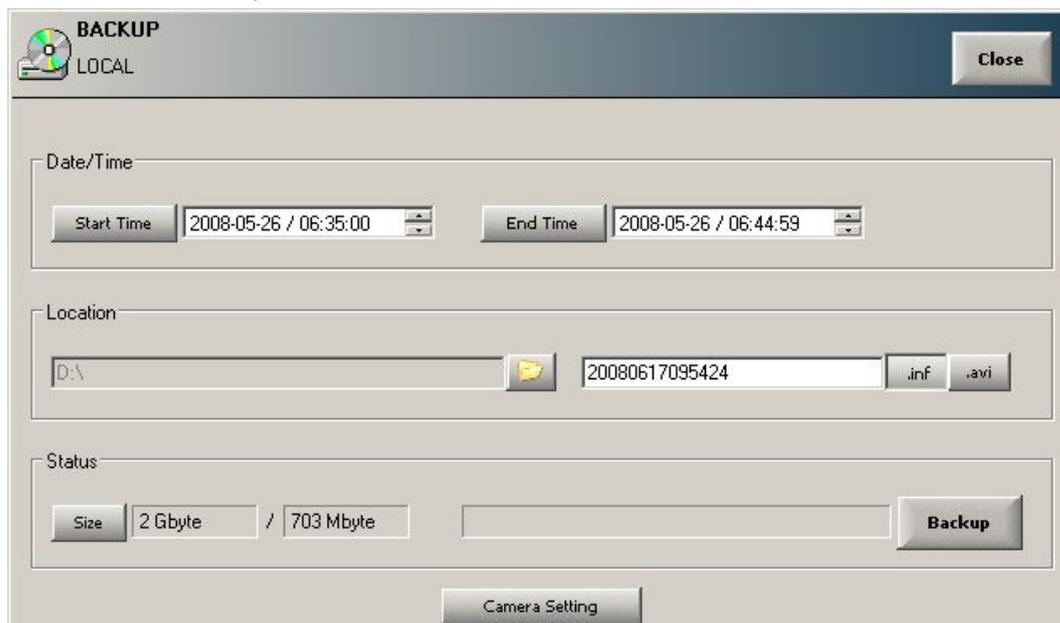|		
2008-06-17 / 09:45:57		Time to bookmark
20080617152156		bookmark name Name is needed to distinguish configuration.
Keyboard		Virtual keyboard
Add		Add bookmark
Del		Delete bookmark
Search		Move to time of selected bookmark
Close		Close

Chapter 7. Backup mode

7.1 Selection of backup scope

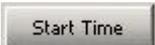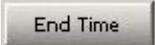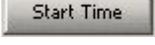

[Pic 7-1] Selection of backup scope
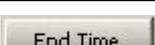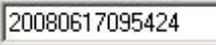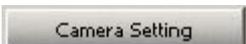
	Drag To archive video clip recorded for certain period, drag the time to backup. Dragged period appear green.
	Backup button Click the backup button. The backup dialog window appears.

7.2 INF / AVI Backup

[Pic 7-2] Backup dialog window
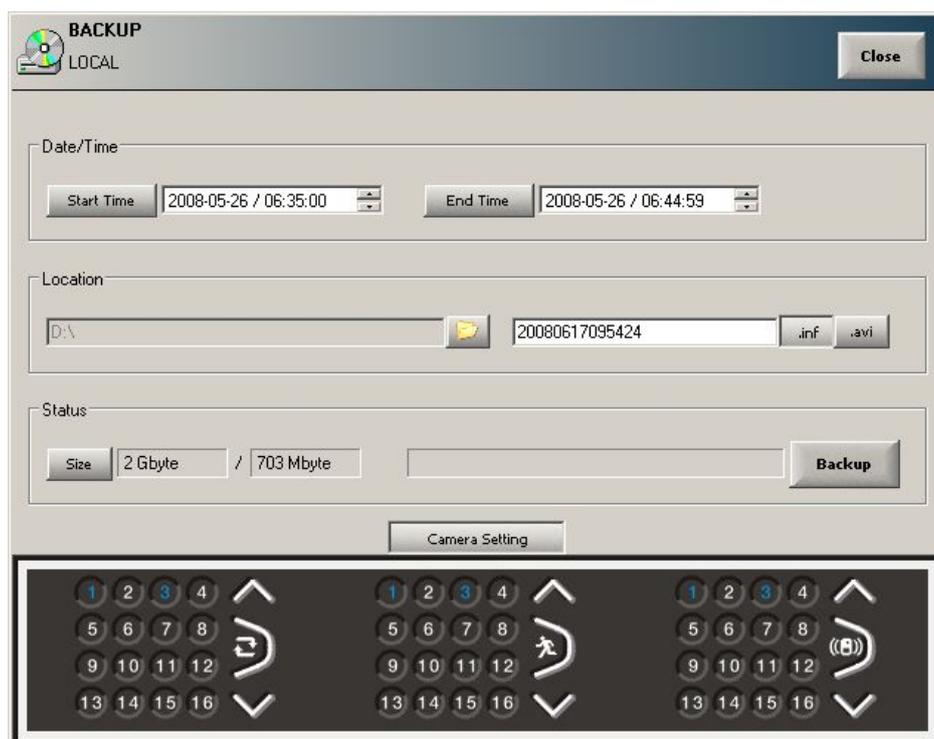
Start Time End Time	Start Time End Time	User can easily archive video while he/she watches video playback. In playback mode, user can set 'start time' and 'end time'.
D:\ 📁	D:\	Location selection – Specify the backup folder in the PC to backup recording files. In case of CD writer installed, CD drive can be selected.
	📁	Open folder selection window
20080617095424		Backup file name – Specify the backup file name
.inf .avi	.inf	Select INF backup
	.avi	Select AVI backup
Size 2 Gbyte / 703 Mbyte		Click "Size" button to learn the backup file size and storage capacity before starting backup.
Backup		Backup button – After setting all about backup, click backup button to start backup
Camera Setting		Camera setting – Click to specify about the channels condition

Chapter 7. Backup mode

1. INF backup
   Click this option to archive several channels simultaneously.
2. AVI backup
   Make the AVI backup file separately for each channel.
3. Camera setting
   After clicking 'camera setting' button, user can select the channel No. that user want to backup.
   The setting parameters are 'continuous', 'motion' and 'sensor' record.

[Pic 7-3] Camera setting window

	① ② ③ ④	Channel selection
	⋀	Showing previous 16 channels
	continuous recording	Select all current 16 channels. If they already selected, cancel all channel.
	motion recording	
	sensor recording	
	⋁	Showing next 16 channels

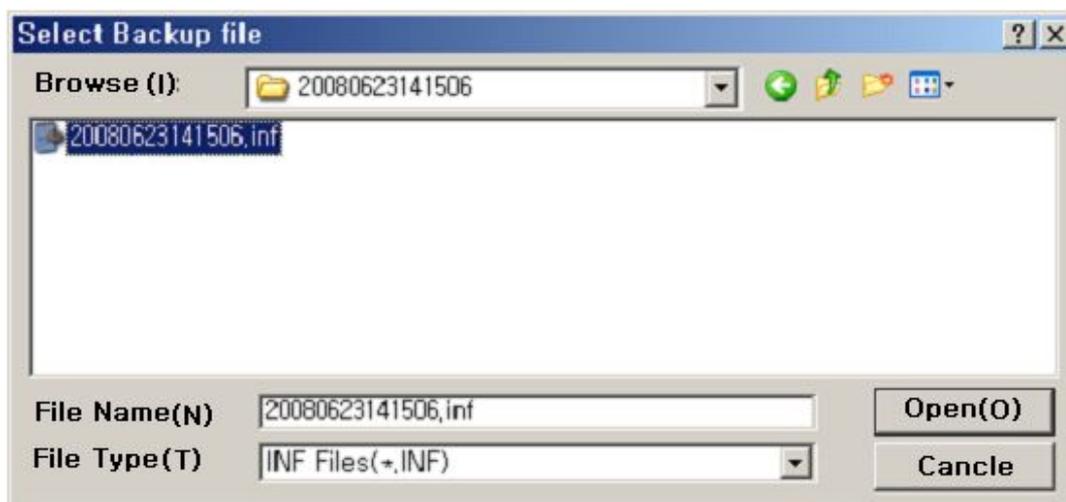# Chapter 7. Backup mode

7.3 How to view INF backup file

There is two ways to view INF backup file.

7.3.1 Using 'Inf file open' button in 'Search' mode on the CMS

In 'search mode' on the CMS,
Click 'Inf file open' button, and then select the backup file.
User can view details on the search list. By double-clicking ⊟↓↓ icon,
user can select search list.

[Pic 7-4] INF file selection window

[Pic 7-5] View details on the search list

Chapter 7. Backup mode

7.3.2 Using 'Player.exe'

Player will be added when user select INF backup.
User can double click 'player.exe' file and add all INF file in the folder at search list.
By double-clicking ⊟ᴵᵢᵢ icon, user can select search list.

[Pic 7-6] Player screen

•Please read this manual carefully before installing and using the product and preserve it for reference purposes.

•This specification is subject to change without any prior notice to improve the quality.