PLANET
Networking & Communication

User's Manual

Central Management Software for NVR-915 / NVR-1615

► **CV5-M256**

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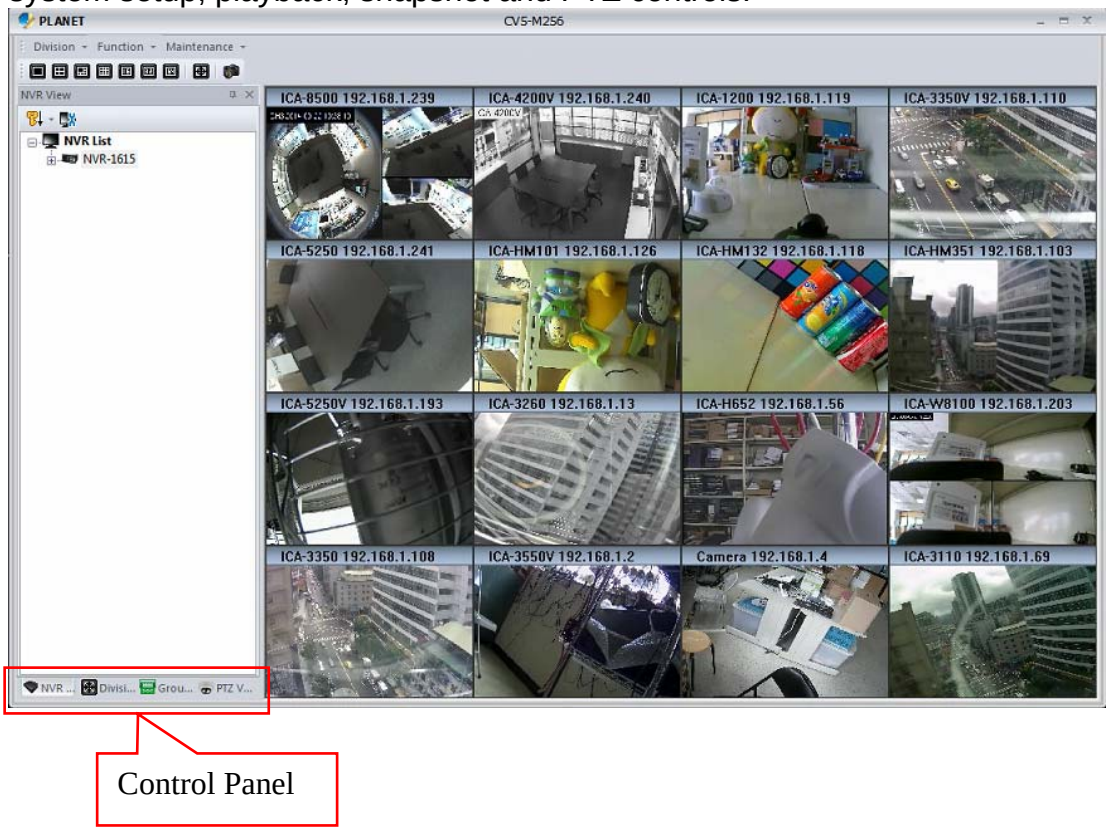
Minimum System Requirements

CPU	Intel Core i7 or above
RAM	Minimum 2GB, 4GB or above is recommended
HDD	SATA 1TB or above is recommended
Display card	Independent display card suggested Note: Make sure your display DPI setting is set to default at 96DPI To set DPI value, right-click on desktop, choose “settings” tab >> “advanced”
Ethernet interface	Gigabit Ethernet card or above
OS	Windows 2000(SP4), Windows XP, Windows 2003, Windows Vista, and Windows 7

Also it is strongly recommend to close the unnecessary programs while running CV5-M256 to monitor and record video streams from NVR.

Chapter 1. Main Console

This is the main control panel of CMS that provides live stream preview, system setup, playback, snapshot and PTZ controls.



1.1 Tool Bar

Division Switch:

You can switch to a screen division by these ways as shown below:

1. **Division Menu:** Click on “Division” on the menu bar and select the new division that you need.

2. **Division Buttons:** Click on the division button to switch to a new division.

Division 1 button

Division 4 button

Division 6 button

Division 9 button

Division 16 button

Division 32 button

Division 64 button

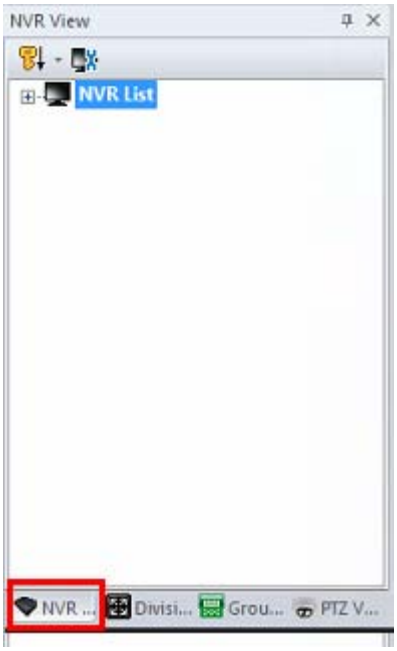
Full-Screen button

3. **Snapshot All:**

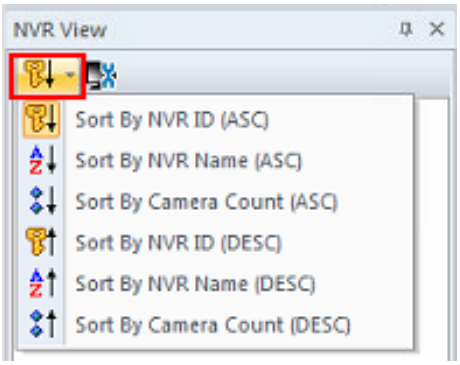
Click on the snapshot button and **the snapshot all dialog** will appear. Select the images that you need and save it.

1.2 NVR List

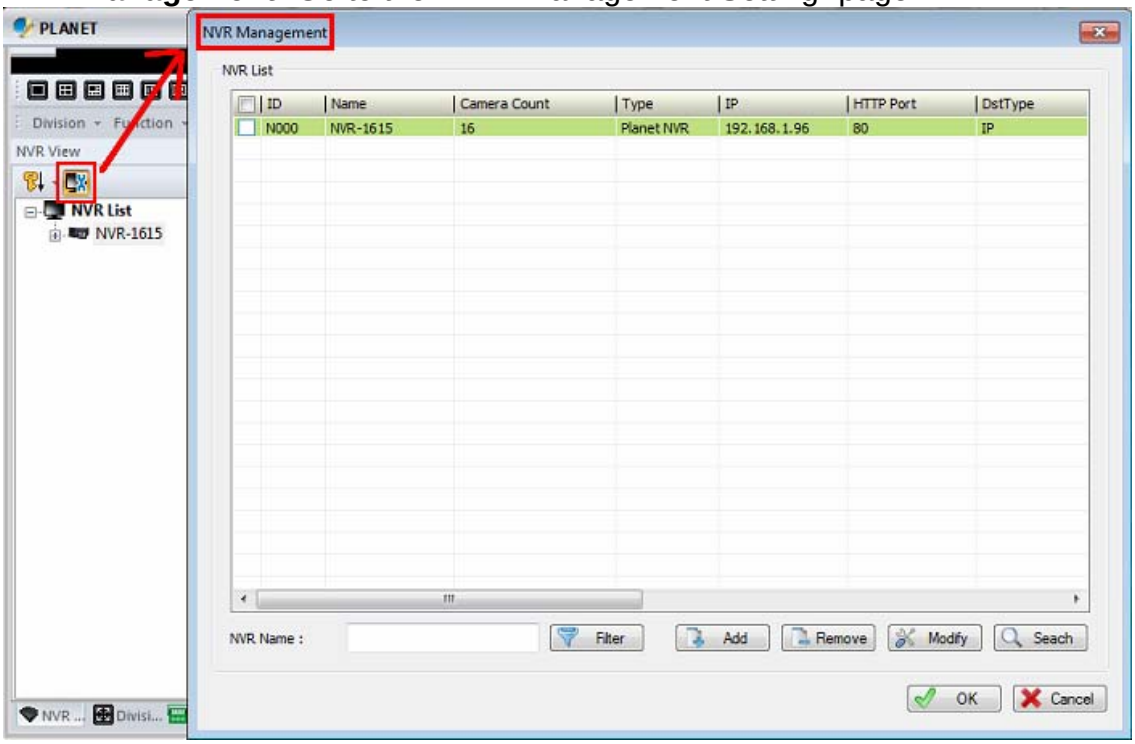
List the NVR and the cameras. You can connect them or go to the NVR setting page.



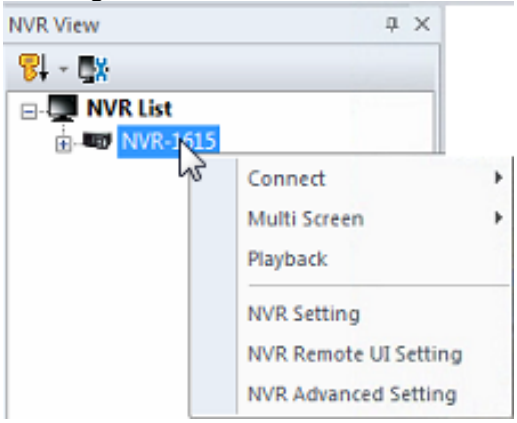
Sort NVR List: Click on the sort button and select the one you need from the menu.



NVR Management: Go to the “NVR Management Setting” page.



Sub Menu of NVR List: Right-click mouse on the NVR.

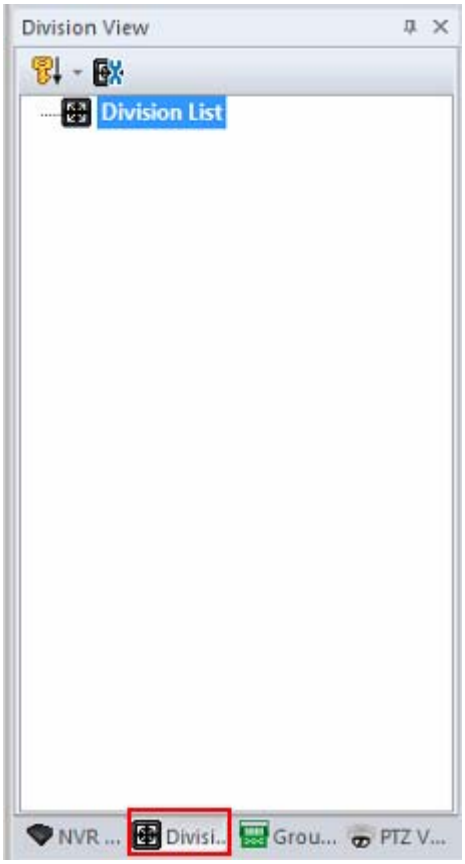


Connect	Connect to the selected NVR to preview live

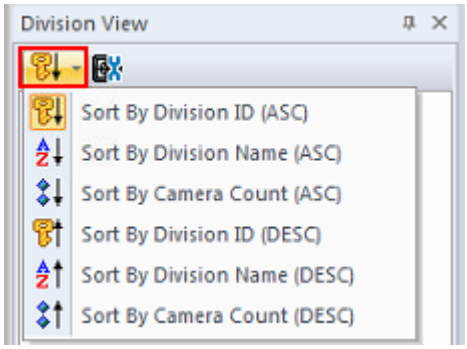
	streaming.
Multi Screen	Create current preview window to selected screen.
Playback	Bring on the playback application.
NVR Setting	Show the NVR setting dialog.
Remote UI Control	Bring on the remote NVR's UI control dialog.
NVR Advanced Setting	Bring on the IE browser to setting with NVR.

1.3 Division List

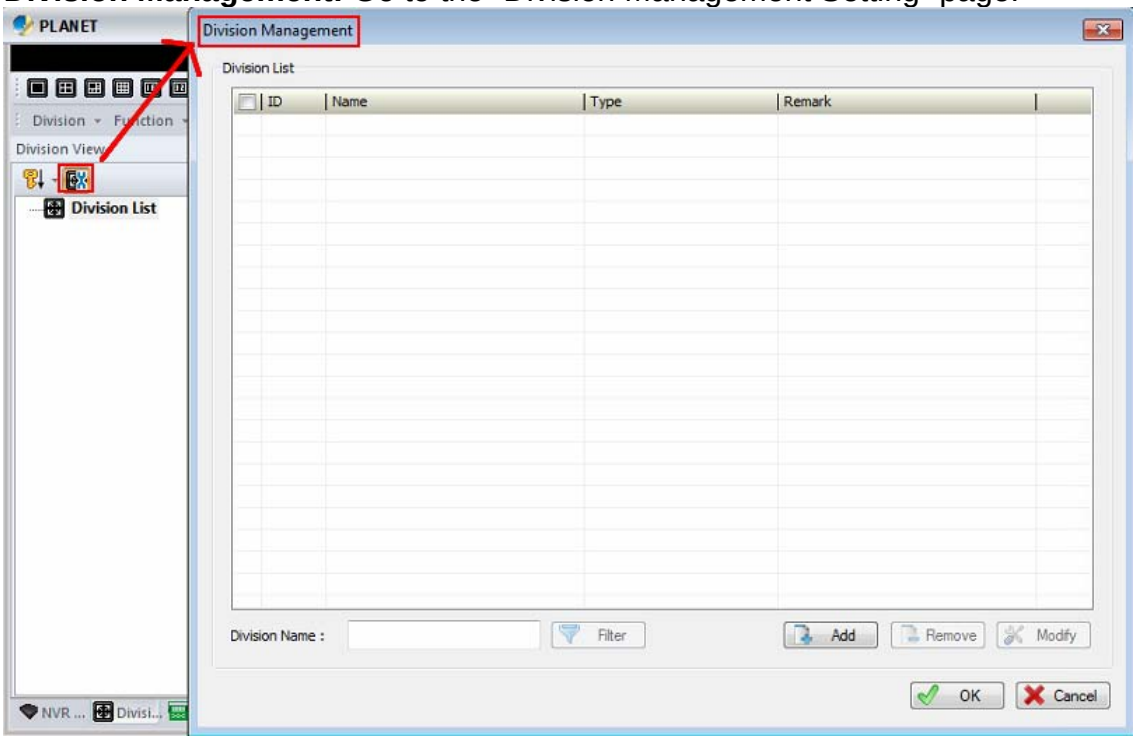
List the existing division and the cameras. You can connect them or go to division setting page from here.



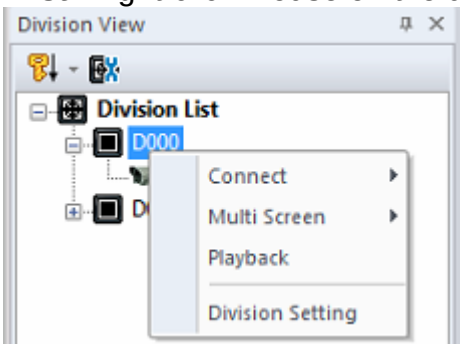
Sort Division List: Click on the sort button and select the one you need from the menu.



Division Management: Go to the “Division Management Setting” page.



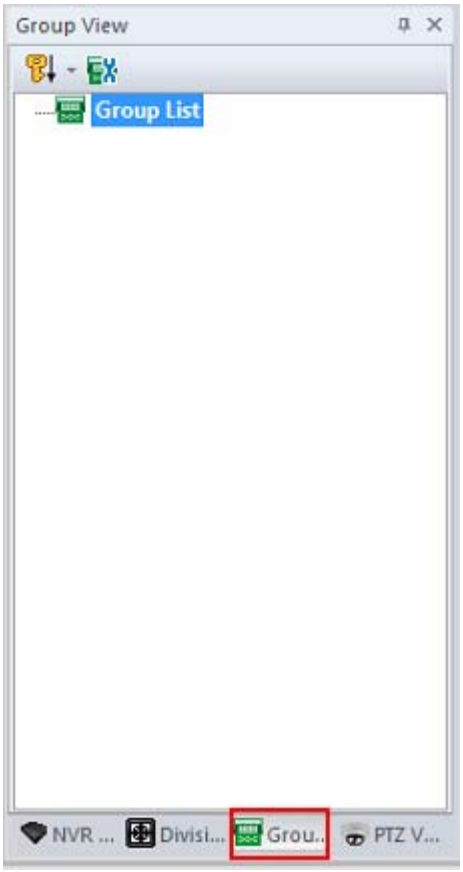
Sub Menu of Division List: Right-click mouse on the division.



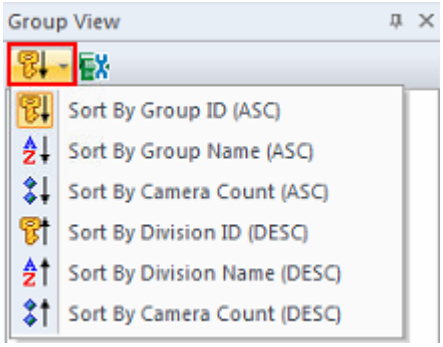
Connect	Connect to the selected Group to preview live streaming or disconnect the division.
Multi Screen	Create current preview window to selected screen.
Playback	Bring on the playback application with the division setting.
Division Setting	Go to the Division Setting page.

1.4 Group List

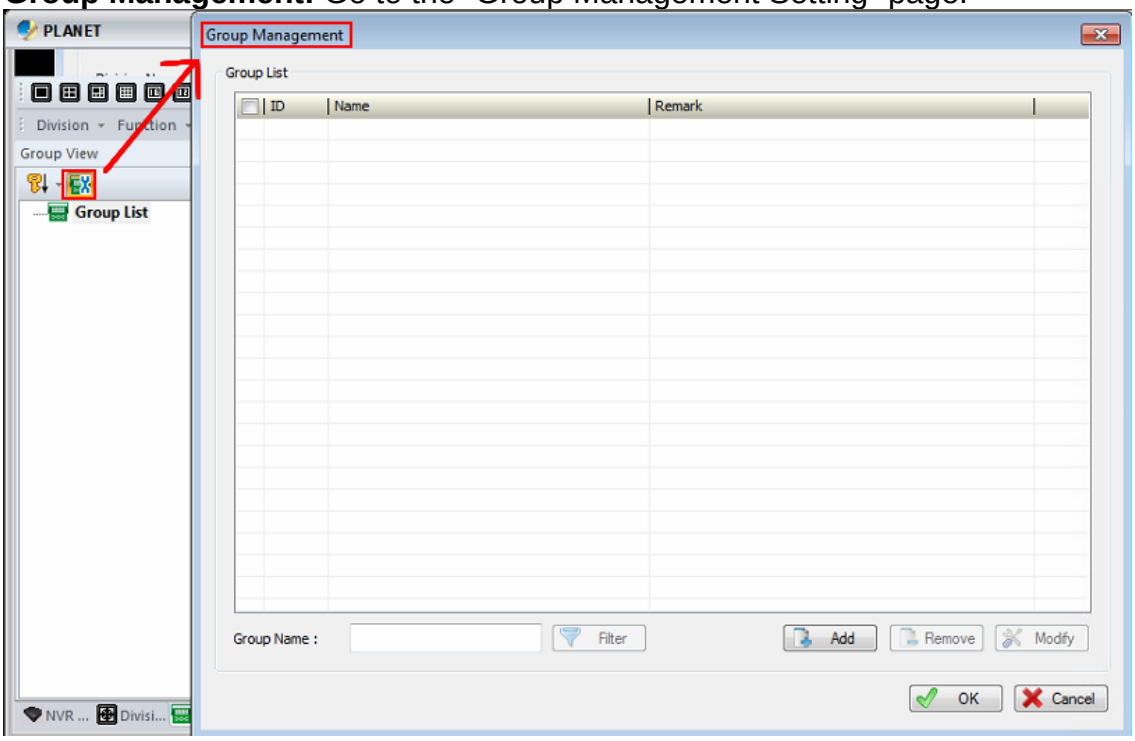
List Groups and their cameras. You can connect them or go to Group setting page from here.



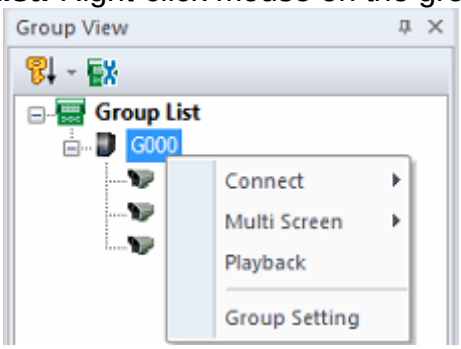
Sort Group List: Click on the sort button and select the one you need from the menu.



Group Management: Go to the “Group Management Setting” page.



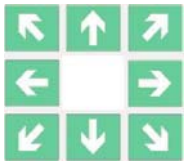
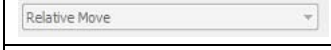
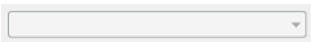
Sub Menu of Group List: Right-click mouse on the group.



Connect	Connect to the selected Group to preview live streaming or disconnect the group.
Playback	Bring on the playback application.
Multi Screen	Create current preview window to selected screen.
Group Setting	Go to the Group Setting page.

1.5 PTZ Panel

Pan /Tilt:

Direction button 	Click it to move PTZ camera direction.
Home button	Click it to make camera return to home position.
PTZ Speed Control	Adjust the increment of the PTZ movements. The default speed is 5. You can adjust it from 1 to10.
Relative Move / Continuous Move 	Select the moving mode.
Tour	Select a tour setting from combo box and click “go” button to start tour. Click “Stop ” button to stop tour.
Preset 	Select a preset position from combo box. Camera will move to preset position after clicking.

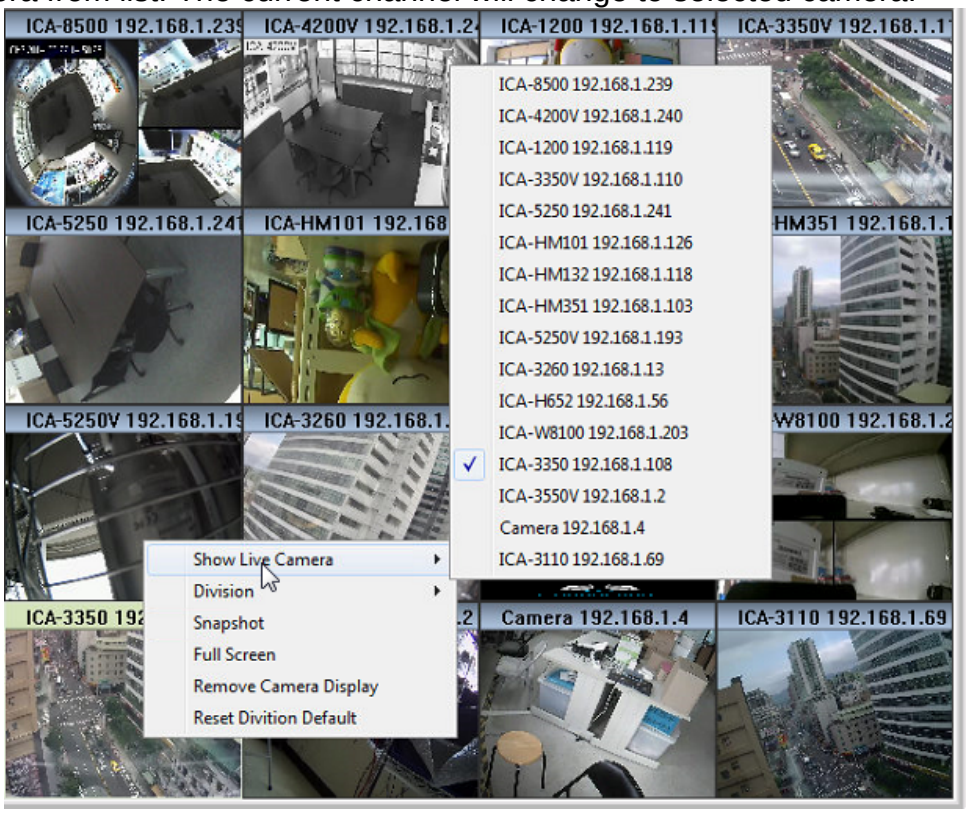
IRIS IRIS : Auto	Adjust camera's IRIS setting, or set it as Auto.
Focus Focus : Auto	Adjust camera's focus setting, or set it as Auto.
Zoom Zoom :	Zoom-in or zoom-out focus.
Pan Pan : Auto Stop	Begin camera auto pan or stop.

1.6 Operation with sub-screen

Right-click mouse and select the operation from popup menu. Some functions have quick link button on main console. You can call the functions from buttons, too.

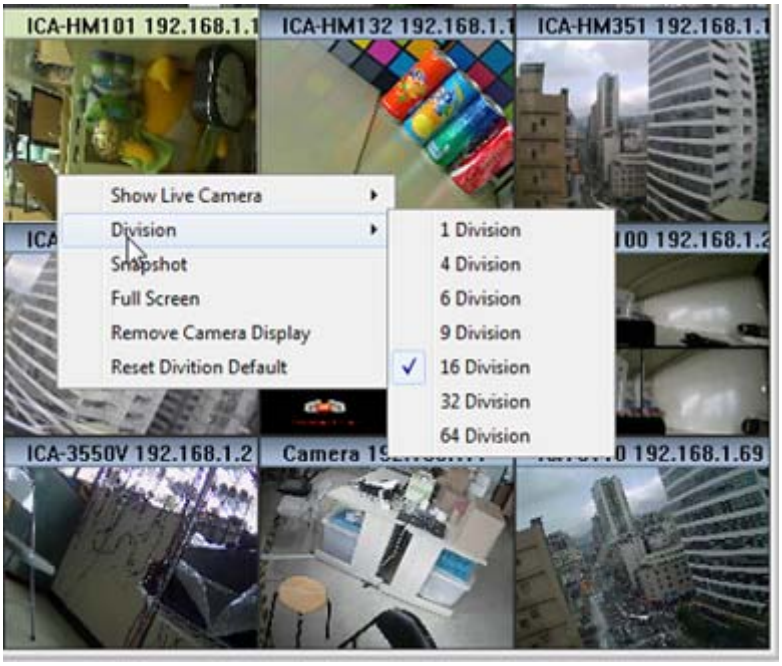
1.6.1 Change display channel

Right-click mouse and move cursor to "Show Live Camera", and select a new camera from list. The current channel will change to selected camera.



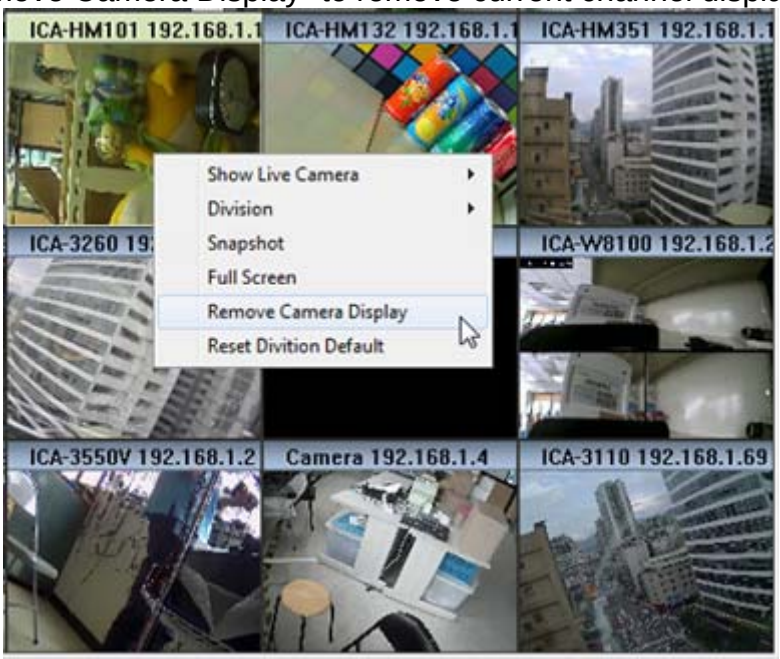
1.6.2 Switch divisions

Right-click mouse and move cursor to “Division” item, and select a new division type.



1.6.3 Remove Camera Display

Select “Remove Camera Display” to remove current channel display.

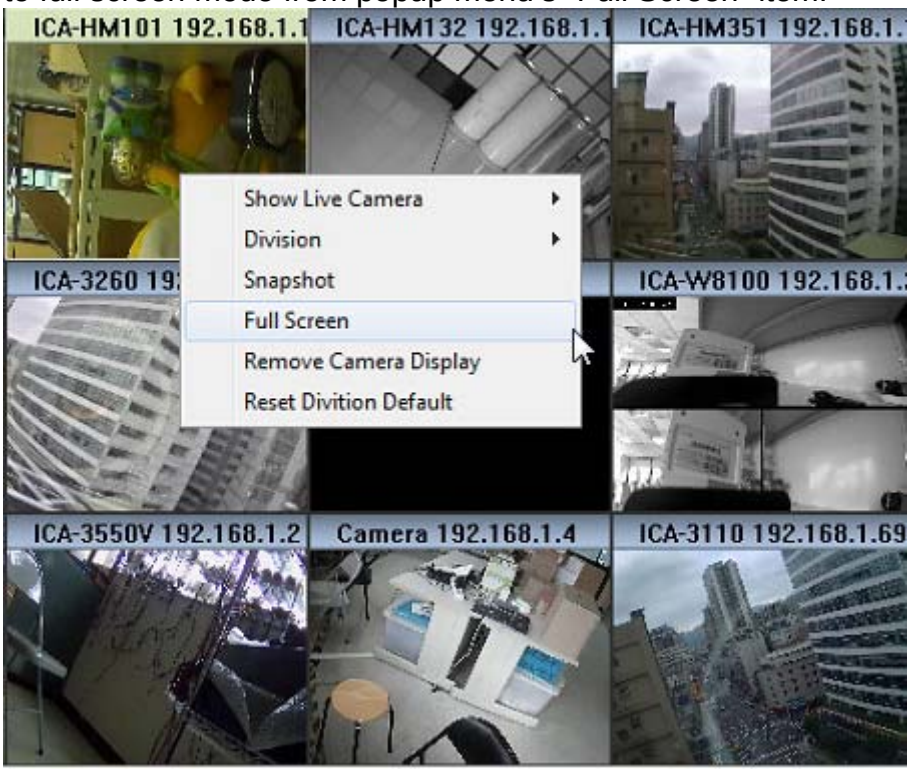


1.6.4 Snapshot

Right-click mouse on the focus channel and select the “Snapshot” item. System will snapshot the current image and save it on an assigned path or print it.

1.6.5 Full Screen

Switch to full screen mode from popup menu's "Full Screen" item.

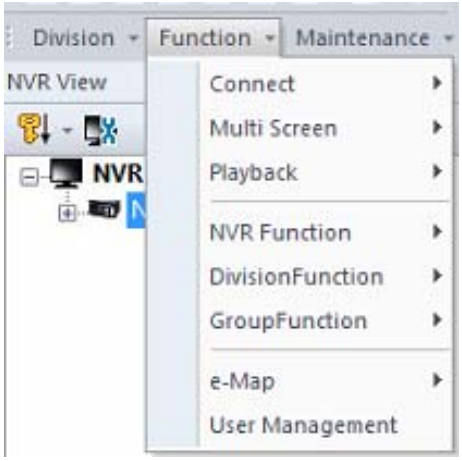


1.6.6 Restore Division Default

Select the "Restore Division Default" item on the popup menu and all sub screen channels will restore to default channels.

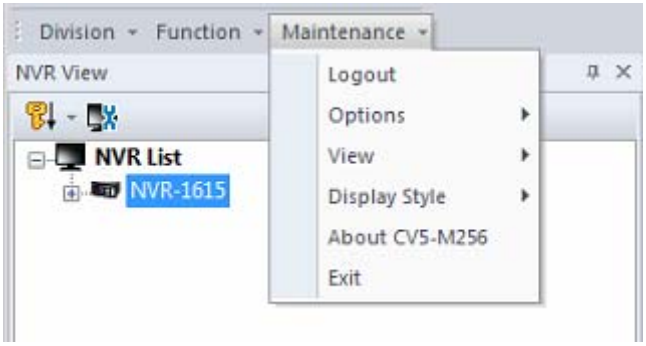
1.7 Function menu

Click on the “Function” item on the menu bar and select a function.

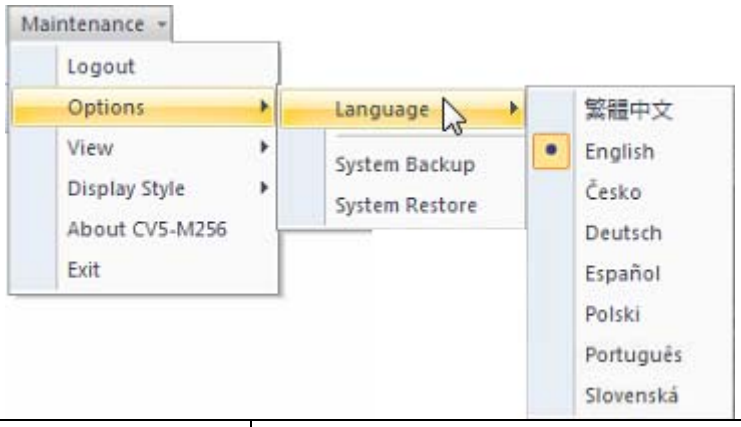


Connect	Connect cameras under the currently selected NVR or Division or Group. And disconnect the current connection.
Multi Screen	Show the currently selected cameras on the assigned screen.
Playback	Choose Playback as the current mode.
NVR Function	• **NVR Management:** Shows the all installed NVR list dialog. • **NVR Setting:** Shows the NVR’s channels Management setting dialog. • **NVR Remote UI Control:** Shows the Remote UI Control dialog with the currently selected NVR. • **NVR Advanced Setting:** Connect to NVR’s web service via IE browser.
Division Function	• **Division Management:** Shows the all created division list dialog. • **Division Setting:** Shows the selected division setting dialog.
Group Function	• **Group Management:** Shows the Group Management setting dialog. • **Group Setting:** Shows the Group’s channels Management setting dialog.
e-Map	• **e-Map:** Shows e-Map window. • **e-Map Setting:** Shows e-Map setting dialog.
User Management	Shows the User Management setting dialog.

1.8 Maintenance menu

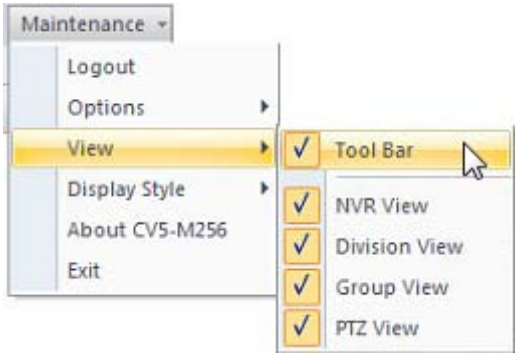


- **Login / Logout:** Login the system or Logout with the current login user.
- **Options:**

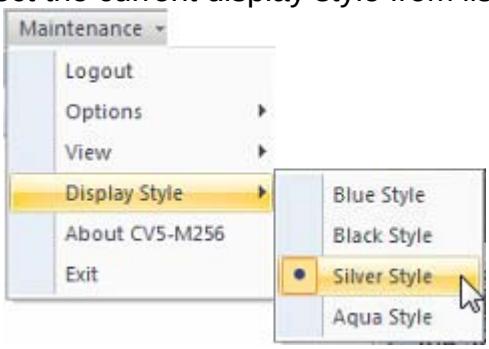


Language	Select the language from list.
System Backup	Backup CMS setting files to assigned path.
System Restoration	Restore backup setting file from assigned path.

- **View:** Select which toolbar items will show or hide.



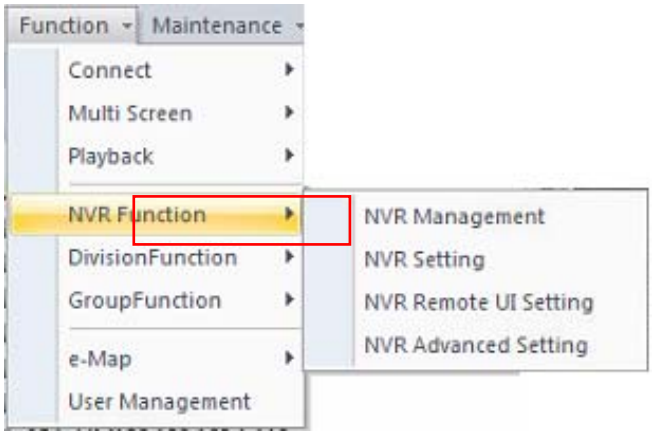
- **Display Style:** Select the current display style from list.

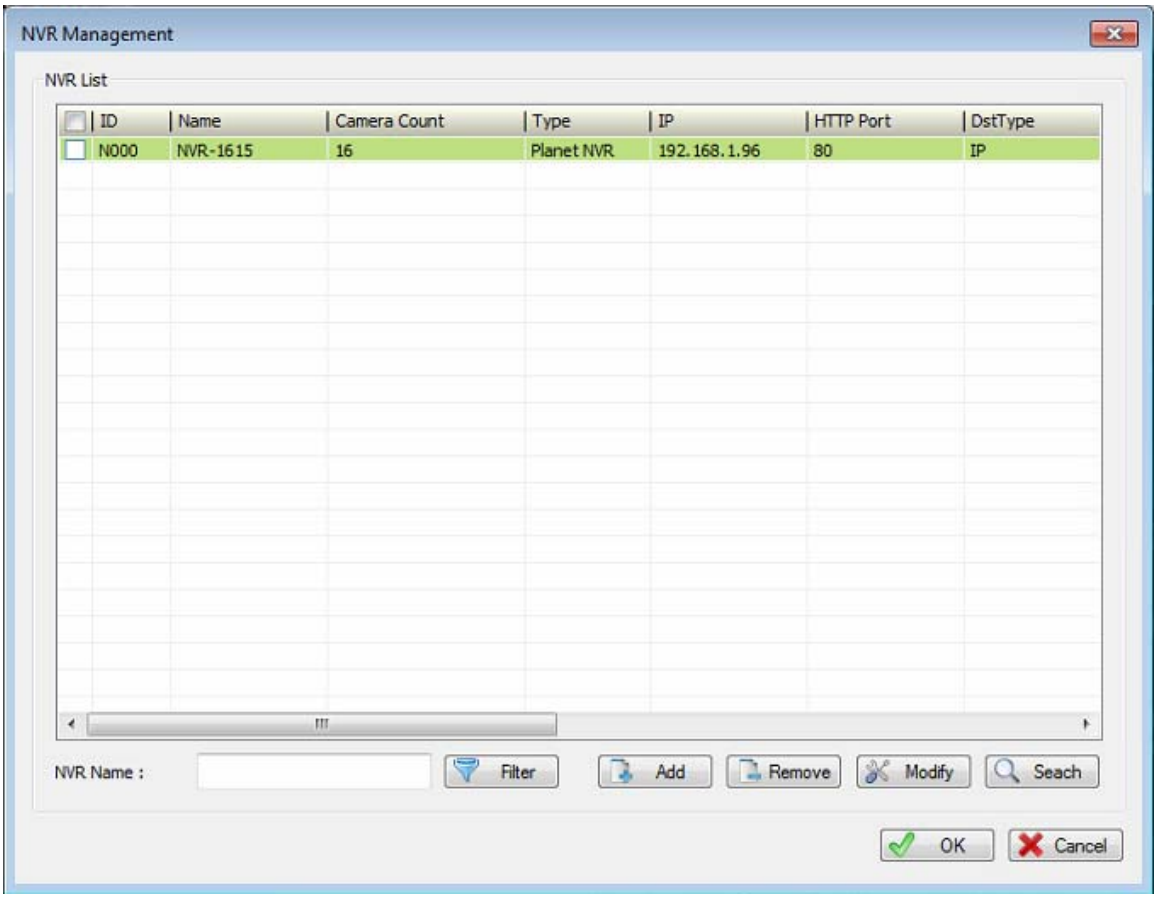


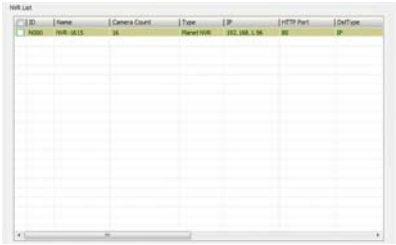
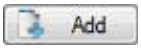
- **About:** Show the CMS's "About" information.
- **Exit:** Leave the CMS.

1.9 NVR Management Dialog:

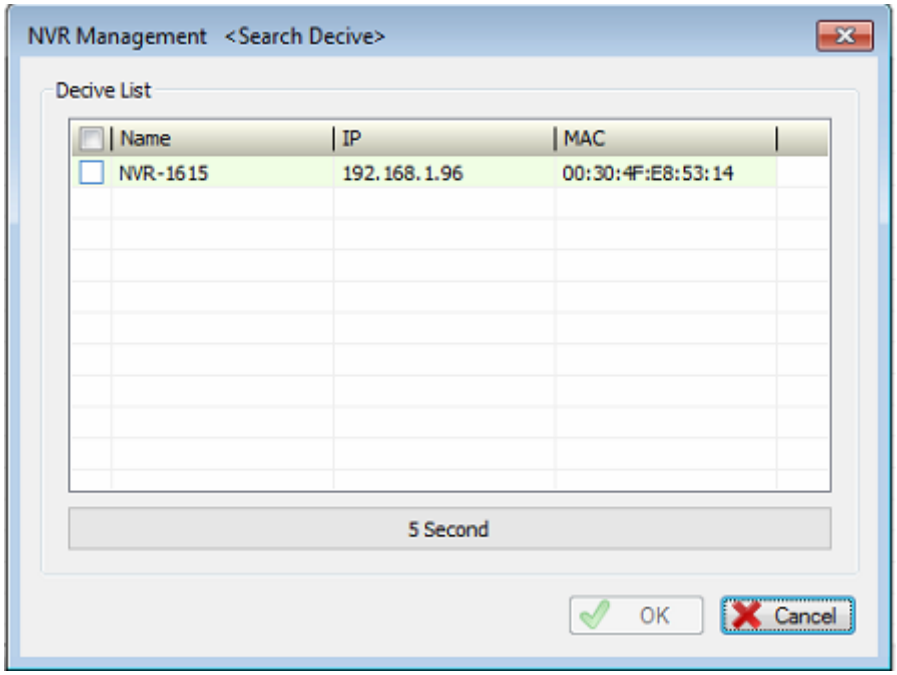
1.9.1 NVR Management



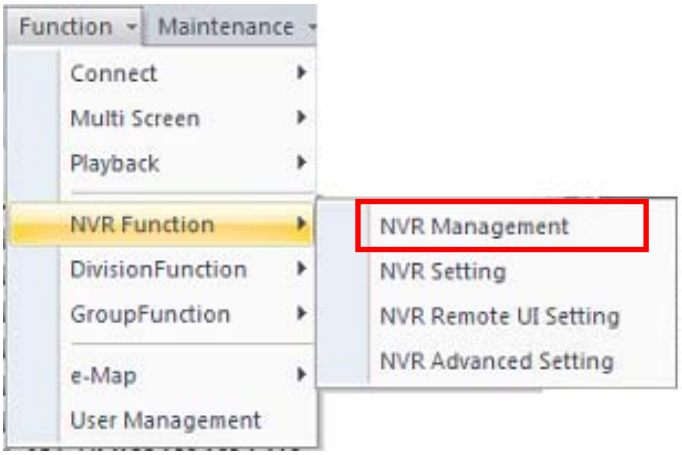


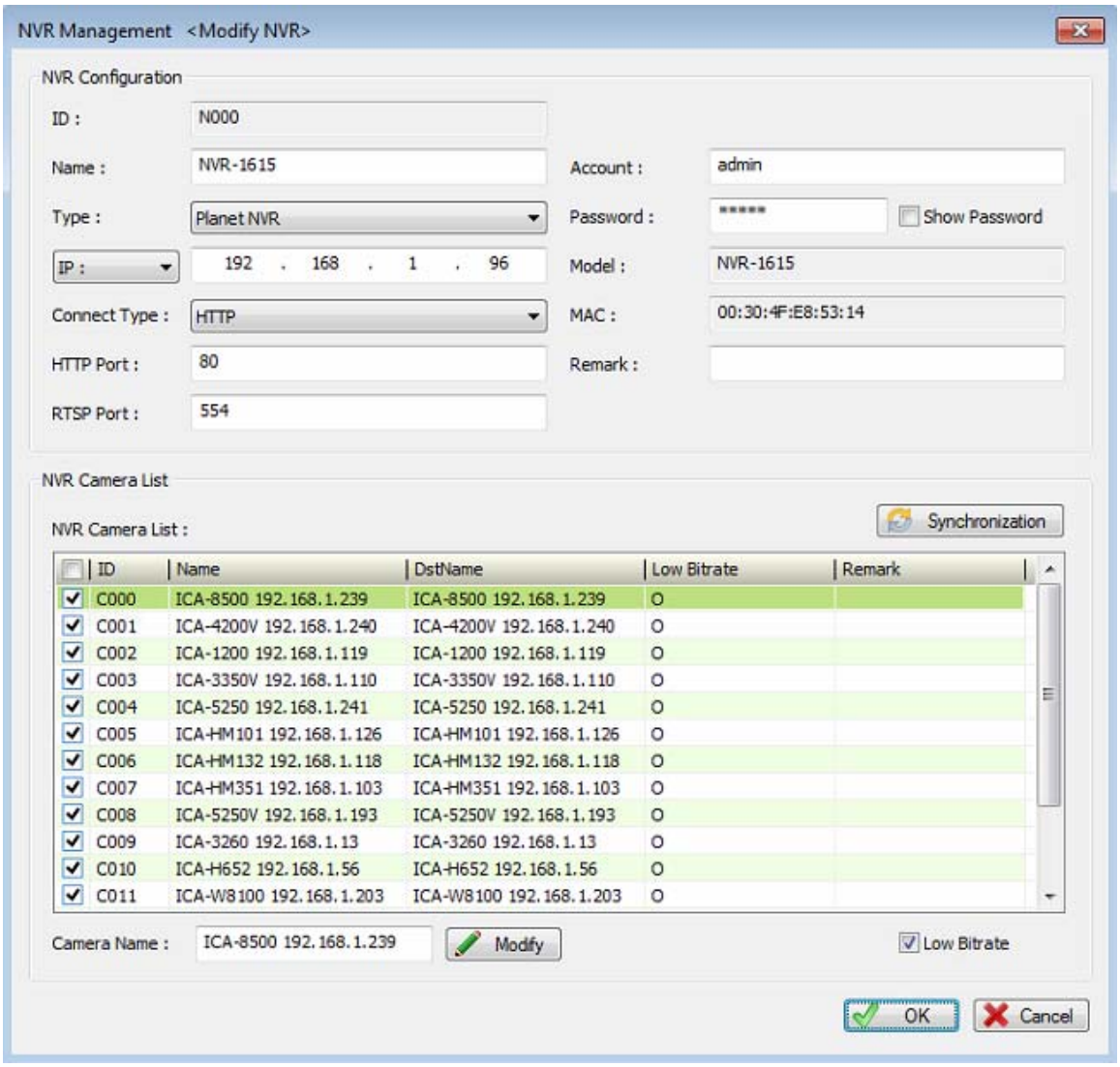
Filter 	Key-in “NVR Name” and then click the “Filter” button. System will display match result in “NVR List” table. If you have many NVRs, maybe you should set filter to find out the NVR that you need to manage. If you search without any filter rule, system will show all NVRs from database.
NVR List 	Display search result with filter and select an NVR from list to modify NVR’s settings.
Select all / Un-Select all 	Click check box in the header will select or un-select all NVR in the list.
Add 	Shows NVR setting dialog with empty setting, and click on to add a new NVR to CMS.
Remove 	Click “Remove” button to remove all selected NVRs from database.

Modify Modify	Select an NVR from list and modify selected NVR's setting.
Search Seach	Search local LAN to find out NVR.



1.9.2 NVR Configuration



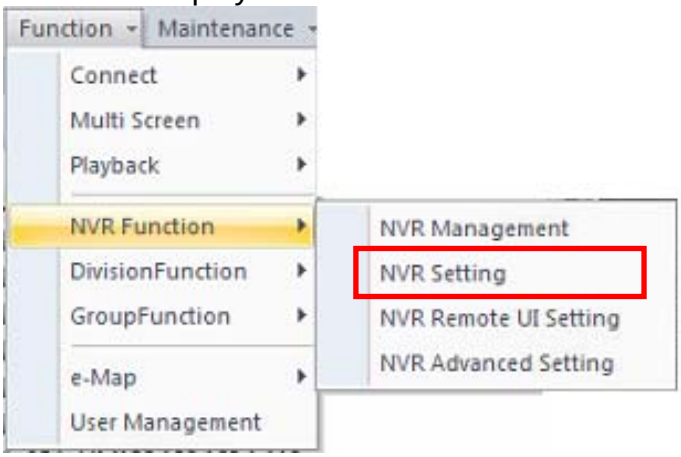


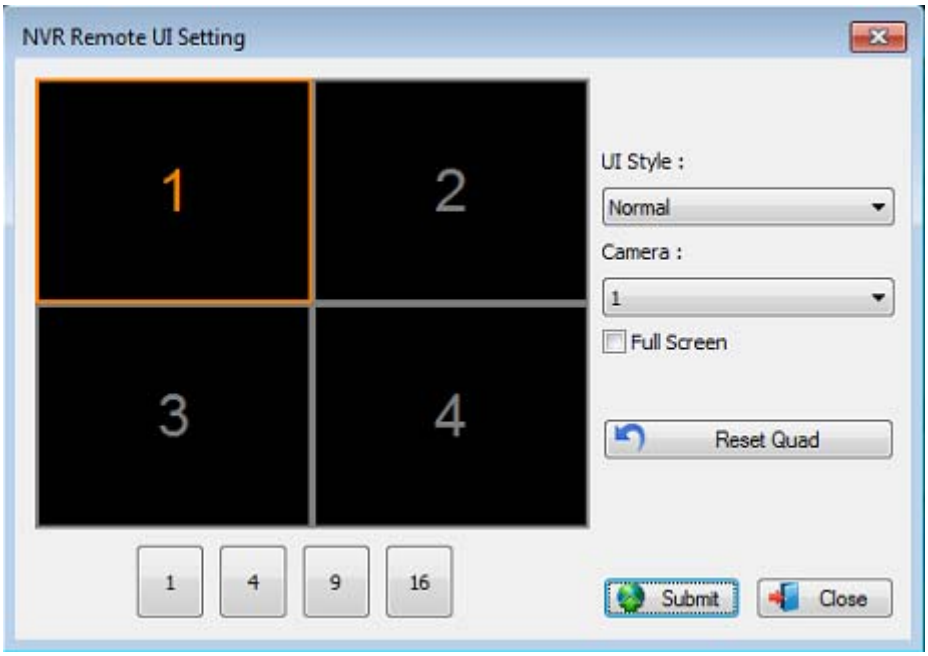
ID	NVR's ID generate by system.
Name	Key-in the NVR's name.
NVR Type	Select the NVR type from the combo box.
IP / Domain / DIPS	• **IP:** Key-in the NVR's IP address. • **Domain:** Key-in the NVR's domain name. • **DIPS:** Key-in the NVR's DIPS ID.
Connect Type	Select a connection type (HTTP/TCP/UDP) from the combo box.
HTTP Port	Key-in the NVR's HTTP port number, default is 80.
RTSP Port	Key-in the NVR's RTSP port number, default is 554.
Playback Port	Key-in the NVR's Playback port number; only SecuGuard needs to set this port. Default is 8866.
Account	The User ID to login NVR.
Password	Key-in the password to login NVR. If you need to confirm password, you can check the box of

	“Show Password”.
Model	Shows NVR’s model name.
MAC	Shows NVR’s MAC address.
Remark	Key-in the remark about this NVR.
Synchronization button	CMS will synchronize with NVR to get the current camera setting and NVR information.
Camera List	Select the cameras of NVR; only selected cameras will display on NVR preview.
Camera Name	Modify camera’s name in CMS; new name can only be effective in CMS.
Low Bit-Rate	CMS will only connect lower bit rate stream only for saving bandwidth.

1.10 NVR Remote UI Control Dialog

You can configure NVR’s display UI at CMS like a TV wall function.



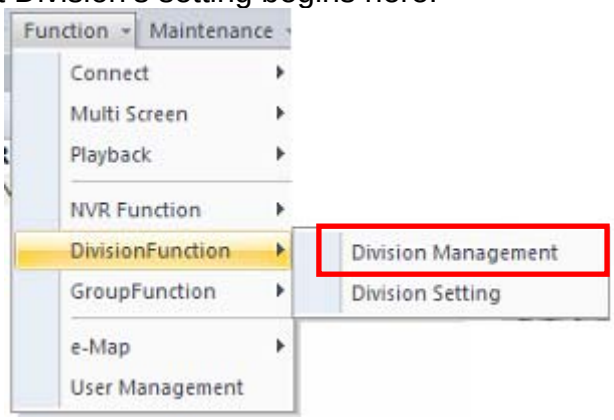


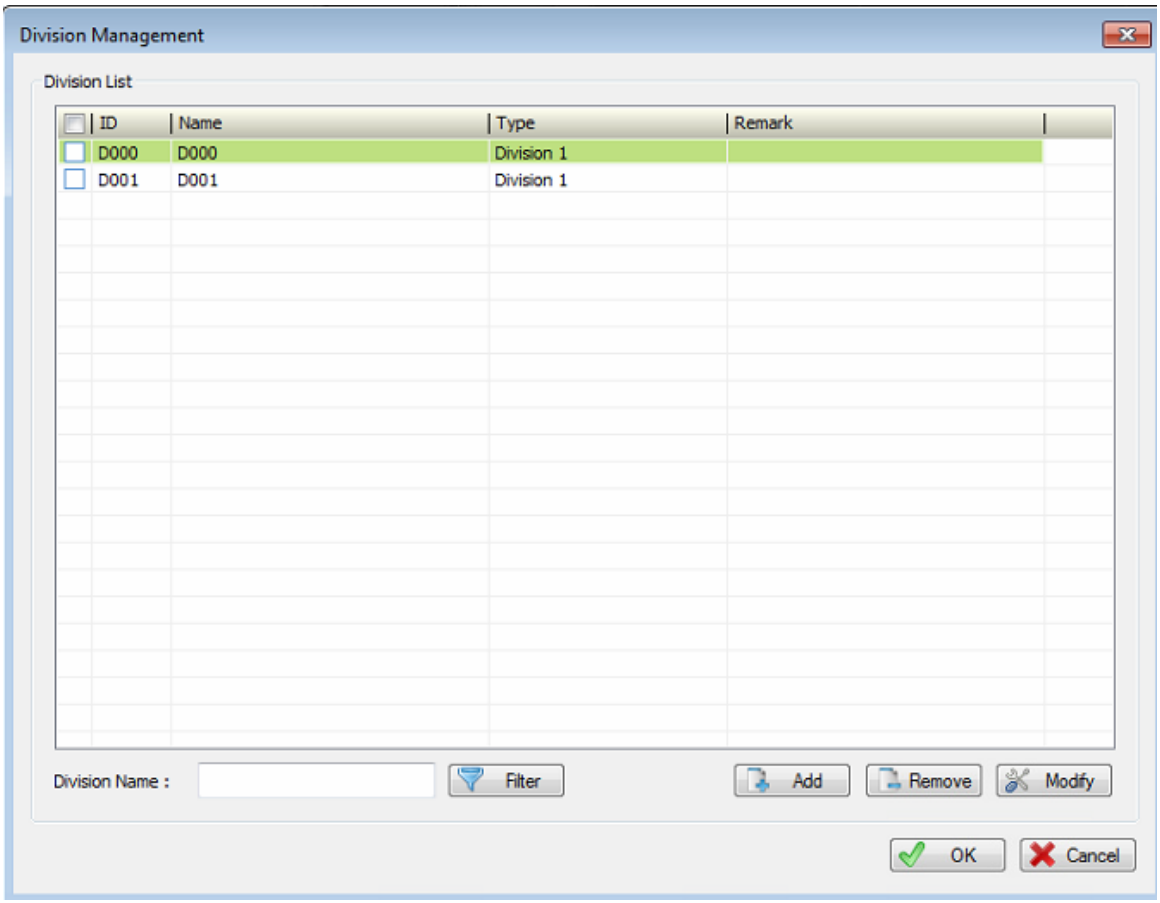
UI Style	Select a UI style from the “UI Style” combo box.

Camera	1. Click on the division widow to select a focus channel. 2. Select a new camera number from “Camera” combo box. 3. The focus channel’s camera number will become the selected number.
Full Screen	Enable full screen by checking the “Full Screen” check box.
Reset Quad	Reset the division windows to default camera number.
Division	Switch NVR’s division by clicking the “1”, ”4”, ”9”, ”16” button.
Submit	After you finish UI setting, click the “Submit” button to submit setting to the NVR. NVR will change style soon.

1.11 Division Management Dialog

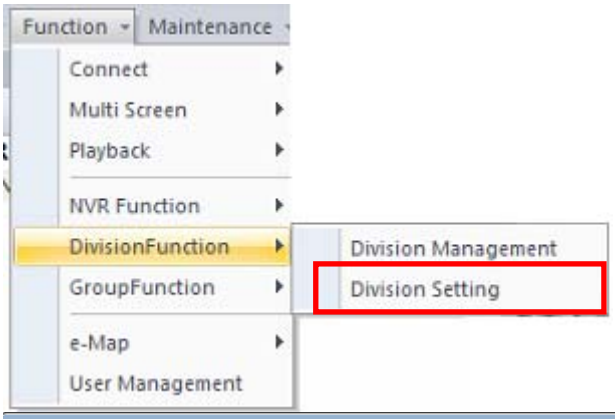
Management Division’s setting begins here.

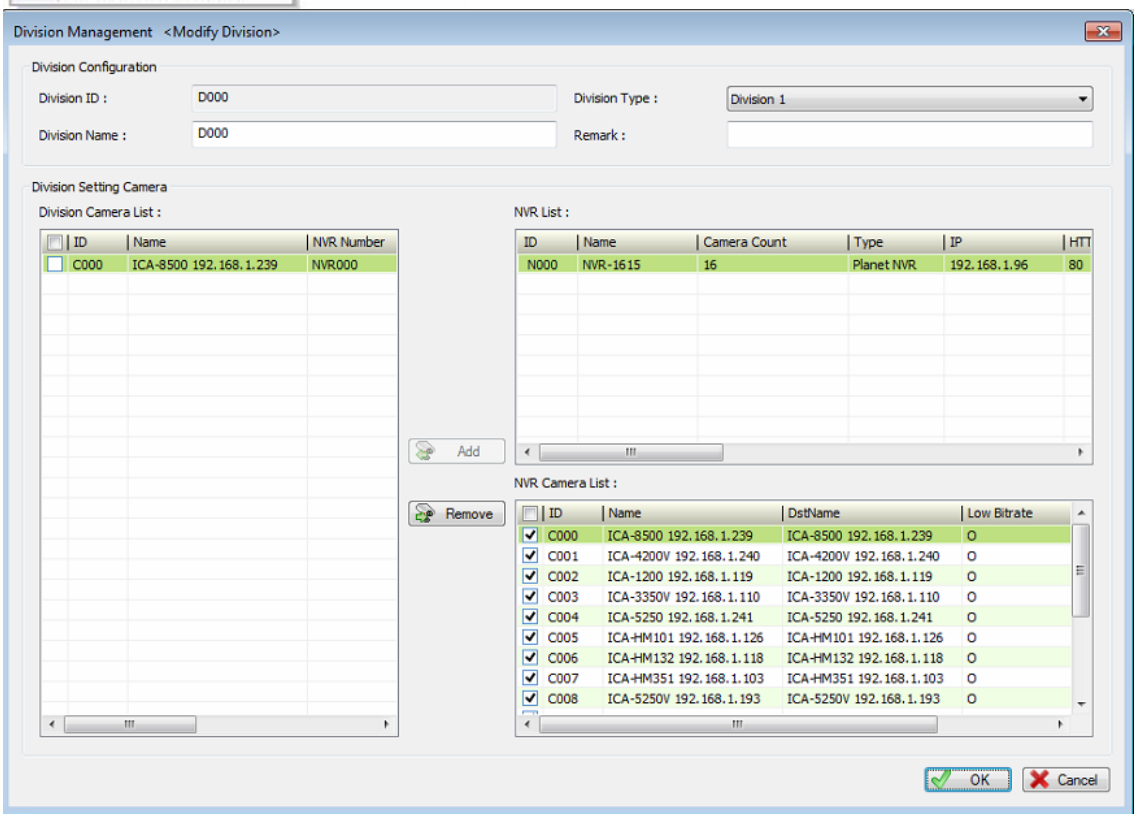




Filter	Key-in the search filters by division name and then click the “Filter” button. System will display the search result in “Division List” table. ■ If you have many division settings, maybe you should set filter to find out the division that you need for management. ■ If you search without filter, system will show all divisions from database.
Division List	Display search result with filter; select a division from list to modify division’s settings.
Select / Un-Select all	Click check box on header row to select / un-select all divisions in the list.
Add	Shows division setting dialog with empty setting, and click on to add a new division to CMS.
Delete	Click “Delete” button to remove all selected divisions from database.
Modify	Select a division from list, and modify selected division’s setting.

1.12 Division Channel Management Dialog



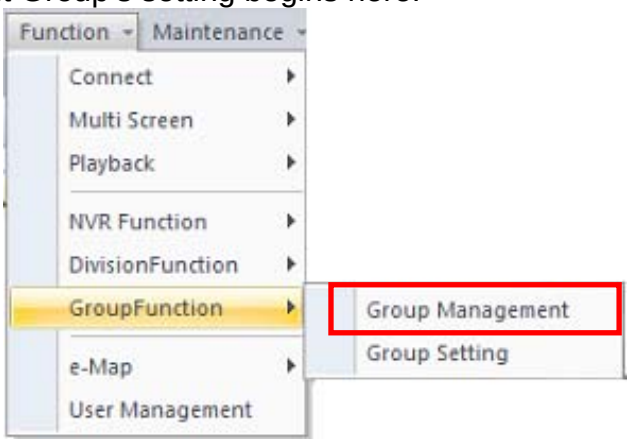


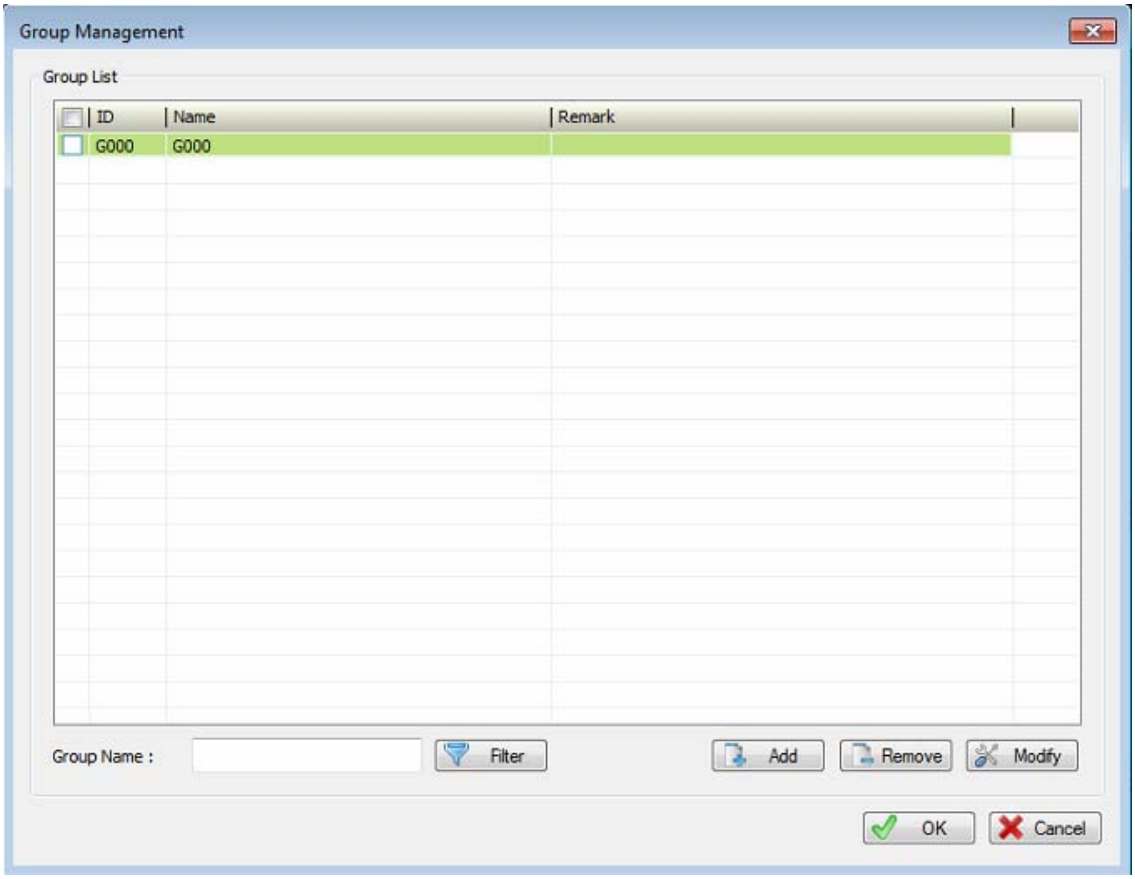
Division ID	Automatically generated by system to identify group.	
Division Name	Please key-in division's name here.	
Division Type	Select a division type from the combo box.	
Remark	Please key-in division's remark at here.	
Camera List	**Channel List table**	List all cameras of current division.
	Select / Un-Select All	Click check box on header row to select / un-select all cameras in the list.
Add	Add all selected cameras from NVR's camera list to current division.	
Remove	Remove all selected cameras in the list from current division.	

NVR list	Select an NVR from NVR list for its cameras.
NVR Camera List	List all cameras of the currently selected NVR.

1.13 Group Management Dialog

Management Group's setting begins here.

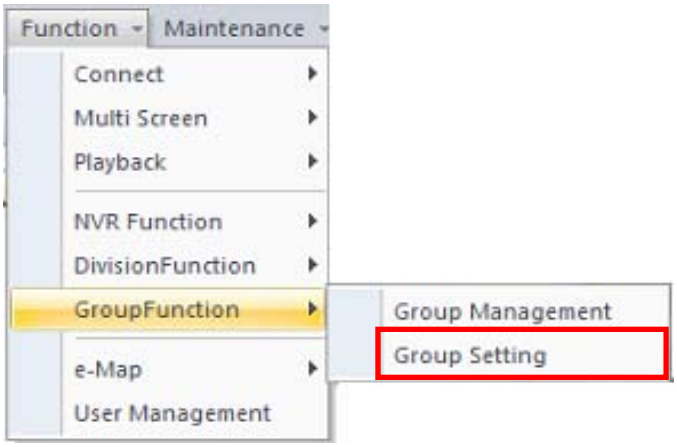


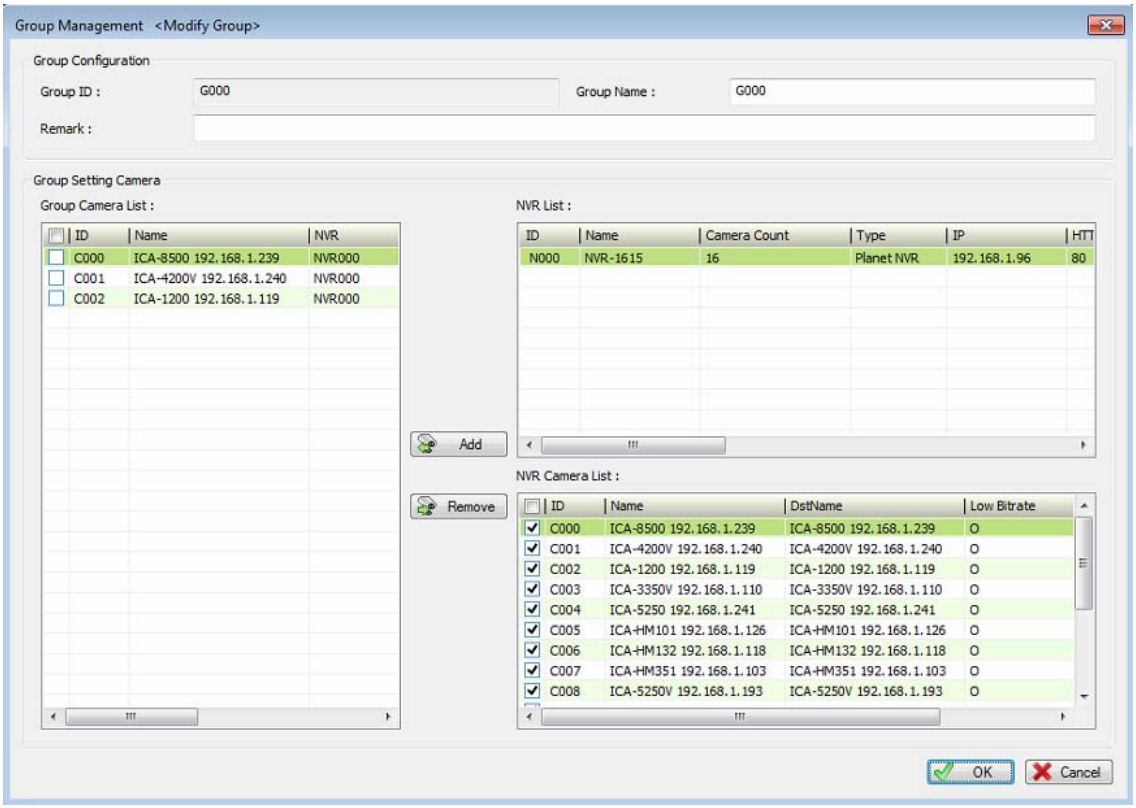


Filter	Key-in the search filters by group name and then click the "Filter" button. System will display the search result in "Group List" table. If you have many group settings, maybe you should set filter to find out the Group that you need for management.

	If you search without filter, system will show all Groups from database.
Group List	Display search result with filter and select a Group from list to modify Group's settings.
Select / Un-Select all	Click check box on header row to select / un-select all Groups in the list.
Add	Shows Group setting dialog with empty setting, and click on to add a new Group to CMS.
Delete	Click "Delete" button to remove all selected Groups from database.
Modify	Select a Group from list and modify selected Group's setting.

1.14 Group Channel Management Dialog

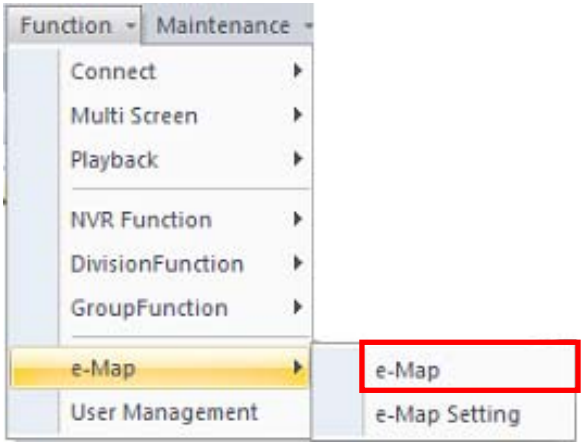




Group ID	Automatically generated by system to identify group.	
Group Name	Please key-in group's name at here.	
Remark	Please key-in group's remark at here.	
Camera List	**Channel List table**	List all cameras of the current Group.
	Select / Un-Select All	Click check box on header row to Select / un-select all cameras in the list.
Add	Add all selected cameras from NVR's camera list to current group.	
Remove	Remove all selected cameras in the list from the current group.	

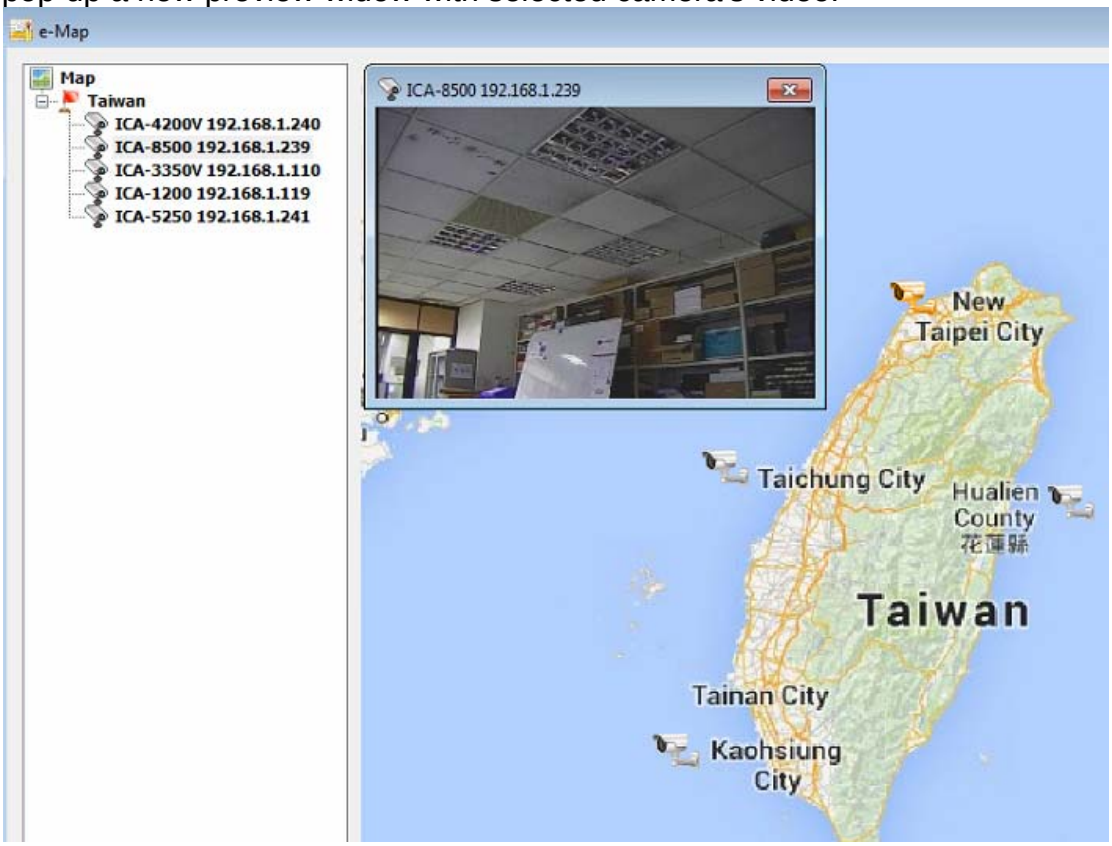
1.15 e-Map

CMS has a 3-layer e-Map, which enables you to easily manage lots of cameras.
Each layer could be added with several sub-layers and many cameras. You could move camera to any position on the map.


Function
Maintenance
Connect
Multi Screen
Playback
NVR Function
DivisionFunction
GroupFunction
e-Map
User Management
e-Map
e-Map Setting

e-Map
Map
Taiwan
Putian
莆田市
Quanzhou
泉州市
New
Taipei City
Taichung City
Hualien
County
花蓮縣
Taiwan
Tainan City
Kaohsiung
City
PrePage
Next Page

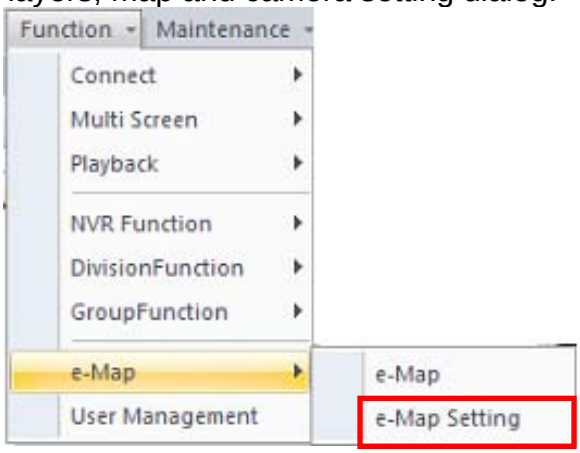
Live Preview: Select a map from list; the map will be shown on the dialog. Double click on the camera icon that you need to preview and e-Map will pop-up a new preview widow with selected camera's video.



PrePage / Next Page: Move current layer to previous layer or the sub-layer.

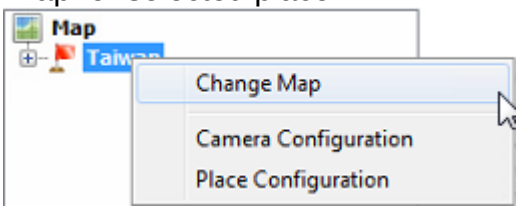
1.16 e-Map Setting

Configure e-Map's layers, map and camera setting dialog.



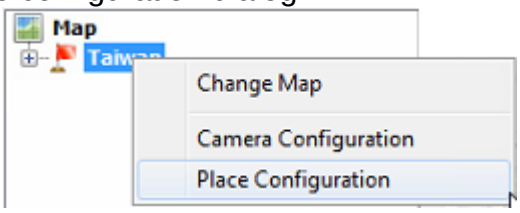
1.16.1 Change map from e-Map setting dialog

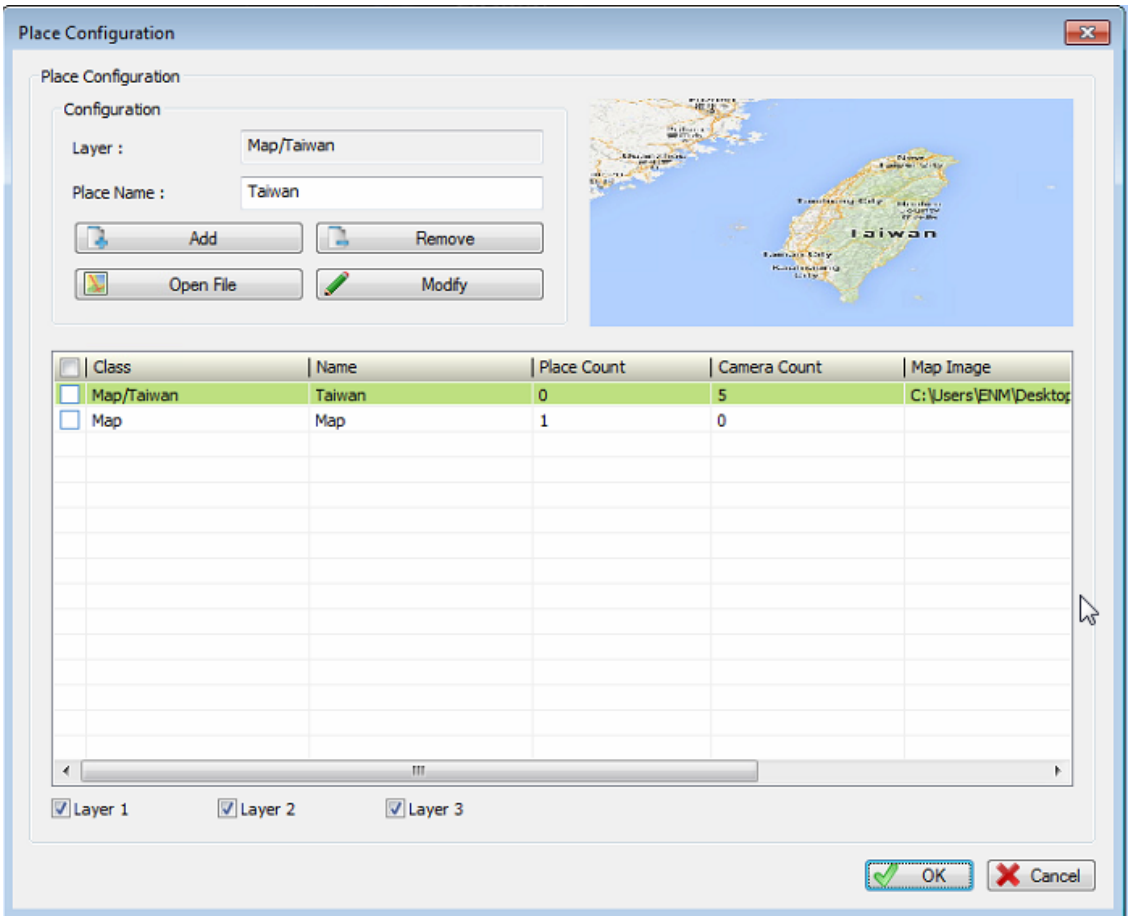
1. Select a place in the list in e-Map setting dialog.
2. Right-click mouse and select “Change map”.
3. Select a new map for selected place.



1.16.2 Place configuration

1. Right-click mouse on a selected layer.
2. Select “Place configuration”.
3. Pop-up the place configuration dialog.



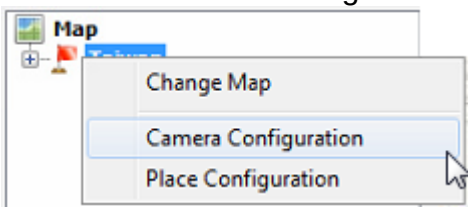


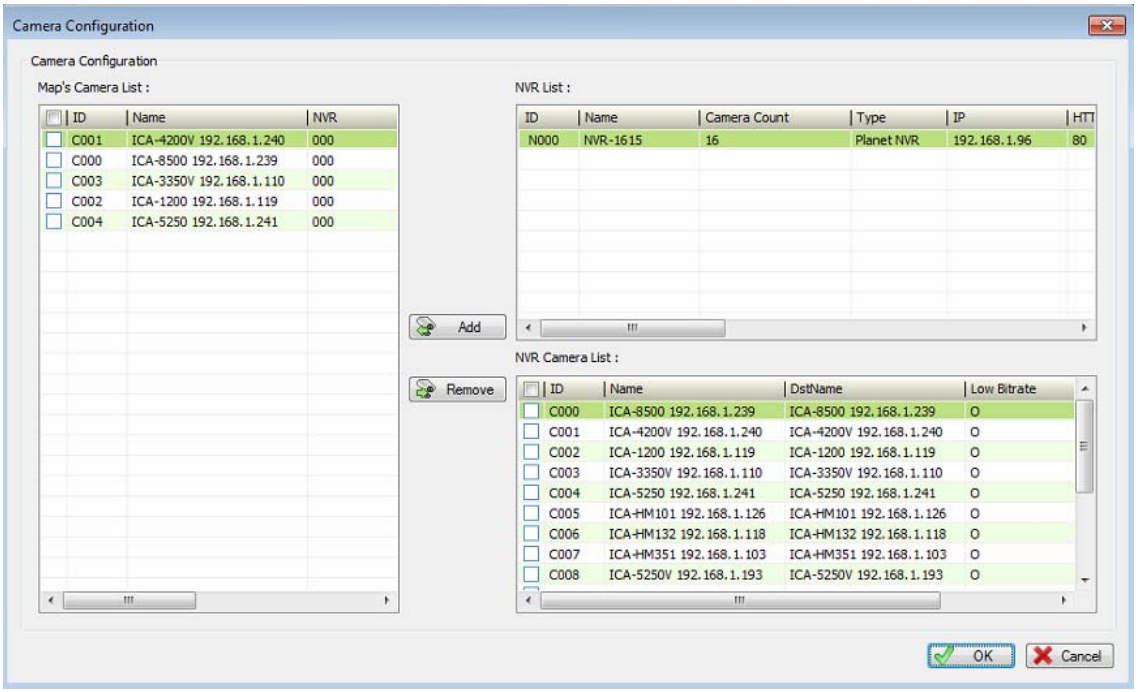
Add a new place	1. Select a place from table. 2. Key-in place name. 3. Click Add button. 4. Select a picture for map. 5. Click OK button to save new setting.
Modify Place	1. Select a place from table. 2. Change place name. 3. Click change map button to select a new map. 4. Click modify button to update new setting.
Remove Place	1. Select places from table. 2. Click remove button to remove selected place from database.
Map Preview	Select a place from table and the select map will be displayed on the upper right corner.
Filter place in table	Check or un-check layer1/layer2/layer3 check boxes to filter the places displayed in the table.

1.16.3 Camera Configuration

1. Select a place in the list in e-Map setting dialog

2. Right-click mouse to select “Camera Configuration”.

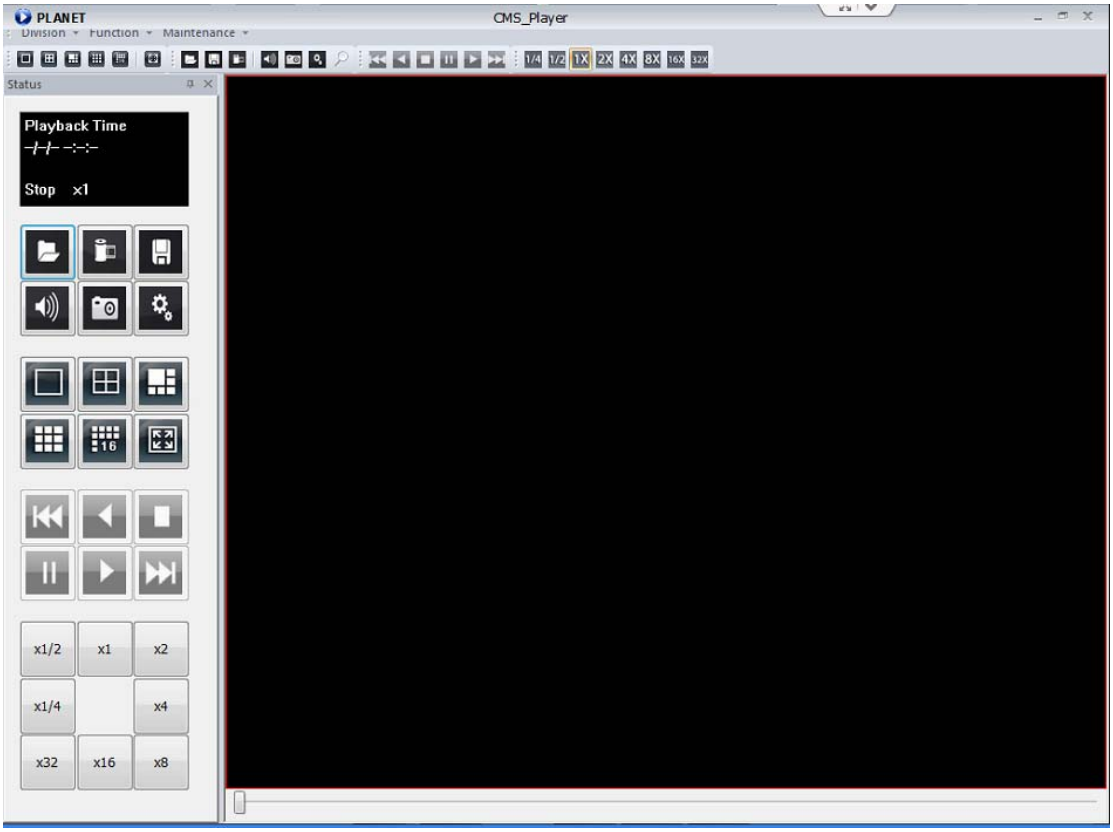




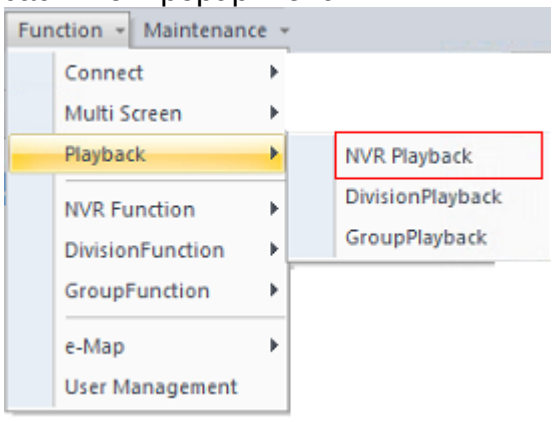
Add Cameras to current place	1. Select an NVR from NVR list in Camera Configuration dialog. 2. Select the cameras in the NVR Camera list that you want to add to current place. 3. Click add button to move selected cameras to left list.
Remove existing cameras from place	1. Select cameras in the list. 2. Click remove button.
Save to database	Click OK button to exit setting dialog. If you click cancel button, all settings will be aborted.

Chapter 2. Playback

Playback provides historically recorded files where playback search can be converted into a file format.

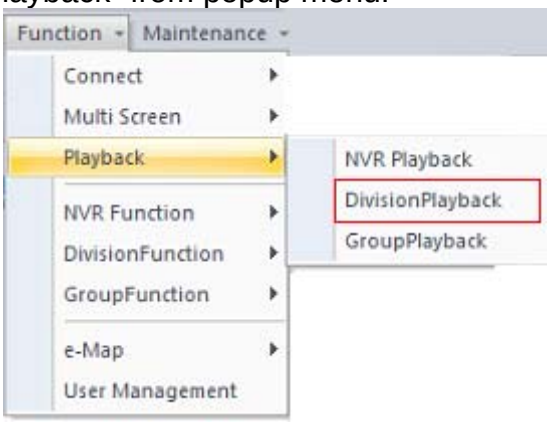


NVR Playback: Select “NVR playback” from menu bar, or right-click on NVR to select “Playback” from popup menu.



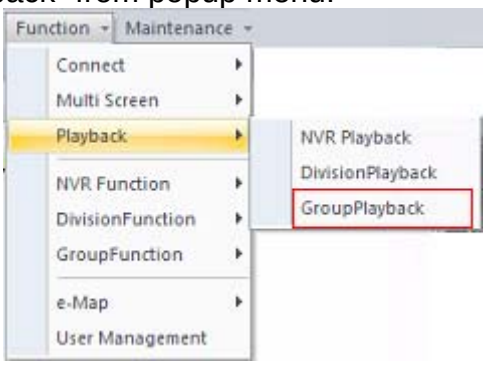
If NVR playback from menu bar is selected, you should select an NVR to play back from the search NVR dialog.

Division Playback: Select “Division playback” from menu bar, or right-click on Division to select “Playback” from popup menu.



If Division playback from menu bar is selected, you should select a Division to play back from the search Division dialog.

Group Playback: Select “Group playback” from menu bar, or right-click on Group to select “Playback” from popup menu.

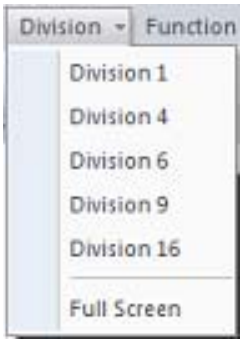


If Group playback from menu bar is selected, you should select a Group to play back from the search Group dialog.

2.1 Screen Division

You can switch to screen division by these ways as shown below:

1. **Division Menu:** Click on “Division” on the menu bar and select the new division that you need.



2. **Division Buttons:** Click on the division button to switch to new division.

Division 1 button

Division 4 button

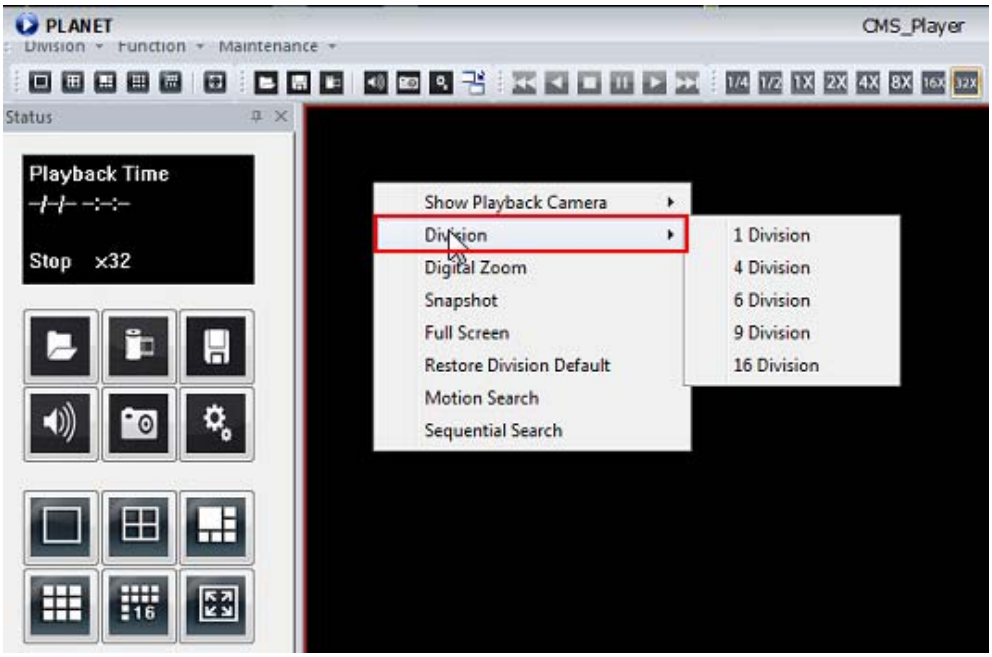
Division 6 button

Division 9 button

Division 16 button

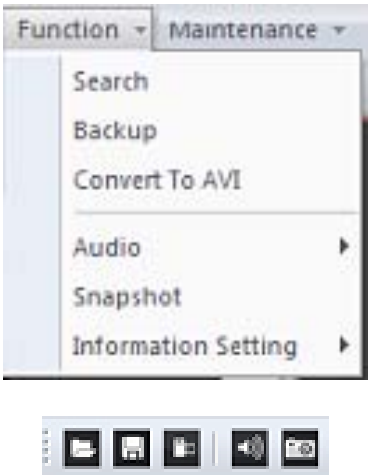
Full-Screen button

3. **Popup Menu of sub-screen:** Right-click mouse on the sub-screen and select a new division from the “Division” sub-menu.



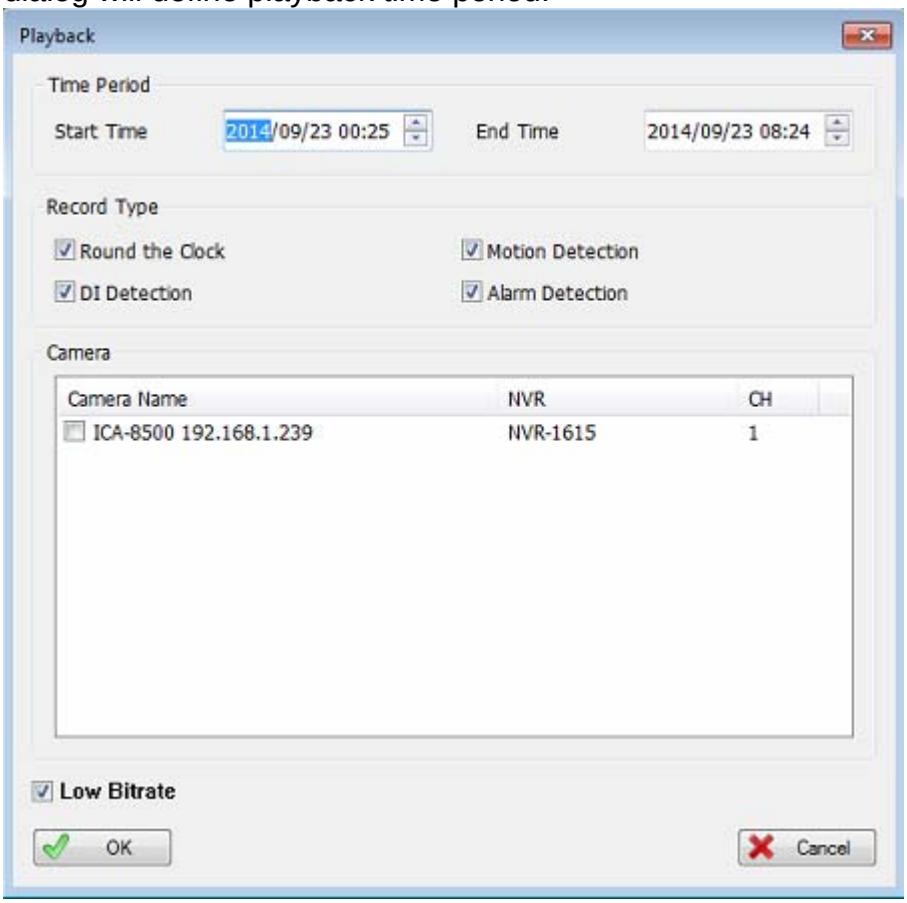
2.2 Playback Functions

You can have the playback on the menu bar by clicking on the function button directly.



2.2.1 Search

Click the button or select “Function” item on the menu bar and the search dialog will define playback time period.

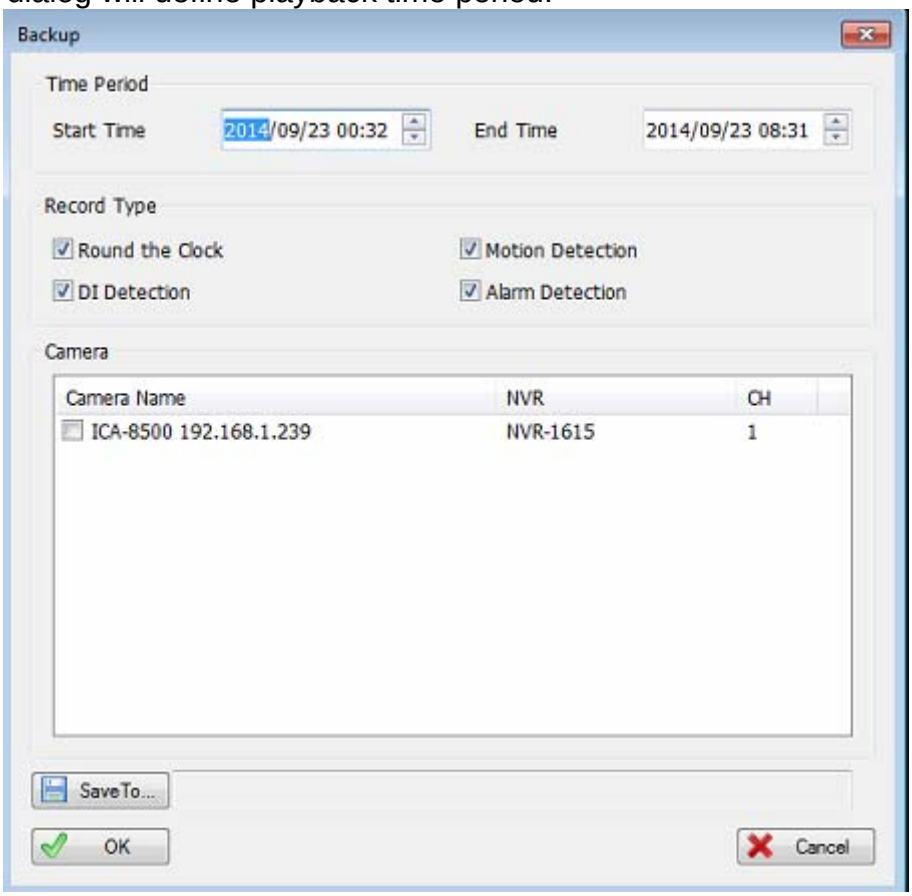


Search Dialog:

Time Period	**Start Time**	Select a start time for search.
	End Time	Select an end time for search.
Record Type	Select which record type will be searched.	
Camera	Select which camera will be searched.	
Low Bit rate	Enable “Low Bit Rate” if you need faster streaming, or PC cannot decode too many channels at the same time.	

2.2.2 Backup

Click the button or select “Function” item on the menu bar and the search dialog will define playback time period.

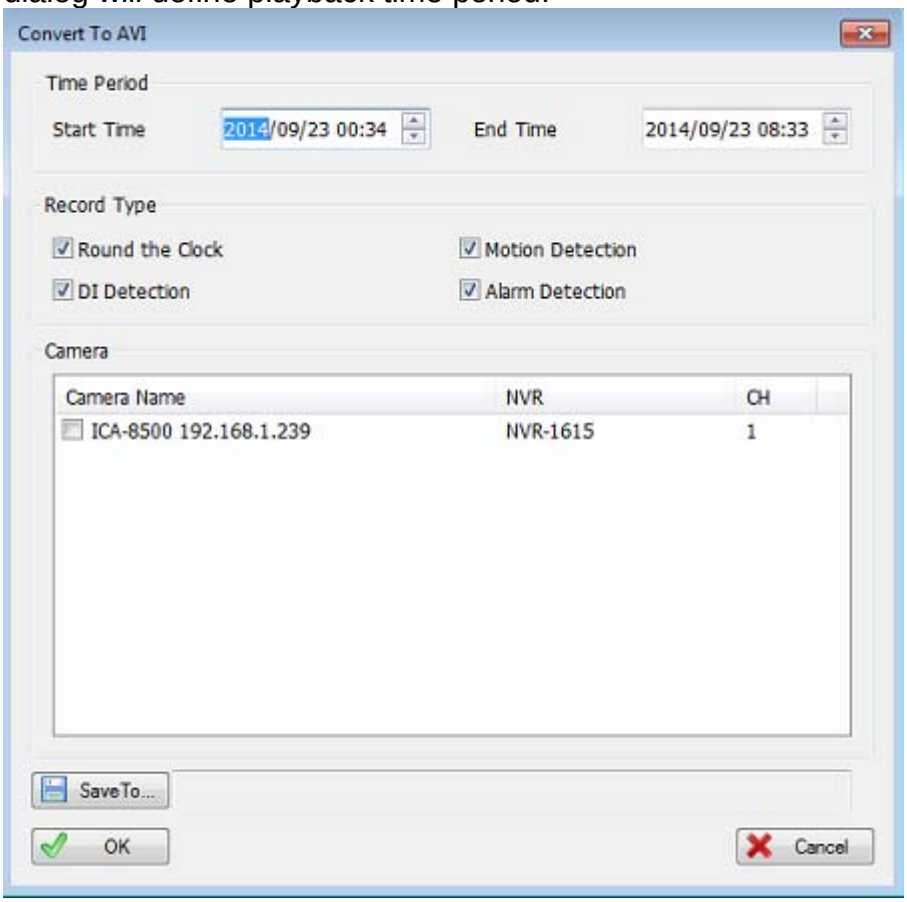


Backup Dialog:

Time Period	**Start Time**	Select a start time for backup.
	End Time	Select an end time for backup.
Record Type	Select which record type will be back up.	
Camera	Select which camera will be back up.	
Save To	Select a path for output backup files.	

2.2.3 Convert To AVI

Click the button or select “Function” item on the menu bar and the search dialog will define playback time period.

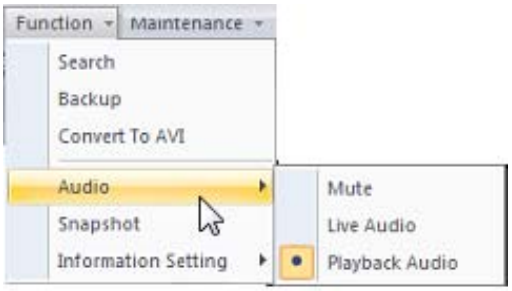


Convert Dialog:

Time Period	**Start Time**	Select a start time for convert.
	End Time	Select an end time for convert.
Record Type	Select which record type will be converted into AVI.	
Camera	Select which camera will be converted into AVI.	
Save To	Select a path for output converted files.	

2.2.4 Audio

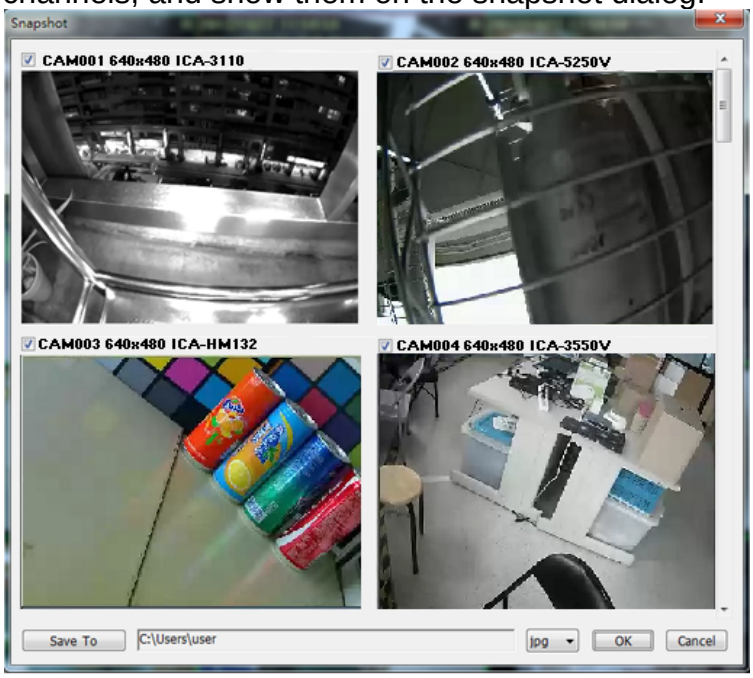
Click button, or select “Audio” item from the menu bar and select audio mode from the sub menu.



Mute	Mute the audio output.
Live Audio	Play the live audio, not the playback audio.
Playback Audio	Play the current playback audio.

2.2.5 Snapshot (Snapshot all)

Click button or select “Snapshot” item from menu bar and system will snapshot all channels, and show them on the snapshot dialog.

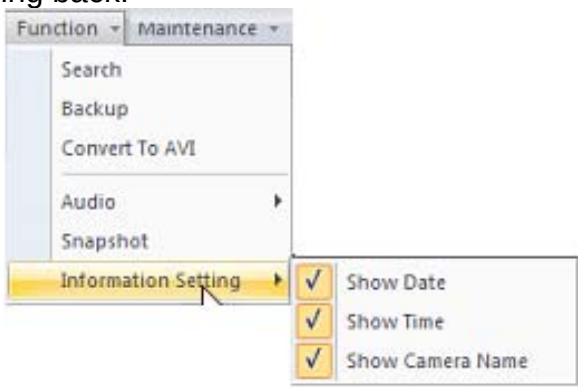


Check the picture’s check box that you need, and select a path to save these images.

You could save these pictures to Jpeg or bitmap format.

2.2.6 Information Setting

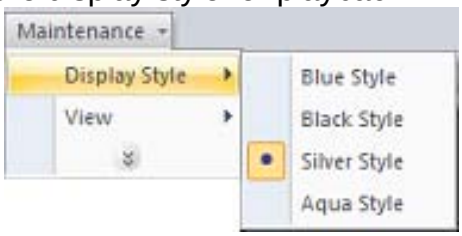
Set the information on the playback channel to enable the item to show on the channel when playing back.



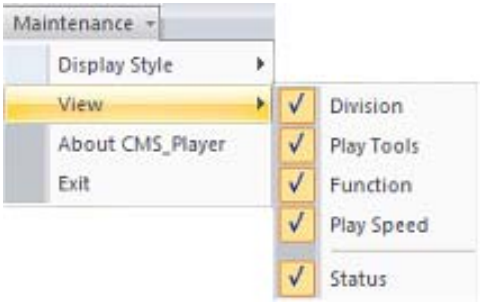
You could click button to get “Information Setting” menu too.

2.3 Maintenance

Display Style: Select the display style for playback.



View: Enable which toolbars will be shown.



About: Show the playback version information.
Exit: Leave the playback.

2.4 Playback control button(s)

- **Play Video Button:**

Play video forward

Pause playing video

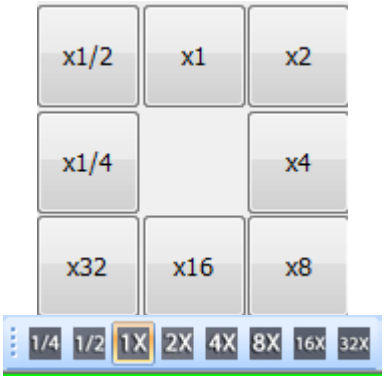
Stop playing video

Play video backward

Seek to previous frame when in pause mode

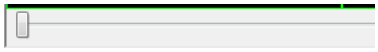
Seek to next frame when in pause mode

- **Speed Button:**



Change playback speed

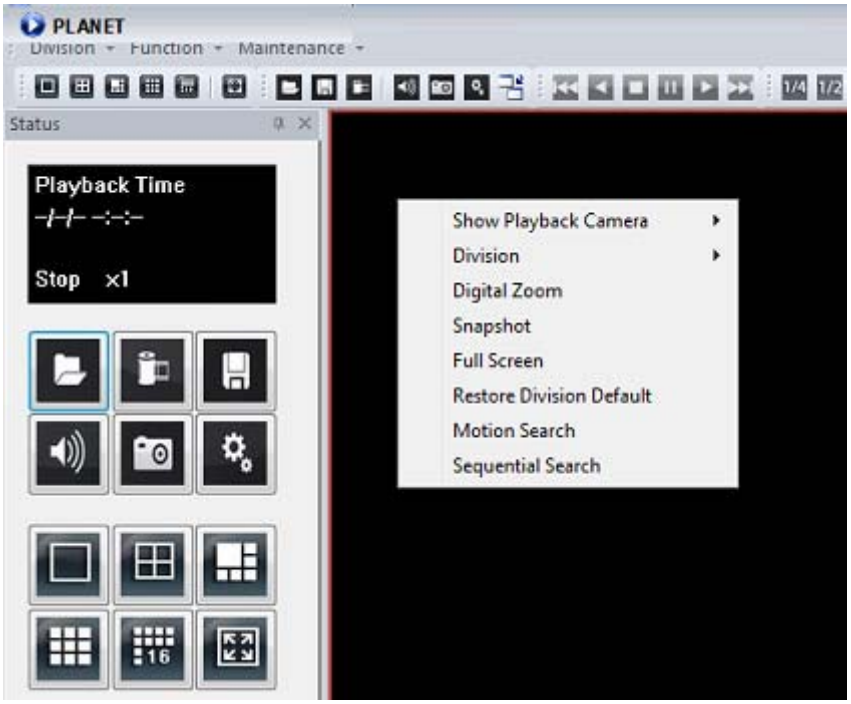
- **Video Time Bar**



You could move the slider bar thumb to change current playback time.

2.5 Operation with sub-screen

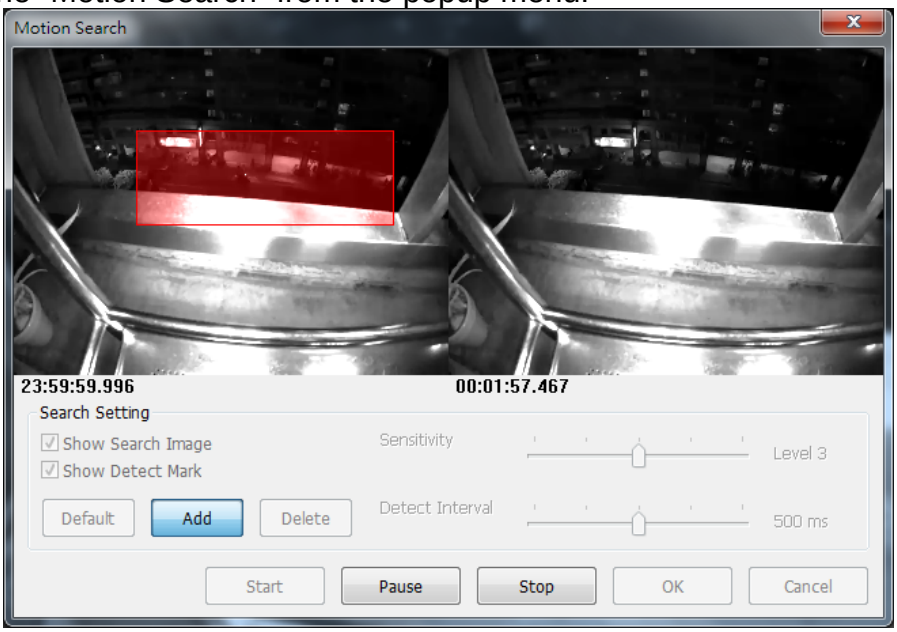
Right-click the mouse on the sub-screen to enable you to select these items shown on the sub-screen.



Show Playback Camera	Change current channel to another camera.
Division	Switch to sub-screen division mode.
Remove Camera Display	Remove current channel from playback list.
Digital zoom	Enable or disable digital zoom mode.
Snapshot	Snapshot current channel and you could modify the snapshot picture from snapshot dialog.
Full Screen	Switch to full screen or normal mode.
Restore Division Default	Reset all channels in division to default camera.
Motion Search	Shows the motion search dialog. Please refer to the “Motion Search” chapter.
Sequential Search	Shows the sequential search dialog. Please refer to the “Sequential Search” chapter.

2.6 Motion Search

Right-click mouse on the channel that you want to do motion search, and then select the “Motion Search” from the popup menu.



Define motion search area:

Default	Click the “Default” button to select full image for motion detection.
Add	Click the “Add” button and then drag a rectangle area where you want to check. The search area will overlay a transparent red mask.
Delete	Define a rectangle area on the image first and then click “Delete” button to remove the region that was defined.
Show Search Image	Enable the “Show Search Image” to display the searching video sequence or un-check this box to only show the image once the event is found.
Show Detect Mark	Enable the “Show Detect Mark” to display the detect result on the image by pink rectangles.
Sensitivity	Select the “Sensitivity” to define the sensitivity of detection. The higher value means the event will be triggered easier.
Detect Interval	Select the “Detect Interval” to define the interval of motion detection. If set longer value, it means system will use less CPU computing power to check motion detection.

When the event has been triggered, the window on the right side will display the triggered image. If the event does not match your expectation, click the “Continue” button to search next event.

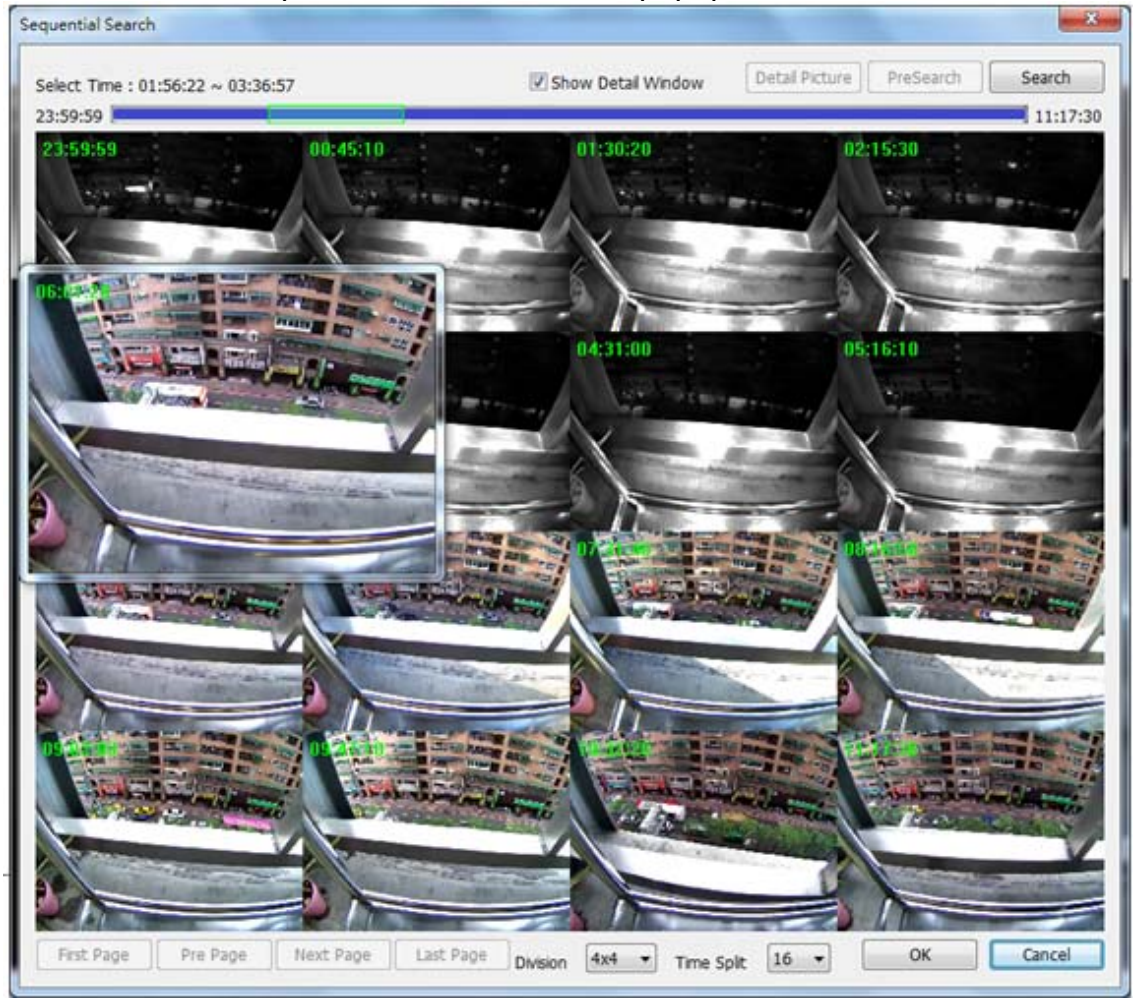
If you found the matched event, click the “OK” button to return to the playback

panel, and all playing channels will be synchronized to the same timestamp of the event.

Click Cancel button to abort this motion search job.

2.7 Sequential Search

Right-click mouse on the channel which you want to do sequential search, and then select the “Sequential Search” from the popup menu.



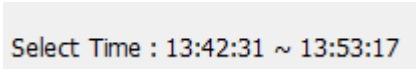
Quick start with sequential search:

1. Choose sequential search channel and time period.
2. Select two images from these sequential pictures by clicking on the images, and then click the “Search” button.
3. Repeat this procedure until time period is into one second resolution.
4. Click “Detail picture” button to approach snapshot images dialog.
5. Select these snapshot images, and save them to assigned folder.

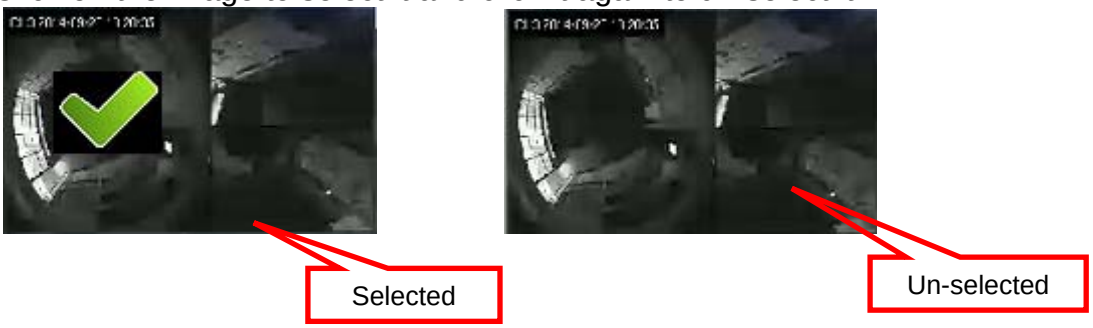
2.7.1 Define search time period

We need to define time period for the sequential search task. We could define time period by two ways and the selected time period will display on the upper

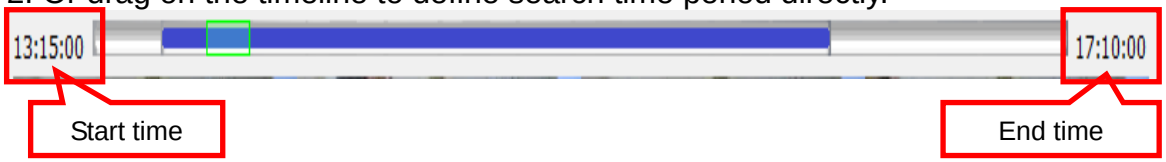
left corner.



1. Select two images from these sequential pictures to define search time period. Click on the image to select it and click it again to un-select it.



2. Or drag on the timeline to define search time period directly.



Blue bar: The time period of selected images for sequential search.
Green transparent bar: New time period to be searched.

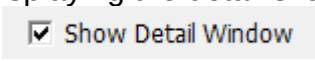
2.7.2 Start search and rollback

After search time period is defined, click the “Search” button to display next search result.

Click “Pre search” button for rollback to previous search result.

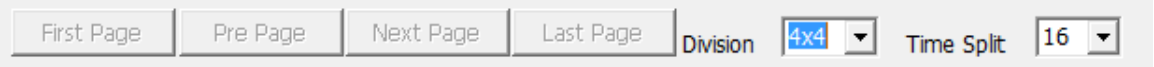
2.7.3 Detail window for snapshots

The dialog will display small snapshot images by search result. In case you need bigger image of snapshots, you could enable “Show Detail Window” to get a resizable window for displaying the detail snapshot.



You could move the detail window and resize it to get bigger preview image size.

2.7.4 Preview mode of search result



You could define the preview mode of search result by these parameters below:

Time Split	Define the number to divide the search time period equally, and take a snapshot at the beginning of each part.
Division	Select the display division mode of search result.
Switch page buttons	In case the search result couldn't be displayed within one page, then these buttons will be enabled. Click these buttons to switch the pages of snapshots.