

MATRIVIDEO

Command Center Series Administrator Manual

Version 5.1.2

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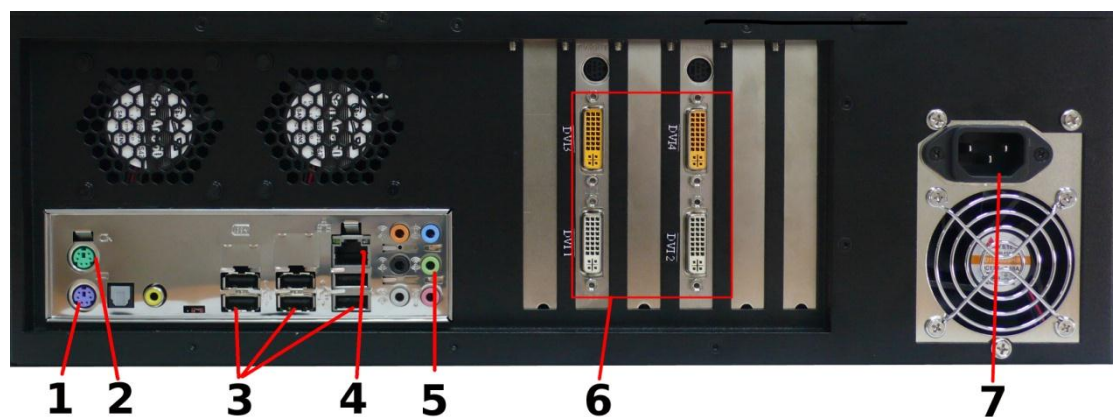
Chapter 1 Product Installation Overview

1-1 Hardware Overview (Command Center)

MatriVideo Command Center provides the highest performance and efficiency to manage an enterprise video surveillance system. Working with triple monitors, it is designed with comprehensive and user friendly functionality for video viewing, playback, analytics and alarm response. The Command Center box has a preinstalled copy of Windows XP and the Command Center software.



Front Panel of Command Center



Rear Panel of Command Center

1. Mouse(PS/2)
2. Keyboard(PS/2)
3. USB 2.0/1.1 Ports
4. Ethernet(RJ45)
5. Speaker
6. DVI connectors
7. Power Socket

1-2 Hardware Installation (Command Center)



1. Connect one end of a VGA connector to the first monitor and the other end of the VGA connector to the VGA/ DVI converter and connect it to the DVI 1 port on the Command Center.
2. Connect one end of a second VGA connector to the second monitor and the other end of the VGA connector to the VGA/ DVI converter and connect it to the DVI 2 port on the Command Center.
3. Connect one end of a third VGA connector to the third monitor and the other end of the VGA connector to the VGA/ DVI converter and connect it to the DVI 3 port on the Command Center.

Note: The DVI 4 port can be used to connect an optional fourth monitor.

4. Connect the keyboard and the mouse.
5. Connect the speakers, if necessary.
6. Connect the Command Center to your network switch/hub.
7. Connect the power cable.

1-3 Software Installation (Command Center Dual and Command Center Lite)

Command Center Lite and Command Center Dual must be installed manually on an existing PC. Follow the steps below to install Command Center Lite or Command Center Dual:

1. The installation file can be found on the included CD or downloaded from the Instek Digital website. Double-click the program setup icon to start the installation process.



2. An installation wizard will guide you through the installation process. You can click **Cancel** to terminate the installation process at any time. On the welcome screen, click **Next** to continue.
3. Change the default installation directory if necessary. Click **Next** to continue.
4. Click **Install** to begin the installation.
5. Click **Finish** to close the installation wizard.

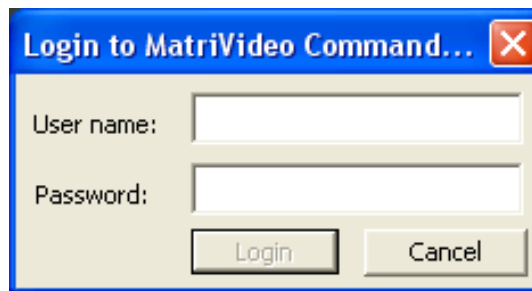
1-4 Run the Application

1. Before running the application, the user should turn on the Command center and login into the Windows XP operating system. Follow the steps below to log into the Command Center application:
2. Double-click the Command Center icon on the desktop.



3. When the login window appears, input the account name and the password. The

default username is: admin and the default password is: id.



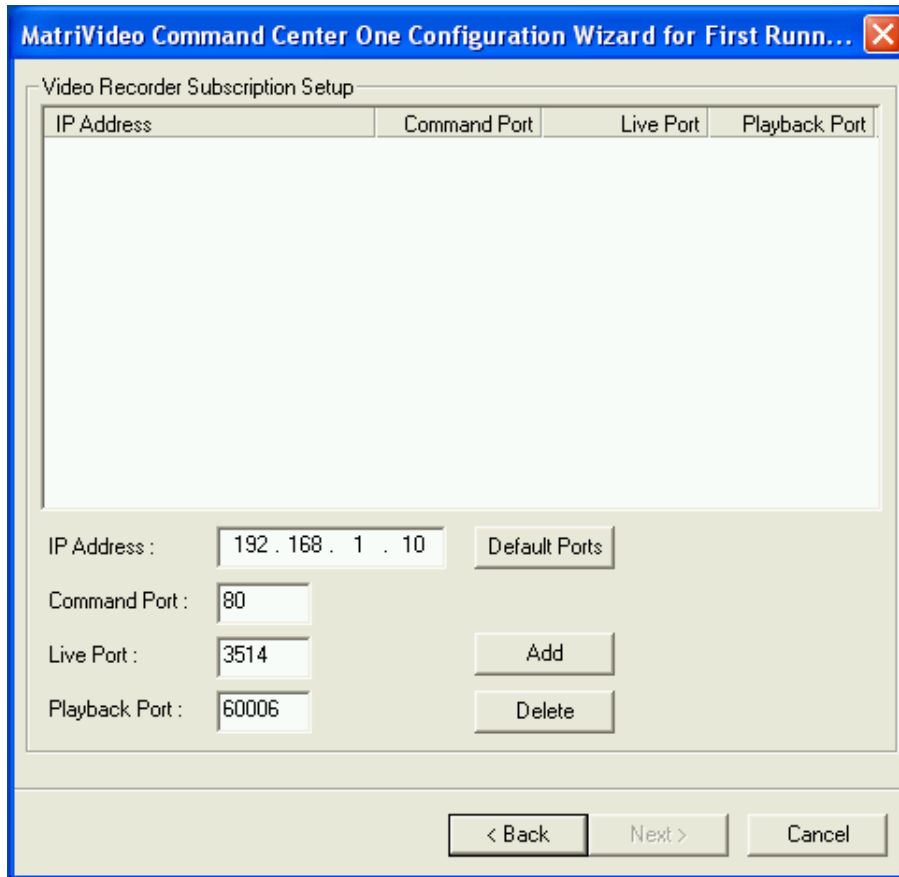
4. Click **Login** or **Cancel** to exit. If the account name and the password are both correct the application will continue to load.
5. Run the Command Center software. During the first run you will be asked to subscribe (add) a video recorder (DVR, NVR or Archive Server) to the video recorder subscription list.
6. Enter the IP address, Command Port, Live Port and the Playback Port of the video recorder (DVR, NVR or Archive Server).

Command Port: 80

Live Port: 3514

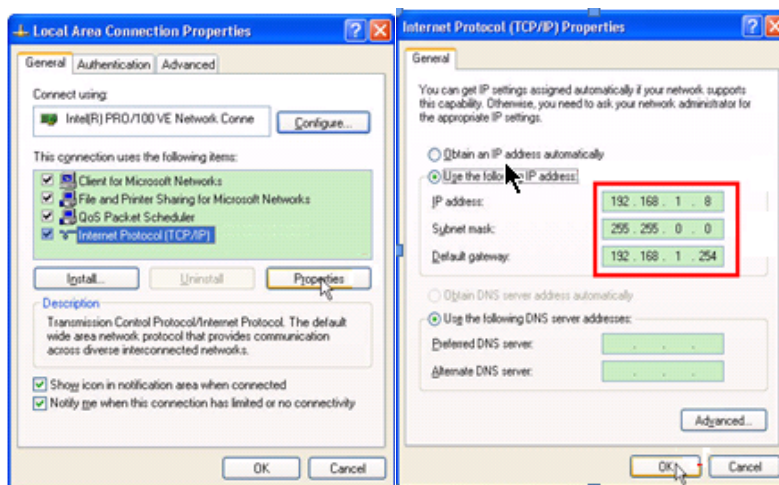
Playback Port 60006

Note: Do not change these port numbers when connecting the video recorder to a LAN network. Also, ensure that these port numbers are not blocked on your router.



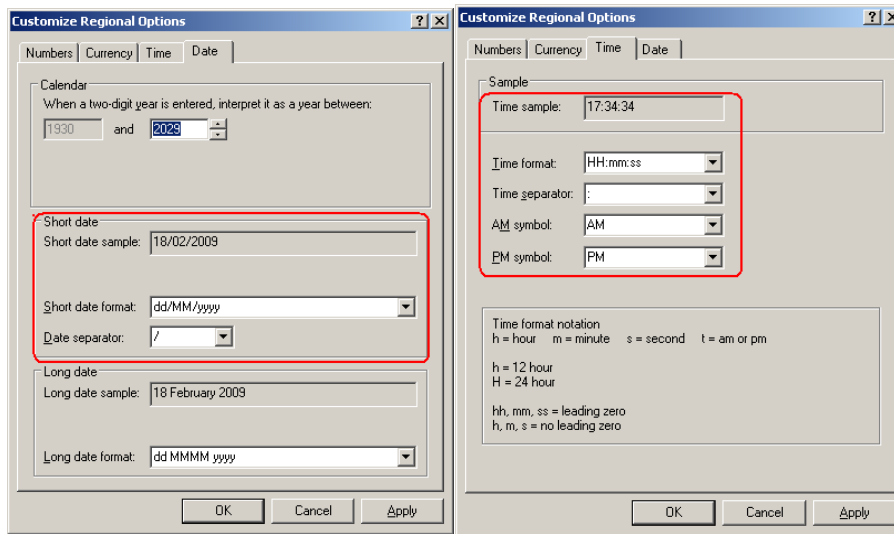
1-5 Configure Windows

1. From the Windows Start menu, navigate to Control Panel > Network Connections. Right-click on Local Area Connection for the appropriate network card and click **Properties**.



2. Adjust the Windows OS time and time zone. From the Start menu of Windows, navigate to the Control Panel > Region and Language > Regional Options > Customization >

Modify the format of 'Date' and 'Time.' Press **Apply**. The changes make the On Screen Display (OSD) of live and playback video stream identical with the computer.



Note: This does not change the actual time and date of the video, this information is stored in the DVR's database and depends on the DVR's time settings.



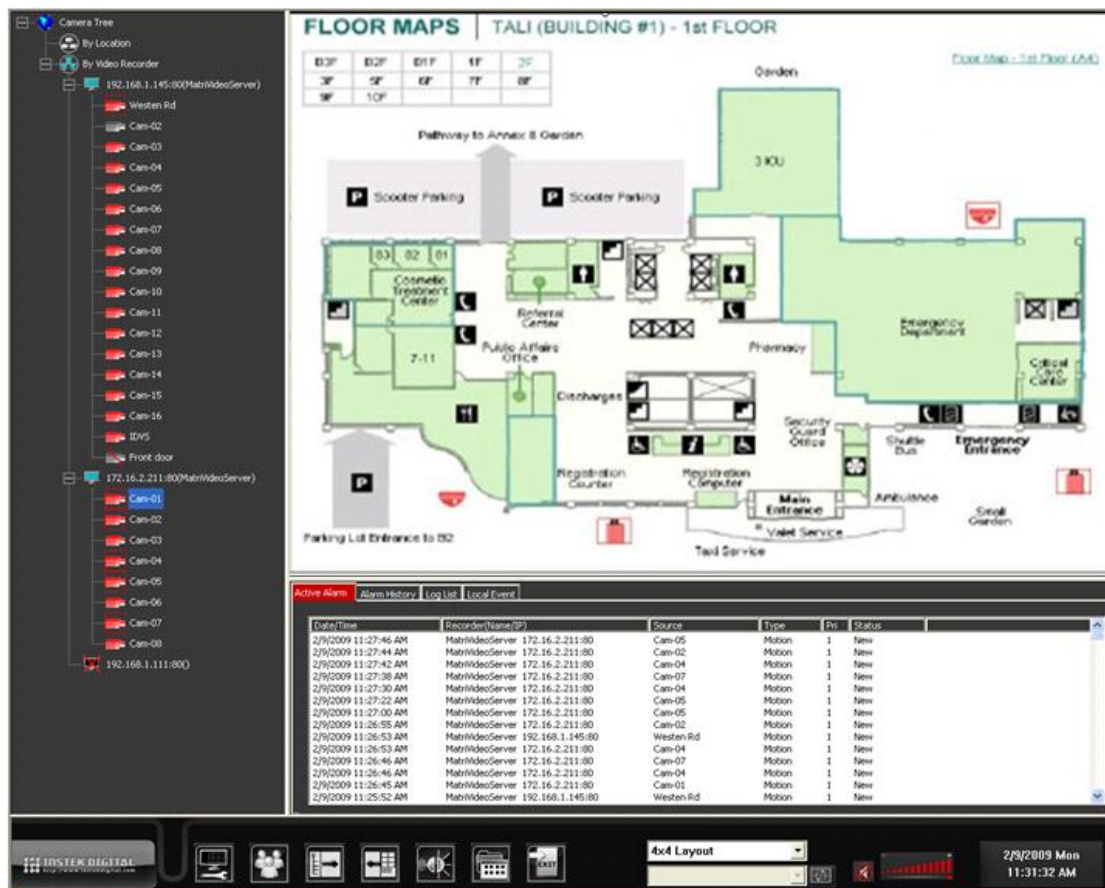
Chapter 2 User Interface Overview

2-1 Three Terminal Overview (Command Center and Command Center Dual)

Command Center and Command Center Dual are monitoring control platforms with three terminals. The three terminals are not determined by the order of the monitor display but rather by the assignment of each monitor. Refer to the illustrations below:

2-1-1 Terminal One

Terminal One (T1) consists of the system console panel, camera tree panel, and the operational panel (including the map window).



2-1-2 Terminal Two

Terminal Two (T2) consists of four display panels and the Media Bar. The Media Bar is used for live and historical video playback as well as searching for video.



2-1-3 Terminal Three

Terminal Three (T3) can display video from up to 16 different sources as well as display camera patterns, tours, and alarm pop-up.



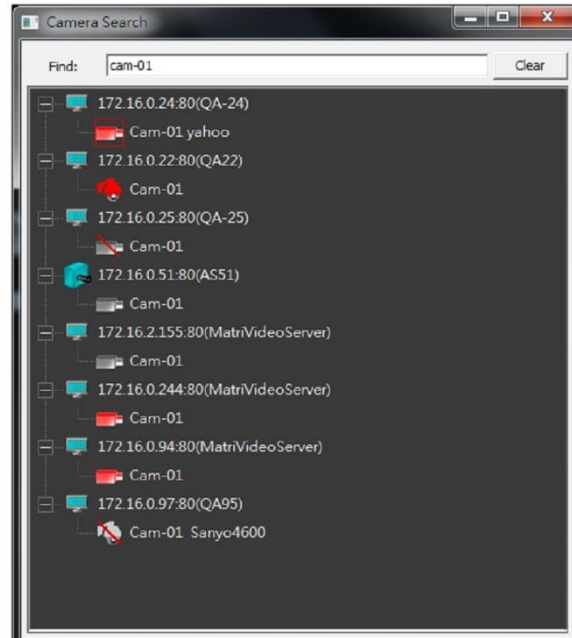
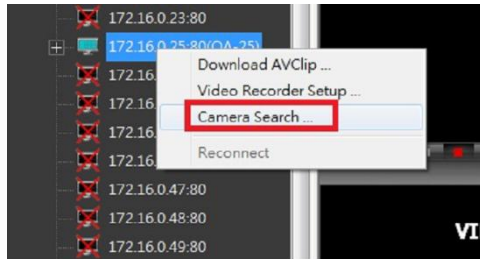
2-2 Main Screen Overview (Command Center Lite)

Users familiar with other versions of Command Center will notice that Command Center Lite shares a similar user interface. The map, T2, and T3 windows are all stacked onto the main screen in Command Center Lite and can be accessed through the user interface. See the following chapter for more details. Once the user has logged into the application the main screen will appear as below:



2-3 Camera Search

Users can search for cameras at any time and then drag and drop the cameras onto any valid location. This allows users to quickly locate a camera for live viewing, camera pattern creation, tree building, or map building.



Users can initiate the camera search by way of the following two methods:

- While holding down the **Ctrl** button press '**f**' to bring up the camera search window.
- Right-click on the camera tree and select **Camera Search**

Chapter 3 Setup and Configuration

The T1 monitor consists of three panels: System Console Panel, Camera Tree Panel, and the Operational Panel (including the Map window). All administrative tasks can be accomplished via the T1 monitor. Administrative tasks in Command Center Lite can be accomplished via the main screen, which provides much of the same functionality found on the T1 monitor in other versions of Command Center.

3-1 System Console Panel Overview

The system Console panel provides tools for setting up and operating all versions of Command Center. The menu buttons will vary somewhat depending on which version of Command Center is used.



The system console panel consists of four parts:

1. Menu Buttons
2. Camera Patterns and Tours Panel
3. Volume Control/Talk to Recorder
4. System Date and Time.

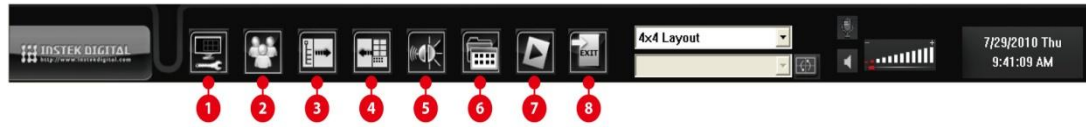
3-2 Menu Buttons Overview

3-2-1 Command Center



1. Command Center Setup
2. User Account Setup
3. Camera Tree Toggle
4. Alarm Log List Toggle
5. Remote DI/DO Monitor and Control
6. Run External Program(s)
7. Exit

3-2-2 Command Center Dual



1. Command Center Dual Setup
2. User Account Setup
3. Camera Tree Toggle
4. Alarm Log List Toggle
5. Remote DI/DO Monitor and Control
6. Run External Program(s)
7. Toggle (T2,T3)
8. Exit

3-2-3 Command Center Lite



1. Command Center Lite Setup
2. User Account Setup
3. Toggle (map, T2,T3)
4. Run External Program(s)
5. Exit

3-3 Using the Menu Buttons

3-3-1 Setup



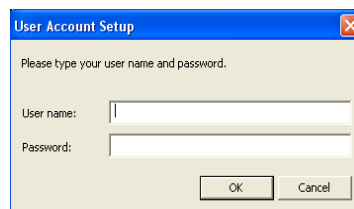
Press the 'Setup' button to enter the configuration panel. See the 'Setup Menu' section for a detailed description of this function.

3-3-2 User Account Setup

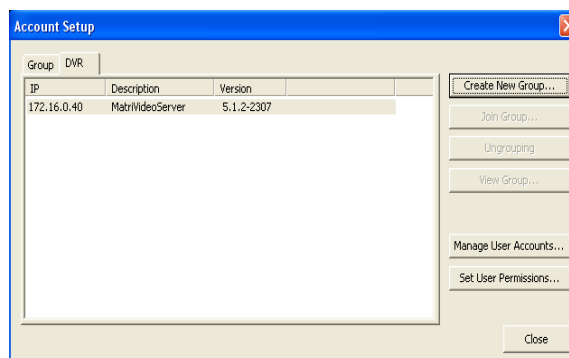


Press the 'User Account Setup' icon to administer user accounts and set up authentication rights for accessing video recorders, cameras, PTZ Control and IO devices. Every user account must belong to the administrator, manager, or operator group. The administrator group has full access to the system while the manager group has full access with the exception of user account management. The operator group can be given access to the system on an individual basis according to the administrator's discretion. To create user accounts follow these steps:

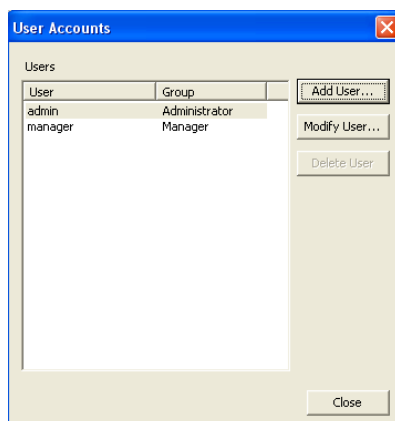
1. Press the 'User Account Setup' icon. Enter a username and password and click **OK**.



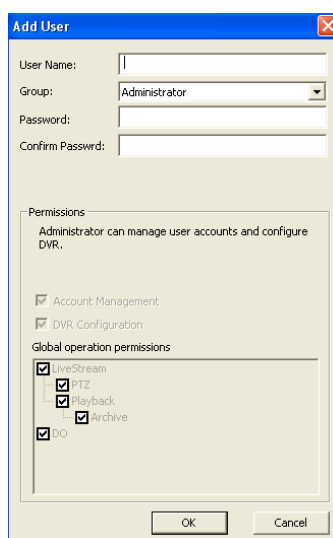
2. The main GUI of 'User Account Setup' will show the DVR groups and individual DVRs. Click on one of the DVR groups or individual DVRs and click **Manage User Accounts**.



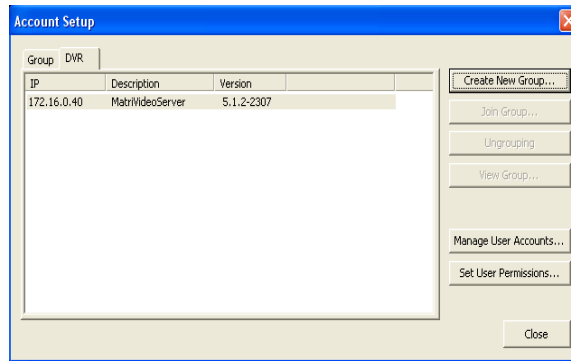
3. A window will show the current user accounts on this DVR group or individual DVR. By default there are 'admin' and 'manager' accounts. It is not possible to delete the 'admin' account. Click **Add User** to create a new user account, or click on one of the users and click **Modify User** or **Delete User** to modify or delete.



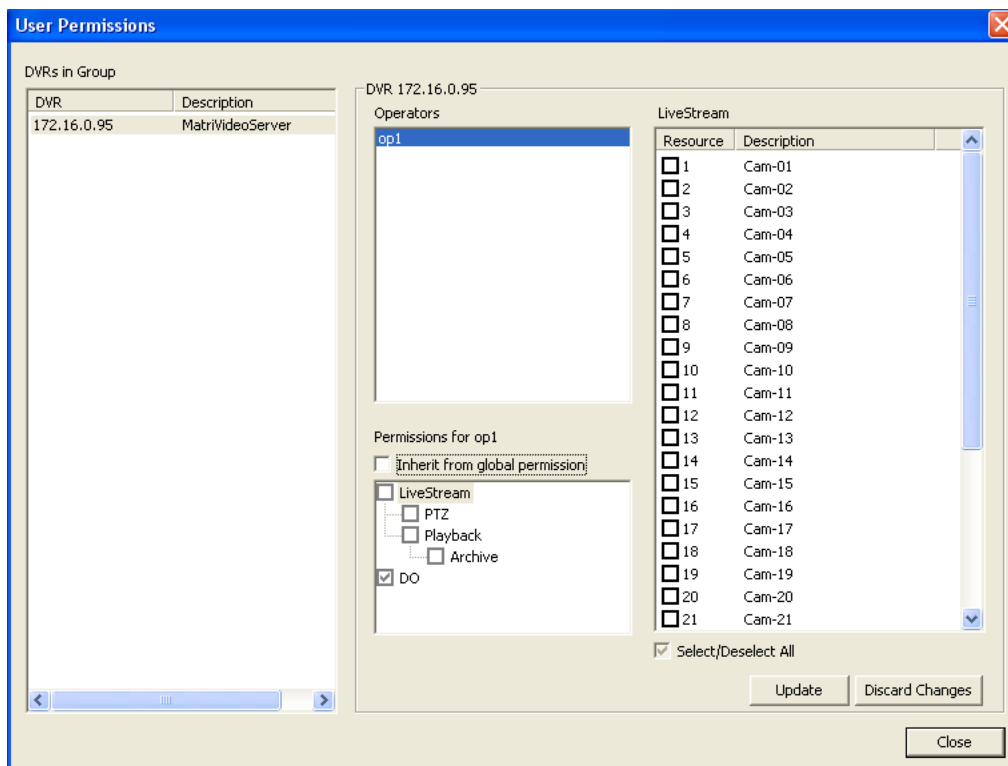
4. In the 'Add User' window enter a username and select a group from the drop-down list. Enter and confirm a password for the new user. Access to Live Video, Playback, PTZ, Archive, and DO can be granted or denied using the corresponding checkboxes. The access rights here will be applied to all cameras in the DVR group or individual DVR for this user. Access rights have dependencies. By granting the 'Archive' access right 'Playback' and 'Live Stream' rights will be also granted. The access rights tree shows the dependency between access rights. Press **OK** to finish creating the new user or **Cancel** to abort the operation.



5. To configure access rights to specific cameras or video recorders return to the 'User Account Setup' main GUI and click **Set User Permissions**. This operation only applies to user accounts in the operator group. The admin and manager groups always have full access to all cameras.



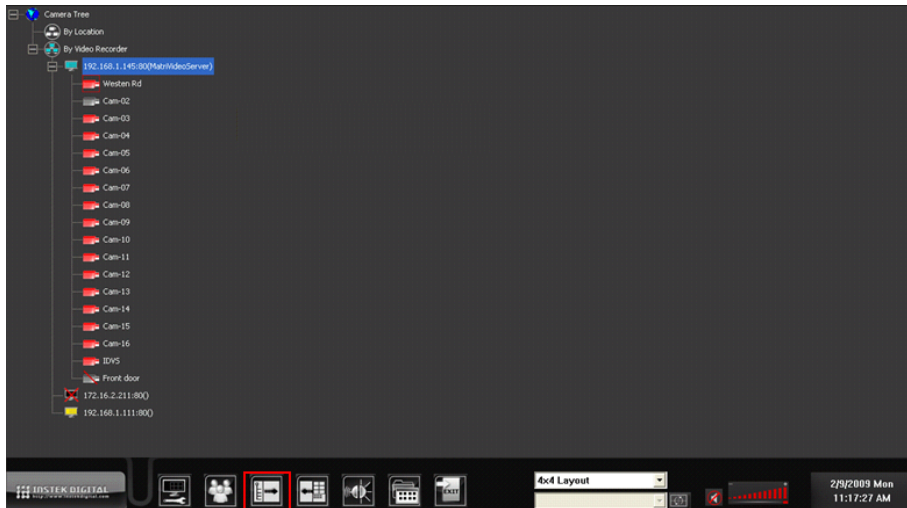
- The 'User Permission' window will show the user accounts in the operator group of the DVR group or individual DVR. Click on any of the user accounts and uncheck the 'Inherit from global permission' option to configure the access rights to specific cameras. Click on one of the access rights (Live Stream, PTZ, Playback, Archive and DO) and the right side list will change accordingly. Check or uncheck the access rights to specific cameras or D/O points. After all changes are made click **Update** to apply the changes or **Discard Changes** to cancel. Click **Close** to go back to main GUI.



3-3-3 Camera Tree Toggle (Command Center and Command Center Dual)



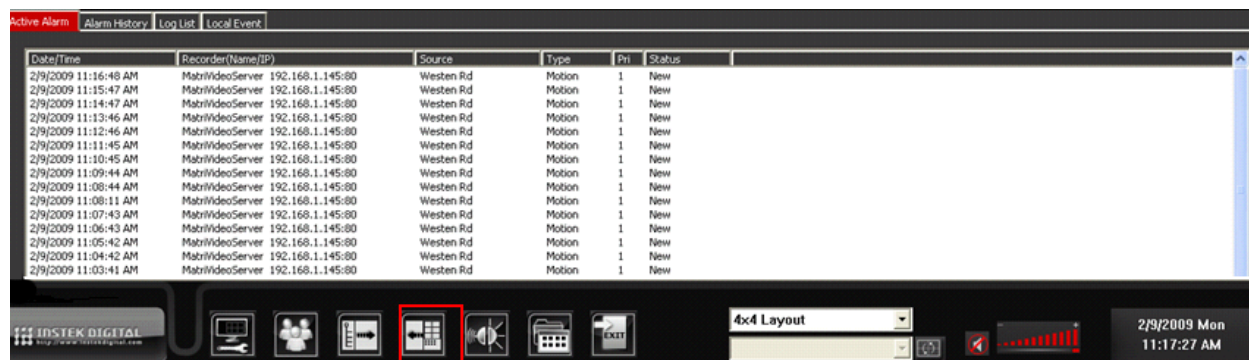
Click the 'Camera Tree Toggle' button to expand the camera tree and hide the operational panel. Click the button again to switch back to the original screen.



3-3-4 Alarm List Toggle (Command Center and Command Center Dual)



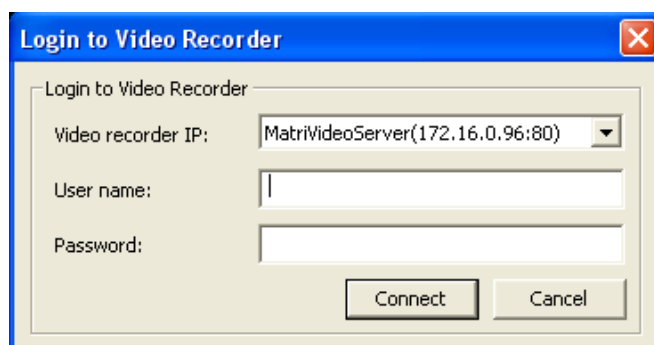
Click the 'Operation Panel Toggle' button to expand the Operational Panel and hide the Camera Tree Panel. Click the button again to switch back to the main screen.



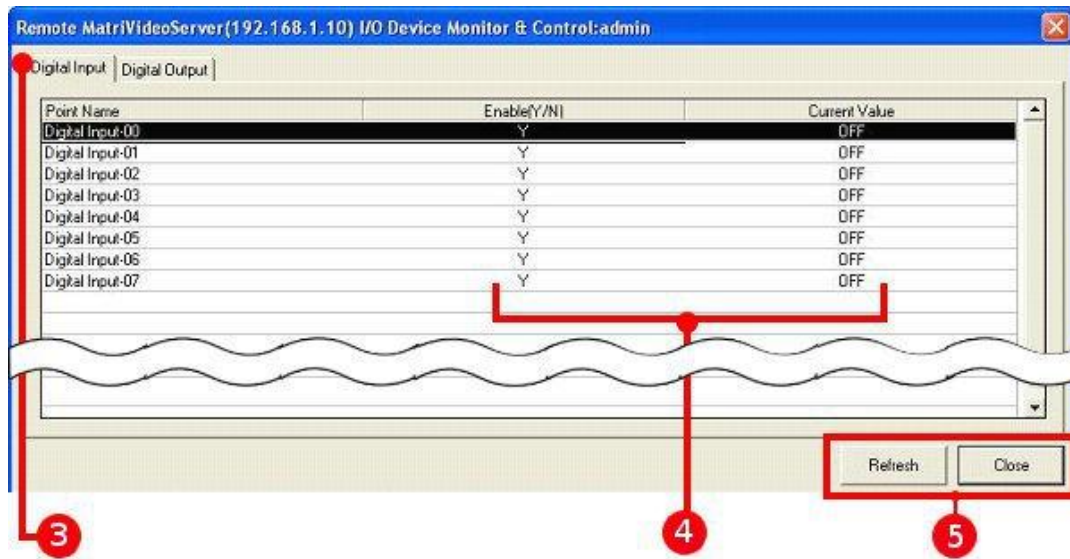
3-3-5 I/O Control Setup (Command Center and Command Center Dual)



Click the 'I/O Control Setup' button to monitor and change the status of a DI/DO module on a video recorder (DVR). To monitor or change the DI/DO module status follow the steps below:

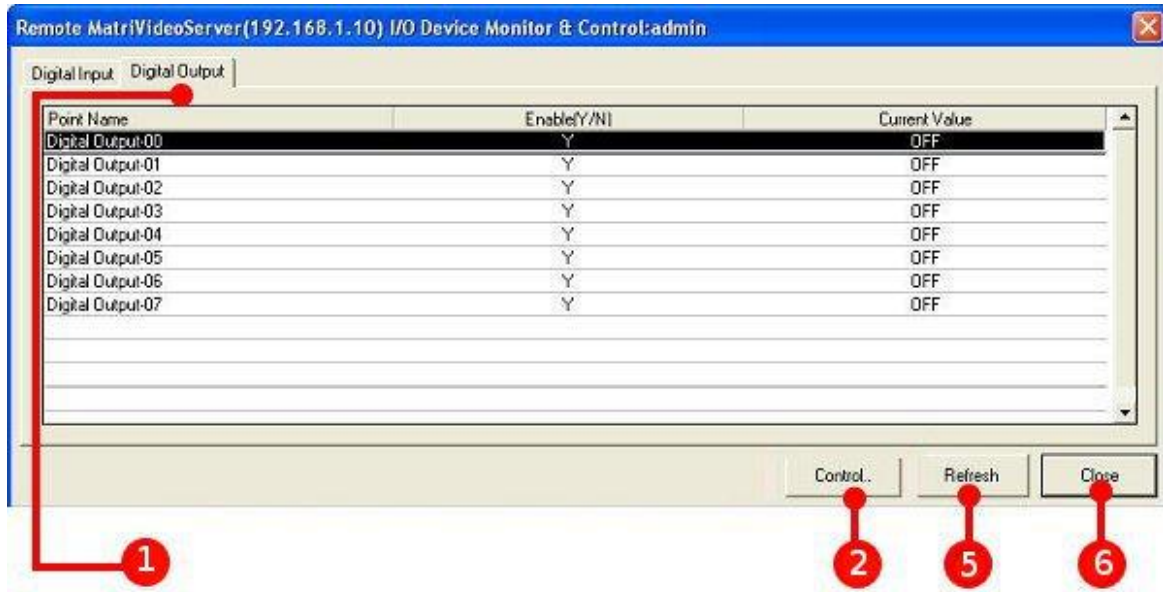


1. Click the 'I/O Control Setup' button. A login window will appear.
2. Select the target video recorder and click **Connect**.

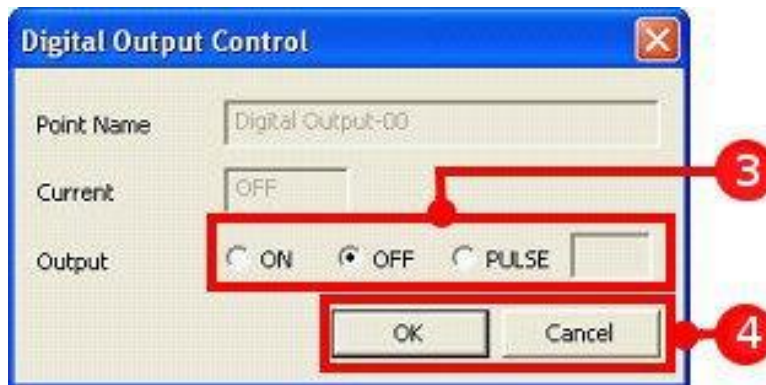


3. A remote video recorder DI/DO monitoring screen appears. The 'Digital Input' tab will show a list of all digital input/output points for the video recorder.
4. Click on a specific DI/DO point to check the values. Every DI/DO point has two values - Enable and Current.
 - *Enable (Y/N)* indicates the functional status of the DI/DO point. 'Y' means normal, and 'N' means closed.
 - *Current Value* indicates the switch status of the point. 'ON' means the DI/DO point is open. 'OFF' means the DI/DO point is closed.
5. Click **Refresh** to get the updated value(s). Click **Close** to go back to the main window.

On the Digital Output Tab the user may click the **Control** button to change the status of a specific point. Follow the steps below:



1. Click the 'Digital Output' tab.
2. Click the **Control** button.
3. A Digital Output Control window appears. Select the value of the output point. There are three options: ON, OFF, PULSE.



- *ON*: Set the output point to 'on.'
 - *OFF*: Set the output point to 'off.'
 - *PULSE*: Set the status of the output point to 'alternating.' (The default interval is 5 seconds.)
4. Click **OK** to save the changes or click **Cancel** to exit without saving.
 5. Click **Refresh** to get the updated value(s), if necessary.

6. Click **Close**.

3-3-6 Run External Program(s)



Users can run selected programs on top of the Command Center application by following the steps below:

1. Click the 'Run External Program' button. A menu will appear.
2. Select the program from the menu to run that particular application.

Note: Prior to running the external programs, the users need to pre-define the external programs and their executable path under in the 'Setup Menu.'

3-3-7 Toggle (Command Center Dual and Command Center Lite)



The 'Toggle' button performs a slightly different function in Command Center Dual and Command Center Lite.

- In Command Center Dual use the toggle button to switch between terminal two and terminal three.
- In Command Center Lite use the toggle button to switch the main screen to playback mode. (terminal two functionality)

3-3-8 Exit



Click the 'Exit' button to exit the application.

3-4 Setup Menu

The 'Setup' menu provides the following functional configurations:

MatriVideo Command Center | Subscribe Video Recorder | Camera Patterns | Camera Tours | Tree Builder | Map Builder | Subscribe Monitor | Joystick |

1. **MatriVideo Command Center** - Layout Setup, Time Synchronization, Alarm Sound Setup, Auto Popup Setup- Live Video & Map, and User Defined Program(s) Setup.


Note: This item will be referred to as the 'MatriVideo Command Center' tab throughout this manual. Depending on which version on Command Center is used, this tab may also appear as the 'MatriVideo Command Center Dual' tab or the 'MatriVideo Command Center Lite' tab.

2. **Subscribe Video Recorder** - Adding or Deleting a Video Recorder.
3. **Camera Patterns** - Add, Modify and Delete Camera Patterns.
4. **Camera Tours** - Add, Modify and Delete Camera Tours.
5. **Tree Builder** - including adding or deleting a location group node, linking a map, and deleting a camera node.
6. **Map Builder** - including adding, deleting, or modifying a map.
7. **Subscribe Monitor** - including adding, deleting, or modifying the nCCTV monitor.
8. **Joystick** - PTZ camera joystick configuration.

3-4-1 Layout Setup (Command Center and Command Center Dual)

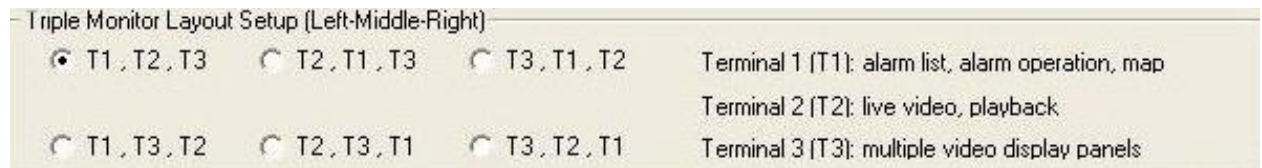
3-4-1-1 Command Center

The layout setup allows users to change the terminal order for triple monitors. To change the terminal display order, follow the steps below:

1. Click on the 'Setup' button. 

2. Click the 'MatriVideo Command Center' tab.


3. Select the desired terminal sequence.



4. Click **Close**.

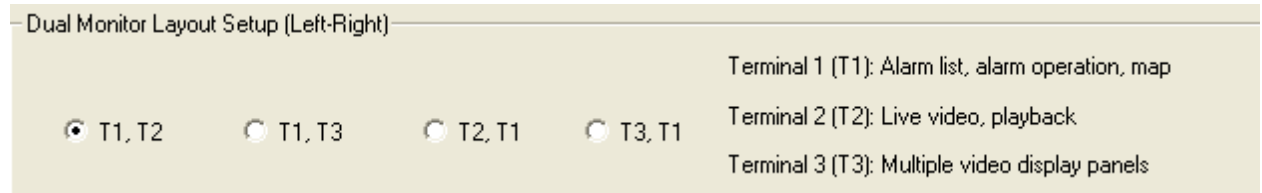
3-4-1-2 Command Center Dual

The layout setup provides users to change the running application order in dual monitors. To change the order, follow the steps below:

1. Click on the 'Setup' button. 

2. Click the 'MatriVideo Command Center Dual' tab.

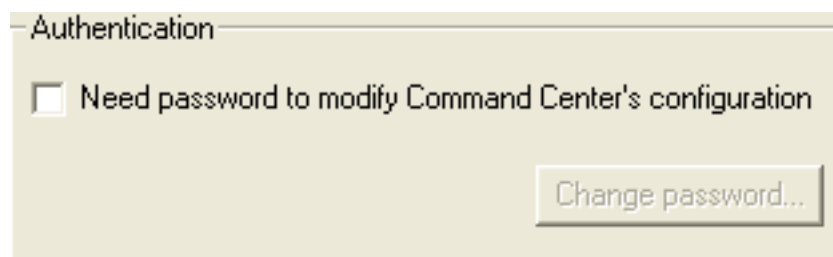
3. Select the desired terminal sequence.



4. Click **Close**.

3-4-2 Authentication

This functionality restricts access to the 'Setup' menu. To set a password, follow the steps below:



1. Click 'Setup.' 


2. Click the 'MatriVideo Command Center' tab.
3. Check the box 'Need password to modify Command Center's configuration.' To change the password click **Change Password**.
4. Click **Close**.



Note: The default authentication password is `id`. It is strongly recommended that a stronger password be set for enhanced security.

3-4-3 Setting the Alarm Sound

A custom alarm sound can be set by following the steps below:

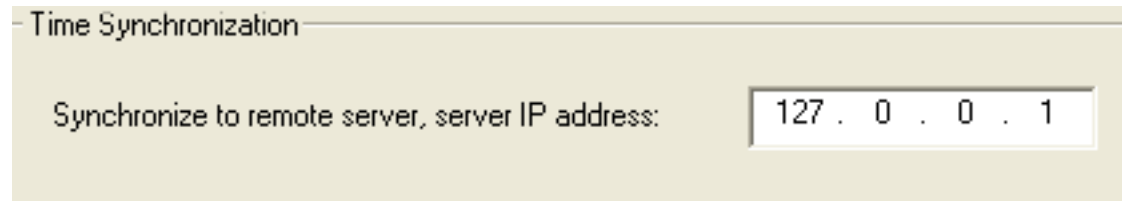
1. Click on the 'Setup' button. .
2. Click on the 'MatriVideo Command' Center tab.
3. Check the box 'Alarm Sound.'




4. Use the browse button to select an alarm sound file.
5. Click **Close** to complete the setup process.

3-4-4 Time Synchronization

This function allows the user to synchronize the data and time with that of a video recorder (or NTP Time Server).



1. Click 'Setup.' 
2. Click on the 'MatriVideo Command Center' tab.
3. Enter the IP address of the time server(DVR or an NTP Time Server)
4. Click **Close**.

Note: This function will synchronize the time, but not the time zone. For example, let's assume that the server is located in New York (Time – 21:03:53 EST), and the Command Center is located in California (18:02:33 PST). After time synchronization, the time in Command Center will be: 18:03:53 PST.

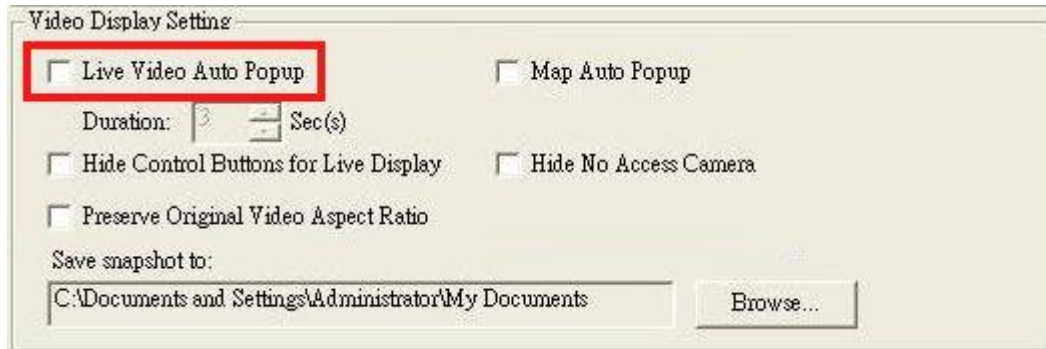
3-4-5 Video Display Setting


The video display setting has six subsidiary functions:

- Live Video Auto Popup
- Hide Control Buttons for Live Display
- Preserve Original Video Aspect Ratio
- Map Auto Popup
- Hide No Access Camera
- Save snapshot to:

3-4-5-1 Live Video Auto Popup Settings

This allows the user to activate the popup functionality during live video/playback.



1. Click on the 'Setup' button. 
2. Click on the 'MatriVideo Command Center' tab.
3. To enable or disable the auto pop up functions for live video set the corresponding checkbox.
4. Set the duration of the popup.
5. Click **Close**.

Note: The maximum duration of the auto popup is up to 2,592,000 seconds (30 days). DO NOT set the duration of the auto popup to exceedingly long intervals as this may freeze your screen.

Note: The auto popup will always keep the 4 recent alarm images on T3. If the duration of the auto popup is too long, other popup alarm images may be skipped.


3-4-5-2 Hide Control Buttons for Live Display

The functionality gives the user the option to either hide or display the control buttons.



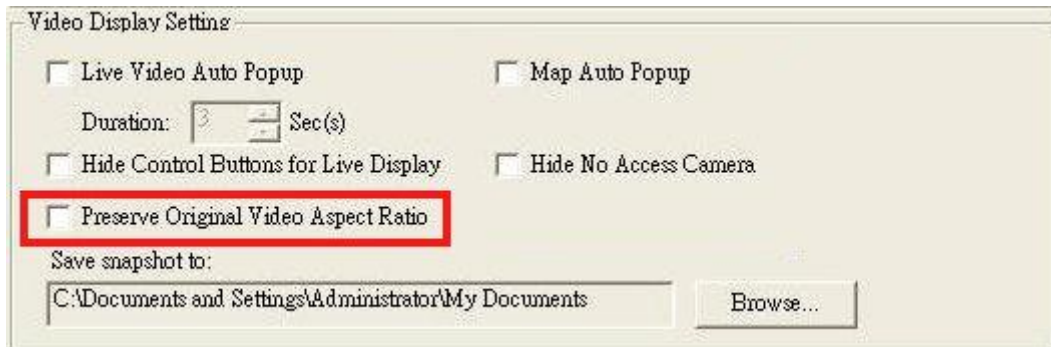
Display the Control Buttons

Hide the Control Buttons

1. Click on the 'Setup' button. 
2. Click on the 'MatriVideo Command Center' tab.
3. Check the box 'Hide Control Buttons for Live Display' to hide the control buttons on the display panel or vice versa.
4. Click **Close**.

3-4-5-3 Preserve the Original Video Aspect Ratio

The functionality sets the video aspect ratio of the display panel. If this box is checked, the image in the display panel will preserve the original display ratio from the camera. Otherwise the image will be stretched to fit the display panel.



1. Click on the 'Setup' button.



2. Click the 'MatriVideo Command Center' tab.

3. Check the box 'Preserve Original Video Aspect Ratio' to maintain the original video aspect ratio from the cameras. Refer to the illustration below:



Original Video Aspect Ratio

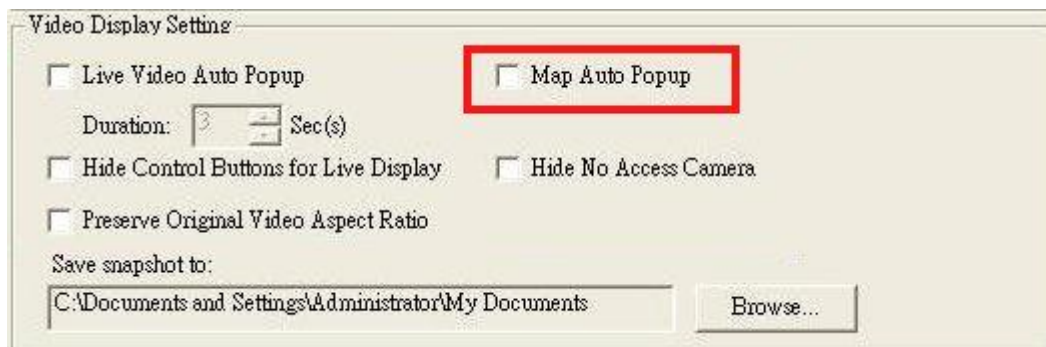



Video Ratio
to Fit Display Panel

4. Click **Close**.

3-4-5-4 Map Auto Popup (Command Center and Command Center Dual)

The functionality allows the user to activate the popup functionality during live video/playback



1. Click on the 'Setup' button. 
2. Click on the 'MatriVideo Command Center' tab.
3. To enable or disable the map auto popup function for live video set the corresponding checkbox.
4. Click **Close**.

3-4-5-5 Hide No Access Camera

This functionality hides the 'No Access' cameras on the camera tree. If the 'Hide No Access Camera' box is checked, all cameras not pre-authorized for a particular user will not be displayed on the camera tree. Additionally, the user will have no access rights to the Camera Patterns/Camera Tours for unauthorized cameras. If the 'Hide No Access Camera' box is unchecked the unauthorized cameras will be displayed with the icon 'No Access.'

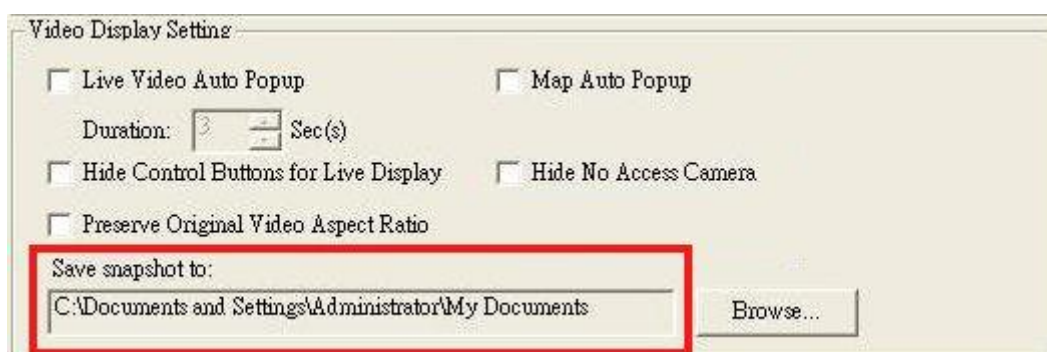



1. Click on the 'Setup' button. 

2. Click the 'MatriVideo Command Center' tab.
3. Check the box 'Hide No Access Camera' to conceal the unauthorized cameras in the camera tree.
4. Click **Close**.

3-4-5-6 Save Snapshot

The function sets the default directory of the snapshot images. Refer to the steps below:

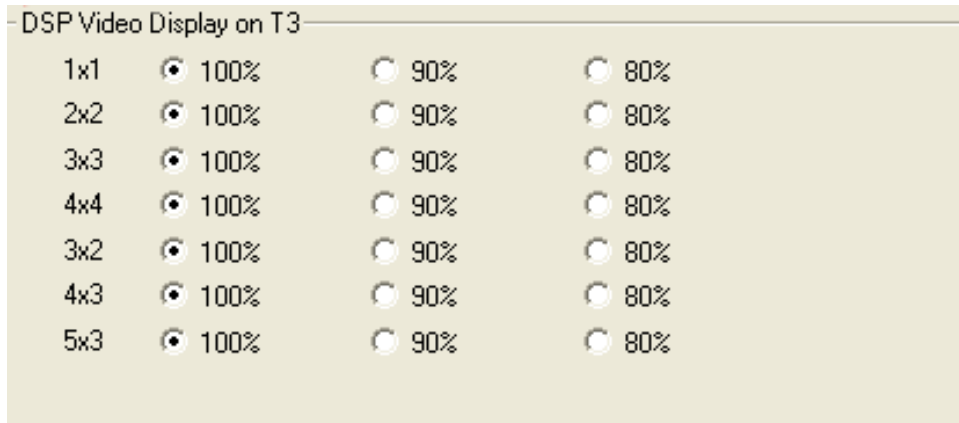



1. Click on the 'Setup' button. 
2. Click the 'MatriVideo Command Center' tab.
3. Click the 'Browse' button to select the location. (All snapshot images will be saved to this location).
4. Click **Close**.

3-4-6 Set the DSP Video Display on Screen

If the user notices video latency, this functionality will allow the user to improve the on-screen display quality by choosing the appropriate image compression algorithm for each pattern.

Refer to the steps below:




1. Click on the 'Setup' button. 
2. Click the 'MatriVideo Command Center' tab.
3. Select one of the default patterns and a designated algorithm (100%, 90% or 80%).
4. Repeat the previous step for the rest of the patterns.
5. Click **Close**.

Note: Patterns 3x2, 4x3 and 5x3 are for widescreen monitors only.

Note: The feature is only useful for analog cameras.

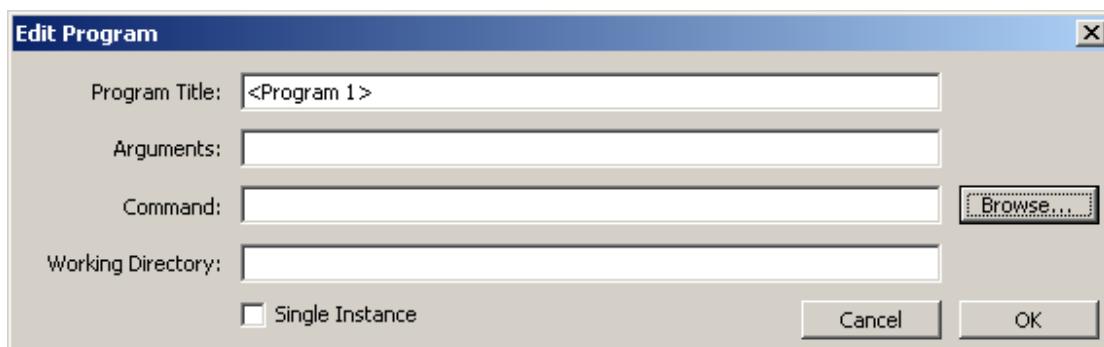
3-4-7 Configure a User Defined Program

This functionality allows the user to run external programs on top of the Command Center application. To configure a user-defined program follow the steps below:

1. Click the 'Setup' icon. 
2. Click the 'MatriVideo Command Center' tab.
3. From the drop-down list box, select an external program entry to edit. If you have not yet defined any programs, select **<Program 1>** and click **Edit...**



4. The screen below will display. Type a descriptive name for the external program in the 'Program Title' field.



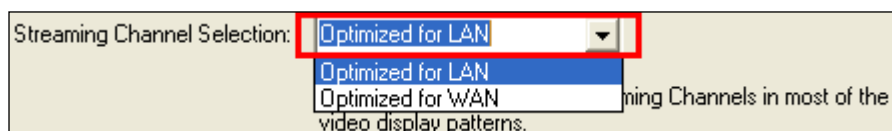
5. Input any arguments, if necessary.
6. Click **Browse** to select the external program's executable file or BAT file.
7. Select the box 'Single Instance,' if necessary.
8. Click **OK** to save your changes or **Cancel** to exit without saving.

Note: The 'Single Instance' feature is for programs that run only once.

3-4-8 Streaming Channel Selection

The 'Streaming Channel Selection' feature allows the user to select if the cameras on the 2x2 and 3x3 patterns should display main-stream or sub-stream (lower resolution) video. This option should be set according to the user's network environment.

Selecting 'Optimized for WAN' will help conserve network bandwidth by always trying to display sub-stream video, while selecting 'Optimized for LAN' will display main-stream video only unless configured otherwise.



Note: Not all cameras have a main-stream and sub-stream. In these cases only the main-stream will be displayed.

Note: 1x1 patterns are always assigned main-stream video while patterns 4x4 and higher are always assigned sub-stream video.

Note: Selecting 'Optimized for WAN' will override any customized camera stream pattern settings that may already be configured.

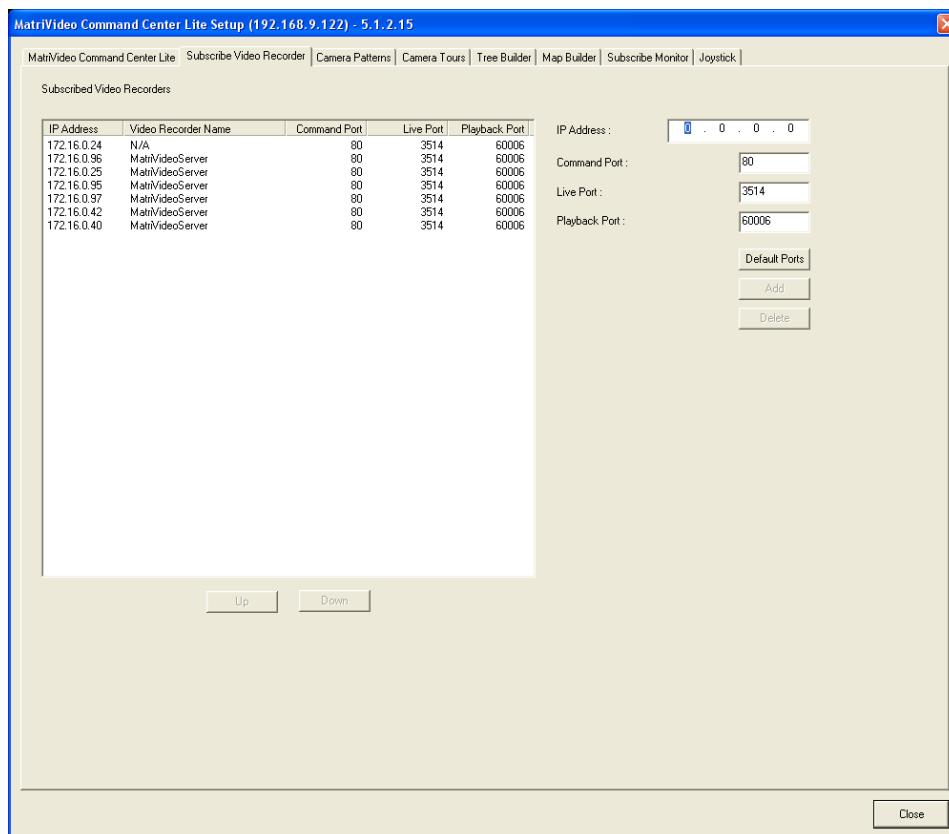
3-5 Subscribe (Add) a Video Recorder

3-5-1 Add a Video Recorder

Command Center can support up to 500 remote video recorders. To add a video recorder, follow the steps below:

1. Click the 'Setup' button. 

2. Click the 'Subscribe Video Recorder' tab.



3. Enter the IP address, Command Port, Live Port, and Playback Port of the video recorder.

Note: In a LAN or VPN environment, do not change the default port numbers of the DVR. In a WAN environment, Command Center needs to adopt the 'Network Address Translation' mechanism to re-map the DVR's IP and port numbers. Each DVR must occupy three ports to communicate with Command Center. Please re-map the IP and port numbers accordingly.

Please consult with your network administrator to obtain the required port numbers. For example:

IP: 192.168.1.10
Command Port: 8000
Live Port: 8001
Playback Port: 8002

IP: 192.168.1.11
Command Port: 8003
Live Port: 8004
Playback Port: 8005


Note: In a WAN environment, map the IP and port numbers in advance. Set the port values on the IP router before setting the connecting ports. Ask your network administrator for the values in order to set the IP address, the Command Port, the Live Port, and the Playback Port.

4. Click **Add**. (Repeat step 3-4 to add additional video recorder(s))
5. The order of the Video Recorders can be changed by using the 'UP' or 'DOWN' buttons.
6. Click **Close**.
7. Restart the application in order to activate these settings.

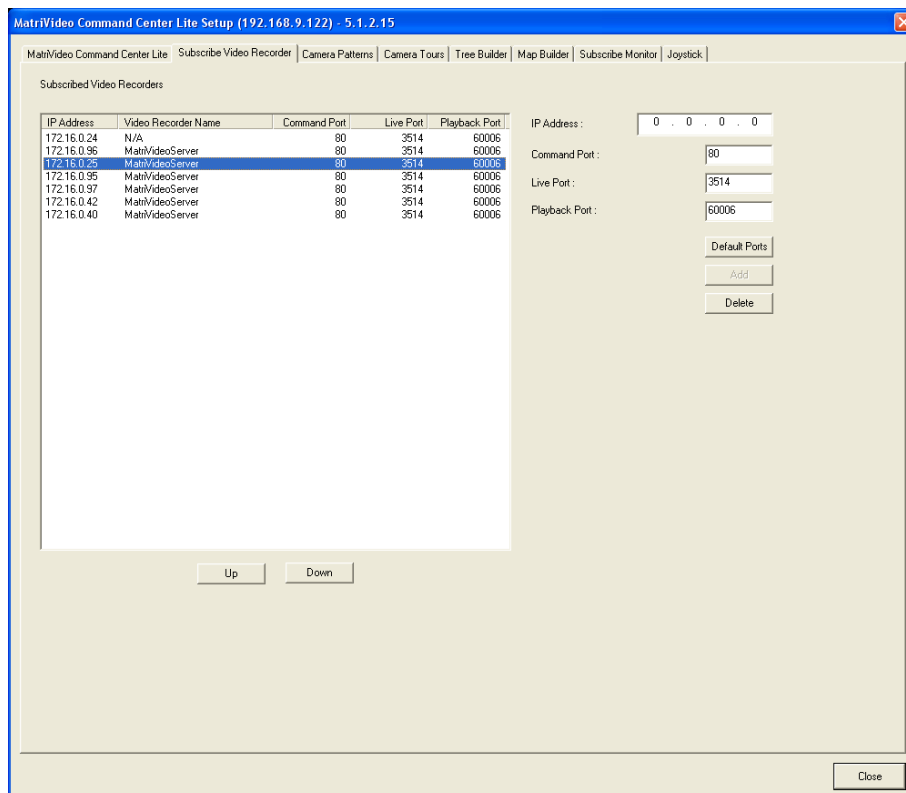


3-5-2 Delete a Video Recorder

To delete a subscribed video recorder follow the steps below:

1. Click on the 'Setup' button. 

2. Click the 'Subscribe Video Recorder' tab.



3. Click on the target video recorder from the list. The video recorder will be highlighted.
4. Click **Delete**. (Repeat step 3-4 to delete other video recorders.)
5. Click **Close**.
6. Restart the Command Center application.

3-6 Camera Patterns

3-6-1 Add a Camera Pattern

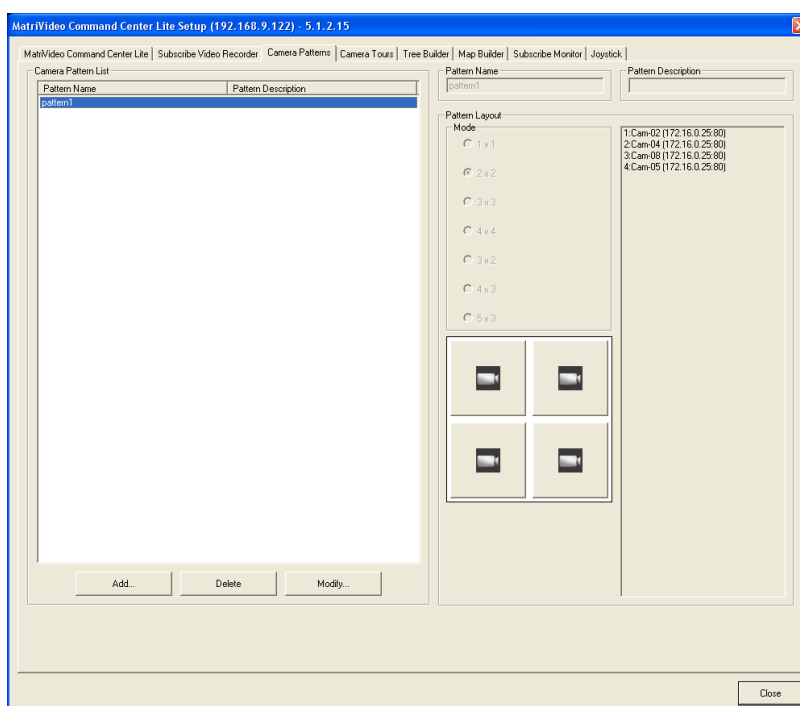
To add a camera pattern, follow the steps below:

1. Click 'Setup.'



2. Select the 'Camera Patterns' tab.

3. Click **Add**.



4. Enter the pattern name and description.

5. Select a pattern from the 'Mode' panel. The layout will change accordingly.

Note: Patterns 3x2, 4x3 and 5x3 are for widescreen displays only.

6. Drag a camera from the camera tree and drop it in the pattern layout. The camera list at the bottom of the panel shows the assigned camera names. Additionally, click the camera icon on the pattern layout to toggle between displaying main-stream and sub-stream video (a low-resolution video stream supported by some cameras). Displaying the sub-stream can help improve video performance and reduce network bandwidth requirements.

Note: Cameras without authorization will be hidden in the camera tree if the 'Hide No Access Camera' option is set.


7. Click **OK** to close the window or click **Cancel** to undo.

8. The pattern name shows in the pattern list. Click **Close**.

Note: Up to 256 camera patterns can be assigned to the MatriVideo system and shared by all operators simultaneously.

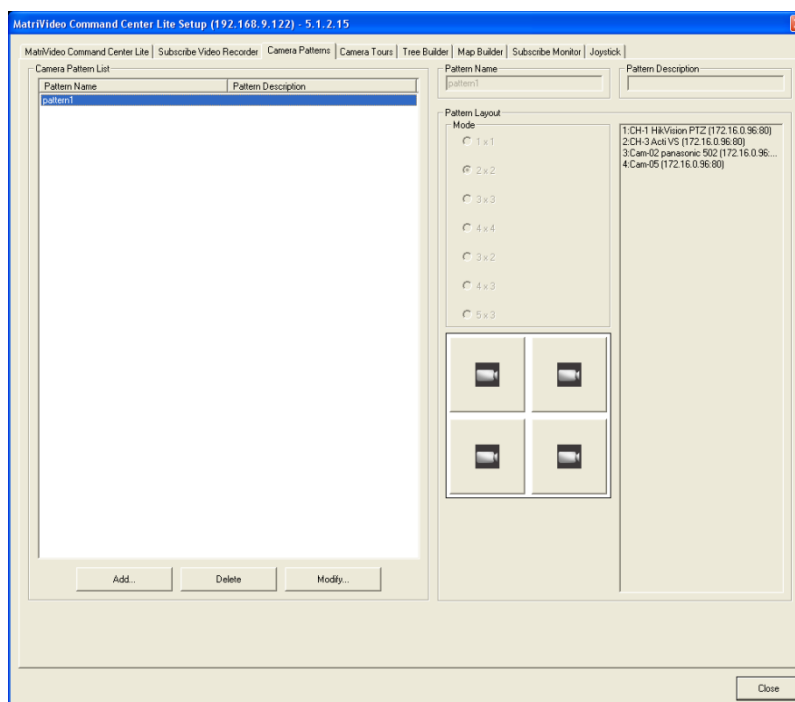
3-6-2 Delete a Camera Pattern

To delete a camera pattern follow these steps:

1. Click 'Setup.' 

2. Select the 'Camera Patterns' tab.

3. Select the pattern name from the pattern list.



4. Click **Delete**.

5. The user will see the message, "Are you sure that you want to delete?" Click **OK** to continue or **Cancel** to undo.



6. Click **Close**.

Note: Patterns used by an existing camera tour cannot be deleted. (The delete button grays out.)

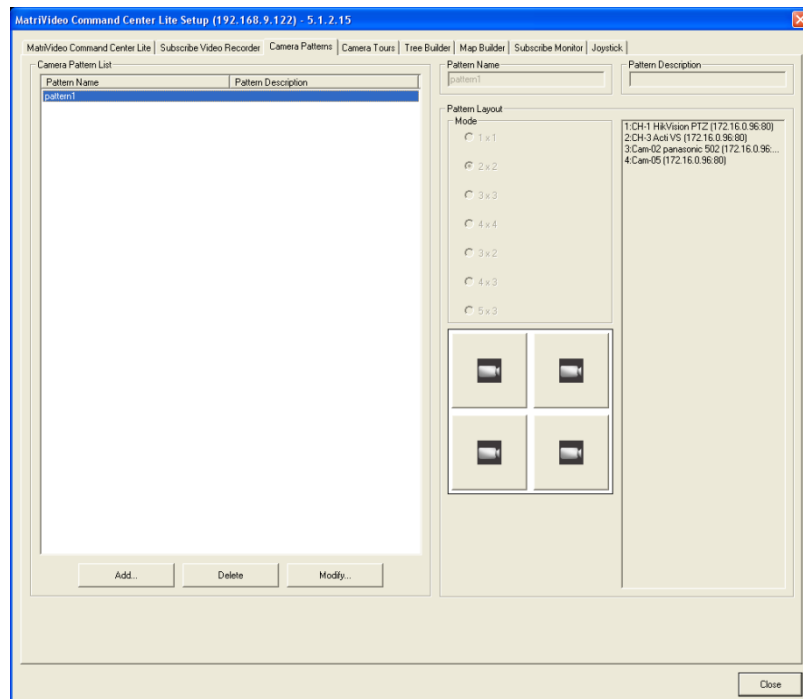
3-6-3 Modify a Camera Pattern

To modify a camera pattern follow these steps:

1. Click 'Setup.' 

2. Select the 'Camera Patterns' tab.

3. Select the target pattern name from the pattern list.



4. Click **Modify**.

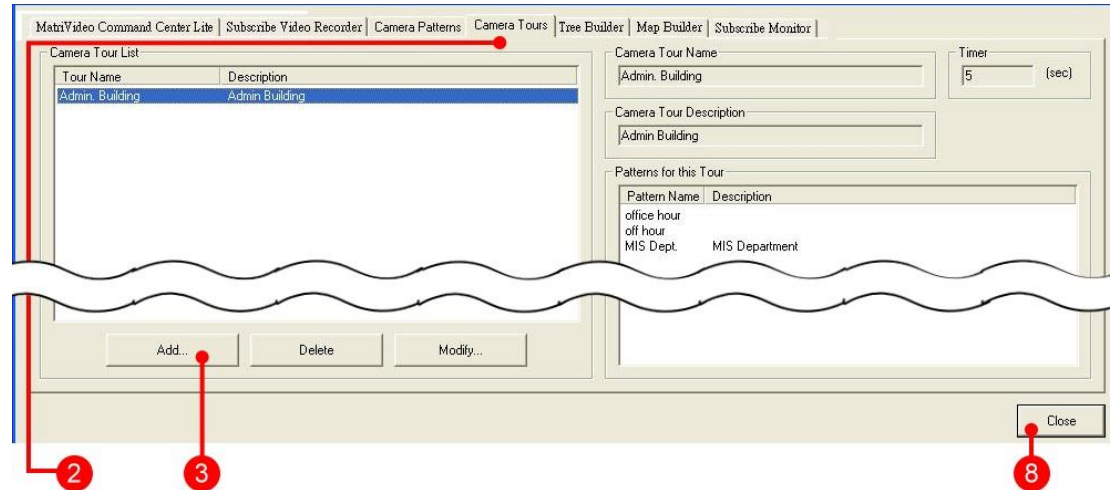
5. A 'Camera Pattern - Modify' window will appear. After changing the pattern setup click **OK** to close the window.


6. Click **Close** to complete the modification.

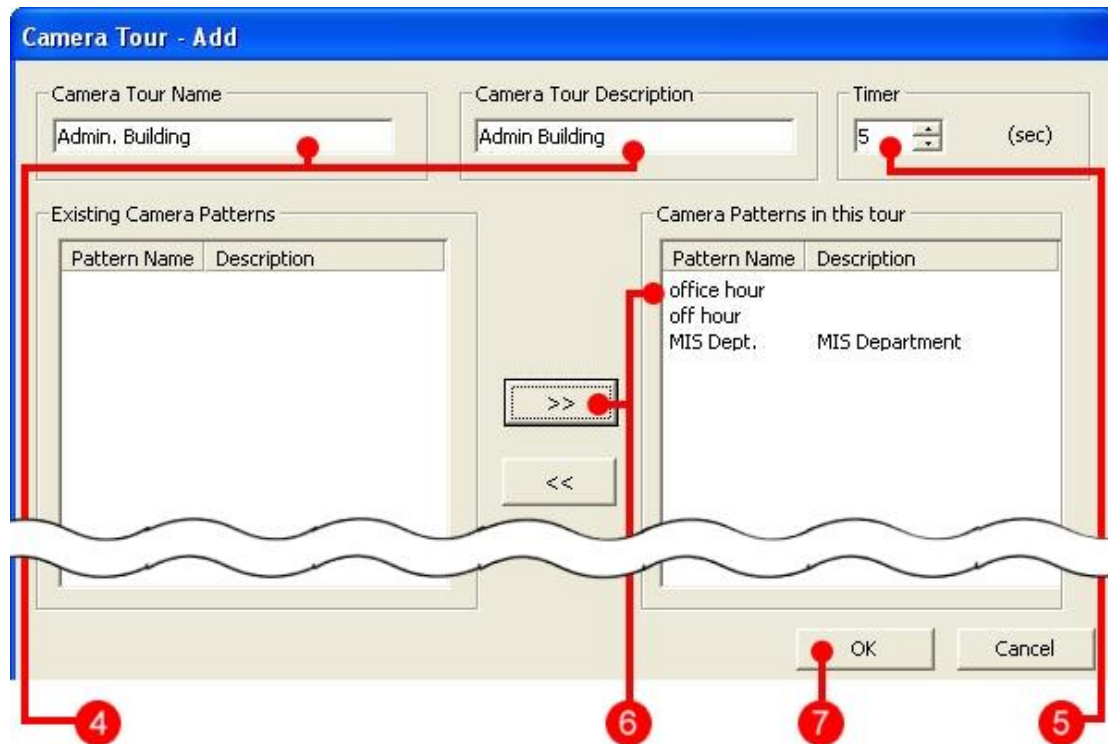
3-7 Camera Tours

3-7-1 Add a Camera Tour

To add a camera tour, follow these steps:



1. Click the 'Setup' button. 
2. Select the 'Camera Tours' tab.
3. On the 'Camera Tour List' window, click **Add**.



4. To define a tour, input the tour name and description.

Note: Do not use the same tour name twice. The system will reject a duplicate tour name.

5. Select a 'Timer' value for the tour interval.

6. Select a pattern from the existing camera patterns list. Click >> to add an existing pattern to the tour.

7. Repeat step 6 to add all the patterns to the tour. Click **OK** to close the window or **Cancel** to undo. The tour will recycle through all the patterns based on the specified time interval.

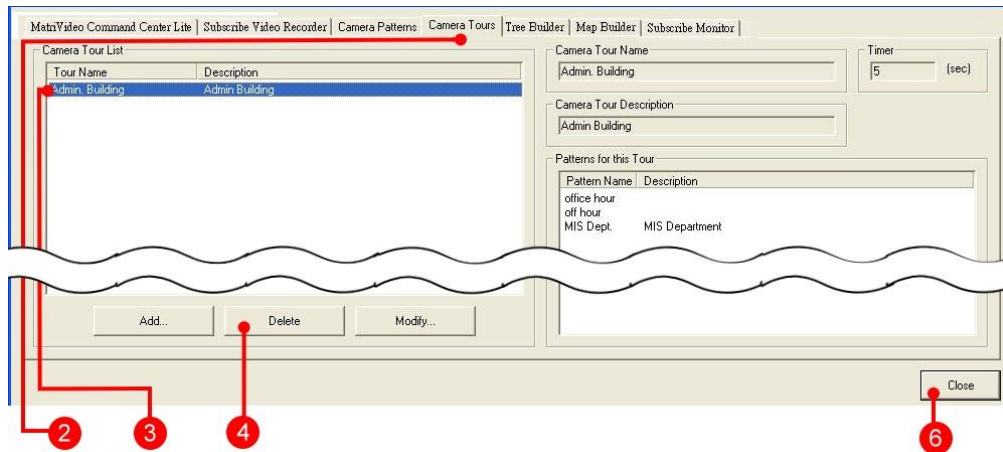
8. The tour name is visible on the 'Camera Tour List.' Click **Close** to complete the process.


Note: Each camera tour accepts a maximum of 128 patterns.

Note: The MatriVideo system can run up to 255 camera tours simultaneously. Each tour can be shared by all operators.

3-7-2 Delete a Camera Tour

To delete a camera tour follow the steps below:



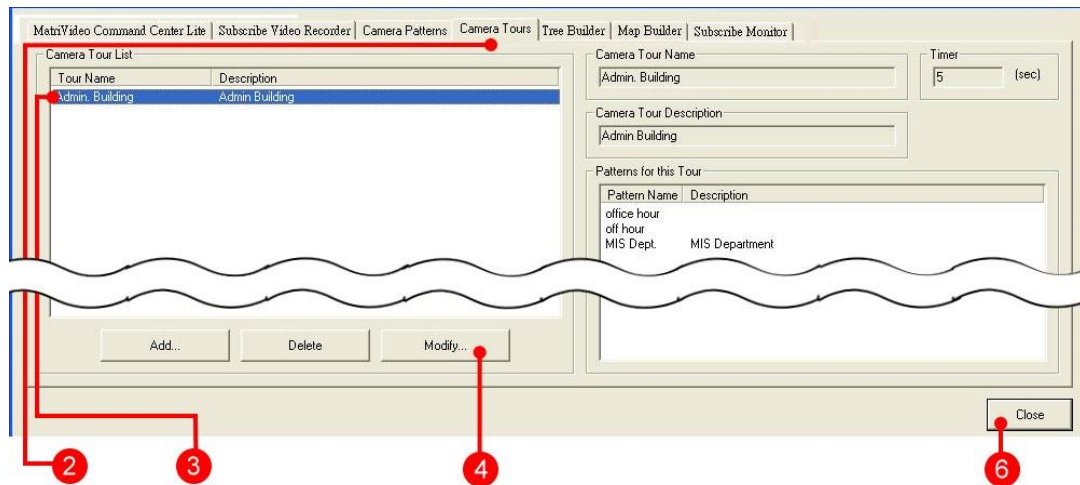
1. Click 'Setup.' 
2. Select the 'Camera Tours' tab.
3. In the 'Camera Tour List' window, select a target tour from the camera tour list.
4. Click **Delete**.
5. The system prompts with the message "Are you sure that you want to delete?" Click **OK** to continue or **Cancel** to restore.




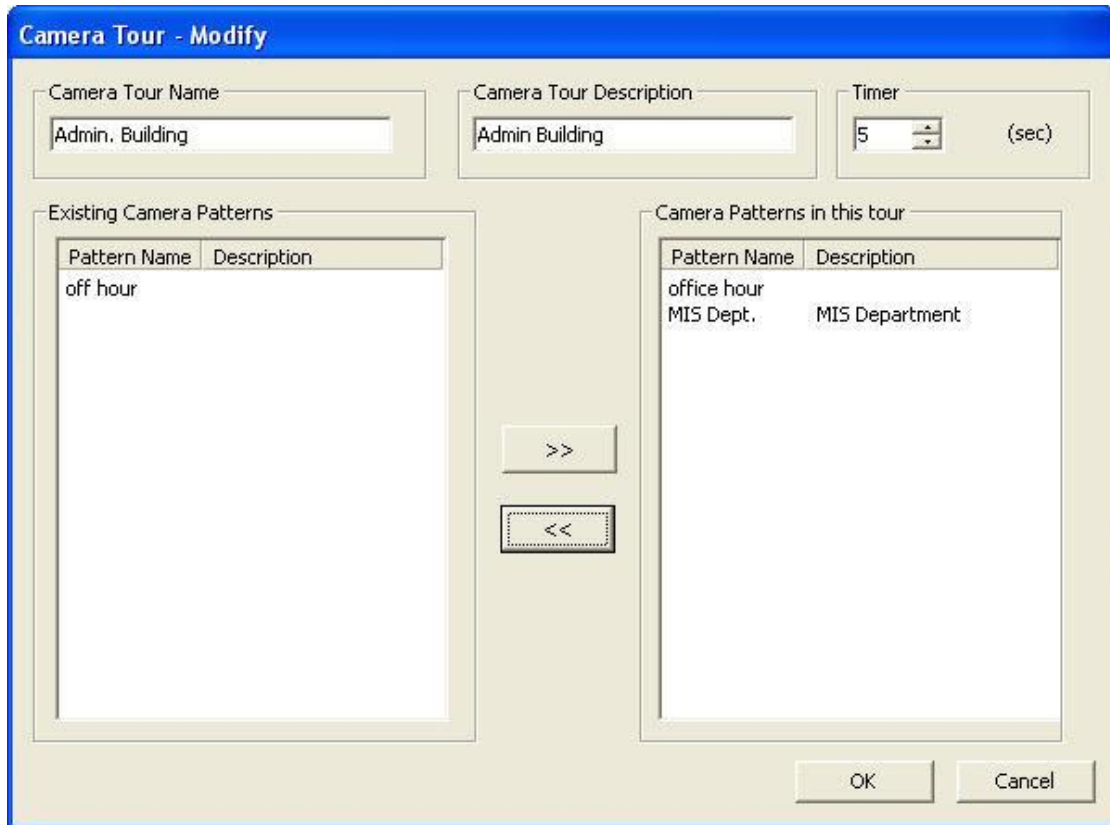
6. The camera tour will be deleted. Click **Close**.

3-7-3 Modify a Camera Tour

To modify a camera tour follow the steps below:



1. Click 'Setup.' 
2. Click the 'Camera Tours' tab.
3. In the Camera Tour List window, select a target tour from the camera tour list.
4. Click **Modify**.



5. Click **OK** to close the window.

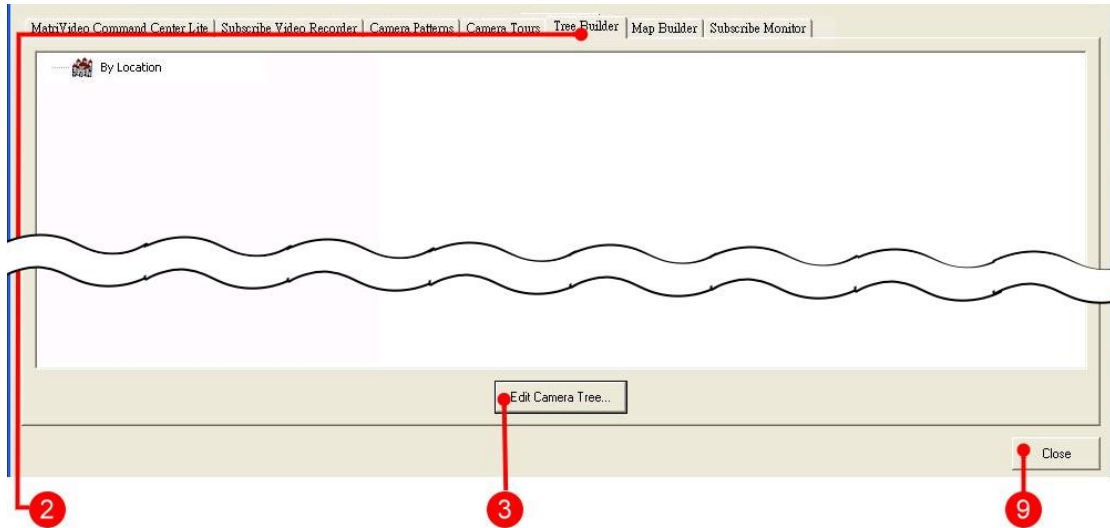
6. Click **Close**.

3-8 Camera Tree Builder

To group cameras by physical locations, use the camera tree builder for customization.

3-8-1 Add Location Group Node

To add a location group node, follow the steps below:



1. Click 'Setup.'

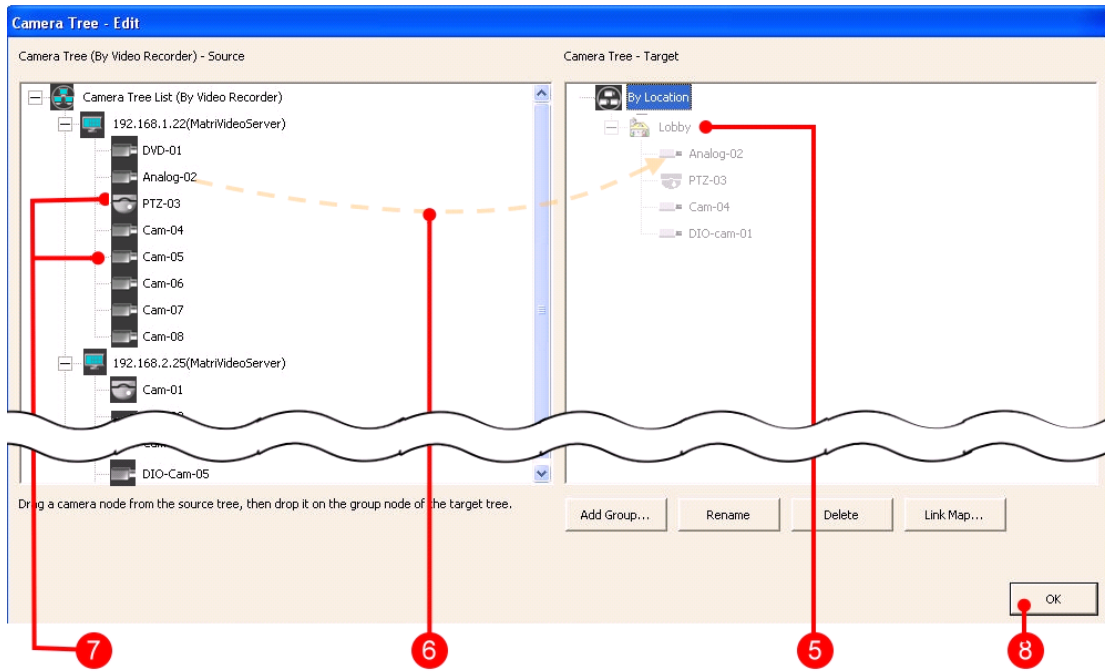


2. Click on the 'Tree Builder' tab.

3. In the camera tree list window, click 'Edit Camera Tree' to open a 'Camera Tree - Edit' window.



4. Click 'Add Group.' In the 'Camera Tree - Add Group' dialog, input the Group name. Click **OK** to continue or **Cancel** to undo.



5. The added node appears on the target camera tree.

6. Drag a camera node from the source camera tree to the target group node. A camera node is added below the group node. (repeat if necessary)

Note: Cameras without authorization will be hidden in the camera tree if the 'Hide No Access Camera' option in the Command Center Setup is set.

7. Click **OK** to continue.

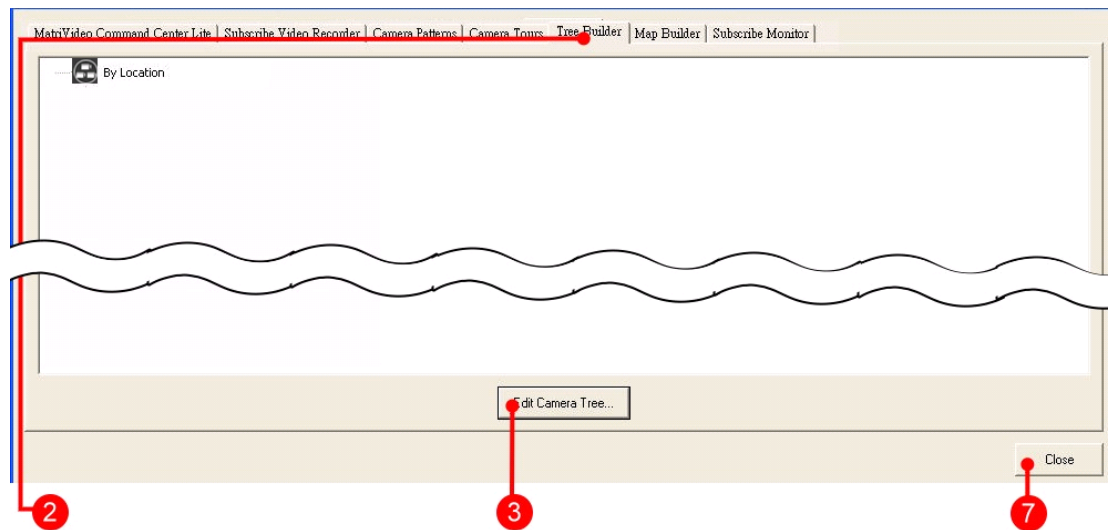
8. Click **Close**.

Note: Before adding a group node, carefully plan the location group and the subordinate cameras.

Note: The camera tree is a hierarchical structure. The system allows a structure with up to 8 layers.

3-8-2 Delete Location Group & Camera Node

See the following illustration to delete a location group node.

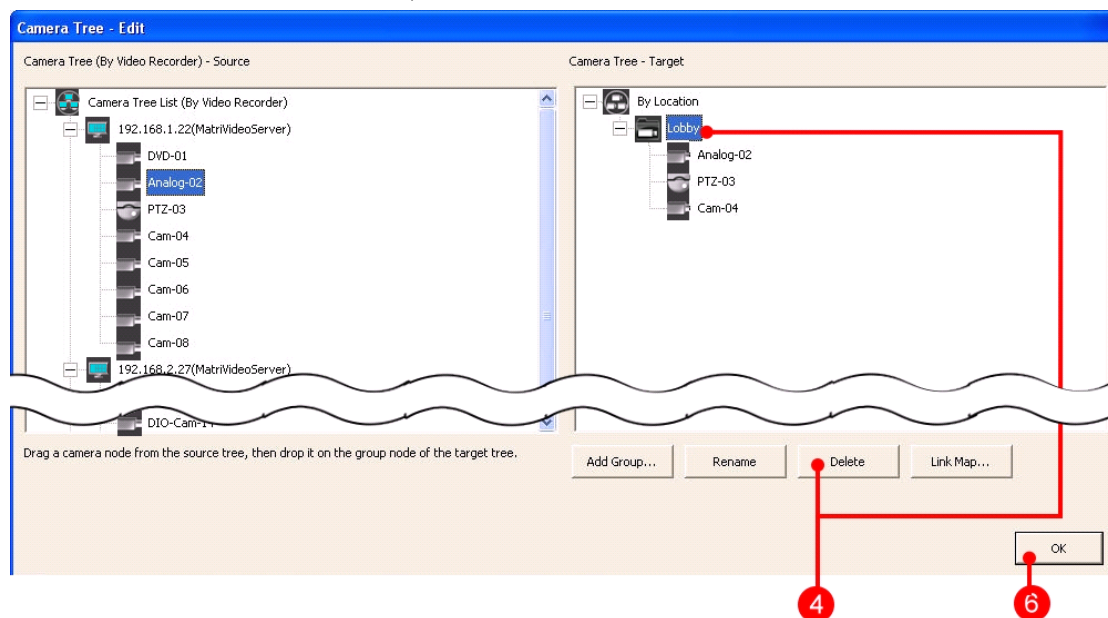


1. Click 'Setup.'

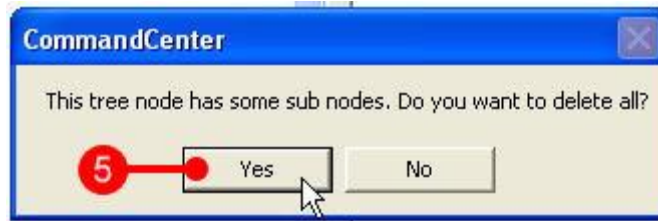


2. Click the 'Tree Builder' tab.

3. In the camera tree list window, click 'Edit Camera Tree.'



4. Click a location group node or a camera node from the target camera tree and press **Delete**.



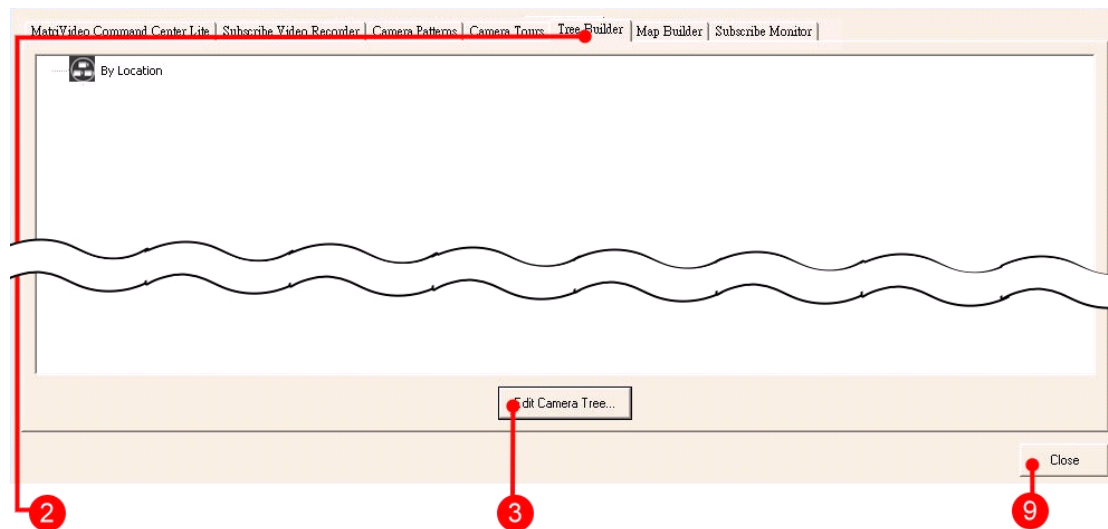
5. If the group node includes other camera nodes the system will prompt the user with “This tree node has some sub nodes. Do you want to delete all?” Click **Yes** to continue or **No** to cancel.


6. The target camera tree shows the result. Click **OK** to confirm.

7. Click **Close**.

3-8-3 Link a Map

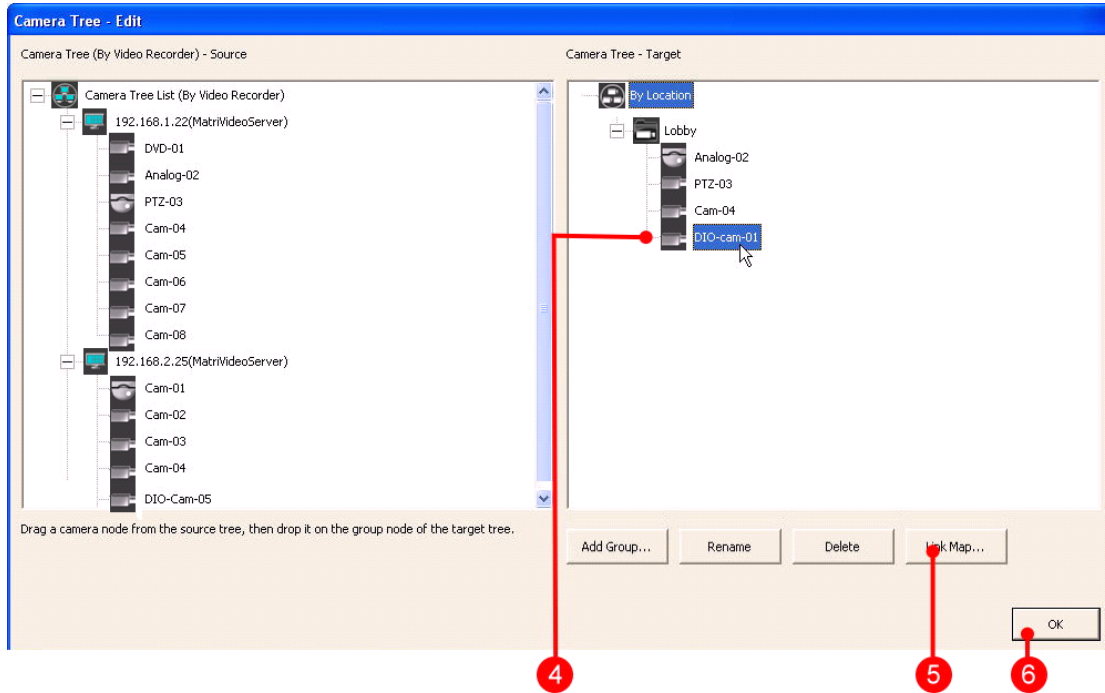
The ‘Link Map’ functionality allows the users to view a map associated with a camera using the right-click mouse button. To set up the link follow the steps below:



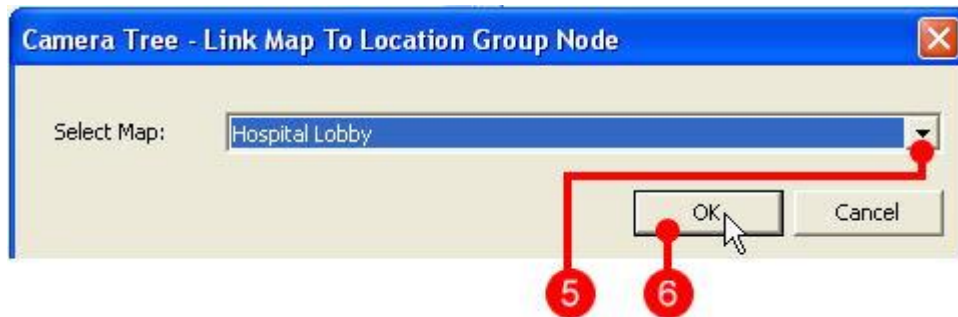
1. Click ‘Setup.’ 

2. Click the ‘Tree Builder’ tab.

3. In the camera tree list window, click ‘Edit Camera Tree.’



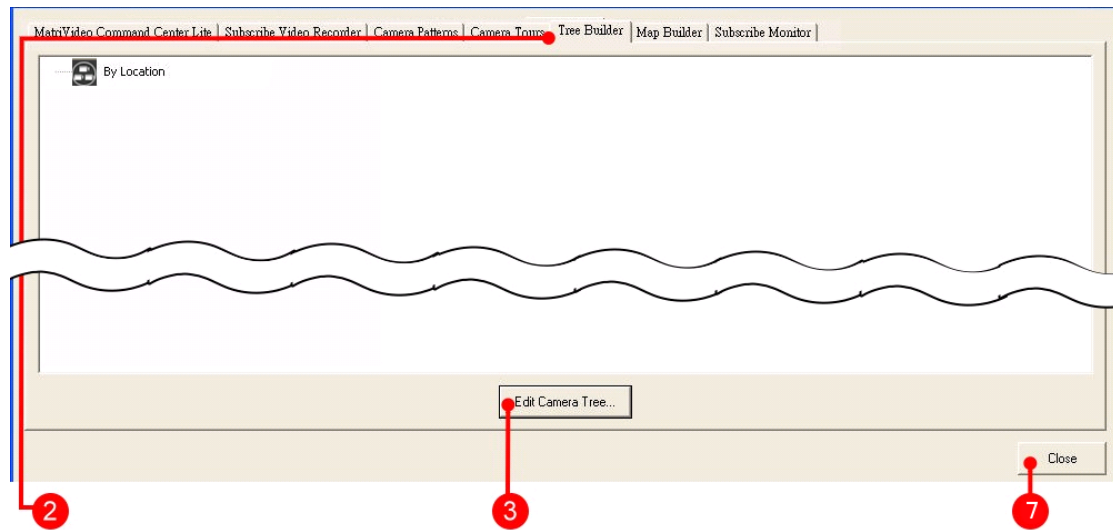
4. Click the location group node from the target camera tree and press **Link Map**.



5. In the 'Camera Tree – Link Map to Location Group Node' dialog, select a target map name from 'Select Map' drop-down menu. The corresponding map appears automatically.
6. Click **OK** to continue or **Cancel** to go back.
7. The name of the location group node adds the map name behind.
8. Click **OK** to close the window.
9. Click **Close**.

3-8-4 Rename Group Node

To rename a node (both location group and camera nodes) follow the steps below:

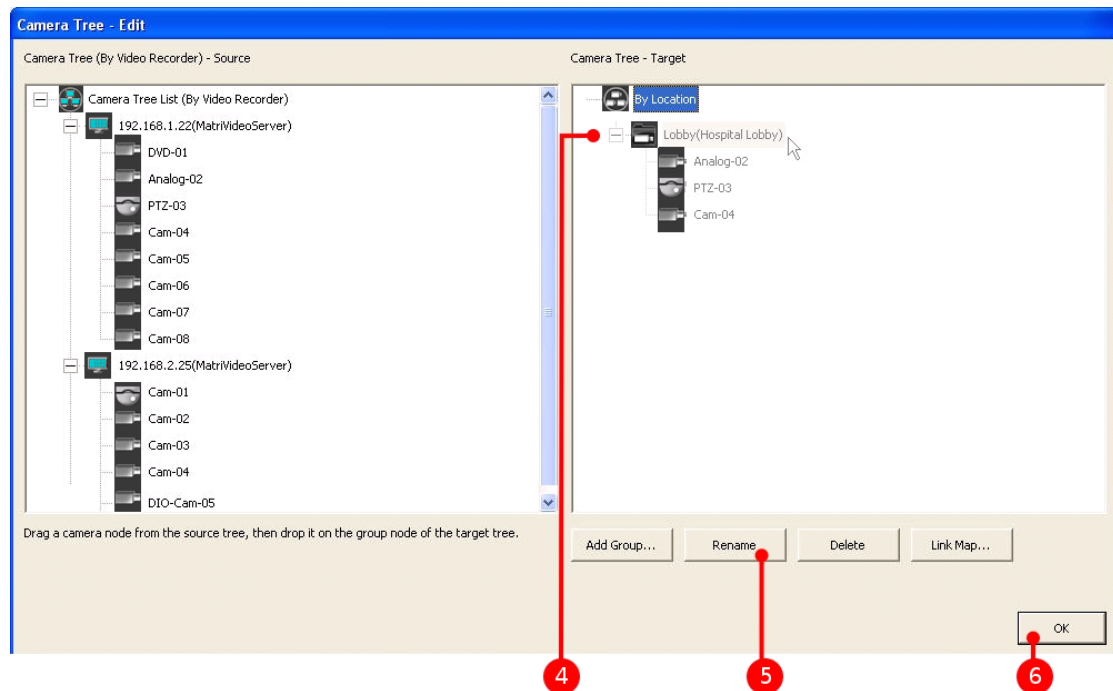


1. Click 'Setup.'



2. Click the 'Tree Builder' tab.

3. In the camera tree list window, click 'Edit Camera Tree.'



4. After selecting the target node from the target camera tree the node will be marked.

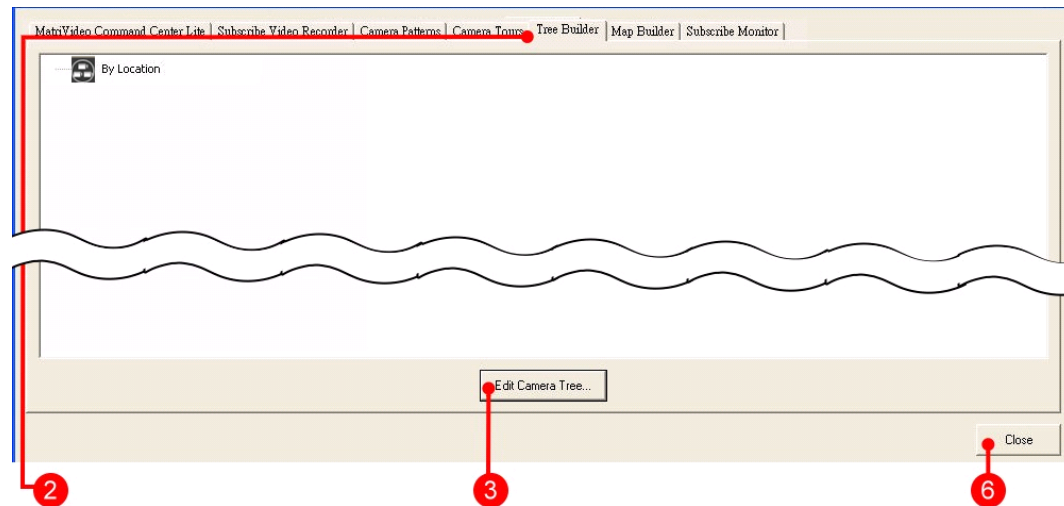
5. Click **Rename** and input the new name of the target node.

6. The target camera tree shows the result. Click **OK** to confirm the change.

7. Click **Close**.

3-8-5 Set the Node Order

To set the node order of the customized tree follow the steps below:

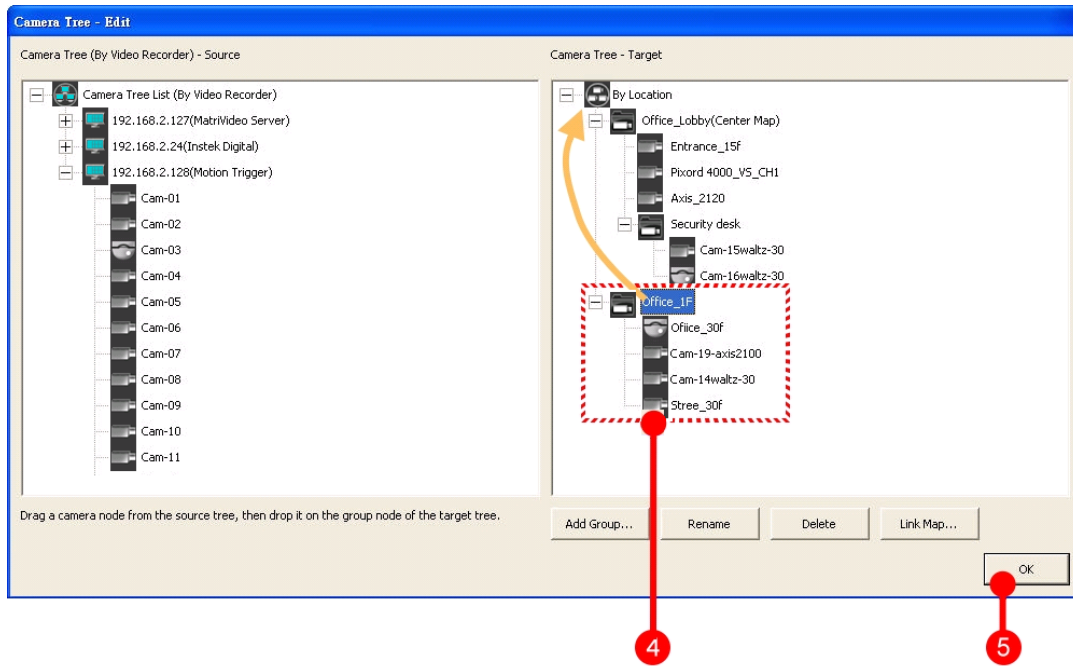


1. Click 'Setup.'



2. Click the 'Tree Builder' tab.

3. From the camera tree list window, select 'Edit Camera Tree.'



4. Select the target group node. Drag the node up and down and drop it in the new position. The sub nodes will move automatically with the group node.

5. Click **OK** to close the dialog.

6. Click **Close**.

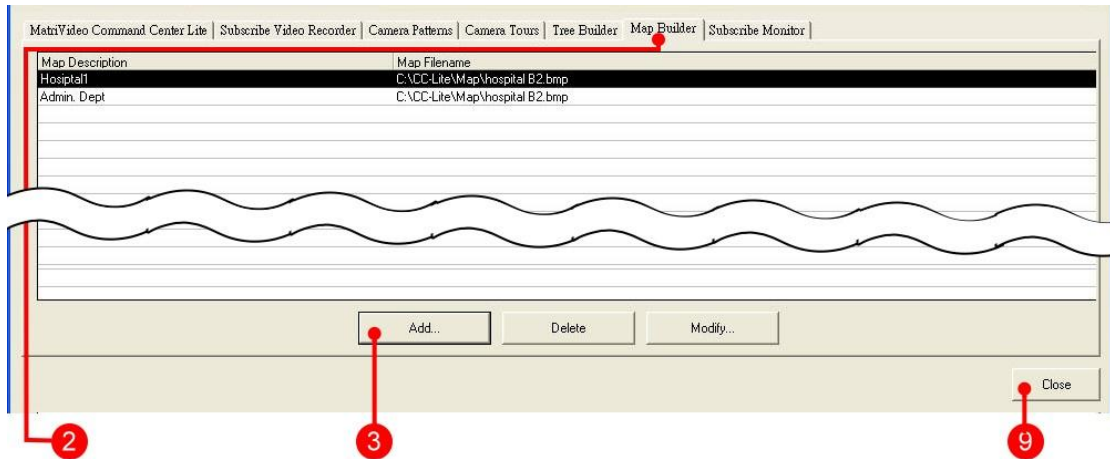
Note: Only the group node can be moved. To set a group node as a sub group node, move the node to the bottom of the target group node

3-9 Map Builder

3-9-1 Add a Map

Security professionals can accelerate their response to an emergency if they know where the events occur within their guarding facilities. Associating cameras with maps provides immediate information to the security guards about how to deal with the situation.

To add a map follow the steps below:

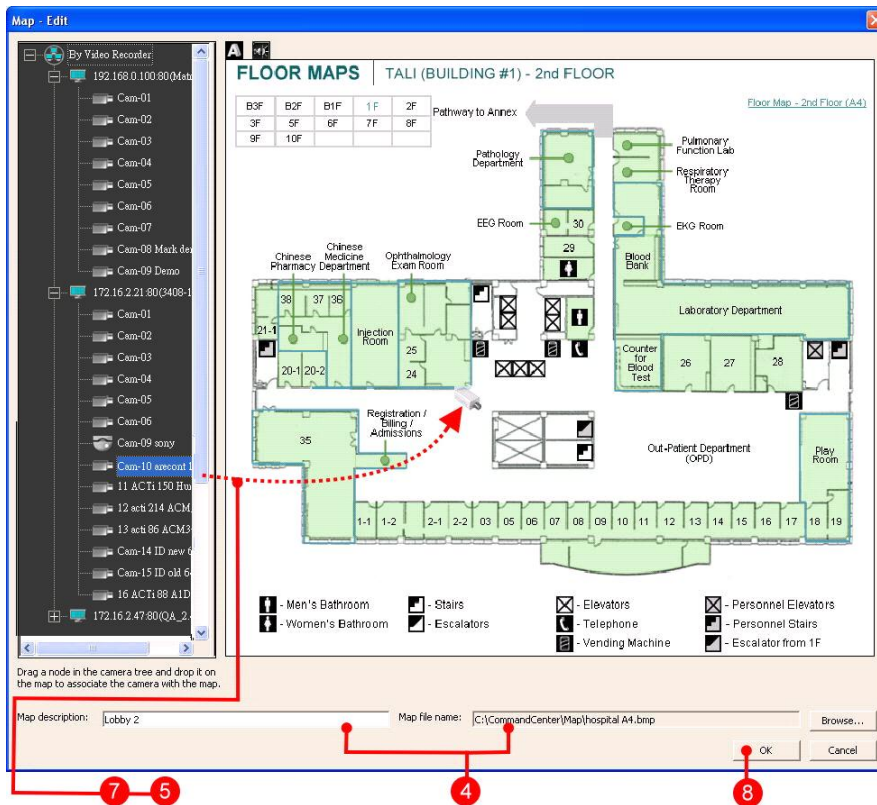


1. Click 'Setup.'



2. Click the 'Map Builder' tab.

3. In the map list window, click **Add**.



4. Input the map description and the name of the map. You may also use the 'Browse' button to browse the map image file.

5. While a map is added, drag the camera from the camera tree and drop it on the desired location on the map, for association.

6. Next, the 'Camera Icon Property' menu will appear. You may specify the direction for only the active cameras. Select one of the 8 pre-defined directions for an analog or IP camera, or take no action for a PTZ camera. Click **OK** to close the window. A camera icon appears on the map.



7. Repeat steps 5-6 until all cameras have been added to the map.

8. Click **OK** to close the window or **Cancel** to abort the change.


9. The map shows on the map list. Click **Close**.

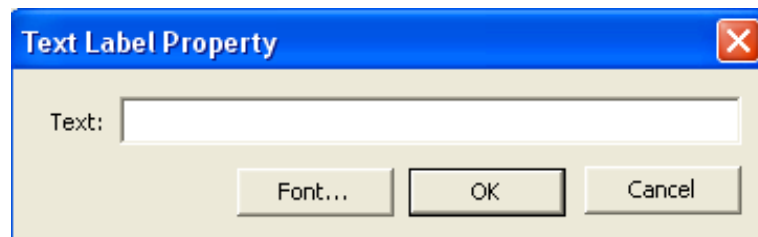
Note: The system only accepts images in either .JPEG or .BMP format.

Note: Cameras without authorization will be hidden on the camera tree if the 'Hide No Access Camera' option is selected in 'Setup.'

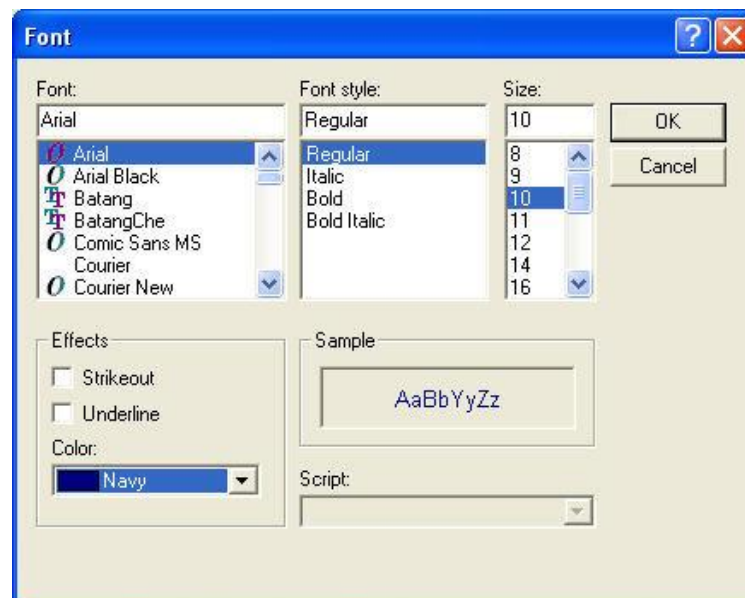
Note: The system allows up to 256 camera objects and 256 text objects on a map.

3-9-1-1 Add a Text Object to a Map

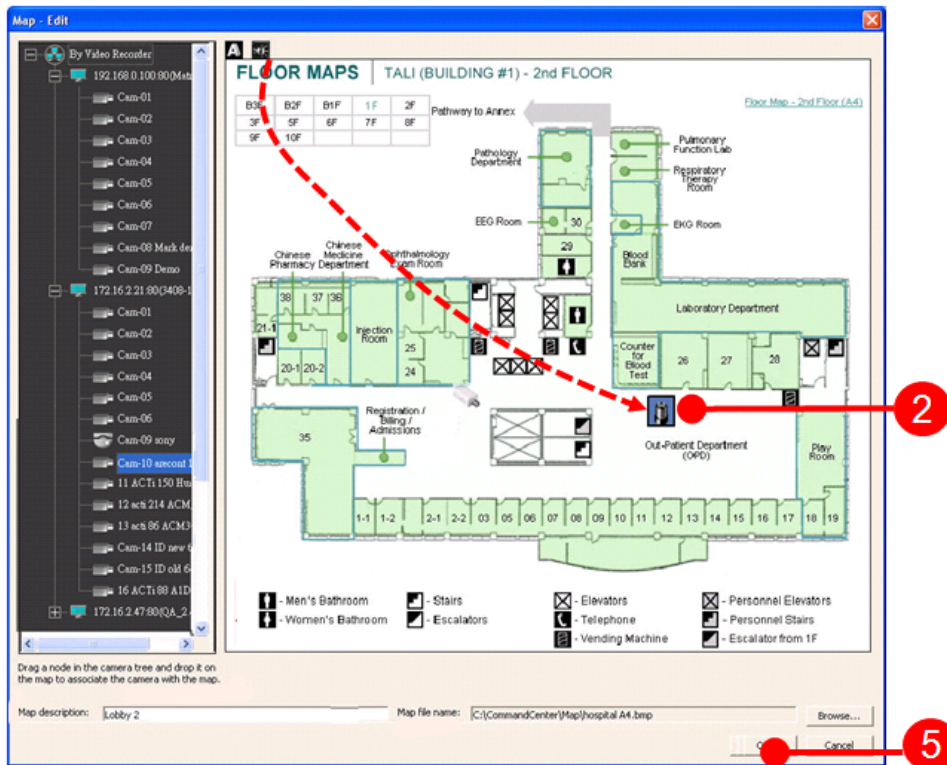
1. Open the 'Map - Add' or 'Map - Edit' window.
2. Drag the text icon  and drop it on the associated camera icon.
3. A 'Text Label Property' dialog box will appear. Input the camera description.




4. Click a style under 'Font' to change the text font style, if necessary.
5. Click **OK** to continue or **Cancel** to undo.
6. Click **OK** to save the setting.



3-9-1-2 Add a DIO point to a map



1. Open the 'Map - Add' or 'Map - Edit' window.
2. Drag the DIO point icon  and drop it on the desired location.
3. In the 'DIO Point Property – Add' dialog, select the Video Recorder, the Module Name and the Point Name from the drop down menu. The default icon of the D/I point is different from the D/O point.

Note: To change the On/Off icon, click **Modify**. A file browser will appear with which a new icon can be chosen.

Add a D/I point to the map

Add a D/O point to the map

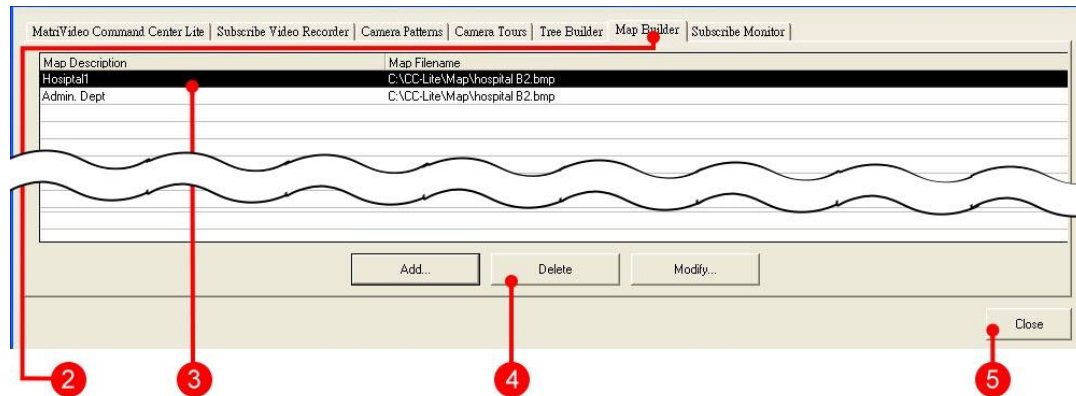
Note: Make sure that the values of the I/O module and DI/DO points have been set.

4. Click **OK** to continue or **Cancel** to undo.

5. Click **OK** to save the settings.

3-9-2 Delete a Map

To delete a map follow the steps below:



1. Click 'Setup.'



2. Click the 'Map Builder' tab.

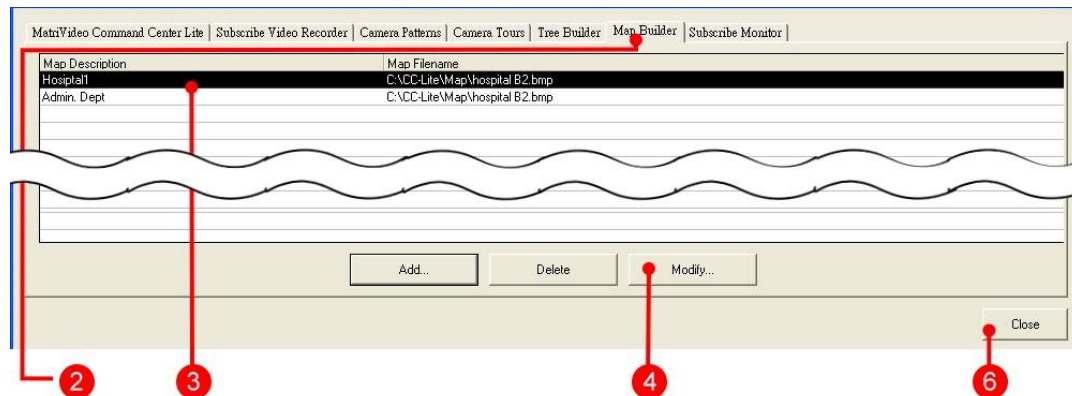
3. From the map list window, select the target map.


4. Click **Delete**.

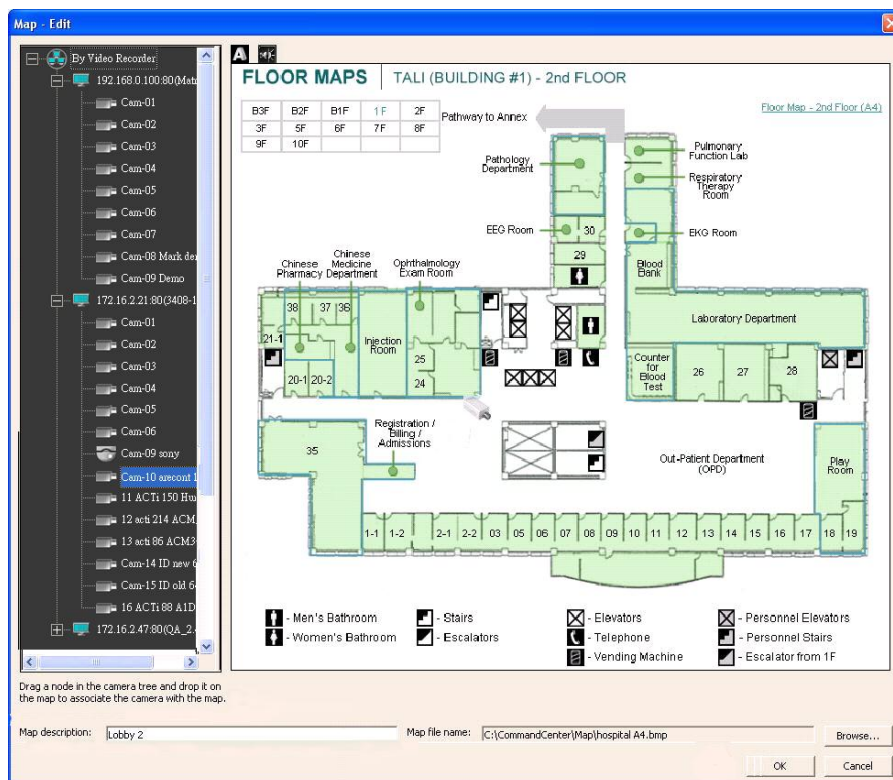
5. Click **Close**.

3-9-3 Modify a Map

To modify a map, follow the steps below:



1. Click 'Setup.' 
2. Click on the 'Map Builder' tab.
3. From the map list window, select the target map.
4. Click **Modify**.



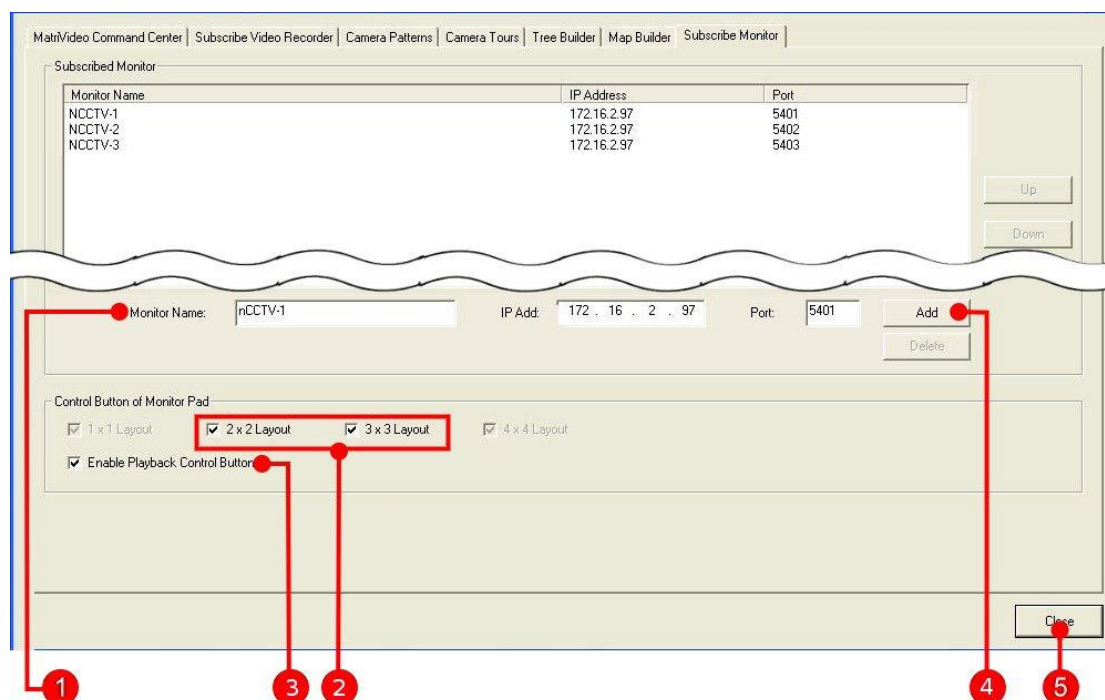
5. After editing the map setup click **OK** to close the window or **Cancel** to restore.
6. Click **Close** to complete the process.

3-10 Subscribe Monitor

To trigger an nCCTV monitor control panel the user can use the 'subscribe monitor' function tab to manage the nCCTV monitor(s).

3-10-1 Add an nCCTV Monitor

Follow the steps below to add an nCCTV monitor.



1. Input the nCCTV monitor name, IP address, and the VGA Port in the fields under the nCCTV list.
2. Check the '2x2 Layout' and '3x3 Layout' to show the '2x2' and '3x3' layout buttons on the control panel of the nCCTV monitor.
3. Check the 'Enable Playback Control Button' to show the Playback Control Button on the control panel of the nCCTV monitor.
4. Click **Add** to append a new nCCTV monitor. The monitor name is shown in the nCCTV Monitor List.
5. Click **Close** to complete the process.

Note: In case the nCCTV is connected to a firewall, ask your network administrator to open the following TCP ports:

Port 5401: (first monitor)

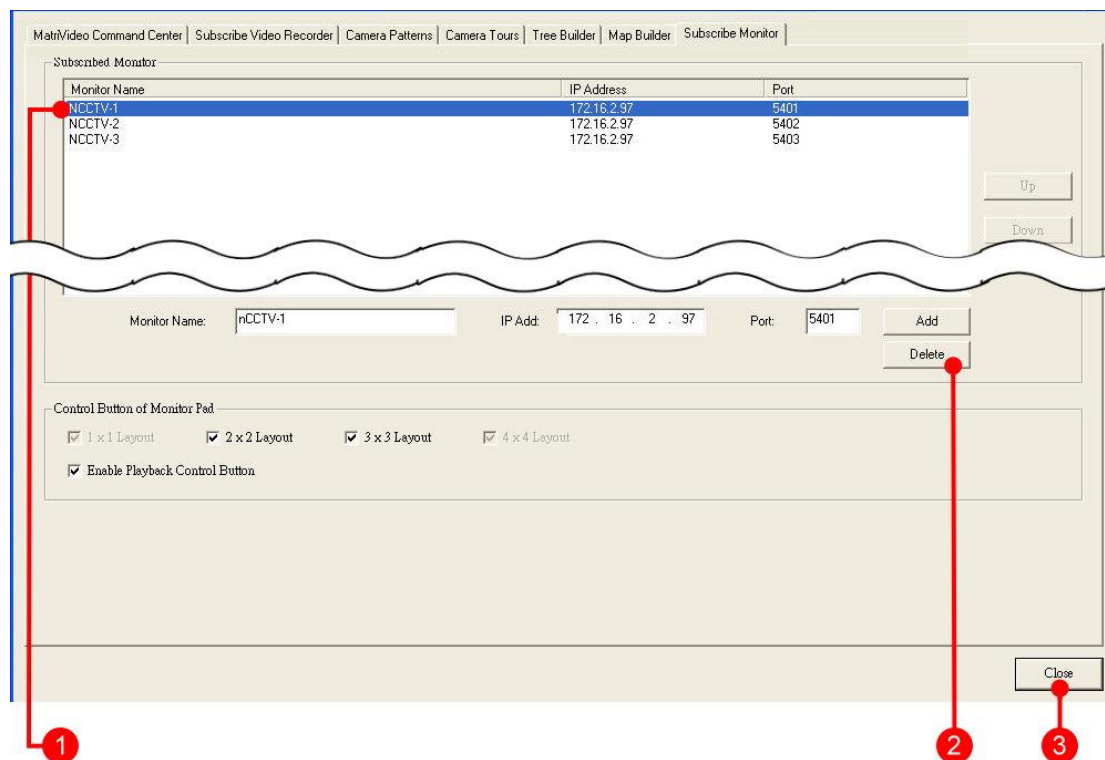
Port 5402: (second monitor)

Port 5403: (third monitor)

Port 5404: (forth monitor)

3-10-2 Delete an nCCTV Monitor

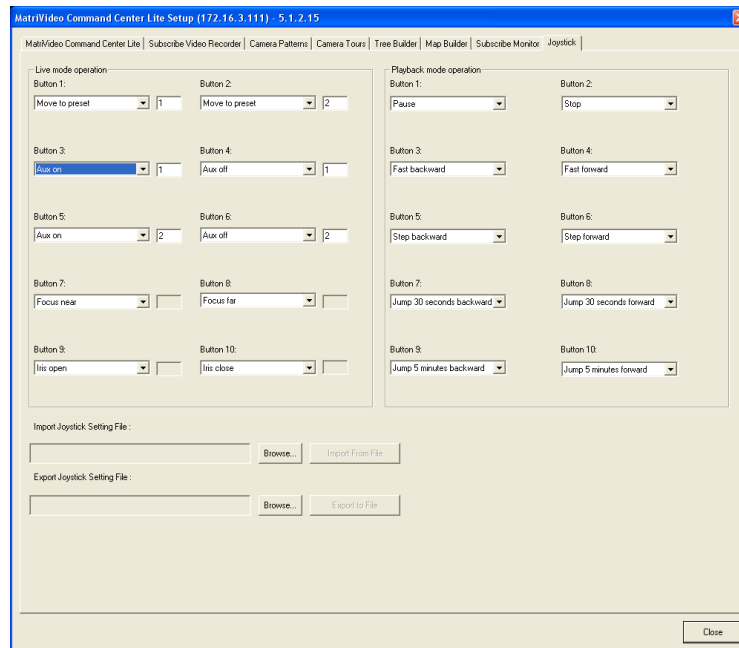
To delete an nCCTV monitor follow the steps below:



1. Click the target nCCTV monitor name in the nCCTV monitor list.
2. Click **Delete** to delete the nCCTV monitor. The target monitor name is removed from the list.
3. Click **Close** to complete.

3-11 PTZ Joystick Configuration

The 'Joystick' tab can be used to assign commands to a 10 button PTZ Joystick.



- Each button can be assigned a different command depending on whether the user is viewing a live video stream or video playback.
- Use the drop down list to choose a command to associate with each button.
- The text boxes under 'Live mode operation' can be used to denote a PTZ preset.
- The user can import or export joystick setting files. Click **Browse** to open a file browser which can be used to find a joystick setting file or to choose a destination to export the current joystick settings file.

Chapter 4 Video Recorder Setup and Configuration

4-1 Video Recorder Setup

4-1-1 Change the Name and the Video Format of the Video Recorder

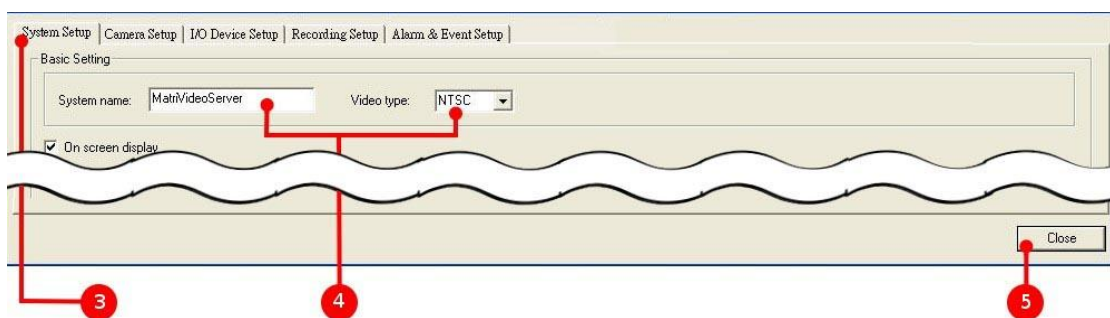
Note: Only users who belong to the Admin or manager groups are allowed to login to the recorder. Thus each recorder must be logged into separately when changing configuration settings. It is recommended that the same username and password be used for each video recorder.

The MatriVideo system supports two video formats– NTSC and PAL. To change the video format, follow the steps below:

1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Use the account name and password to log into the DVR. The default username is: admin and the default password is: id.

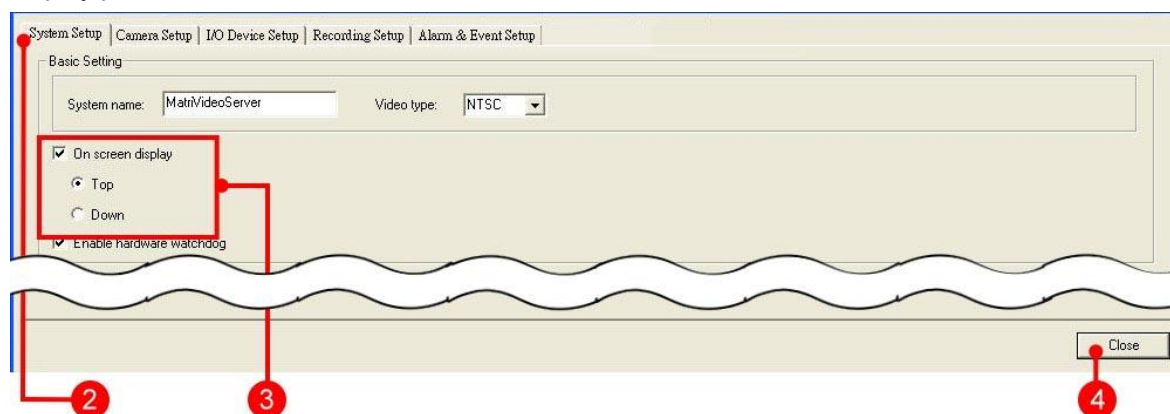


3. Click on the 'System Setup' tab.
4. Change the 'System Name' and the 'Video Type.'
5. Click **Close**.

Note: You need to reboot the video recorder if any changes were made to the 'Video Type.'

4-1-2 Change the On Screen Display

'On Screen Display' includes information about the camera and the time. This functionality allows the user to change the position of the message to either the top or bottom of the display panel.



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'System Setup' tab.
3. Check the box 'On Screen Display' to display the message. Click one of the selected radio buttons (Top or Down) to change the positioning.
4. Click **Close**.



On Screen Display on Top



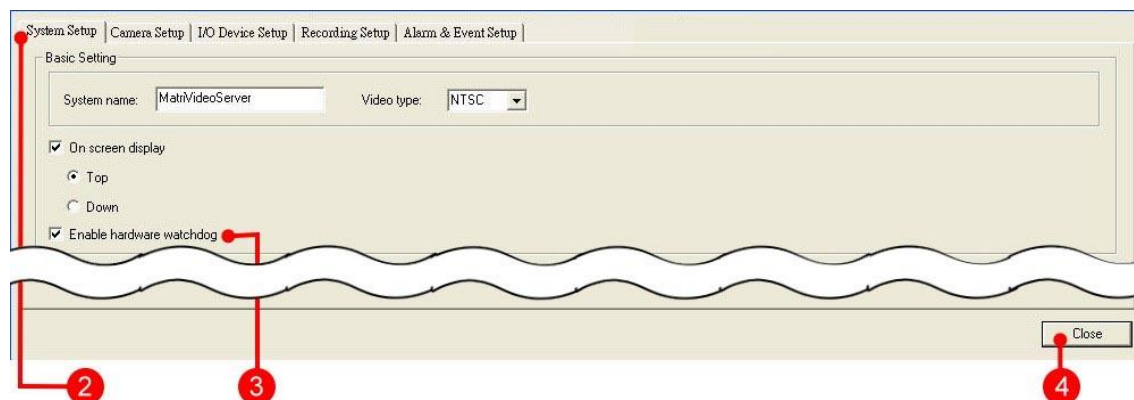
On Screen Display on Bottom

4-1-3 Enable Hardware Watchdog

If the user enables the Hardware Watchdog the DVR will automatically reboot after 5 minutes if the unit experiences a failure. It is highly recommended to disable the hardware watchdog before upgrading the system or performing any maintenance on the system.

Note: Hardware Watchdog is turned on by default.

To enable the hardware watchdog follow the steps below:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



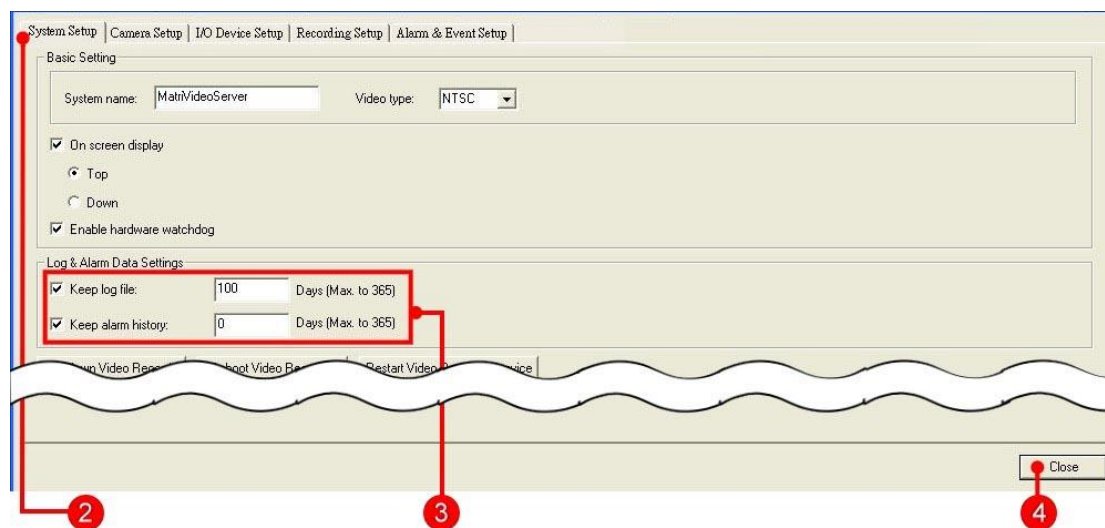
2. Click on the 'System Setup' tab.

3. Check or uncheck the box 'Enable hardware watchdog.'

4. Click **Close**.

4-1-4 Set the Log & Alarm Data

“Log and Alarm Data Settings” determines the preservation time span of historical alarms and log entries.



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'System Setup' tab.
3. Check the box 'Keep log file' and/or 'Keep alarm history.' Input the number of days to store the log files and the alarm history.
4. Click **Close**.

4-1-5 Remotely Control the Video Recorder

There are three buttons to control the subscribed video recorder: Shutdown Video Recorder, Reboot Video Recorder, and Restart Video Recorder Service.

4-1-5-1 Shutdown the Video Recorder

This button will shut down the video recorder remotely:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'System Setup' tab.
3. Click 'Shutdown Video Recorder.'
4. Click **Close**. The system prompts with a message, "The Video Recorder has been shut down and the configuration window will be closed."

4-1-5-2 Reboot the Video Recorder

This button will reboot the video recorder including the Linux platform and the system application.



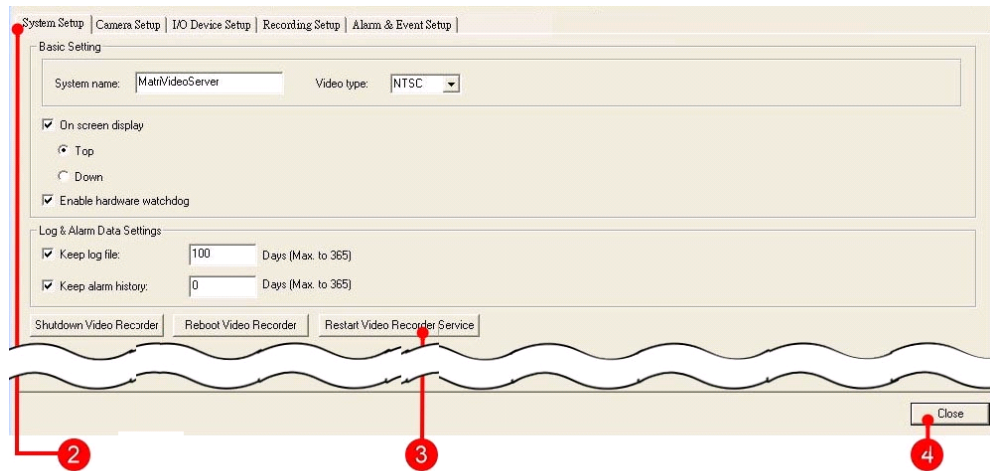
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'System Setup' tab.
3. Click 'Reboot Video Recorder.'
4. Click **Close**.

4-1-5-3 Restart the Video Recorder Service

This button will restart the Video Recorder application (services).



1. From the camera tree, right click on the video recorder IP address. Select 'Video Recorder Setup.'

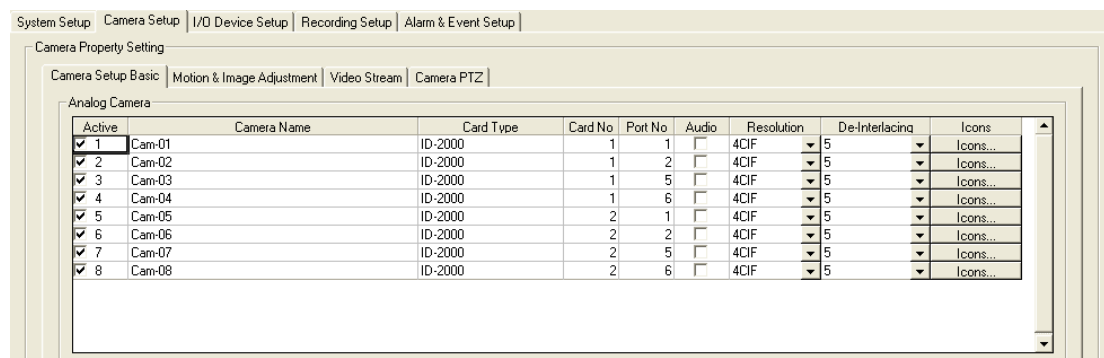


2. Click the 'System Setup' tab.
3. Click 'Restart Video Recorder Service.'
4. Click **Close**.

4-2 Camera Setup

4-2-1 Analog Camera

Follow the steps below to configure an analog camera:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Camera Setup' tab.
3. Click the 'Camera Setup Basic' tab.
4. In the Analog Camera table, set the corresponding values for the cameras:
 - **Active** - Set the camera as active or inactive.
 - **Camera name** - Assign a name to the camera.
 - **Card Type** - The default Image Compression Card built in the video recorder. (This is a system default value, and it cannot be modified.)
 - **Card No** - The Compression Card number that the camera connects to. (This is a system default value, and it cannot be modified.)
 - **Port No** - The ports in compression card that the camera connects to. (This is a system default value, and it cannot be modified.)
 - **Audio** - Enable the audio feature of the camera.

- **Resolution** - The frame size of the camera. (This value is default. It depending on the model of the video recorder.)

Note: The frame size of 4CIF is 704x480 pixels in the NTSC format, and 704x576 pixels in the PAL format. The frame size of CIF is 352x240 pixels in the NTSC format, and 352x288 pixels in the PAL format.

- **De-Interlacing** - Set the De-interlacing parameter to sharp the edges of the captured image. If the value is higher (max. 10), then the image has a sharper edge.

5. Click **Close** to complete the process.

4-2-2 IP Camera

Follow the steps below to configure an IP camera:

Active	Camera Name	Brand	Camera Type	DN/IP Addr	CH	Port	Settings	Audio	Resolution	Icons
<input checked="" type="checkbox"/>	Cam-01	Acti	Acti	172.16.1.2	1	80	Setup...	<input type="checkbox"/>	1280x1024	Icons...
<input checked="" type="checkbox"/>	Cam-02	Axis	RTSP-MPEG4	172.16.1.12	1	80	Setup...	<input type="checkbox"/>	Best	Icons...
<input checked="" type="checkbox"/>	Cam-03	Arecont	RTSP-H264	172.16.0.127	1	80	Setup...	<input type="checkbox"/>	Full	Icons...
<input checked="" type="checkbox"/>	Cam-04	Acti	Acti	172.16.1.11	1	80	Setup...	<input type="checkbox"/>	1280x1024	Icons...
<input checked="" type="checkbox"/>	Cam-05	Acti	Acti	172.16.1.11	1	80	Setup...	<input type="checkbox"/>	1280x1024	Icons...
<input checked="" type="checkbox"/>	Cam-06	Instek Digital	MC-AX	172.16.1.108	1	5000	Setup...	<input type="checkbox"/>	VGA	Icons...
<input checked="" type="checkbox"/>	Cam-07	Instek Digital	MC-AX	172.16.1.120	1	554	Setup...	<input type="checkbox"/>	VGA	Icons...
<input checked="" type="checkbox"/>	Cam-08	Sony	IPELA IP Camera	172.16.1.130	1	80	Setup...	<input type="checkbox"/>	Stream 1	Icons...
<input type="checkbox"/>	Cam-09	Instek Digital	MC-AX	172.16.1.108	1	5000	Setup...	<input type="checkbox"/>	VGA	Icons...
<input type="checkbox"/>	Cam-10	Instek Digital	MC-AX	192.168.1.100	1	80	Setup...	<input type="checkbox"/>	VGA	Icons...
<input type="checkbox"/>	Cam-11	Instek Digital	MC-AX	192.168.1.100	1	80	Setup...	<input type="checkbox"/>	VGA	Icons...
<input type="checkbox"/>	Cam-12	Instek Digital	MC-AX	192.168.1.100	1	80	Setup...	<input type="checkbox"/>	VGA	Icons...
<input type="checkbox"/>	Cam-13	Instek Digital	MC-AX	192.168.1.100	1	80	Setup...	<input type="checkbox"/>	VGA	Icons...
<input type="checkbox"/>	Cam-14	Instek Digital	MC-AX	192.168.1.100	1	80	Setup...	<input type="checkbox"/>	VGA	Icons...

Scan Cameras

1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Camera Setup' tab.

3. Click the 'Camera Setup Basic' tab.

4. In the IP Camera table, set the corresponding values for the IP camera.

- **Active** - Set the camera active or inactive.
- **Camera name** - Give a new name to replace the default name.

- **Brand** - Select the camera brand.
- **Camera Type** - Indicate the IP Camera Type. The system default type is Instek MC-AX. Be sure that your IP camera is in the camera list. Select your camera type from 'Camera Type' drop-down menu.
- **DN/IP Address** - Indicate the IP Address or the DN (Domain Name) of the IP Camera.
- **CH** - Indicate the channel of the IP Camera.
- **Port** - Indicate the IP Camera Port.
- **Settings** - Set the user authorization for the IP camera.
- **Audio** - Enable the audio function for the IP camera
- **Resolution** - The frame size of the camera. (The value is default. It depends on the DVR model.)

Note: Some IP cameras provide a customized resolution. For those cameras, the system provides different options in the drop-down list. For example, the options of the Sony IP cam are VGA (640×480 pixels) and QVGA (320×240 pixels). The drop-down list of the mega pixel IP cam has two options: Full and Half.

Note: For all Acti IP cameras, the video recorder provides four resolution options: 1280×1024, 1280×720, D1, and CIF. If the camera does not support the mega pixel options, the real resolution will automatically defer to D1 even though the option is set to 1280×1024 or 1280×720.

5. Click **Close** to complete the process.

4-2-3 Analog PTZ Camera

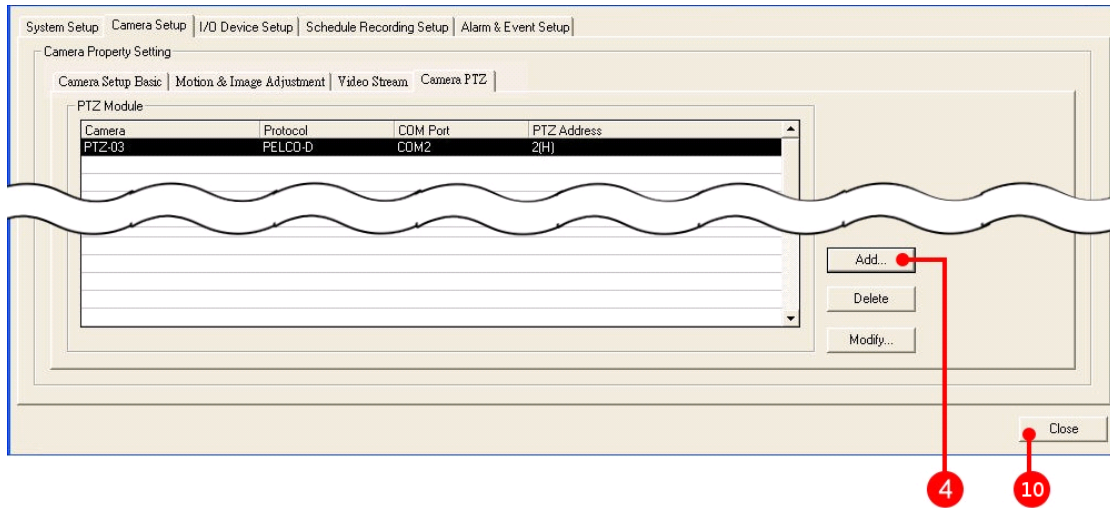
To add a PTZ Camera follow the steps below:

- 1.** From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

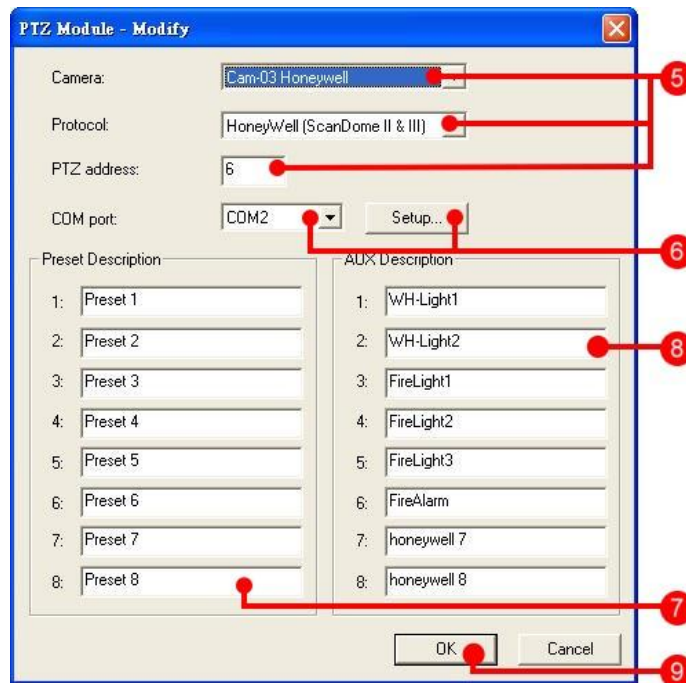


2. Click 'Camera Setup' tab.

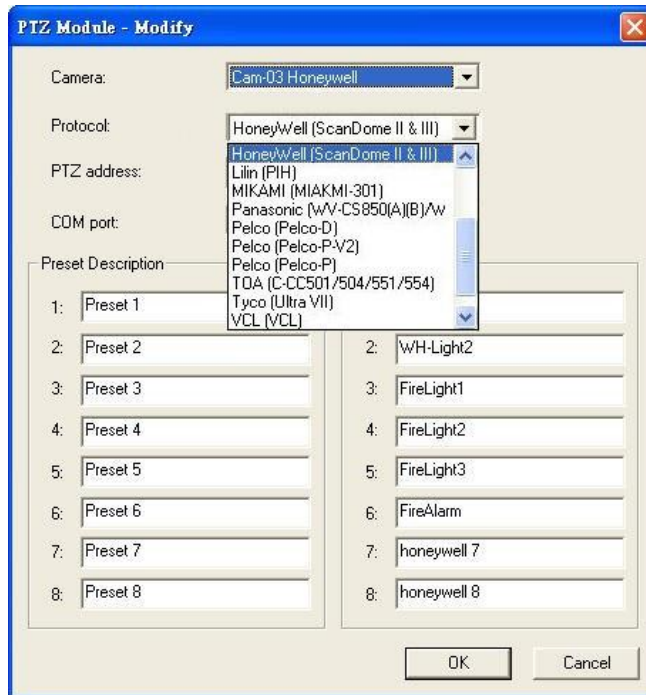
3. Click the 'Camera PTZ' tab.



4. Click Add.

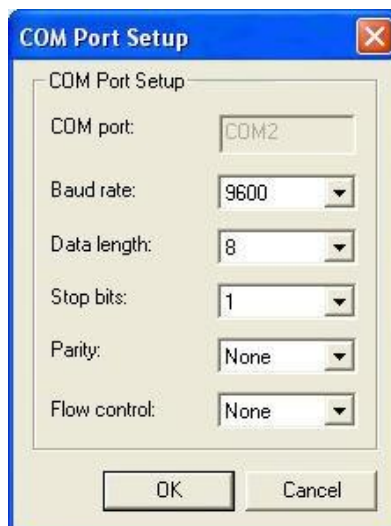


5. In the 'PTZ Module - Add' dialog box; select the PTZ camera from the drop-down menu.



Note: The system supports the following protocols: Pelco (Pelco-D & Pelco-P), Lilin, TOA, Bosch, Tyco, GE, Honeywell, ChipER, Panasonic, VCL, and Native. Refer to the PTZ camera manual for more information about implementation settings. Please ensure that the protocol setting of the PTZ camera is consistent with the setting of the DVR. Avoid using the auto mode of the PTZ camera, as the DVR may not recognize this functionality properly.

Note: Some characteristics may vary by different video recorder types. Check the PTZ camera specifications for more information.



6. To change the COM port value, select the COM port from the drop down menu. For detailed setup, click the 'Setup' button. The 'COM Port Setup' dialog box will appear.

7. Change the value of baud rate, Data length, Stop bits, Parity, and Flow control if necessary. Click **OK** to set the change or click **Cancel** to undo.
8. Change the Preset descriptions from Preset 1-8 if necessary.
9. If the PTZ camera is capable of controlling the auxiliary output points, set the Aux description separately for every active auxiliary output points. The description must be no more than 10 characters.
10. Click **OK**.
11. Click **Close**.

4-2-4 IP PTZ Camera

To add an IP PTZ Camera follow the steps below:

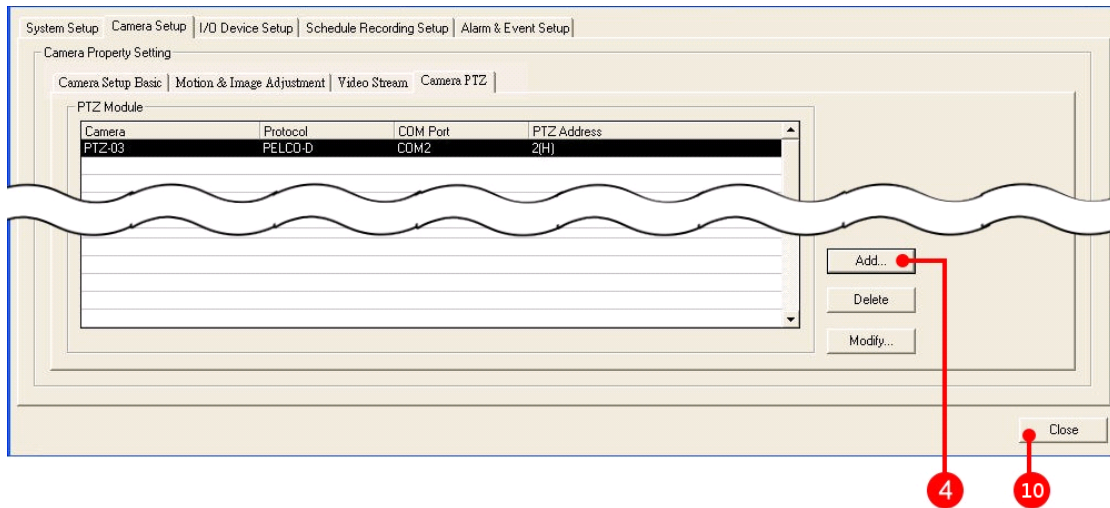
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



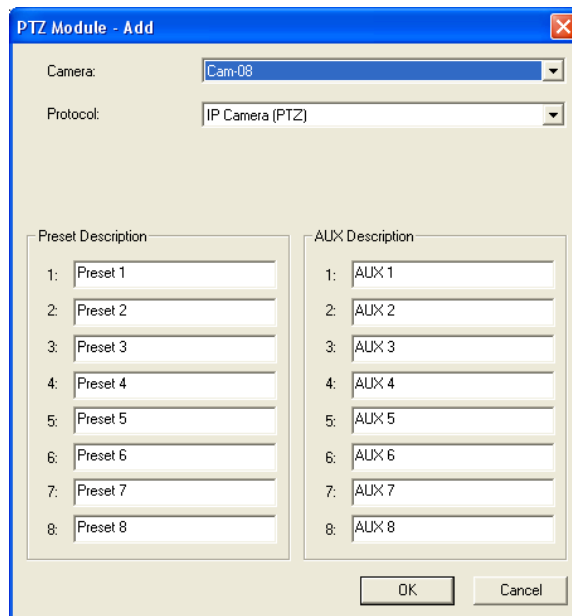
2. Click 'Camera Setup' tab.

Note: Camera configuration should be completed in the 'Camera Setup Basic' tab before adding a PTZ module.

3. Click the 'Camera PTZ' tab.



4. Click **Add**.



5. In the 'PTZ Module - Add' dialog box, select the PTZ camera from the drop-down menu.

Note: Almost all of the protocols in the list are for analog cameras. For most IP cameras, choose the IP Camera (PTZ) protocol. If the camera does not use this protocol, please consult with FAE or the camera's application note for more information.

6. In the 'Protocol' box, select IP (PTZ).

7. Change the Preset descriptions from Preset 1-8 if necessary.

8. If the PTZ camera is capable of controlling the auxiliary output points, set the Aux description separately for every active auxiliary output points. The description must be no more than 10 characters.

9. Click **OK**.

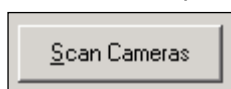
10. Click **Close**.

4-2-5 Scan Cameras

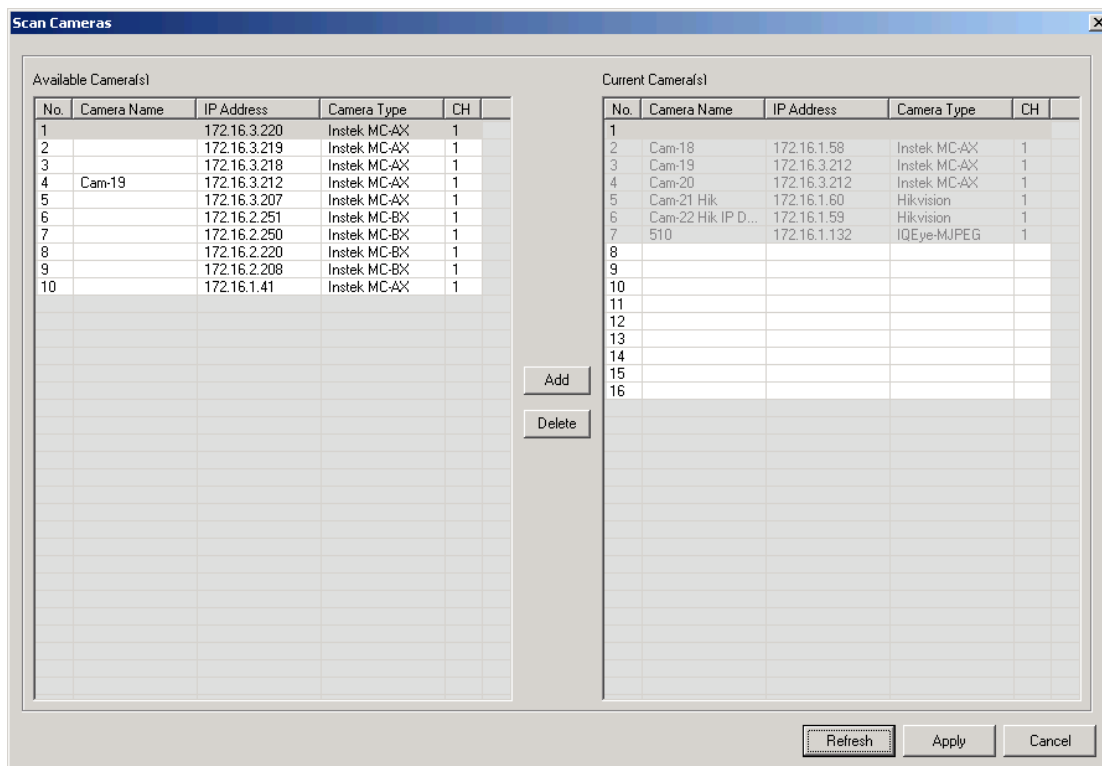
The **Scan Camera** function in the Command Center application automatically seeks out all Instek Digital IP cameras connected to the same network as the recording device. The user can then view the IP address of a particular IP camera and add the camera to an NVR or hDVR.

Note: This feature is not available for all IP camera models.

1. On the 'Camera Setup' > 'Camera Setup Basic' screen, click **Scan Cameras**.



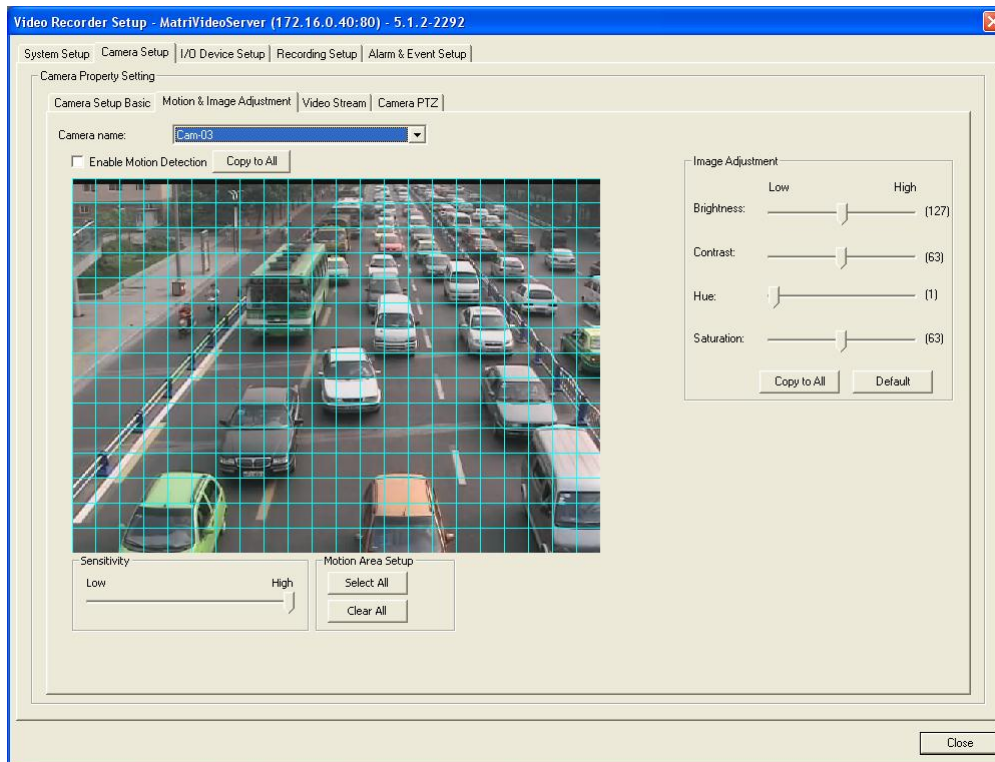
2. The following screen will display. To add an IP camera to the recording device select it from the 'Available Camera(s)' table and click **Add**. You can also delete a camera from the current cameras list by clicking **Delete**.



3. Click **Apply** to confirm your changes or **Cancel** to exit without saving.

4-2-6 Adjust the Image

To adjust the video image:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Camera Setup' tab.
3. Click the 'Motion and Image Adjustment' tab.
4. Select a camera from the drop down menu.
5. In the Image Adjustment panel, move the pointers to adjust the brightness, the contrast, the hue, and the saturation to achieve the desired image quality.
6. Click the 'Copy to All' button to apply the setting to all cameras. Alternatively, click the 'Default' button to use the factory setting.
7. Click **Close**.

4-3 Configure Motion Detection

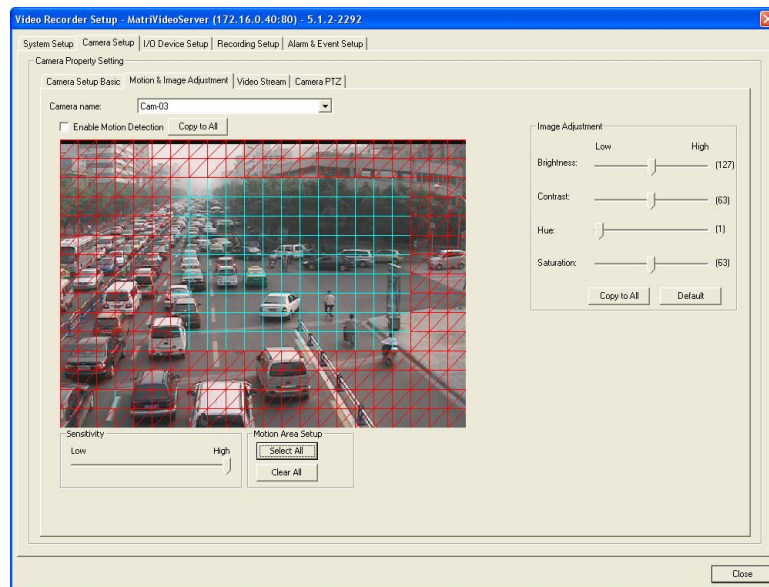
This functionality allows the user to adjust motion detection, alarm, and event settings for a

particular camera. There are four different methods for configuring motion detection. Which method is used depends on the type of camera being configured. The configuration procedure is identical for all analog cameras. MatriVideo also supports several brands/models of IP camera.

Note: Many IP cameras have different methods of motion configuration. Contact FAE for application notes specific to all supported IP camera models.

4-3-1 Grid Configuration

For cameras using a grid to configure motion detection follow these steps:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



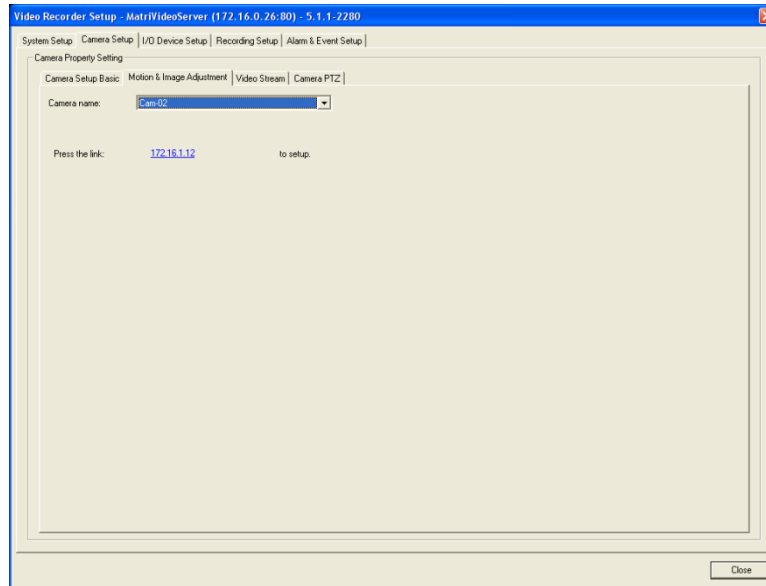
2. Click the 'Camera Setup' tab.
3. Click the 'Motion & Image Adjustment' tab.
4. Select a camera from the drop down menu. Check the box 'Enable Motion Detection.' Move the pointer to adjust the level of sensitivity.
5. Specify the motion detection area.
 - Click **Select All** to enable motion detection for the entire viewable area.

- Click **Clear All** to disable motion detection for the entire viewable area.
- Hold down the left mouse button and drag a selected area. (Or single click the grid repeatedly.)
- Hold down the left mouse button and drag the same area again to disable motion detection. (Or single click the selected grid repeatedly.)

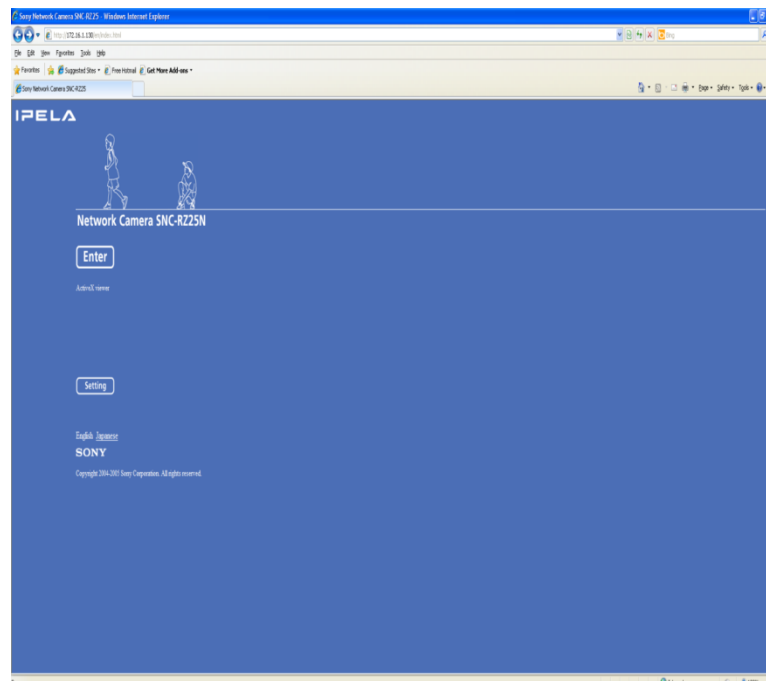
6. Click **Close** to end the process.

4-3-2 Web Link Configuration

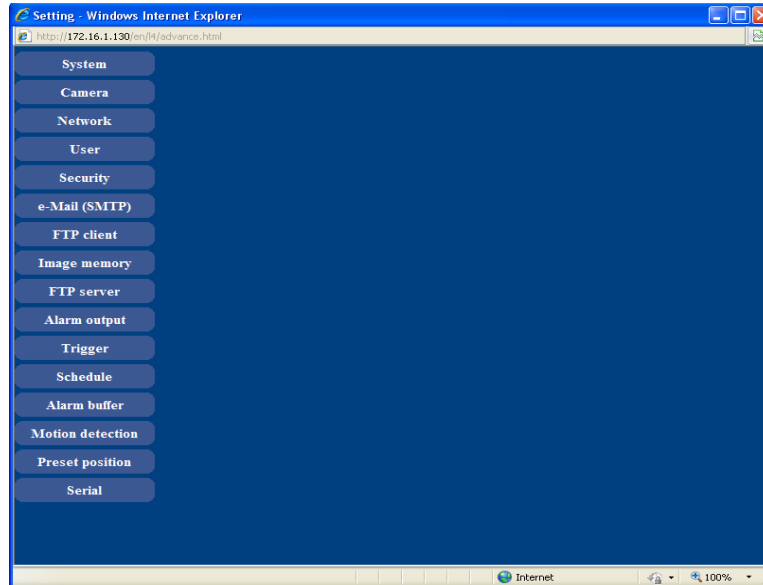
For cameras using web link configuration the following window will appear after selecting the camera from the drop down list:



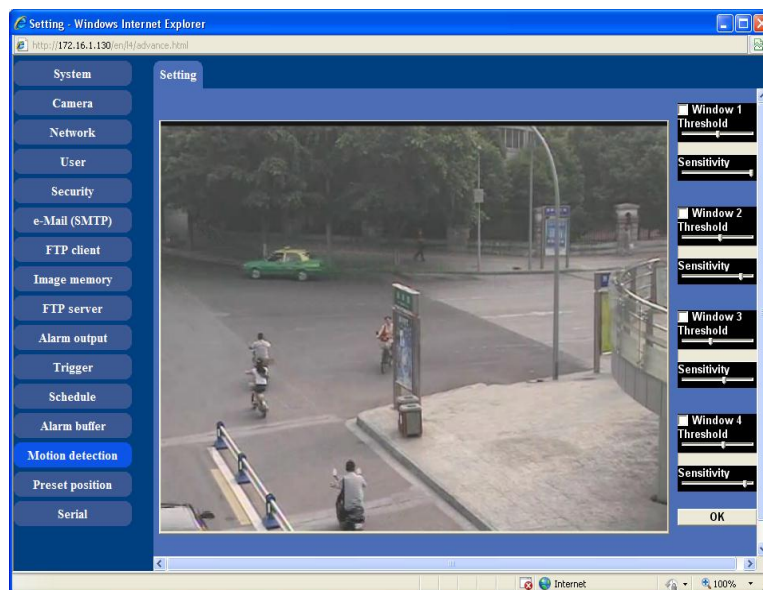
1. Click the link. The online configuration page for that particular camera will appear. The following is an example using the Sony web interface. Each brand will have a unique interface.



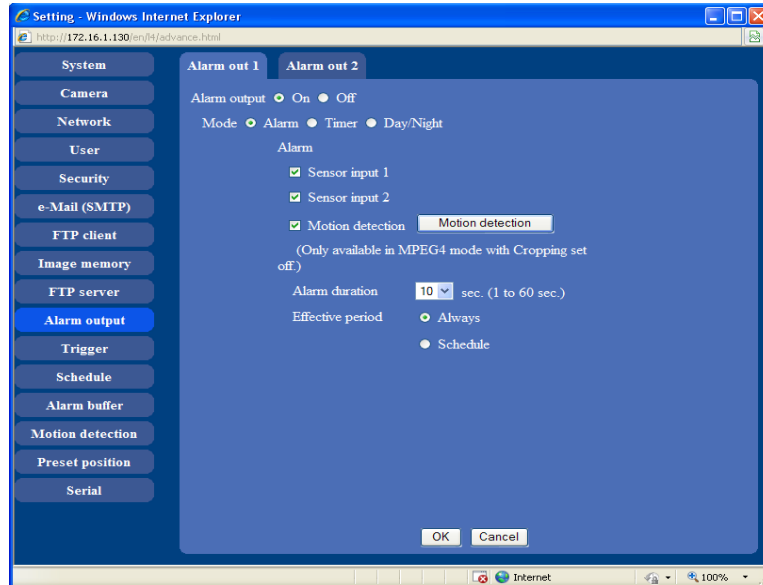
2. Click **Setting**.



3. Click **Motion detection**. A window will appear in which the motion detection settings can be adjusted.



4. Click **Alarm output**. Ensure that motion detection has been enabled and that alarm output has been turned on.



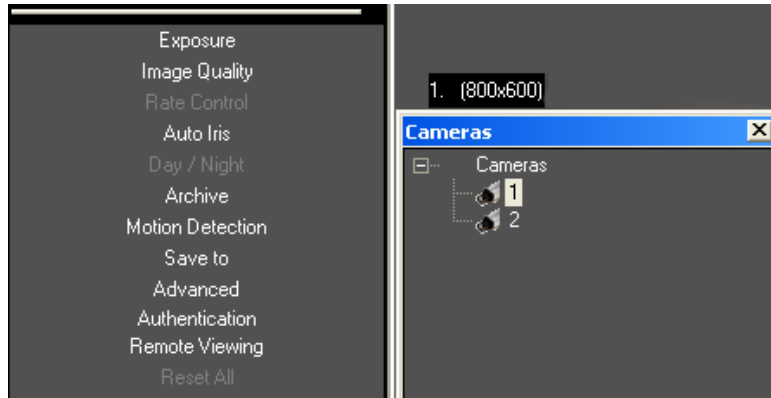
4-3-3 Software Configuration (Arecont Vision Cameras)

For Arecont Vision camera configuration, follow these steps:

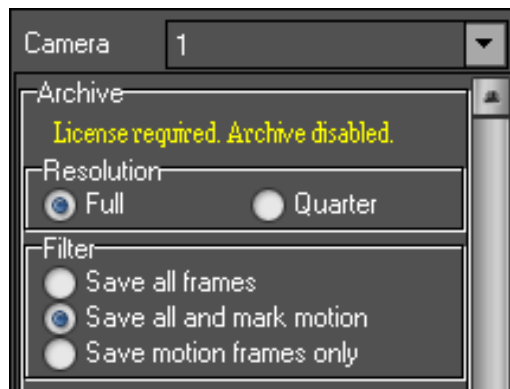
1. Install the AV100 software. The installation file can be downloaded from the Arecont Vision website.
2. Run the application. The following window will appear:



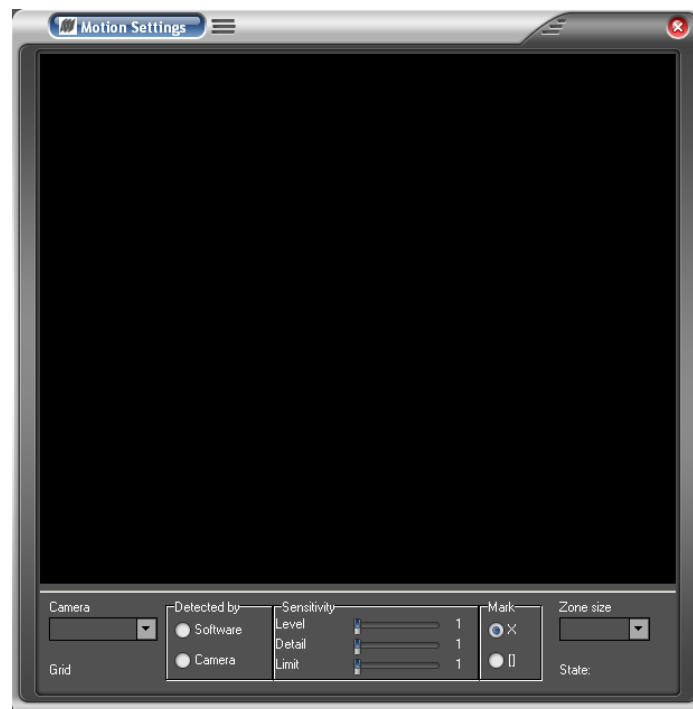
3. Click **Run** in the **Live video** section.
4. Highlight a Camera from the list and click **Archive**.



5. Enable the option **Save all and mark motion** or **Save motion frames only**.



6. Click **Motion Detection**. The following window will appear:

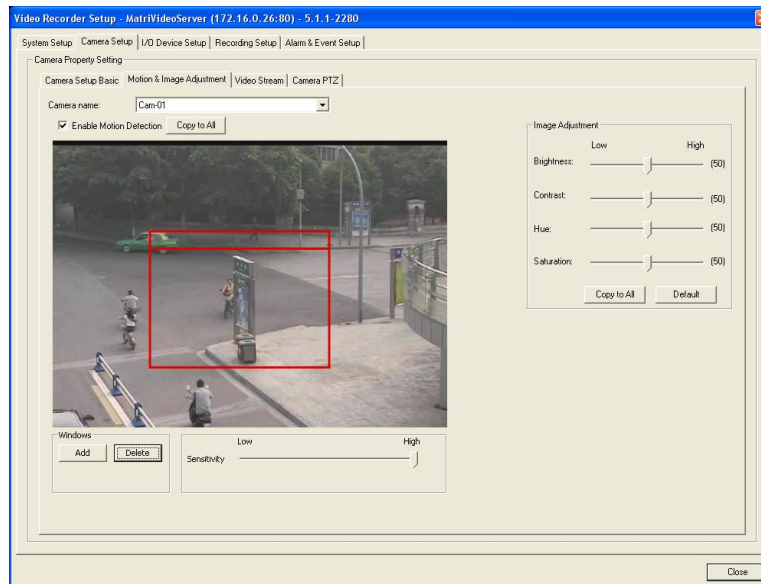


7. Choose a Camera from the drop down list and select **Camera** under 'Detected by.' Both the camera and software can detect motion but selecting the camera will greatly reduce CPU and network load.

8. Motion detection will begin automatically in the main window. Refer to the Arecont AV100 manual for more detailed configuration information.

4-3-4 Window Configuration (Acti Cameras)

For ACTi Cameras follow these steps:



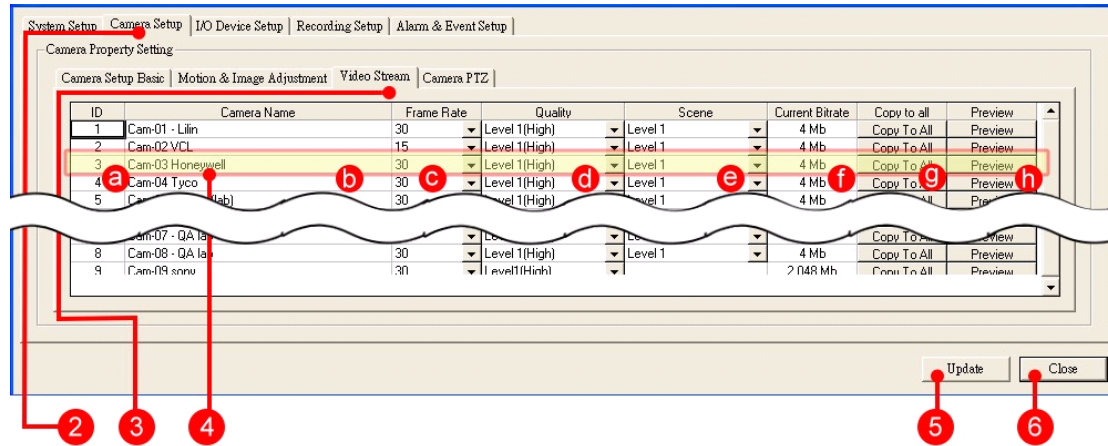
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Camera Setup' tab.
3. Click the 'Motion & Image Adjustment' tab.
4. Click the drop-down menu from the camera name to select a working camera. Check the 'Enable Motion Detection' checkbox. Move the pointer to adjust the level of sensitivity.
5. Click **Add** to add a rectangle area on the video. Multiple areas can be enabled.
6. Define the motion detection area. Hold down the left mouse button and drag the right bottom corner of the rectangle area to specify the area for motion detection.

4-4 Set the Video Stream

The function allows users to apply the video stream configurations from one camera to the rest. To set the video stream follow the steps below:



- From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

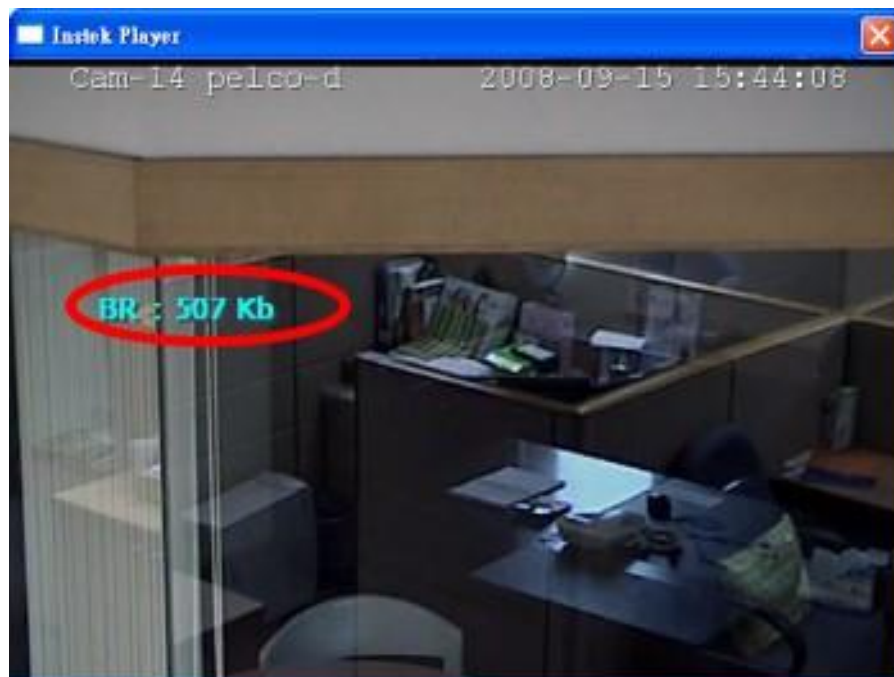


- Click the 'Camera Setup' tab.
- Click the 'Video Stream' tab.
- Change the following parameters for the desired playing settings:
 - ID** - The camera number (This value cannot be modified.)
 - Camera Name** - The camera name (This value cannot be modified.)
 - Frame Rate** – Controls the number of frames the hDVR generates per second. The frame rate determines the smoothness of the video.

- **Quality** – Controls the video quality the hDVR generates from the camera. Videos with a higher quality keeps store more image detail and hence require more storage.

Note: The quality options for analog cameras are different from that of IP cameras

- **Scene** - Sets the main image recording frequency. If the value is set to a higher level (Level 1) the hDVR records more images with smoother quality, but requires more storage. The value is not available for IP cameras.
- **Current Bitrate** - Shows the bit rate requirement. The value will be blank if the camera uses motion jpeg compression.
- **Copy to all** – Applies the current settings to all other cameras of the same type. For example, analog to analog or Acti to Acti.



- **Preview** - Provides a preview of the camera. Clicking the button will cause a preview window with the current bit rate information to appear:

Note: The preview window allows the user to view the image from the camera, in advance. If the image quality is poor, set the 'Quality' to a higher parameter to improve the image quality.

5. Click **Update** to update the Bitrate value.

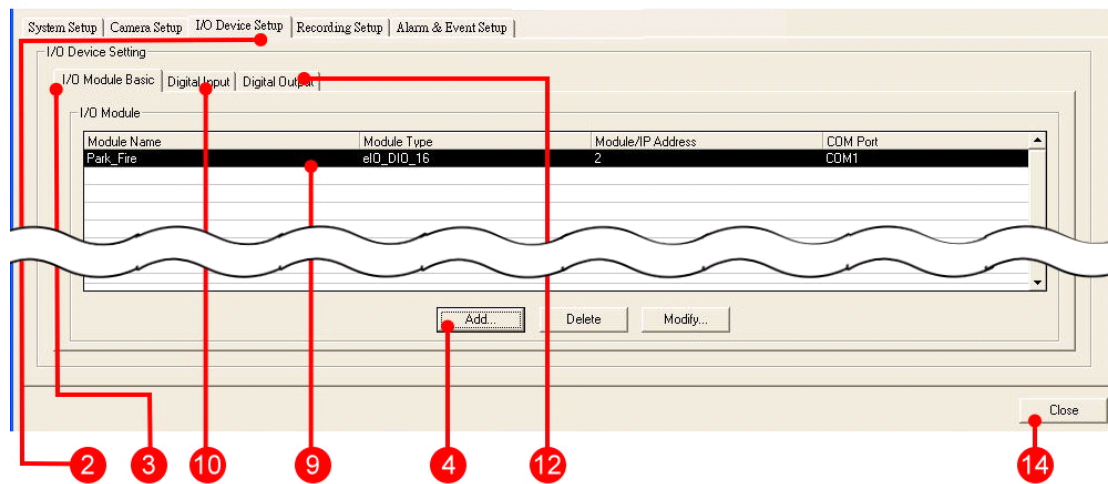
6. Click **Close** to complete the process.

4-5 Set the I/O Device Module

The MatriVideo system is capable of controlling and monitoring external devices such as lights, fire alarm, etc., via an I/O device module. The system supports 2 types of I/O modules - remote I/O modules and the internal I/O modules.

4-5-1 Add a Remote I/O Module

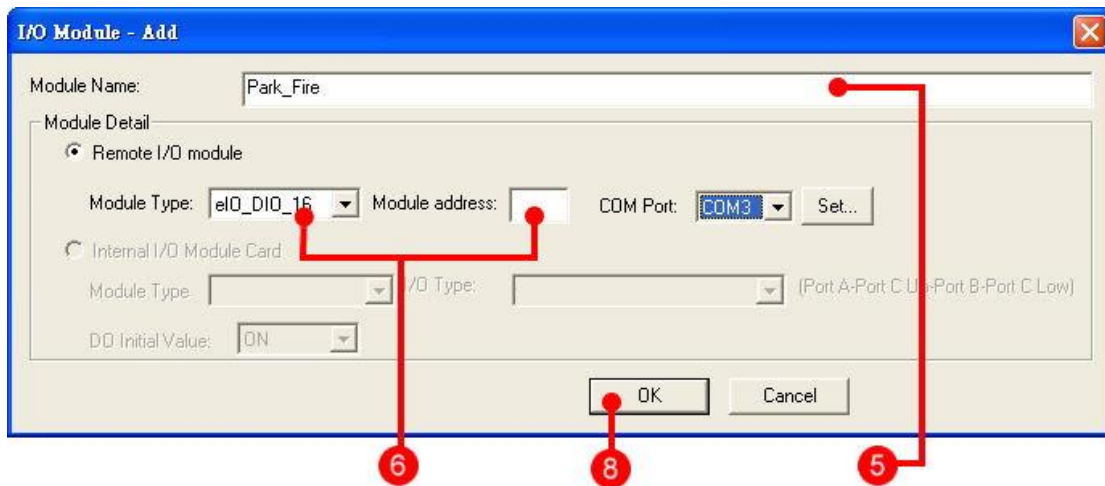
To add an I/O module to a video recorder follow the steps below:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'I/O Device Setup' tab.
3. Click 'I/O Module Basic.'
4. Click **Add** to add an I/O device module. An 'I/O Module - Add' dialog box will appear.

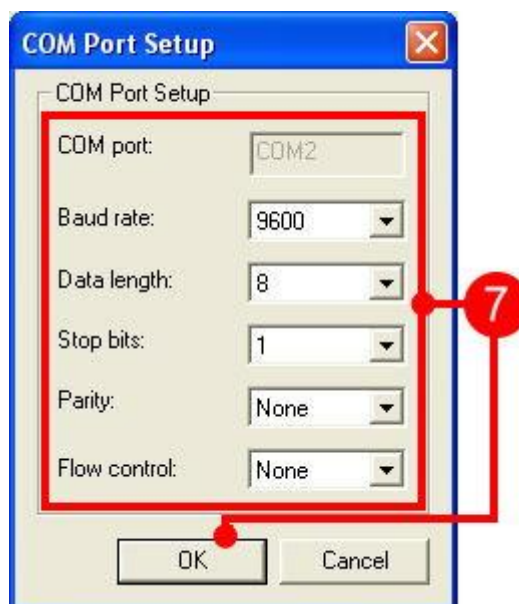


5. Input the module name.

Note: Do not leave the module name empty. A warning message will appear if the module name is empty.

6. Select the module type from the drop-down menu. Select the right module from the list and input the module address.

Note: The system supports three types of I/O modules: 8 D/I and 8 D/O, 16 D/I, and 8 D/O.

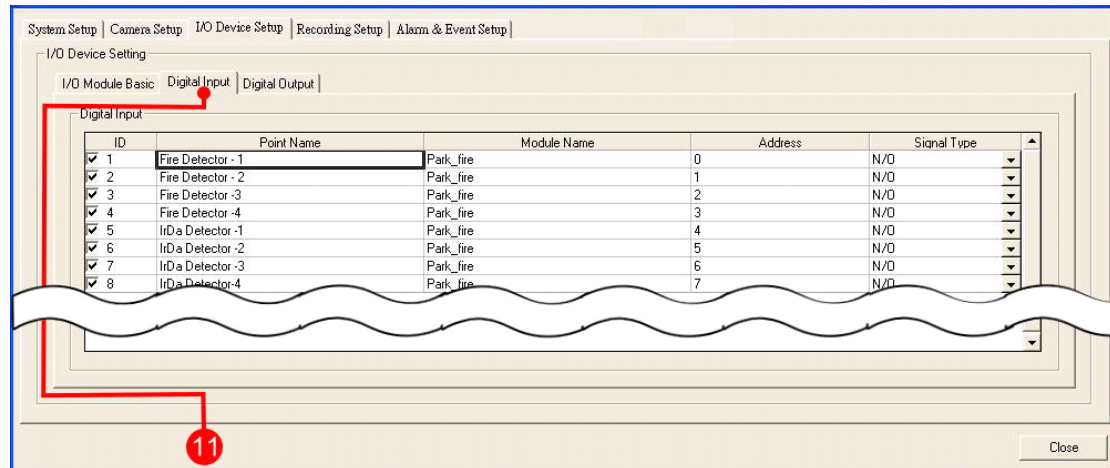


7. If necessary, click on the 'Set' button for advanced COM Port setup.

8. Click **OK** to close the 'I/O Module - Add' dialog box.

9. The module name is automatically added to the module list.

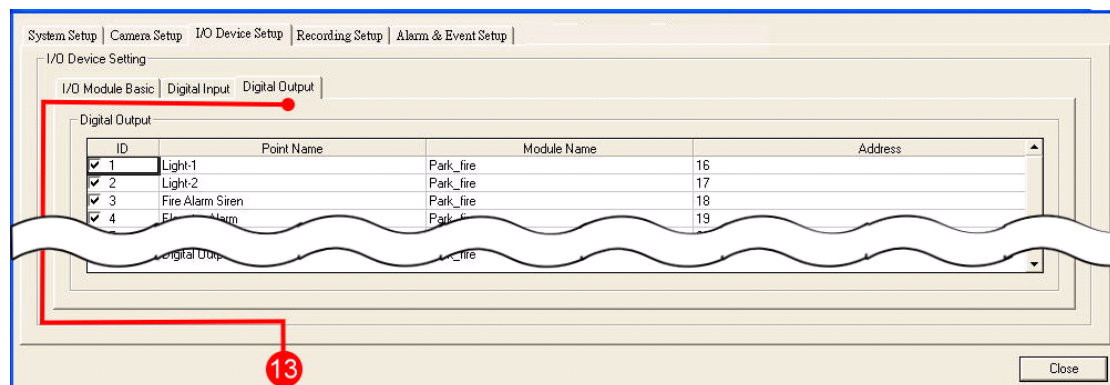
10. Click the 'Digital Input' tab if the module is connected. The connection points are automatically added to the list.



11. The list shows the details of the connection points, including:

No.	Column	Description
1	ID	Check the box to either enable /disable the point.
2	Point Name	Enter a name to define the point
3	Module Name	Indicates the module name.
4	Address	The module address set for the point. This value cannot be edited.
5	Signal Type	Change the signal type (N/O – normally open or N/C – normally closed) from the drop down menu

12. Click the 'Digital Output' tab if the module is connected. The connection points are automatically added to the list.



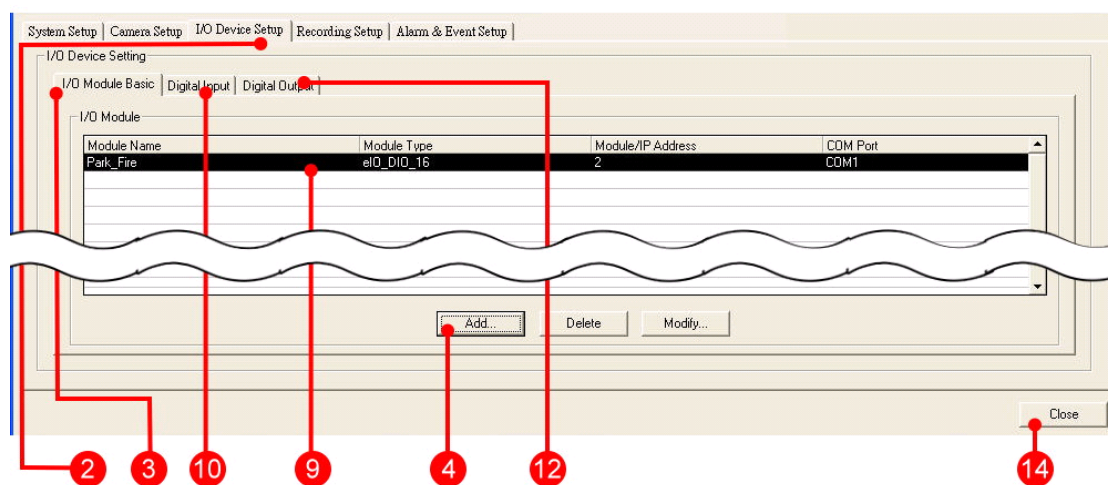
13. The list shows the details of the connection points, including:

No.	Column	Description
1	ID	Check the box to either enable /disable the point.
2	Point Name	Enter a name to define the point
3	Module Name	Indicate the module name. The value cannot be edited.
4	Address	The module address set for the point. The value cannot be edited.

14. Click **Close**.

4-5-2 Add an Internal I/O Module (Optional)

To add an internal I/O module to a video recorder:



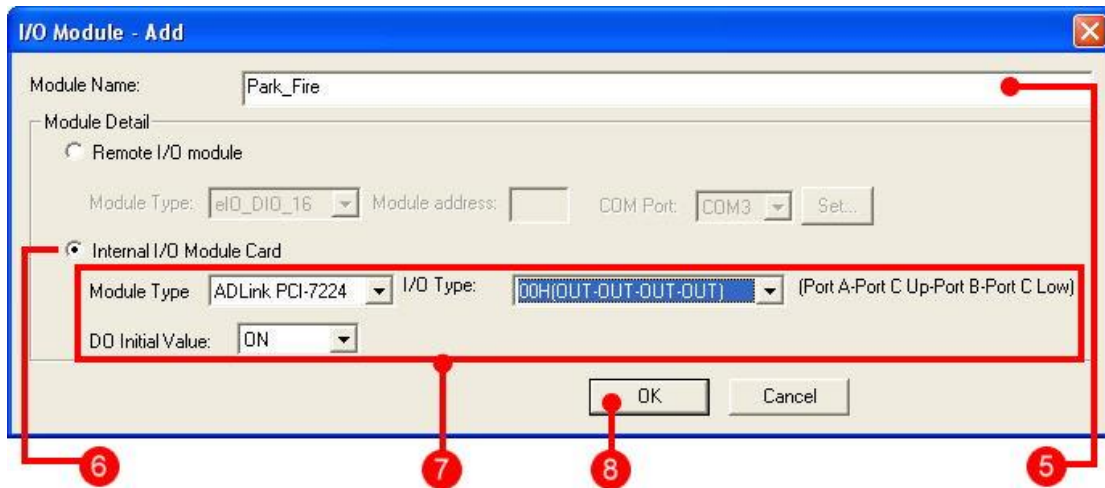
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'I/O Device Setup' tab.

3. Click 'I/O Module Basic.'

4. Click **Add** to add an I/O device module. An 'I/O Module – Add' dialog box will appear.



5. Input the module name.

Note: Do not leave the module name empty. A warning message will appear if the field is empty.

6. Click on the Internal I/O Module Card radio button

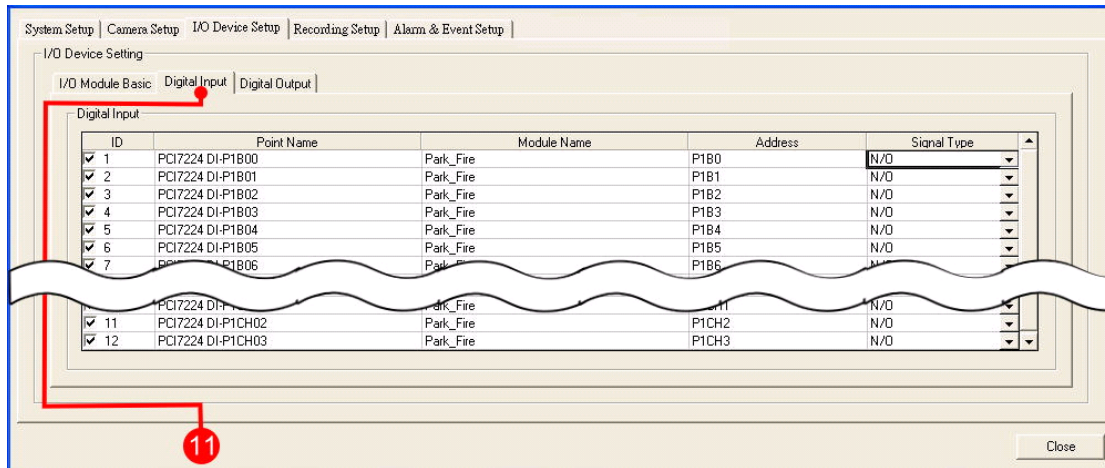
7. From the drop down menu, select the Module Type, the I/O Type and the DO Initial Value.

Note: The I/O type drop down list has 16 items, that determine the point values of the 3 ports - Port A, B, and C. Every port has 8 points. The points in either Port A or B must be the same value (all in or out). Points in Port C are divided into 2 groups – the up group and the down group. Every group has 4 points and can be set separately. For additional information, please refer to the Internal I/O User manual.

8. Click **OK** to close the dialog box of 'I/O Module – Add.'

9. The module name is automatically added to the module list.

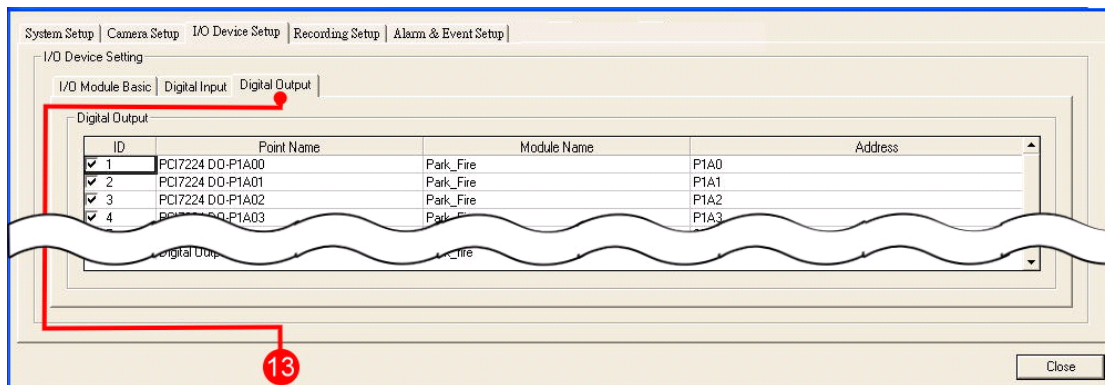
10. Click the 'Digital Input' tab if the module is connected. The connection points are automatically added to the list.



11. The list outlines the details of the connection points, including:

- | No. | Column | Description |
|-----|-------------|--|
| 1 | ID | Check the box to enable /disable the point. |
| 2 | Point Name | Enter a name to define the point |
| 3 | Module Name | Indicate the Module name. The value cannot be edited. |
| 4 | Address | The module address set for the point. The value cannot be edited. |
| 5 | Signal Type | Change the signal type (N/O – normally open or N/C – normally closed) from the drop down menu. |

12. Click the 'Digital Output' tab if the module is connected. The connection points are automatically added to the list.



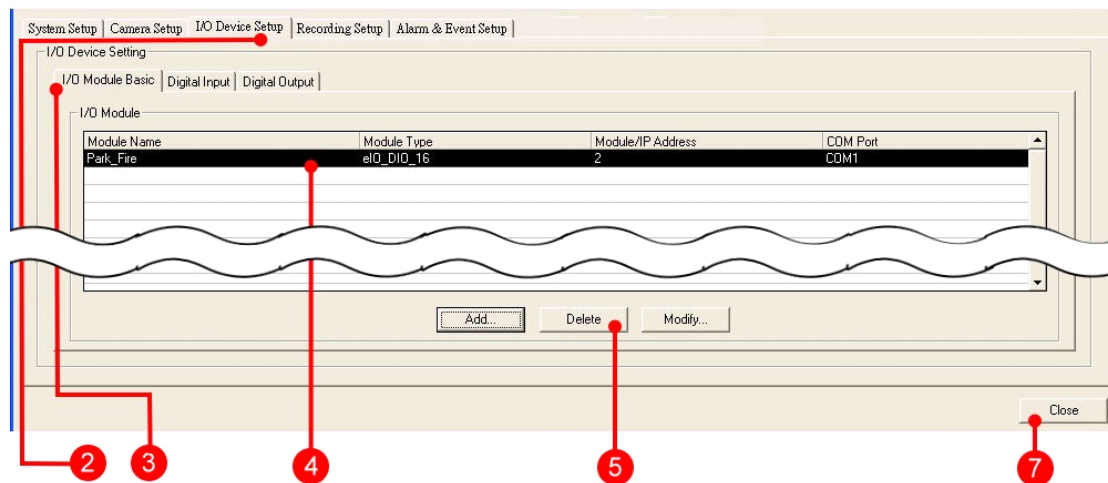
13. The list shows the details of the connection points, including:

No.	Column	Description
1	ID	Check the box to enable /disable the point.
2	Point Name	Enter a name to define the point
3	Module Name	Indicate the Module name. The value cannot be edited.
4	Address	The module address set for the point. The value cannot be edited.

14. Click **Close**.

4-5-3 Delete an I/O Module

To delete an I/O module:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

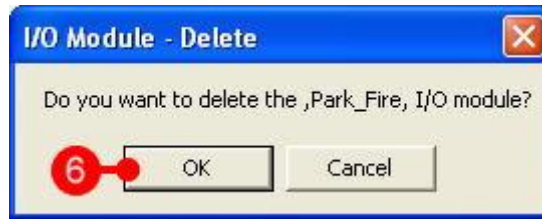


2. Click the 'I/O Device Setup' tab.

3. Click the 'I/O Module Basic' tab.

4. Select the target module name from the I/O Module list. The module name is marked.

5. Click **Delete**.

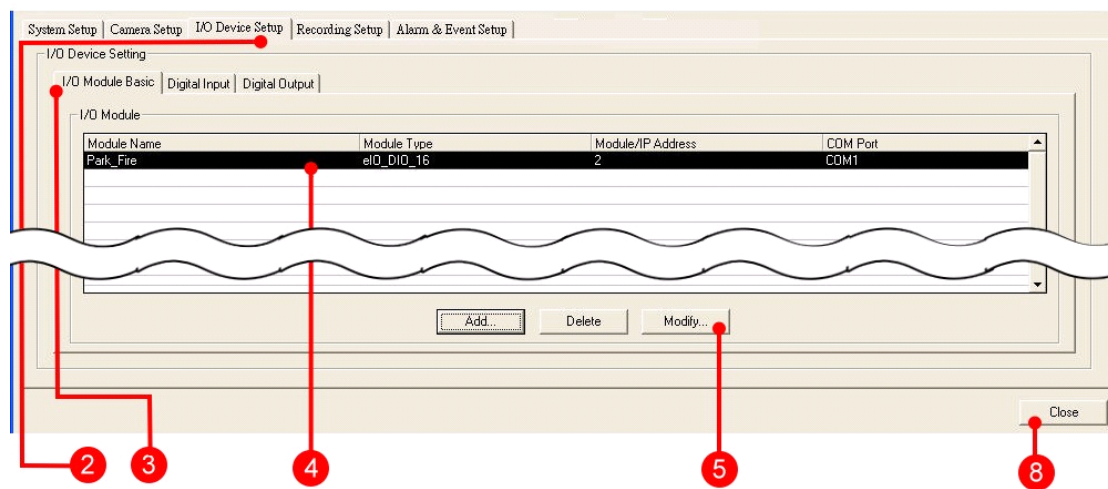


6. The system prompts the user with a confirmation message. Click **OK** to continue.

7. Click **Close**.

4-5-4 Modify a Remote I/O Module

To modify an I/O module:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

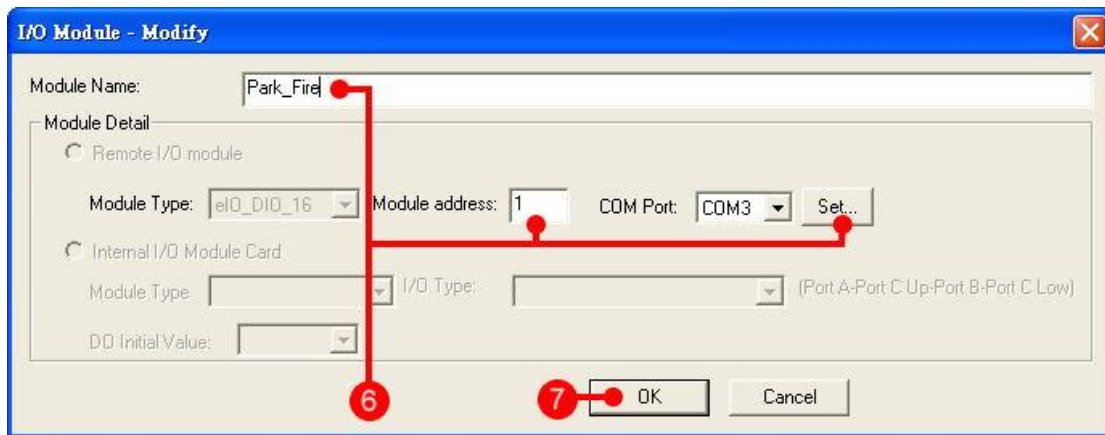


2. Click the 'I/O Device Setup' tab.

3. Click the 'I/O Module Basic' tab.

4. Click the target module name from the I/O Module list. The module name is marked.

5. Click **Modify**.



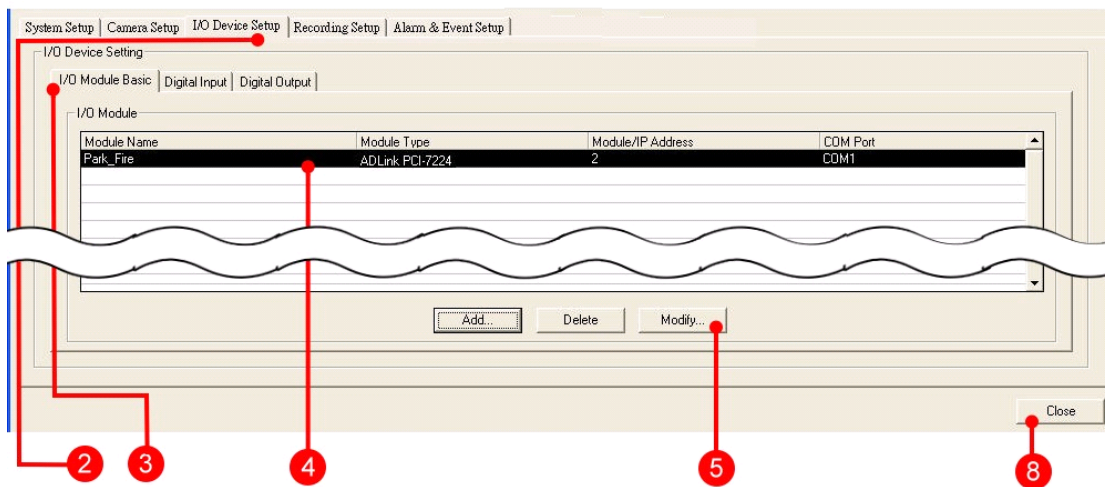
6. From the 'I/O Module - Modify' dialog box, change the value of the Module Name and the Module address. Click the 'Set' button to change the Com Port settings, if necessary.

7. Click **OK** to close the dialog box.

8. Click **Close**.

4-5-5 Modify an Internal I/O Module (Optional)

To modify an internal I/O module:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

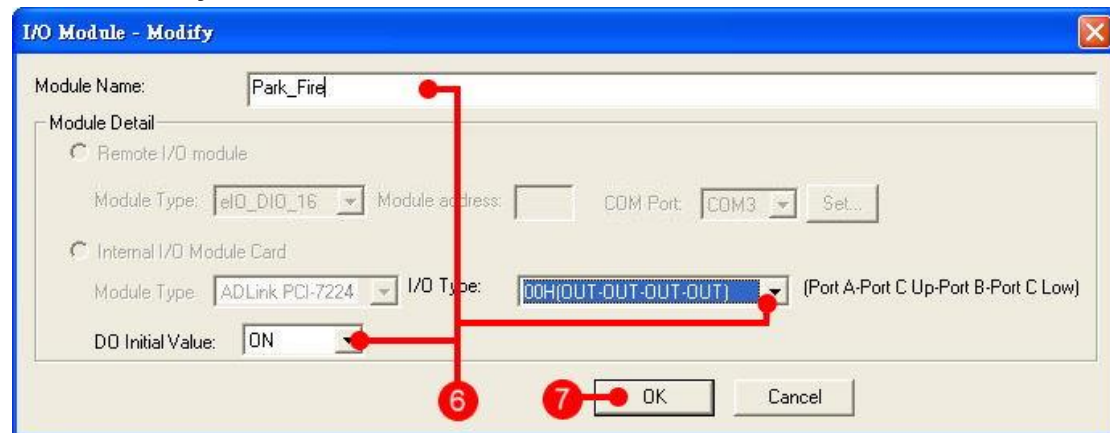


2. Click the 'I/O Device Setup' tab.

3. Click the 'I/O Module Basic' tab.

4. Click the target module name from the I/O Module list. The module name is marked.

5. Click **Modify**.



6. In the 'I/O module – modify' dialog box, change the value of the Module Name, the I/O type, and the DO Initial value if necessary.

7. Click **OK** to close the dialog box.

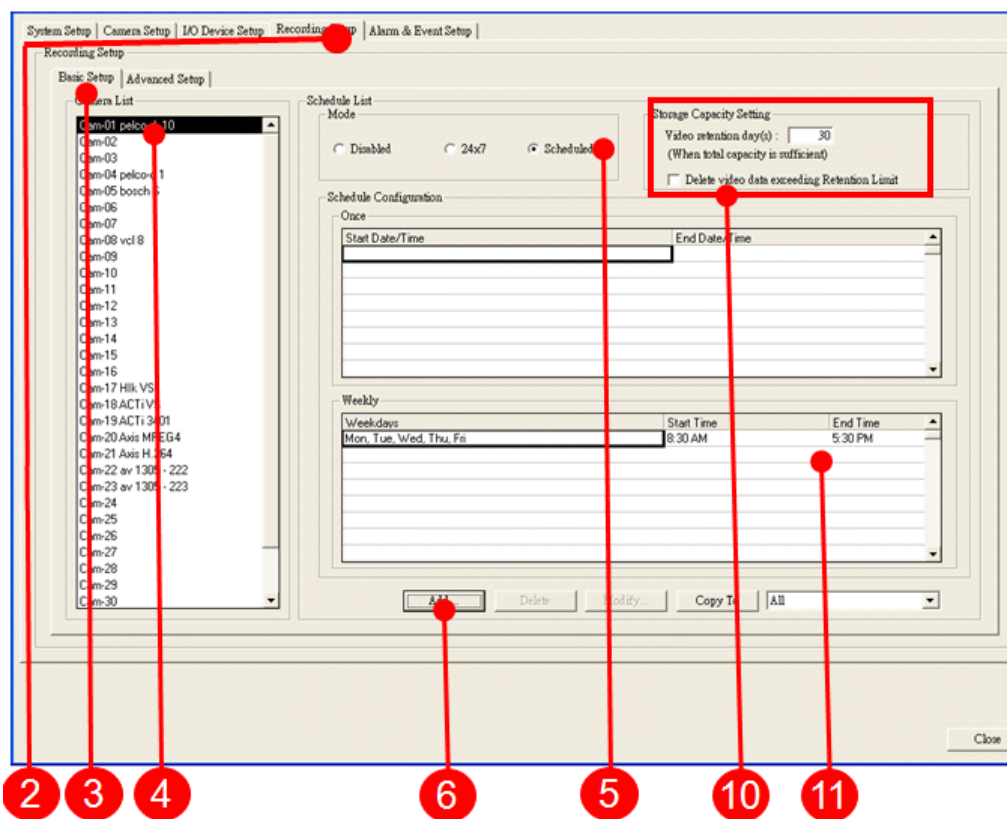
8. Click **Close**.

4-6 Recording Setup

The recording setup allows the user to set up both general recording and scheduled recording. The 'Recording Setup' tab has two sub-sections: 'Basic Setup' and 'Advanced Setup.' Basic Setup allows the user to set the recording time and mode for cameras. Advanced setup determines the recording quality and the file size.

4-6-1 Configure a Scheduled Recording

To configure a schedule recording follow the steps below:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

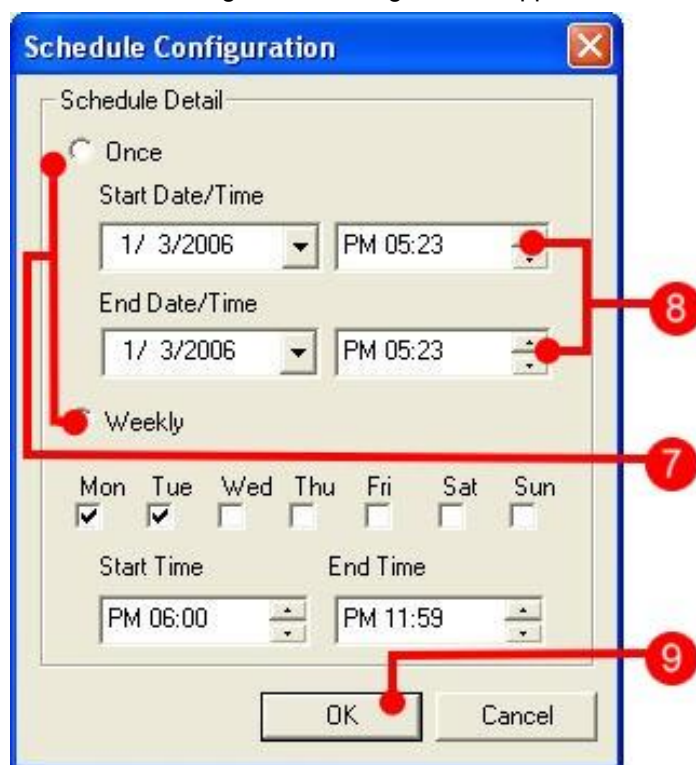


2. Click the 'Recording Setup' tab.
3. Click the 'Basic Setup' tab.
4. Select a working camera from the 'Camera List.'

5. Click 'Scheduled' in the mode panel.

Note: Click the '24x7' mode to record 24 hours a day, 7 days a week. The recording mode is disabled by default.

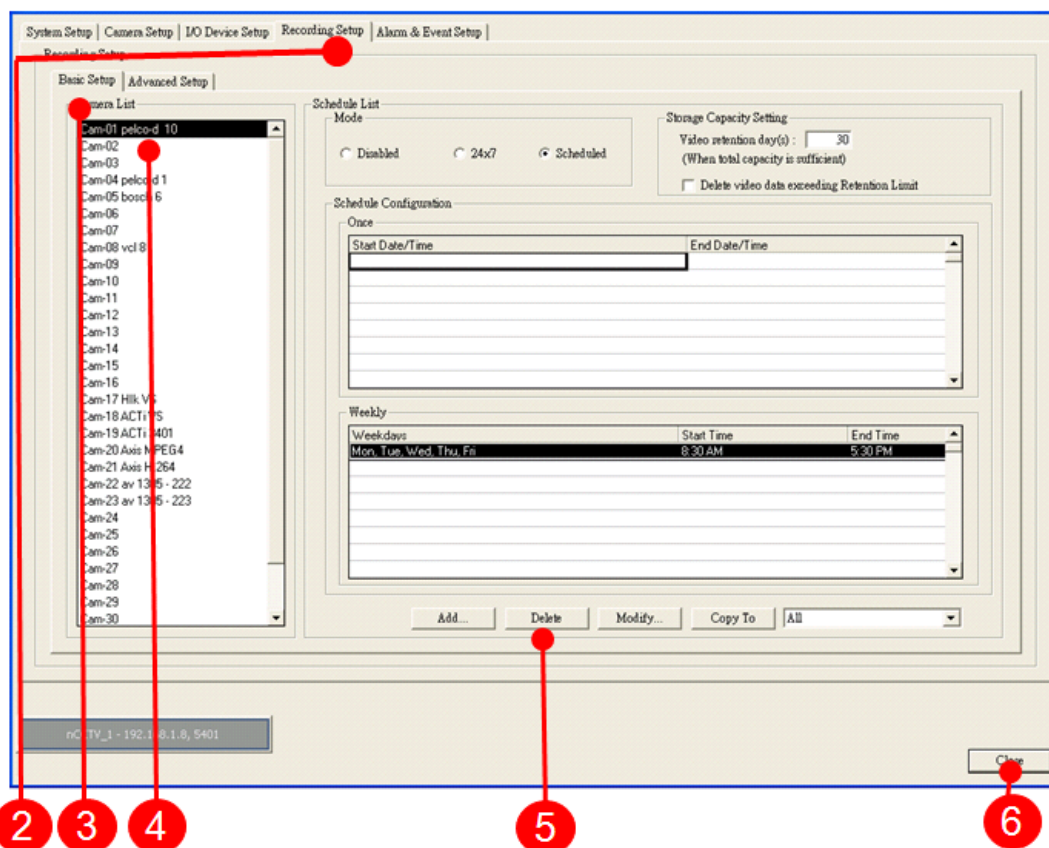
6. Click **Add** and a 'Schedule Configuration' dialog box will appear.



7. Click 'Once' to record only during the specified duration, or click 'Weekly' to record on a weekly basis.
8. Select the Start Date/Time and the End Date/Time.
9. Click **OK** to close the dialog box.
10. 'Video retention day(s)' means recorded video would be kept on the video recorder if total storage capacity is sufficient. If 'Delete video data exceeding Retention Limit' is enabled, the recorded video would be kept for the specified number of days. No more will be retained even if the storage capacity is more.
11. The schedule list shows the result. Click **Close**.

4-6-2 Delete a Schedule Recording

To delete a schedule recording follow the steps below:



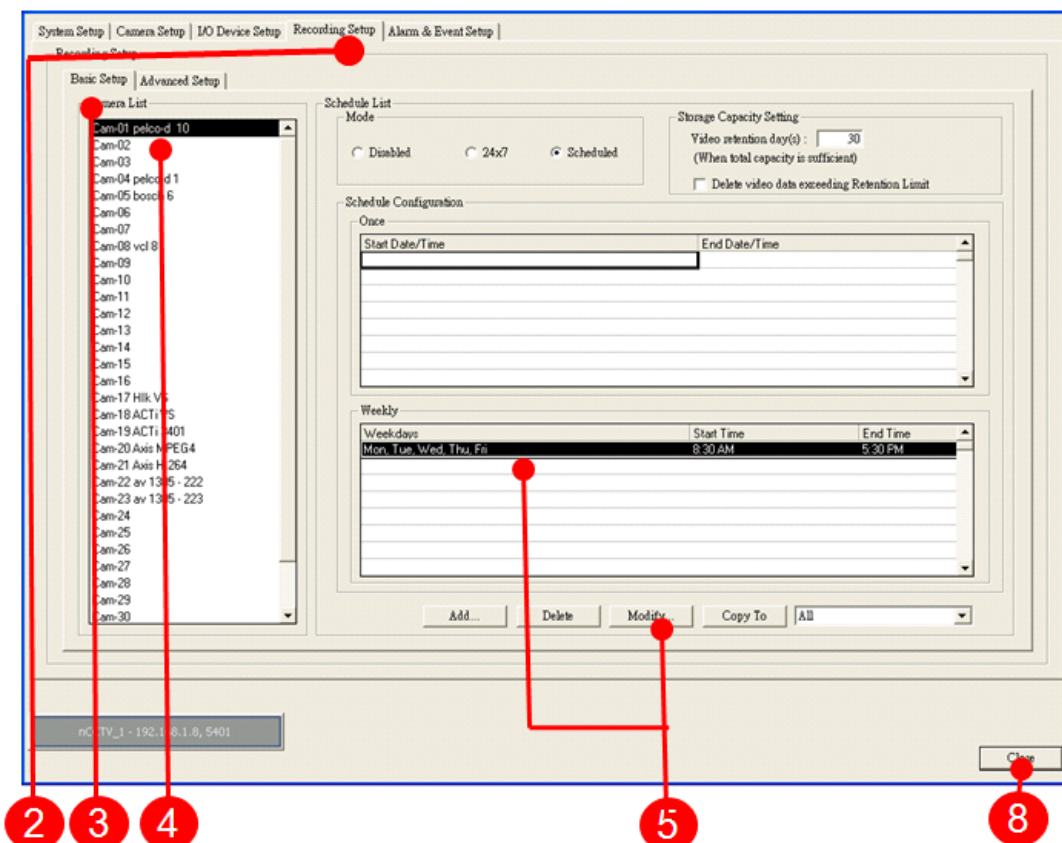
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Recording Setup' tab.
3. Click the 'Basic Setup' tab.
4. Select a working camera from the 'Camera List.'
5. Select a scheduled recording from the 'Schedule List.' Click **Delete**.
6. The schedule list shows the result. Click **Close**.

4-6-3 Modify a Schedule Recording

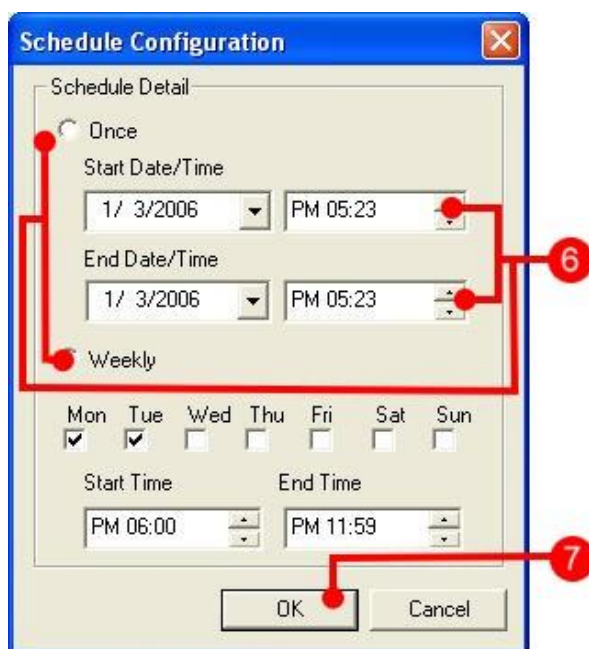
To modify a schedule recording refer to the steps below:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



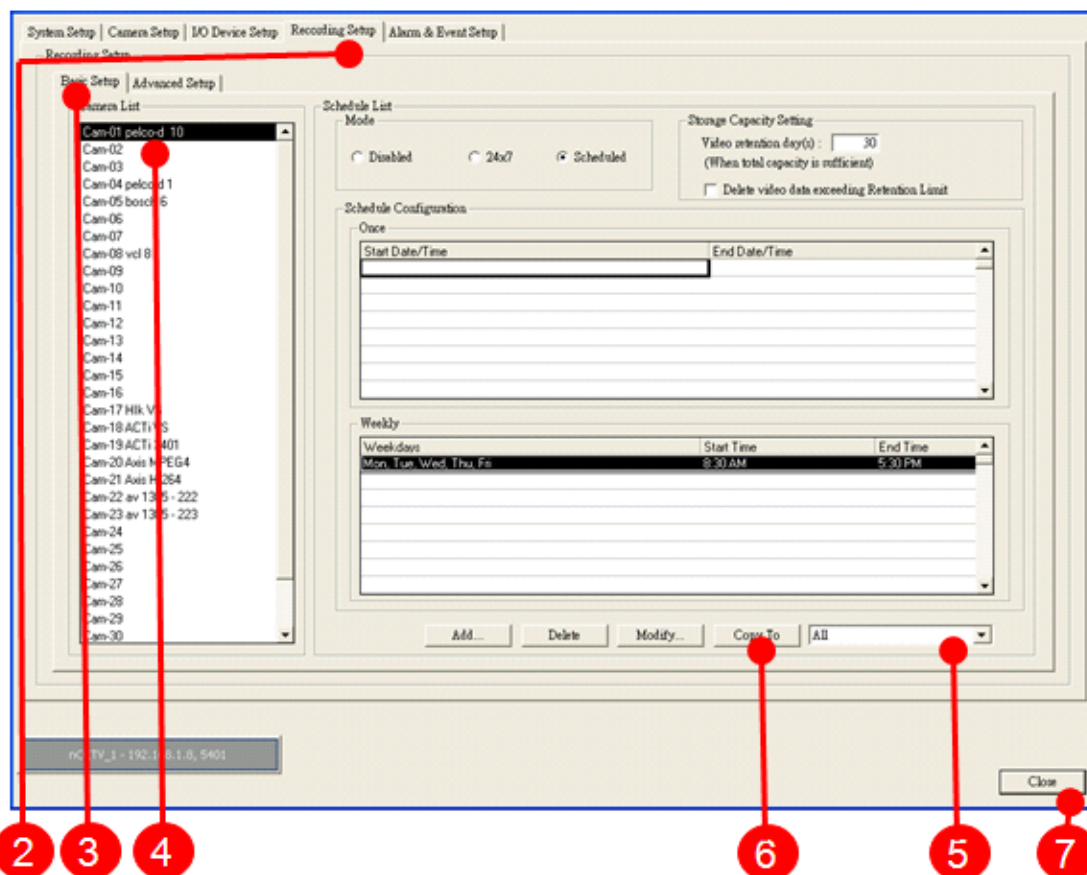
2. Click the 'Recording Setup' tab.
3. Click the 'Basic Setup' tab.
4. Select a working camera from the Camera List.
5. Select a scheduled recording from the schedule list. Click 'Modify' and a 'Schedule Configuration' dialog box will appear.



6. Change the recording mode, the start date/time, or the end date/time if necessary.
7. Click **OK** to close the dialog box.
8. The schedule list shows the result. Click **Close**.

4-6-4 Apply the Current Setting to All Cameras

To apply the current settings to rest of the cameras follow the steps below:



1. From the camera tree, right click on the DVR IP address. Select the Video Recorder Setup.



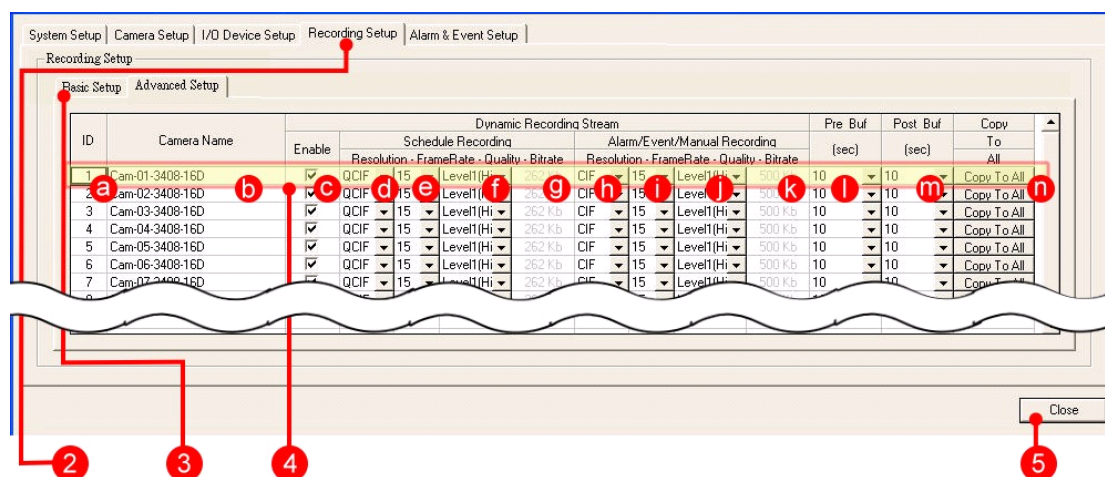
2. Click the 'Recording Setup' tab.
3. Click t the 'Basic Setup' tab.
4. Select a working camera from the 'Camera List.'
5. From the drop-down menu on the lower right-side, select 'All' to apply the settings to all cameras.
6. Click 'Copy To.'

7. Click Close.

4-6-5 Advanced Setup

Note: This feature only applies to analog cameras and Arecont MJPEG IP cameras.

To set the recording details follow the steps below:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

2. Click on the 'Advanced Setup' tab.

3. Change the following parameters:

- **ID** - the camera number (This value cannot be modified)
- **Camera Name** - the camera name (This value cannot be modified)
- **Enable** - allow the video stream from the camera to propagate
- **Resolution** - (Schedule Recording) - set the recording resolution in schedule recording mode.
- **FrameRate** (Schedule Recording) - set the recording frame rate in schedule recording mode.
- **Quality** (Schedule Recording) - set the recording quality in schedule recording mode.
- **Bitrate** (Schedule Recording) - The recording file size, determined by the combination of resolution, frame rate, and quality.
- **Resolution** (Alarm/Event/ Manual Recording) - set the recording resolution in

Alarm/Event/Manual Recording mode.

- **FrameRate** (Alarm/Event/Manual Recording) - set the recording frame rate in Alarm/Event/Manual Recording mode.
- **Quality** (Alarm/Event/Manual Recording) - set the recording quality in Alarm/Event/Manual Recording mode.
- **Bitrate** (Alarm/Event/Manual Recording) - The recording file size, determined by the combination of resolution, frame rate, and quality.
- **PreAlmBuf** - the pre alarm buffer is a pre-recorded video clip before an alarm is generated. The parameter decides the size of the recording clip. The maximum buffer is up to 60 seconds.
- **PostAlmBuf** - the post alarm buffer is a post-recorded video clip after an alarm is generated. The parameter decides the size of the recording clip. The maximum buffer is up to 60 seconds.
- **Copy to All** - copies the recording configuration from one camera to all the cameras.

5. Click **Close** to complete the process.

Note: The system provides 3 recording modes: Live Play, Schedule Recording, and Alarm/Event/Manual Recording. Scheduled Recording and Alarm/Event/Manual Recording are used for the functionality of Dynamic Recording. Each recording mode can be independently configured for Resolution, Frame Rate, and Quality.

The system defines the priority of the three modes as follows:

Alarm/Event/Manual Recording > Schedule Recording > Live play (configured by 'Video Stream')

When two recording modes run together, the system defaults to the higher priority recording mode. For example, let's set the resolution of live play mode on Camera A to CIF, and the resolution of schedule recording mode on Camera A to 4CIF. The default resolution for Camera A will be set to 4CIF, since schedule recording has a higher priority than live play.

The following tabular data demonstrates how the system utilizes the three modes, depending on the status of dynamic recording.

Dynamic Recording is disabled:

Recording Moments Configuration	Video Live	Scheduled Recording	Alarm/Event/ Manual Recording
No Recording (Live view only)	Video Stream Setting	X	X
Enable Scheduled Recording	Video Stream Setting	Video Stream Setting	X
Enable Alarm/Event/ Manual Recording	Video Stream Setting	Video Stream Setting	Video Stream Setting

Dynamic Recording is enabled:

Recording Moments Configuration	Video Live	Scheduled Recording	Alarm/Event/ Manual Recording
No Recording (Live view only)	Video Stream Setting	X	X
Enable Scheduled Recording	Scheduled Recording Setting	Scheduled Recording Setting	X
Enable Alarm/Event/ Manual Recording	Alarm/Event/ Manual Setting	Alarm/Event/ Manual Setting	Alarm/Event/ Manual Setting

If the 'enable' option of the camera's dynamic recording stream is unchecked, the system uses the video stream setting of the Live play mode as the default recording mode.

Note: An exception is when the resolution of the mode with higher priority is QCIF and the resolution of the mode with lower priority is CIF or 4CIF, the resolution of the camera is changed to CIF or 4CIF.

4-7 Set Up an Alarm or Event

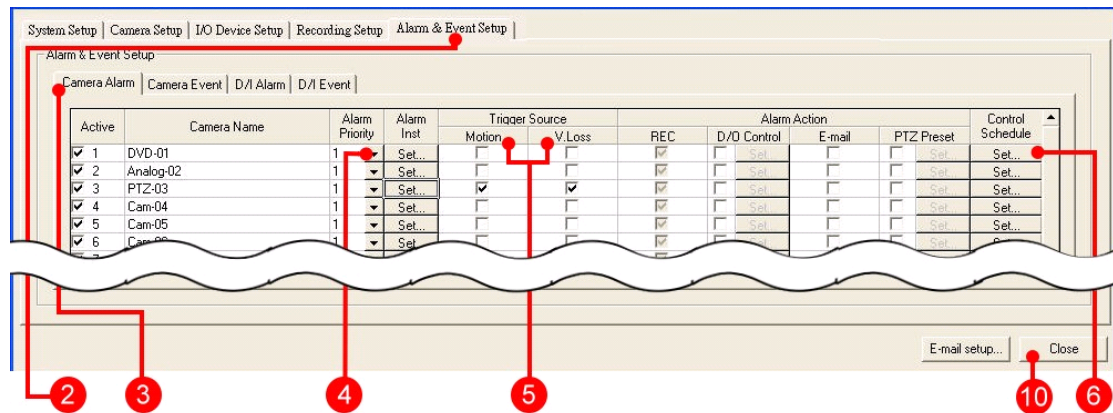
4-7-1 Set Up the Alarm

When an alarm is detected, the alarms will pop-up in the 'Active Alarm' list. There are two kinds of alarms that can be configured through the user interface: Camera Alarm and D/I Alarm. All other alarms function automatically.

Date/Time	Recorder(Name/IP)	Source	Type	Pri	Status
2009/1/19 下午 02:13:52	MahriVideoServer 192.168.1.155:80	Cam-08	Mobon	1	New
2009/1/19 下午 02:13:46	MahriVideoServer 192.168.1.155:80	Cam-08	Mobon	1	New
2009/1/19 下午 02:13:26	MahriVideoServer 192.168.1.155:80	Cam-09	Mobon	1	New

4-7-1-1 Trigger a Camera Alarm

To trigger an alarm from a linked camera source follow the steps below:



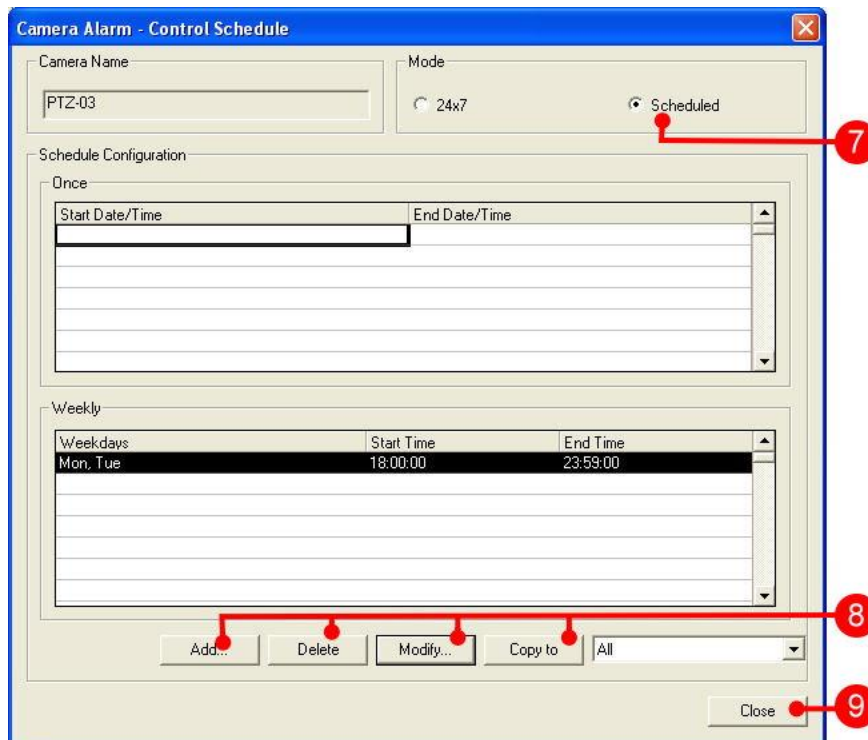
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click the 'Alarm & Event Setup' tab.
3. Click the 'Camera Alarm' tab.
4. Under the camera list, from the alarm priority drop down menu, select a value to set the alarm priority.

Note: Higher priority has a smaller number. For example, Priority 1 means that it has the highest priority.

5. Check the motion or/and V.Loss checkbox to active alarm detection for the camera.
6. Click on the 'Set' button under the Control Schedule column.



7. In the 'Camera Alarm – Control Schedule' dialog box; click 'Scheduled' in the 'Mode' panel to set a schedule. (If you click '24x7', the camera will detect the alarms during that period of time. In this case, 'Scheduled Configuration' will be grayed out. Click **Close**.

8. Click **Add**, **Delete**, **Modify**, and **Copy to** buttons to edit and manage the schedule.

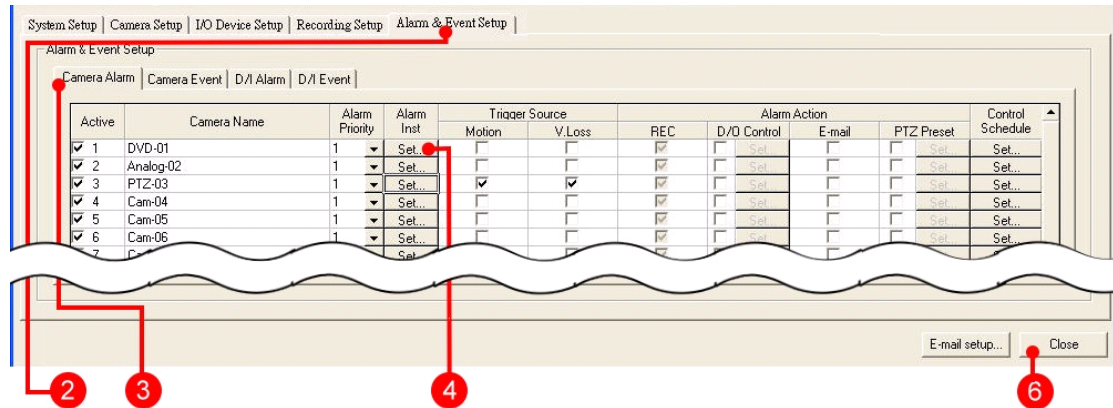
9. Click **Close** to continue.

10. Click **Close** to complete the process.

4-7-1-2 Action Configuration of a Camera Alarm

When a camera alarm is detected, the MatriVideo System allows users to take three actions – trigger a D/O control, send an E-mail notification, or control a PTZ preset.

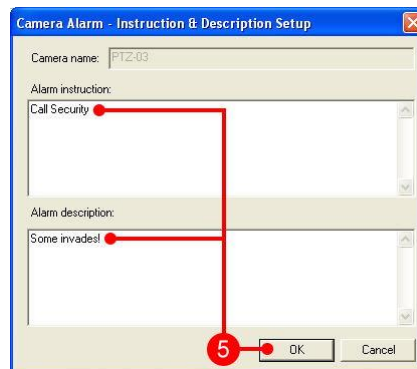
Set the Alarm Instructions:



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

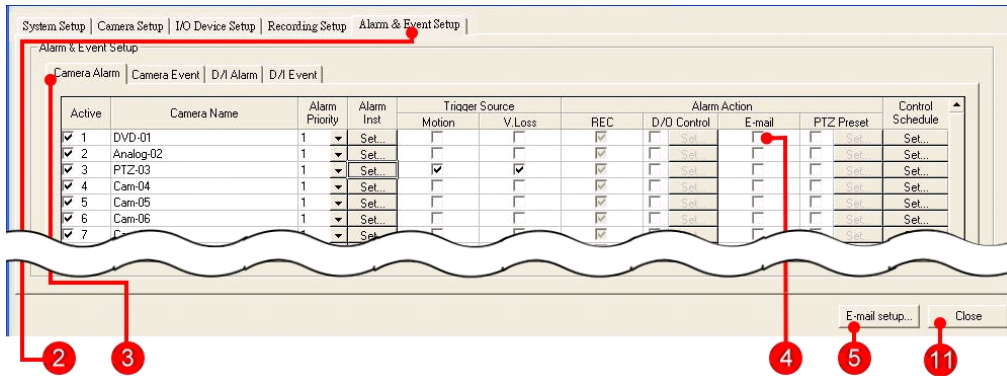


2. Click on the 'Alarm & Event Setup' tab.
3. Click on the 'Camera Alarm' tab.
4. From the camera list, click the 'Set' button in the 'Alarm Inst' column. 'Camera Alarm – Instruction & Description Setup' dialog box will appear.



5. Input the notification messages in the 'Alarm Instruction' and the 'Alarm Description' panels. Click **OK** to close the dialog box.
6. Click **Close**.

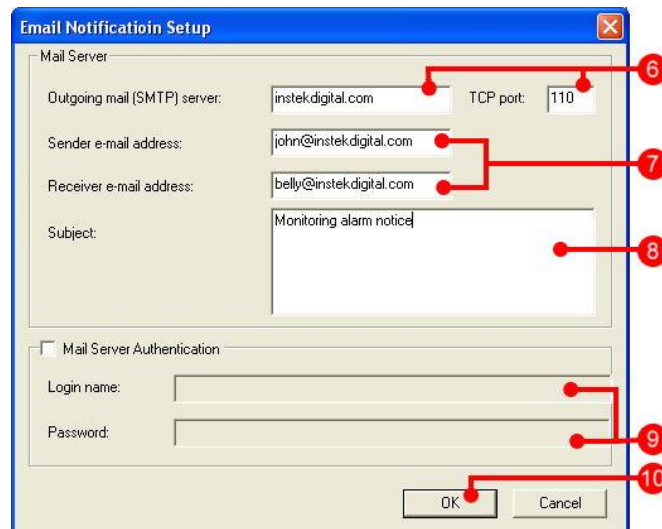
Send an E-mail Notification



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'Alarm & Event Setup' tab.
3. Click on the 'Camera Alarm' tab.
4. Check the box titled 'E-mail' under the column 'Alarm Action.'
5. Click on the 'E-mail Setup' button.



6. Input the outgoing mail server and the TCP port. (Ask your system administrator for the TCP port number.)
7. Input the E-mail addresses of the sender and the receiver.

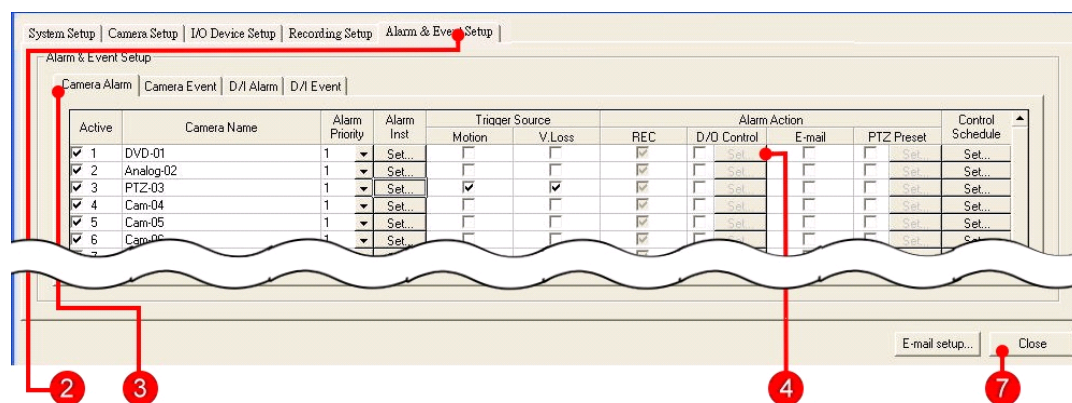
8. Insert the subject line.

9. If necessary, click the 'Mail Server Authentication' checkbox to pre-load the login information for the mailbox.

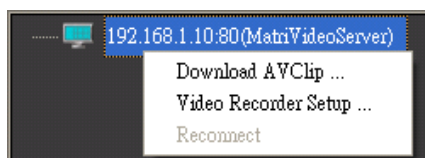
10. Click **OK**.

11. Click **Close**.

Set a D/O Control



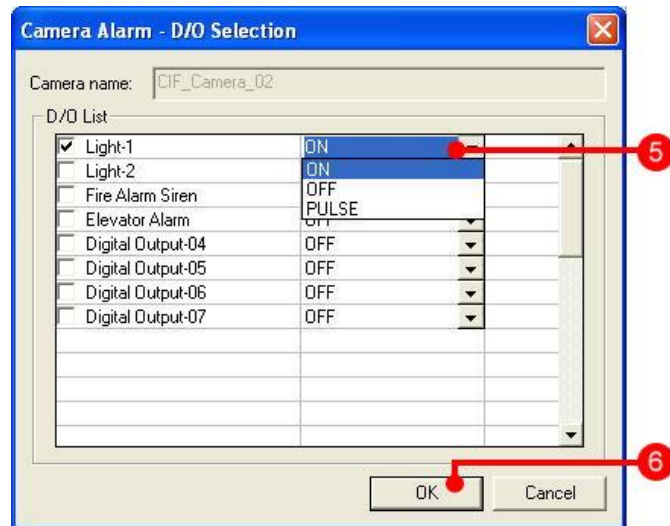
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



2. Click on the 'Alarm & Event Setup' tab.

3. Click on the 'Camera Alarm' tab.

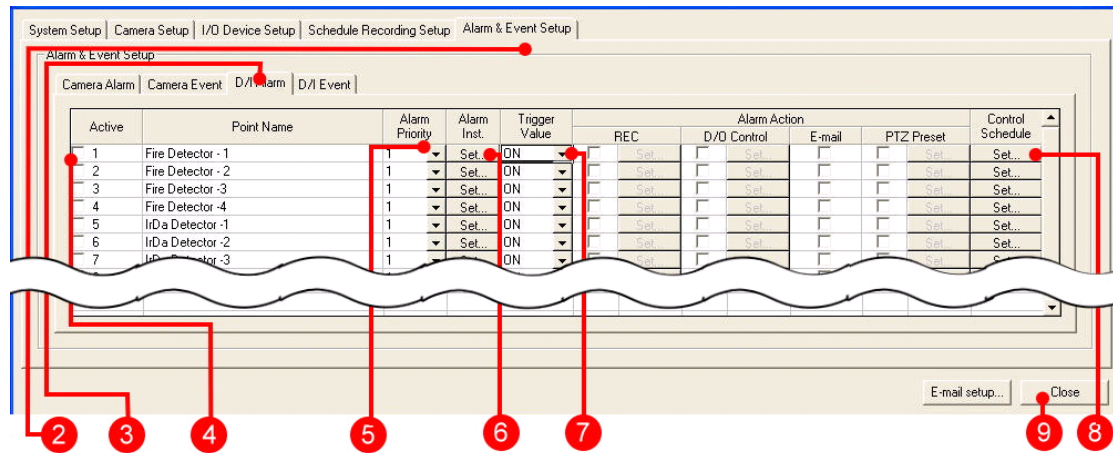
4. Check the D/O control box and click on the 'Set' button under the D/O Control column.



5. The 'Camera Alarm – D/O Selection' dialog box will appear. Click the target output point from the D/O list. From the drop-down menu, select the signal type to set the output status.
6. Click **OK** to close the dialog box.
7. Click **Close**.

4-7-1-3 Trigger a D/I Alarm

To set a D/I alarm:



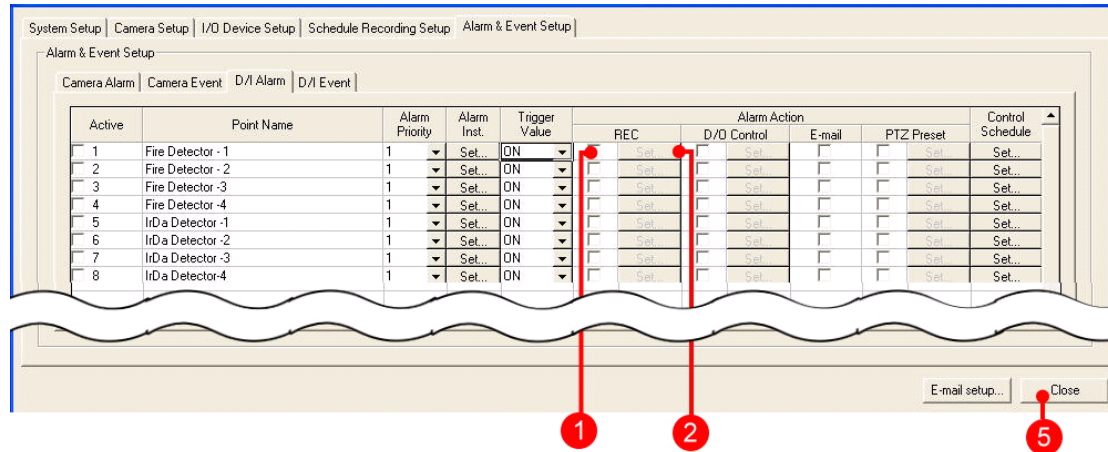
1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



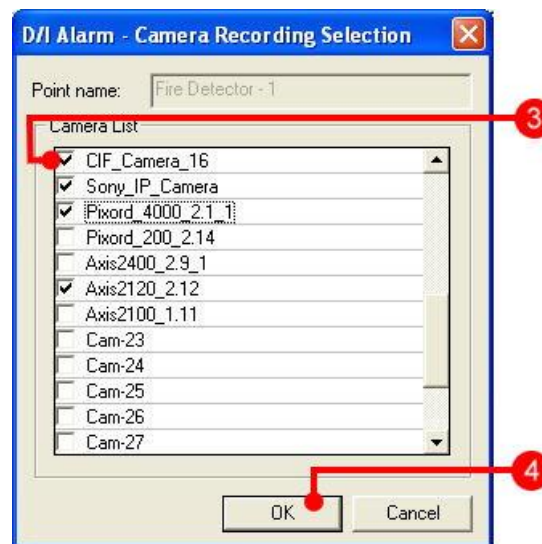
2. Click the 'Alarm & Event Setup' tab.
3. Click the 'D/I Alarm' tab.
4. Click the 'Active' checkbox to activate the desired point.
5. From the 'Alarm Priority' drop down menu, set the alarm priority. The highest priority has the smallest value.
6. Click on the 'Set' button under the 'Alarm Inst' column to define the alarm content and the post-alarm operation.
7. Change the Trigger value if necessary.
8. Click on the 'Set' button under the column 'Control Schedule', to set a scheduled control.
9. Click **Close** to complete the process.

4-7-1-4 Action Configuration of a D/I Alarm

When a D/I alarm is detected, the MatriVideo System provides users with four alarm actions – launch a recording, trigger a D/O control, send an E-mail notification, and control a PTZ preset.

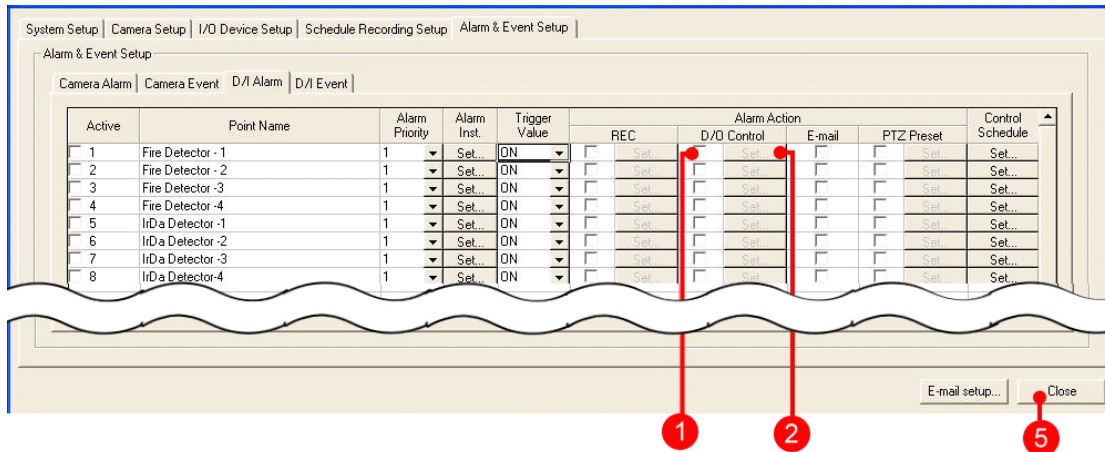


1. From the D/I alarm list, select an active point and check the box under the 'REC' column. (Refer to the previous section to understand how to enter the D/I alarm list.)
2. Click the 'Set' button under the 'REC' column. The pop-up window 'D/I Alarm – Camera Recording Selection' will appear.

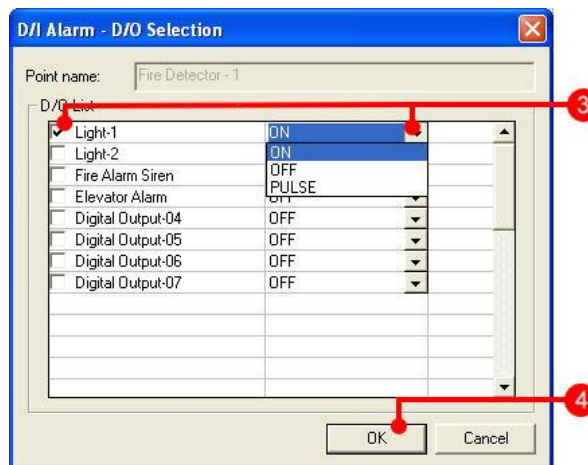


3. Check the box for all the cameras which are connected to the system. The selected camera will trigger the recording function when a D/I alarm is detected.
4. Click OK to continue.
5. Click Close.

Trigger a D/O Control

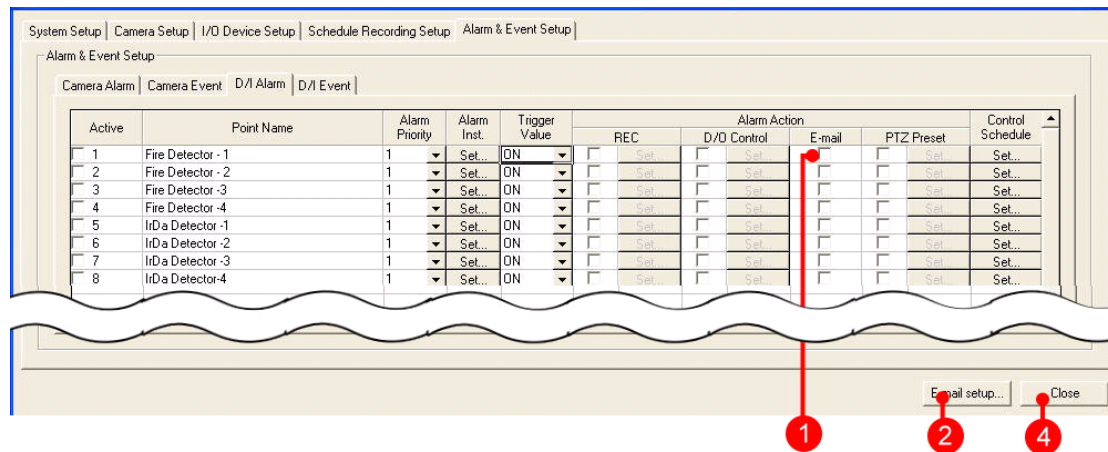


1. From the D/I alarm list, select an active point and check the corresponding box under the column, 'D/O Control.'
2. Click on the 'Set' button to open the 'D/I Alarm – D/O Selection' pop-up window.



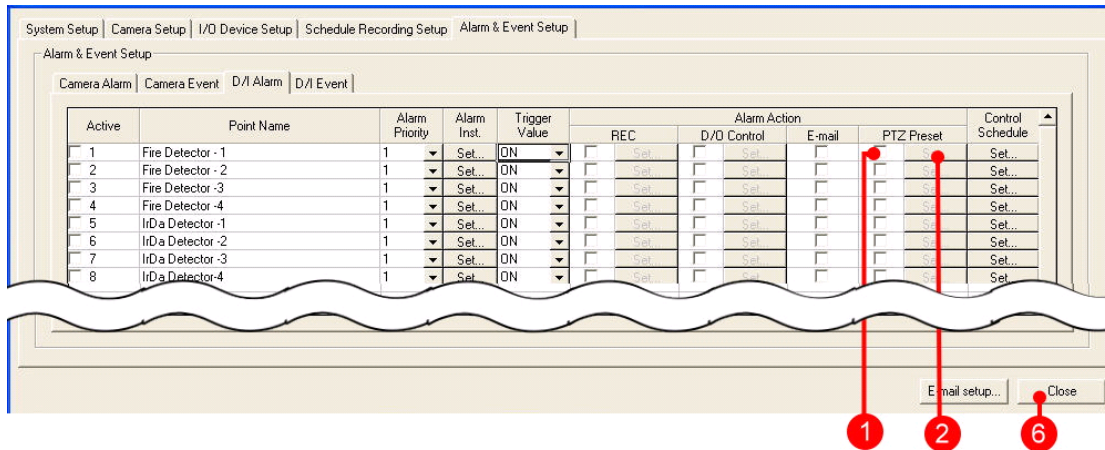
3. From the D/O list, select the output point by checking the box next to it and set a signal type (ON or PULSE, OFF is the default value.)
4. Click **OK** to close the dialog box.
5. Click **Close**.

Send an E-Mail Notification:

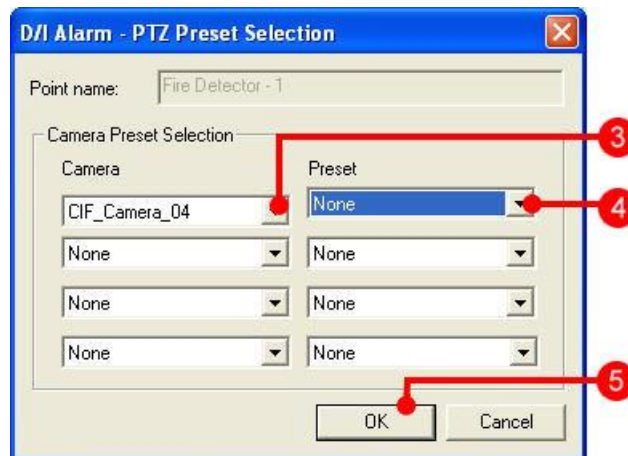


1. From the D/I alarm list, select an active point and check the box under the column 'E-mail.'
2. Click on 'E-mail setup. Refer to section 'Send an E-mail Notification' for further instructions.
3. Click **Close**.

Control a PTZ Preset



1. In the D/I alarm list, select an active point and check the box under the column 'PTZ Preset.'
2. Click on the 'Set' button to open the 'D/I Alarm – PTZ Preset Selection' pop-up window.



3. From the 'Camera Preset Selection', select the appropriate camera from the 'Camera' drop-down menu.

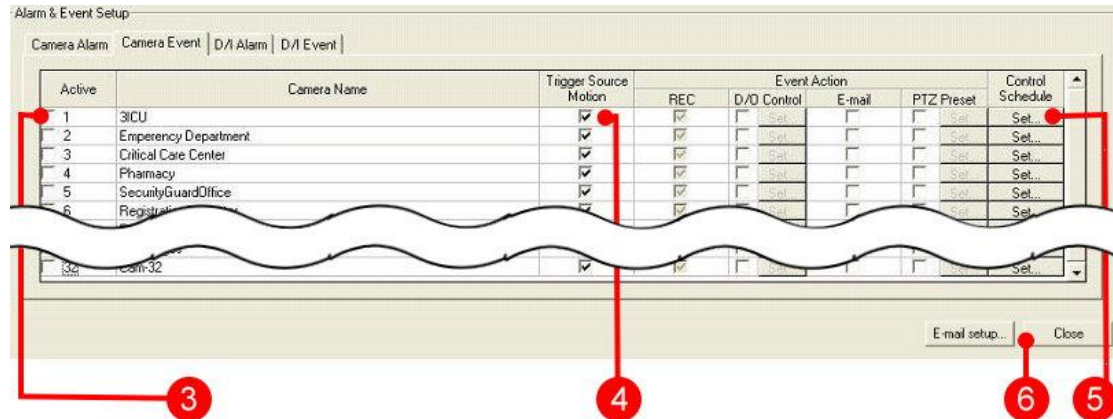
Note: Only PTZ cameras will appear in the list.

4. From the 'Preset' drop-down menu, select a pre-defined preset. The PTZ camera will automatically move to the preset direction when a D/I alarm is detected.
5. Click **OK** to close the dialog box.
6. Click **Close**.

4-7-2 Set the Event

When an event is detected, the event is marked in the Timeline Control Bar located on T2. There are two events: Camera Event and D/I Event.

Trigger a Camera Event



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'



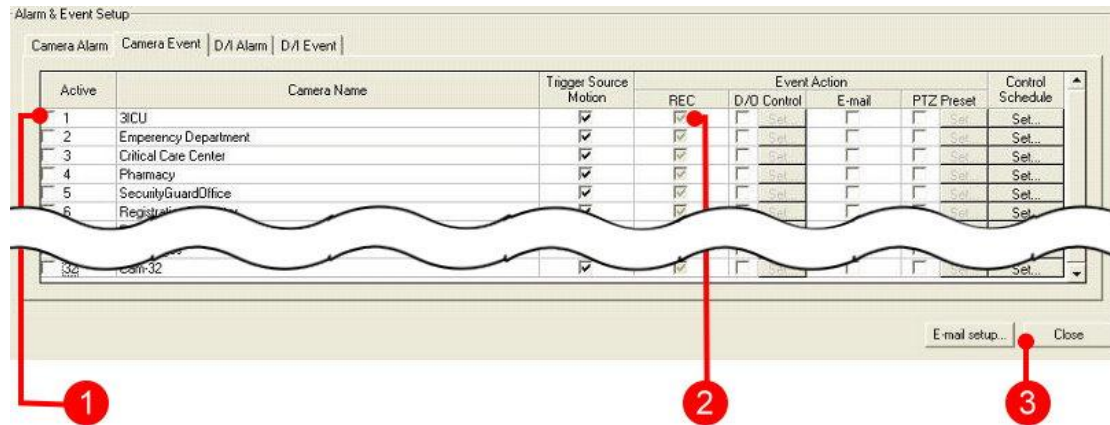
2. Check the 'Active' box next to the camera.
3. Check the box 'Trigger Source Motion', if unchecked.
4. Click on the 'Set' button under the column 'Control Schedule', to control the schedule.
5. Click **Close**.

4-7-2-1 Action Configuration of a Camera Event

When a camera event is detected the MatriVideo System provides the user with four actions- launch a recording, trigger a D/O control, send an E-mail notification, and control a PTZ preset.

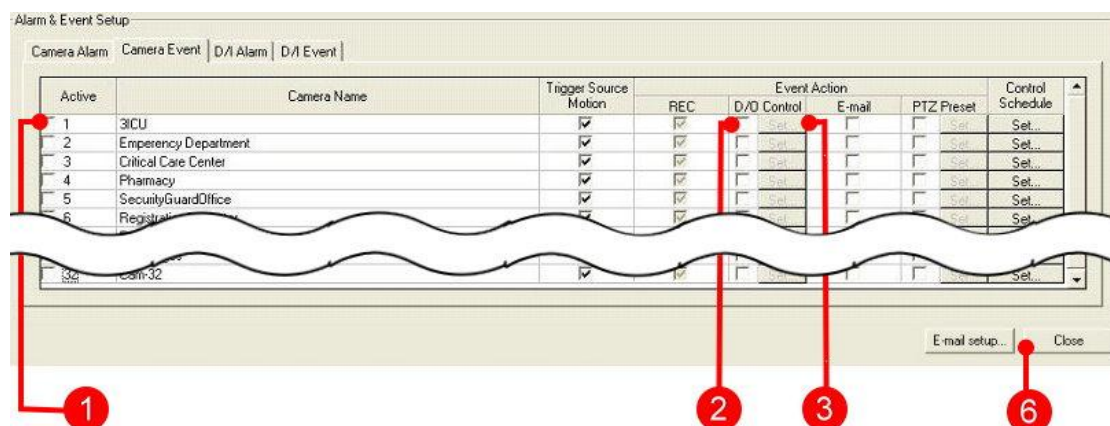
Launch a Recording

Recording is enabled by default. If recording is not enabled follow the steps below:



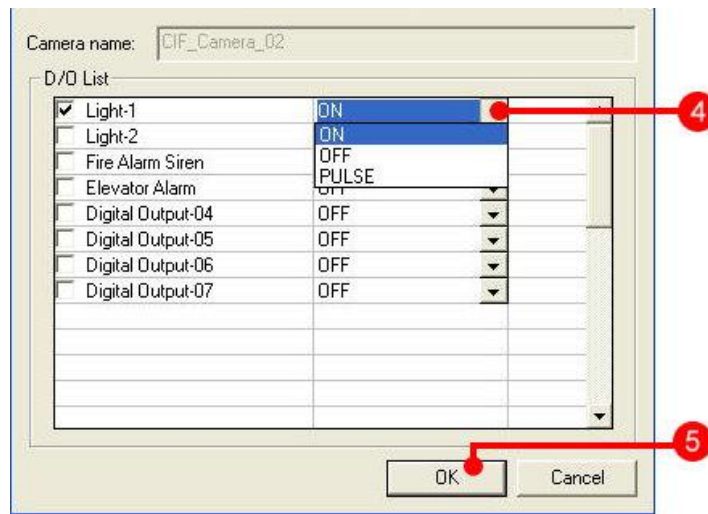
1. From the 'Camera Event' tab select a linked camera by clicking the 'Active' checkbox.
2. Check the box under the 'REC' column, if unchecked.
3. Click Close.

Trigger a D/O Control



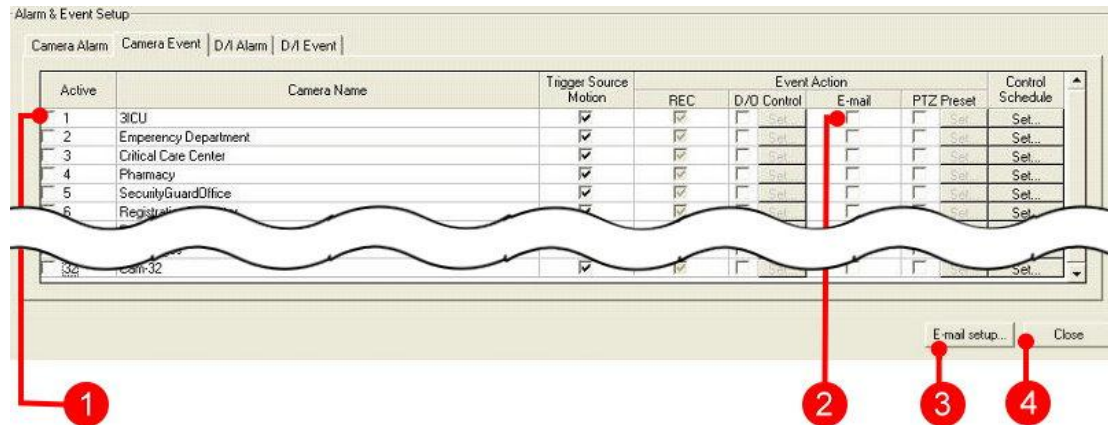
1. From the 'Camera Event' tab select a linked camera by clicking the 'Active' checkbox.
2. Check the box under the column 'D/O Control'

3. Click on the 'Set' button to open the 'Camera Event – D/O Selection' pop-up menu.



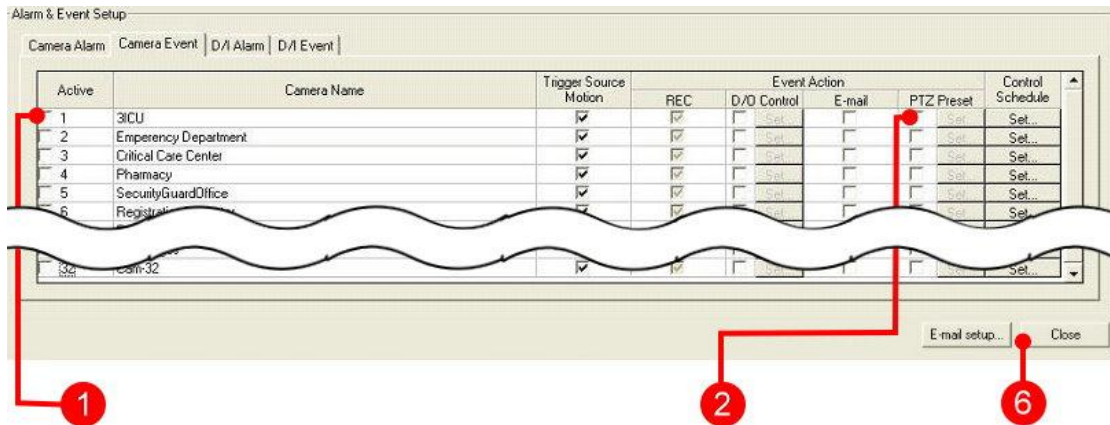
4. From the D/O list, select an output point by checking the box next to it and set the signal type (ON or PULSE, OFF is the default value.)
5. Click **OK** to close the dialog box.
6. Click **Close**.

Send an E-Mail Notification

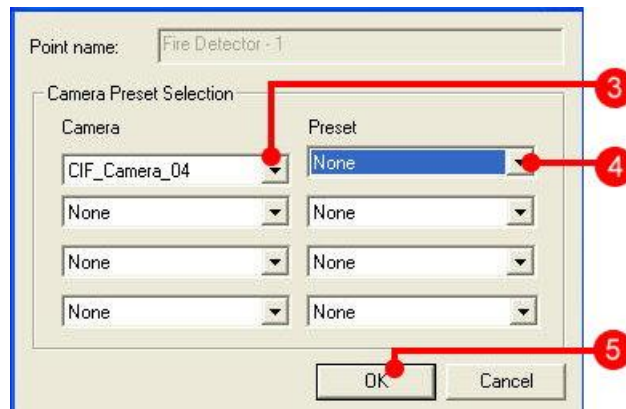


1. From the 'Camera Event' tab, select a linked camera, by clicking the 'Active' checkbox.
2. Check the box under the 'E-mail' column.
3. Click 'E-mail setup' and refer to section 'Send an E-mail Notification' to complete the setup.
4. Click **Close**.

Control a PTZ Preset



1. From the 'Camera Event' tab select a linked camera by clicking the 'Active' checkbox and then check the corresponding box under the column, 'PTZ Preset.'
2. Click 'Set' and the 'Camera Alarm – PTZ Preset Selection' pop-up menu will appear.

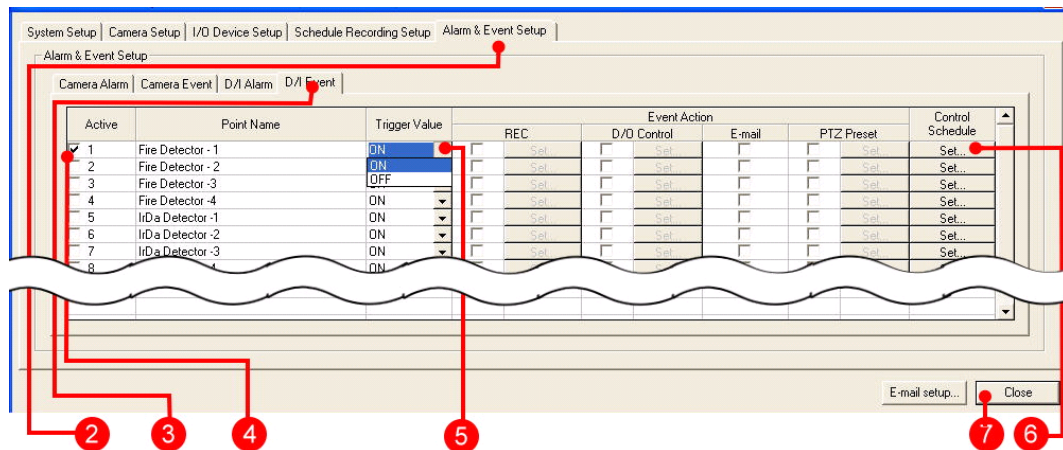


3. From the 'Camera' selection drop-down menu, select the linked camera

Note: The camera list will only display the PTZ cameras.

4. Select the defined preset from the 'Preset' down-down menu. The PTZ camera will automatically move to the preset direction when a camera event is detected.
5. Click **OK** to close the dialog box.
6. Click **Close**.

4-7-2-2 Trigger a D/I Event



1. From the camera tree, right click on the DVR IP address. Select 'Video Recorder Setup.'

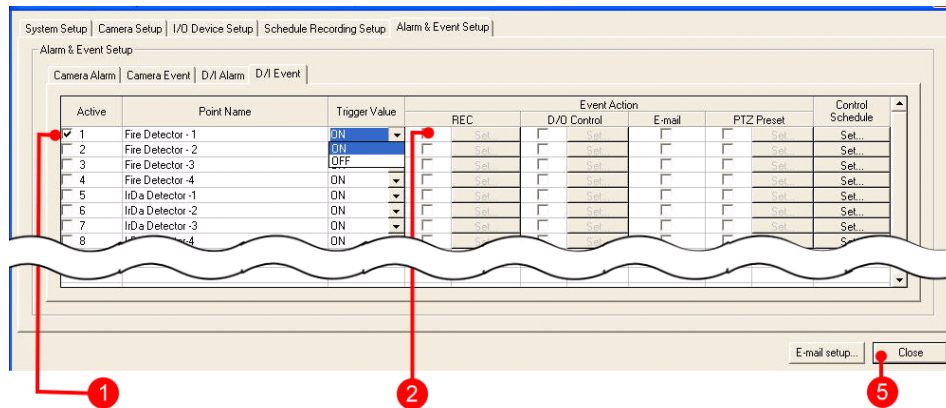


2. Click on the 'Alarm & Event Setup' tab.
3. Click on the 'D/I Event' tab.
4. Select a point by checking the box next to the 'Point Name.'
5. Change the 'Trigger Value' if necessary.
6. Click on the 'Set' button under the column 'Control Schedule', to set a control schedule. Refer to Step 6-9 in section 'Trigger A Camera Alarm' for additional information.
7. Click **Close** to complete the process.

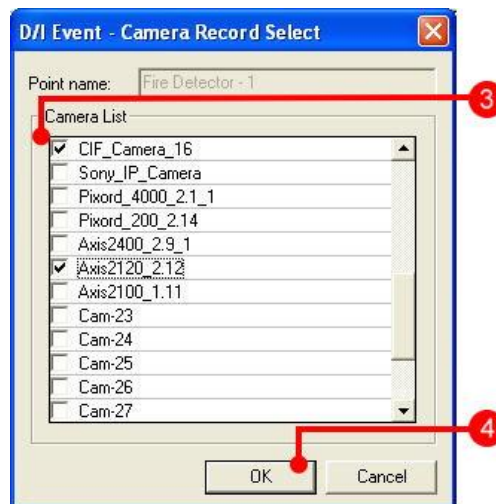
4-7-2-3 Action Configuration of a D/I Event

When a D/I event is detected, the MatriVideo System allows users to take four separate actions on the alarms - launch a recording, trigger a D/O control, send an E-mail notification, and control a PTZ preset.

Launch a Recording

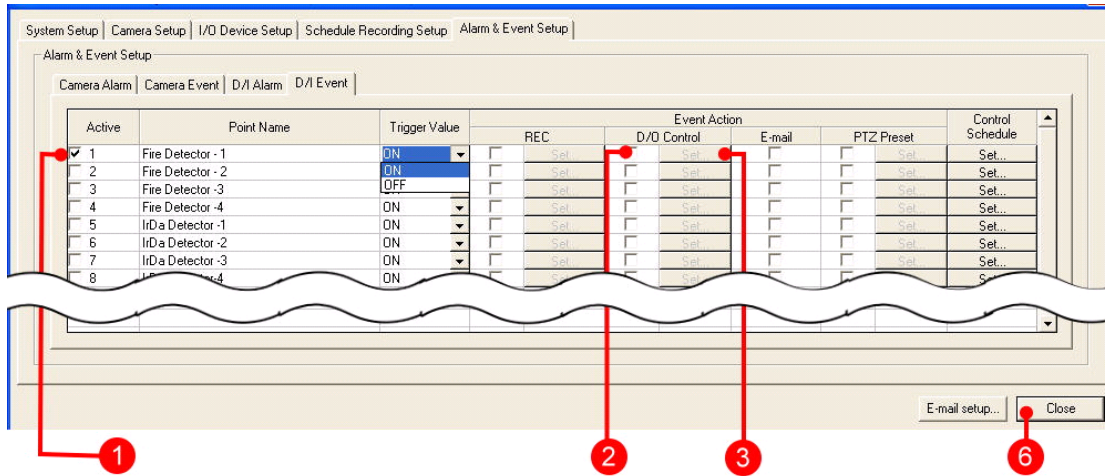


1. From the D/I event list, select an active point and check the corresponding box under the 'REC' column.
2. Click on the 'Set' button to open the 'D/I Event – Camera Recording Selection' pop-up menu.

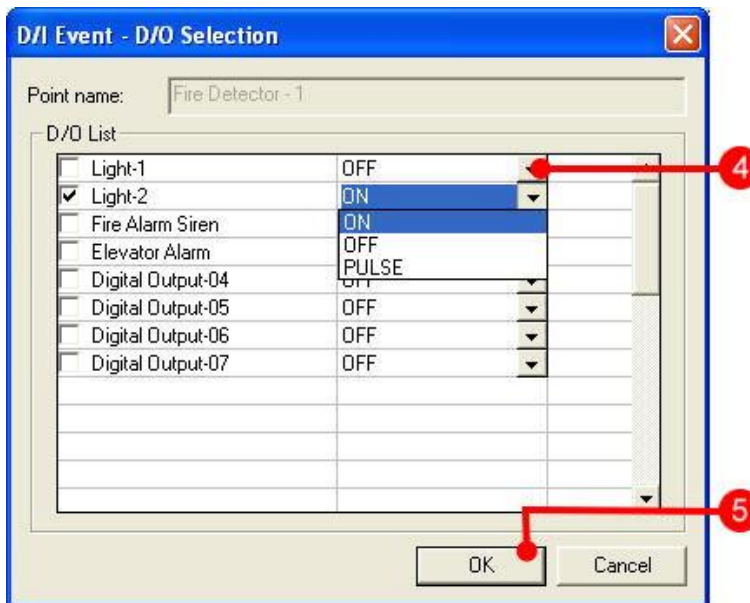


3. Select the linked camera from the 'Camera list.' The selected camera will trigger the recording function when a D/I event is detected.
4. Click **OK** to continue.
5. Click **Close**.

Trigger a D/O Control

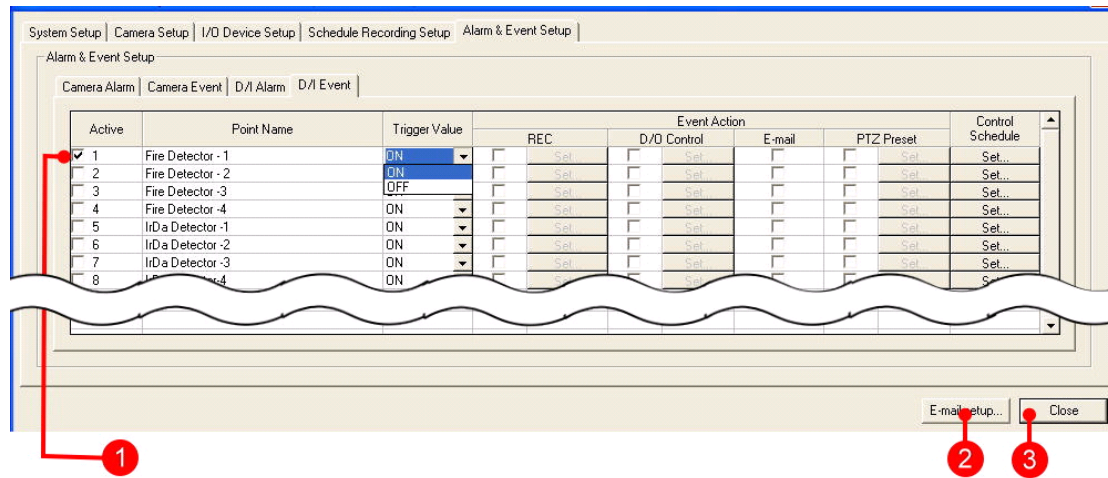


1. From the D/I event list, select an active point.
2. Check the corresponding box under the column 'D/O Control.'
3. Click on the 'Set' button to open the 'D/I Event – D/O Selection' pop-up menu.



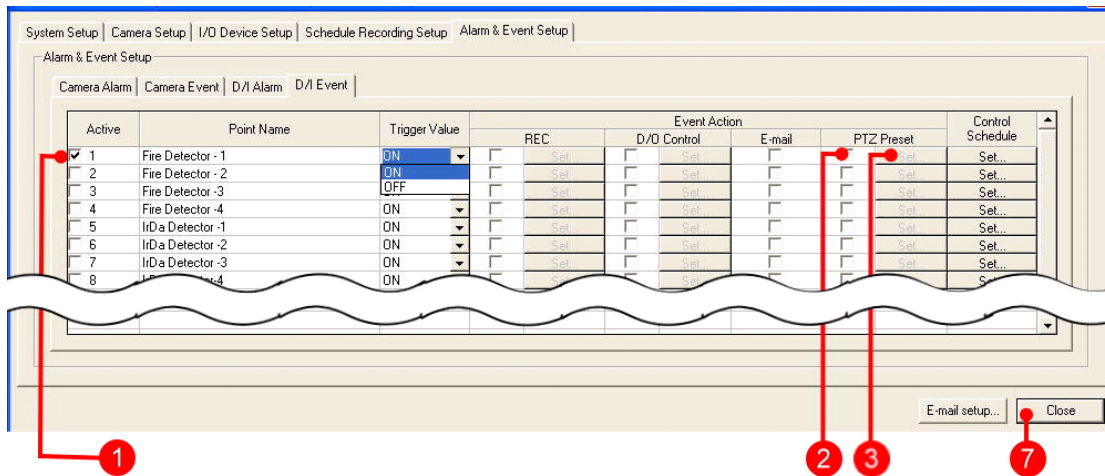
4. From the D/O list, select an output point and from the pop-up menu, set the signal type (ON or PULSE, OFF is the default value.)
5. Click **OK** to close the dialog box.
6. Click **Close**.

Send an E-Mail Notification

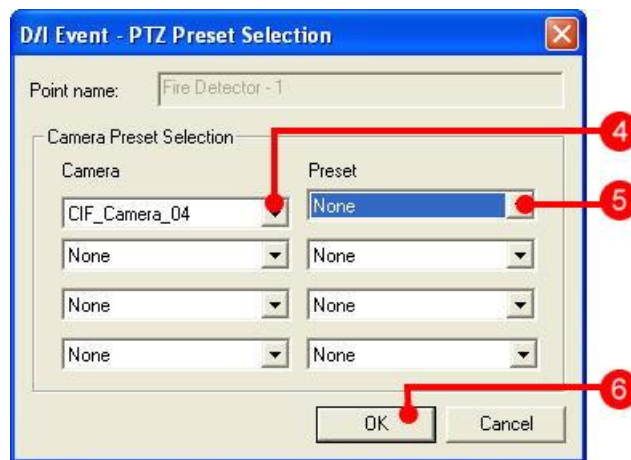


1. From the D/I event list, select an active point and check the corresponding box under the column 'E-mail.'
2. Click on 'E-mail setup' and refer to section 'Send an E-mail Notification' to complete the setup process.
3. Click **Close**.

Control a PTZ Preset



1. From the D/I event list, select an active point.
2. Check the corresponding box under the column 'PTZ Preset.'
3. Click on the 'Set' button to open the 'D/I event – PTZ Preset Selection' pop-up menu.



4. Select the camera from the 'Camera' drop-down menu.

Note: The camera list will only display the PTZ cameras.

5. Select a pre-defined preset from the 'Preset' drop-down menu. The PTZ camera will automatically move to the preset direction when a D/I event is detected.
6. Click **OK** to close the dialog box.
7. Click **Close**.

