



User Manual

Version 2.2

Business Class Networking

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System Requirements

To ensure your D-ViewCam system can maintain high video monitoring and recording performance, certain minimum system configurations are required. A higher performance system is required especially when the number of IP cameras exceeds nine.

Number of IP Cameras	1-4	5-9	10-16	16+
CPU	P4 2.8 GHz	P4 2.8 GHz	P4 3.0 GHz	P4 Dual Core 1.8
				GHz or better
Memory	512 MB	512 MB	1GB	1-2 GB
Hard Disk Size (GB) *	40	60	80	120
Display Memory	32MB			
Display Resolution	1024x768; 1280x1024; 1600x1024			
Operating System	Windows XP Professional Service Pack 2 English/ Traditional Chinese/ Simplified Chinese version. Windows Vista (32 Bit) English/ Traditional Chinese/ Simplified			
	Chinese version.			
Network Interface	10/100 Mbps Ethernet			

^{*} Recording video over a long period of time will consume large amounts of disk space. Make sure that you have enough disk space available if you want to use the recording function. You can still complete the installation even if you have less than the suggested free disk space.

Note: If a mega pixel camera is used with the D-ViewCam application, the minimum system requirement should be raised to CPU: Intel P-4 3.4GhZ or above with 1GB of memory due to the resources required to process and store large amounts of image data.

Introduction

Thank you for purchasing a D-Link IP camera, which provides state-of-the-art camera technology combined with IP network capabilities. You can build a home or small business surveillance system by using D-Link IP cameras and the latest features offered by the D-ViewCam application software.

Features

- D-ViewCam can automatically locate and add IP cameras in the local network.
- Storage management for recording files.
- Single and multiple video stream monitoring (up to 32 video channels).
- Two-way audio communication.
- Intelligent filter and search capabilities for scheduling recording and/or event recording.

Installing Your IP Camera

Before installing D-ViewCam, please make sure you have installed your D-Link IP camera(s) that will be managed by D-ViewCam.

- **Step 1 -** Follow the installation procedures that came with your IP camera(s) to complete the camera installation process.
- **Step 2 -** Verify that you are able to view the video images from the IP camera(s) by accessing the camera's built-in web configuration page. It is recommended that all IP cameras be installed in the same subnet as your management PC running the D-ViewCam software.
- **Step 3 -** Please refer to page 11 to add IP camera(s) to the D-ViewCam system.

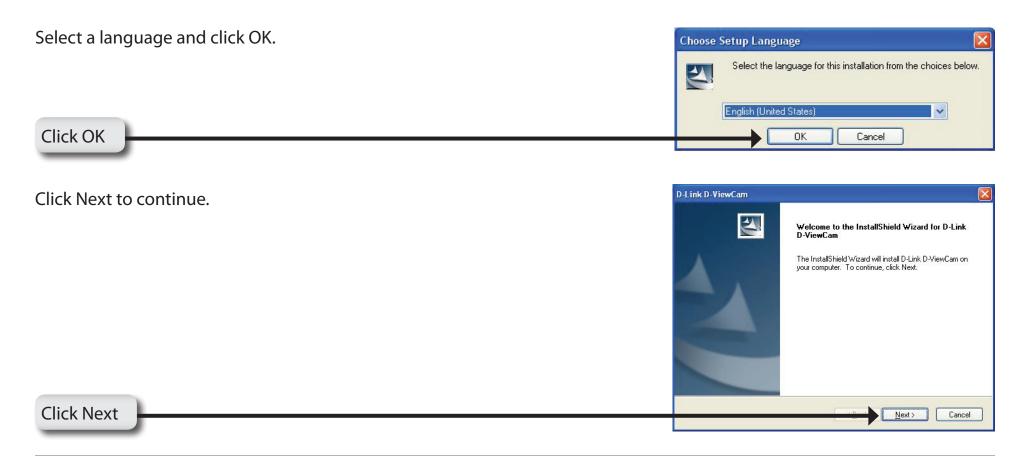
Note: D-ViewCam is optimized for small-scale LAN environment. To protect the system and cameras from attack from the Internet, place D-ViewCam behind a firewall or an IP sharing device.

Software Installation

Turn on the computer and insert the IP Camera Installation CD into the CD-ROM drive. Below step-by-step instructions will be shown if you are using Windows XP. However, similar instructions and screens will also be provided for other Windows operating systems.

When the autorun screen starts, click Install D-ViewCam.

Note: If the Installation Wizard does not start automatically, you can manually start the wizard by double-clicking the setup.exe file from the CD.



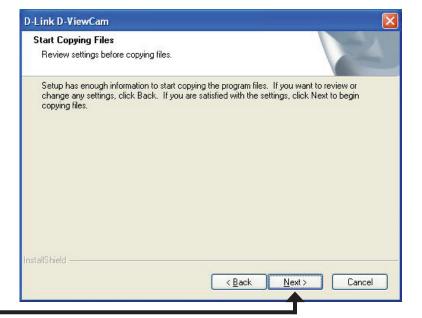
Click Next to install the software into the default folder. Otherwise, click Browse to select a folder.



Click Next

Click Next to start the installation process.

Note: The D-ViewCam installation may take several minutes to complete.



Click Next

Click Finish to complete the installation.



Click Finish

Using D-ViewCam

This section will show you how to start and configure D-ViewCam.

To start D-ViewCam, select Start > All Programs > D-Link > D-Link D-ViewCam.



Enter Admin as the default username and leave the password blank. Click OK to log into the system.

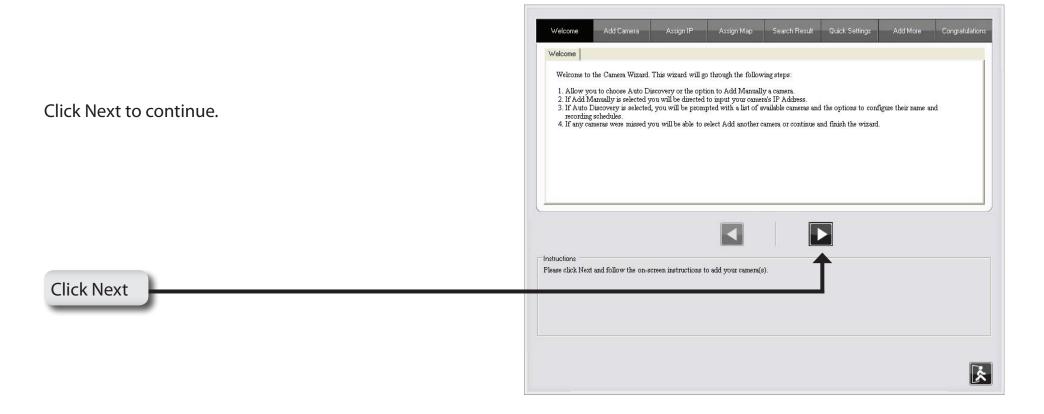
Note: You can change the admin password by clicking the lock icon or you can skip this step and change your password by following the steps on page 48.



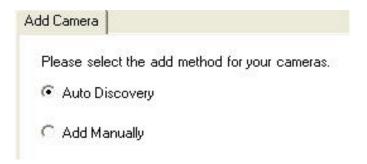
Add Camera Wizard

Welcome to the camera wizard. Use this wizard to add your cameras to the D-ViewCam system.

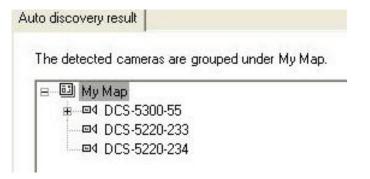
Note: Use the left or right arrow to navigate the wizard.



Choose which method to add your camera(s). You can choose Auto Discovery to automatically search for your camera(s), or choose Add Manually to add your camera(s) via the camera's IP address. Click Next to continue.



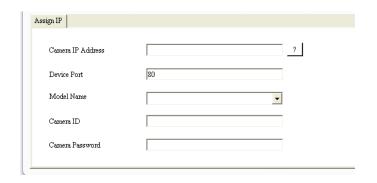
If you choose Auto Discovery, the system will search all cameras that are located in the same subnet within a LAN environment. The system will place all found cameras at the default map called My Map. Click Next to continue.



If you choose Add Manually, enter the IP address or domain name, http port, model name, camera ID and password.

Click the "?" button to auto detect the camera's model name, then the model name will appear in the Model Name box.

Click Next to continue.

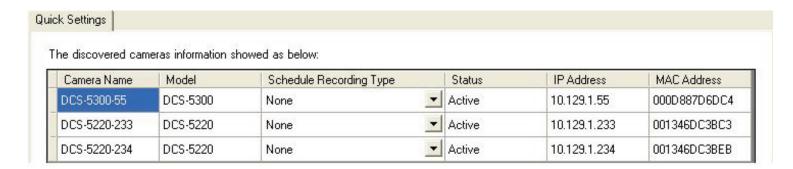


D-ViewCam shows the detected IP camera(s) information. You will be able to schedule which recording type you wish to set for each camera.

- 24/7 Continuous Recording: Start scheduled recording 24 hours a day, 7 days a week.
- 24/7 Motion Detection Recording: Continuously monitoring the videos but ONLY make recording when motion is detected.
- Office Hours Only: Continuously monitoring the videos during office hours (08:00 AM to 06.00 PM) and ONLY make recording when motion is detected.
- Non-Office Hours Only: Continuously monitoring the videos during non-office hours (06:00 PM to 08.00 AM) and ONLY make recording when motion is detected.

Note: Excluding 24/7 Continuous Recording, other schedule recording types can ONLY be activated when motion detection is configured on the camera. Please refer to page 56 in the users manual for more information.

Click Next to continue.



Select Yes to add other camera(s), or select No if you have no additional camera(s) to add. Click Next to continue.

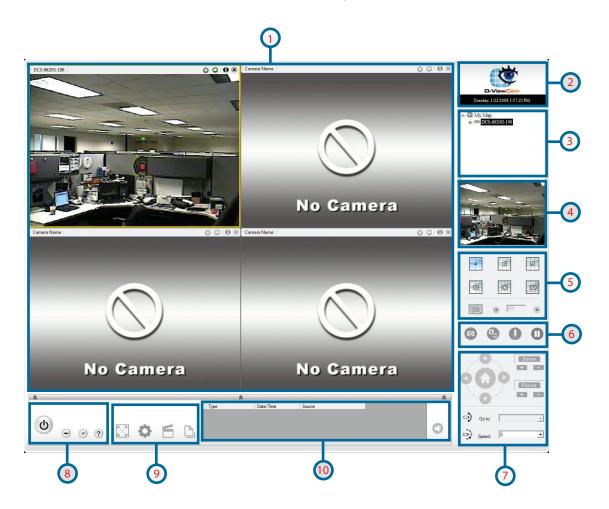


The Add Camera wizard is now complete. Click Close to access the D-ViewCam main screen interface.



Using D-ViewCam Software

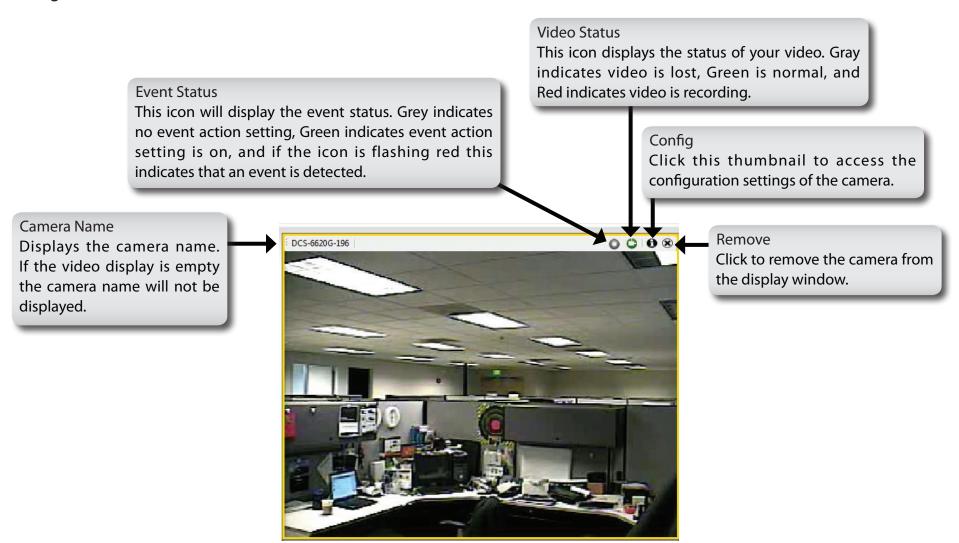
D-ViewCam software provides advanced security monitoring and device management functions when used in configuration with D-Link IP camera(s). D-ViewCam uses IP technology to provide comprehensive management functions, such as system controls, live video feeds, and archived recordings. The main user interface includes ten areas, refer to the table below for more descriptions.



Area No.	Area Name	Description
		Video monitoring area. Number of screens
1	Main Display Area	displayed is determined by split-screen
		configuration
2	System Board Area System date and time display	
3	Select Device and Map	Tree structure display that shows maps and
3	Area	devices
4	Preview Window Area	Display map or current video image if an active
4	Freview William Alea	camera is selected from the tree structure
5	Split Screen Area	Selected number of screen displayed at the
J	Split Screen Area	main display area
6	Manual Control Area	Snapshot, manual recording, two-way audio
0	Maridal Control Area	controls and freeze video display
7	PTZF Control Area	Selectable when a camera selected has pan,
- 1	F 12F CONTO A TEA	tilt, zoom and focus function
8	Program Control Area	Minimize the main window, exit D-ViewCam,
0	Frogram Control Area	auto-hide and help page
9	Setting and Search Area	Full screen, system configuration, search and
9	Setting and Search Area	playback videos, search and playback events
10	Event Action Log	Event log list

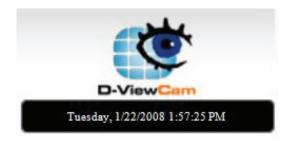
Main Display Area

The main screen interface is where live images from the cameras or e-Map are displayed. For live images, depending on the split-screen configuration, this area can display images from multiple cameras. There is an information bar for each image that can be used to identify a camera and its current status. This bar will not be displayed in high split-screen configuration such as 10, 16 or 32.



System Board Area

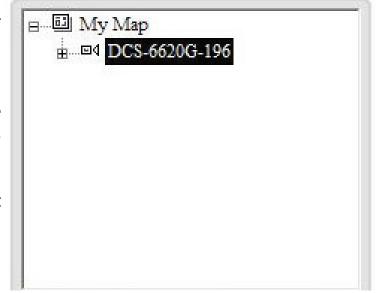
This area displays the D-ViewCam logo, system date and time, and version information.



Select Device and Map Area

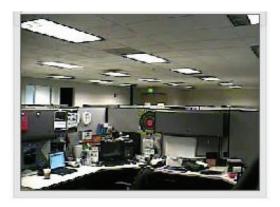
This area displays your map and camera(s) in a tree structure.

- 1. Left click the tree node of My Map or New Map, the e-map will appear on the Main Display area.
- 2. Right click the My Map or New Map tree node, the Main Display area will show all the cameras in split screen mode. The split screen mode selection (4, 6, 9, 10, 16 and 32) is according to the number of cameras allocated under the map.
- 3. Double-click the camera node in the tree list to bring up the expert mode configuration.



Preview Window Area

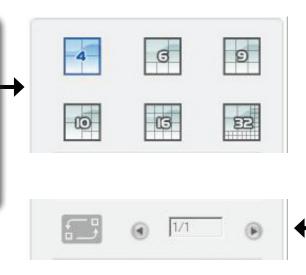
This area will display an image preview of a selected camera from My Map. If a map is selected (instead of a camera), this preview window will cycle through images (one after the other) from all of the available cameras.



Split Screen Area

Split Screen

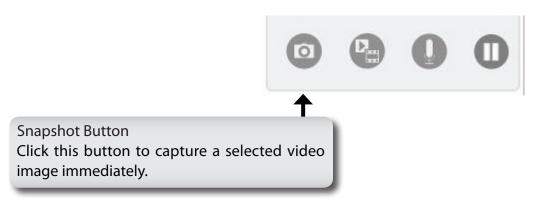
Select a split-screen display layout by clicking on the desired layout icon. The system provides 4, 6, 9, 10, 16 and 32 split screen modes. To switch to single camera display, double-click the camera's image. To return to the previous configuration screen, press the Esc key or double-click on the screen again.



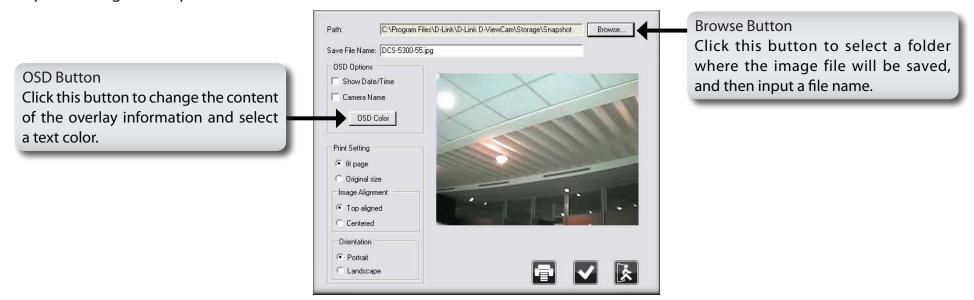
Rotation

Control the rotation of the video monitoring screen. The live video display will start to rotate from the upper left to the lower right. Click the rotation icon to start or stop the rotation. If the number of cameras is more than the current split screen configuration, the main display window will arrange in multiple pages. You can access all the cameras by using the paging mechanism.

Manual Control Area Snapshot Button



When a camera is selected and live video image can be seen in the main display or preview area, you can take a snapshot using the snapshot button. When this button is pressed, the system will show a dialogue window with the snapshot image and options as shown below:



Note: You can save the file in a different format by typing the file format after the file name, such as: .png, .gif, .jpg.

Start/Stop Manual Recording Button



When performing a manual recording, the video window will be marked red and the recording time information will be displayed red in the lower right hand corner of the screen.



If you want to manually record multiple videos, follow these three steps below.

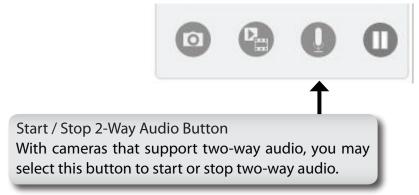
- 1. Select a group of live videos by pressing and holding the Ctrl key on the keyboard, and then click on all of the camera images that you want recorded in the video display area.
- 2. To start recording, click the Start Manual Recording button.
- 3. To stop multiple recordings, select the cameras you wish to stop recording by repeating step 1, and then click the Manual Record button to stop recording. All video data is recorded in the QVGA or CIF format. The frame rate depends on the camera that you select and should be configured via the camera's web interface.

Start/Stop 2-Way Audio Button

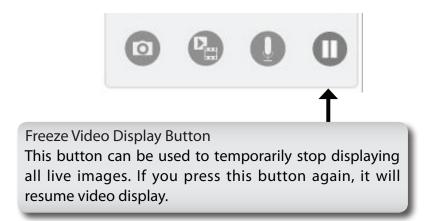
For camera(s) that support audio, D-ViewCam provides two-way audio features, which enable a user to start an audio conversation with another person near the camera(s).

To start an audio conversation, first select a camera and then press the Start/Stop 2-Way Audio button. You can press the button again to stop the function.

Note: If the two-way audio mode is on and you select another camera, the audio conversation session will automatically terminate.



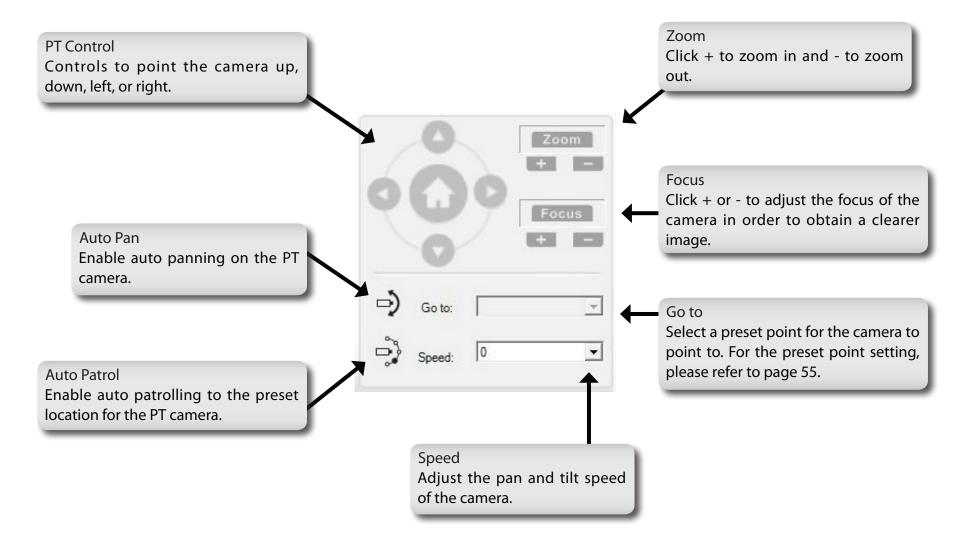
Freeze Video Display Button



Note: This feature only freezes the live image display; all other functions such as event and recording are not affected.

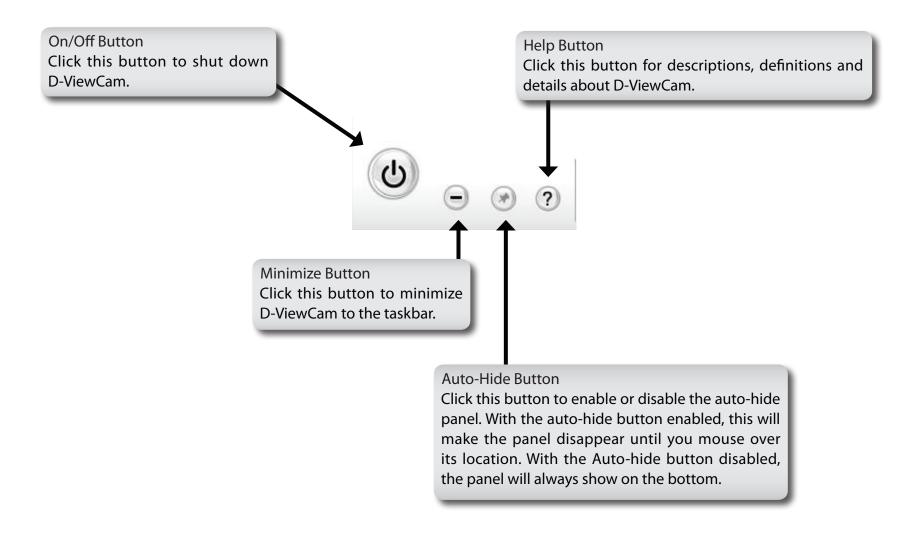
PTZF Control Area

PTZF control area provides pan, tilt, zoom and focus functions to control the movement of PTZF capable cameras.



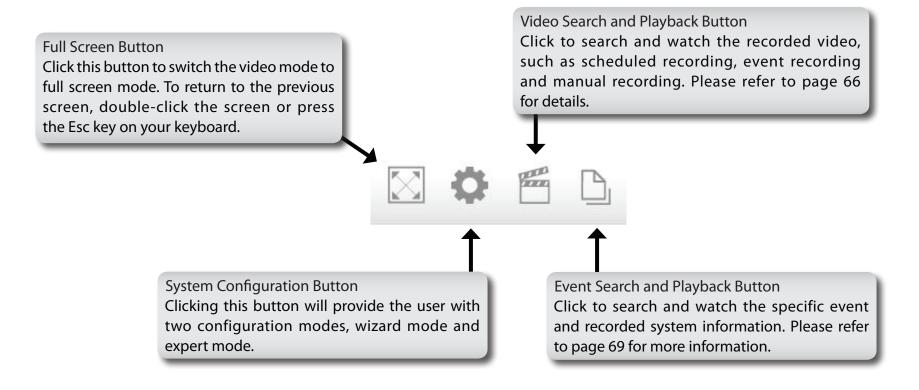
Program Control Area

This area provides you 4 buttons to control the program or obtain help information.

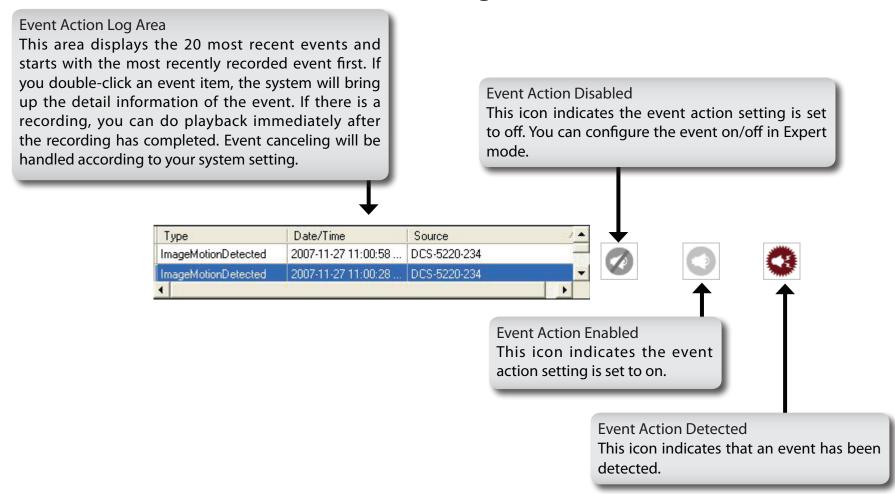


Setting and Search Area

This area enables you to view the video in full screen mode by clicking the first button. The second button enables you to configure the system in two different modes. Last, the third and fourth button enable you to search and playback the video(s) and event(s).



Event Action Log Area



When event action is enabled, event canceling will be handled according to your system setting:

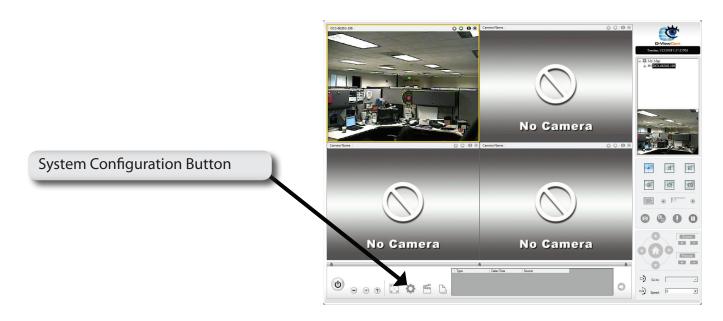
- Automatic event canceling the cancel event button will be flashing for a pre-determined period of time and then the event will automatically cancel.
- Manual event canceling the cancel event button will keep flashing until it is clicked. Click the cancel event button and then the system will cancel all active events

Configuring D-ViewCam

The D-ViewCam application is designed so that it can easily set up a simple home and/or small business surveillance application. It provides two modes of configuration, wizard mode and expert mode. Wizard mode is designed for basic configuration, including Add Camera, System Backup and Quick Recording Settings. Expert mode is for more advanced use with comprehensive configuration options. The user can switch between these two modes at any time.

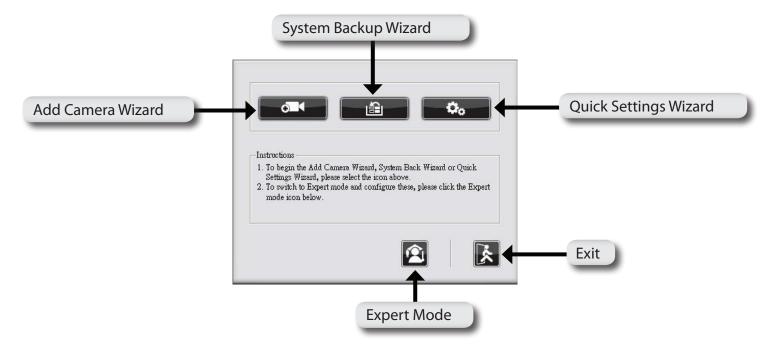
To configure D-ViewCam, follow the instructions below:

- **Step 1** Move your mouse pointer to the bottom of the screen if the Setting and Search Area is hidden.
- **Step 2 -** The Setting and Search Area will raise automatically.
- **Step 3 -** Click the System Configuration button. For Wizard Mode, please refer to page 28. For Expert Mode, please refer to page 34.



Wizard Mode

Wizard mode configuration is designed to allow a user to quickly set up a D-ViewCam system with just a few simple clicks. This mode is recommended to quickly set up a working D-ViewCam system. You can use expert mode configuration to fine-tune the system at a later time. Click a button of the wizard you wish to begin.

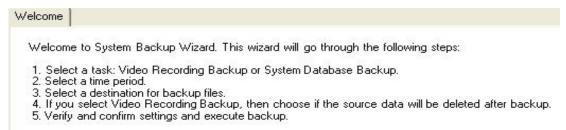


Add Camera Wizard

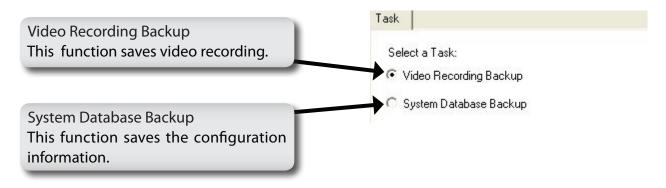
To add a new IP camera, please refer to page 11.

System Backup Wizard

There are two system backup types, Video Recording Backup and System Database Backup. Click Next to continue.



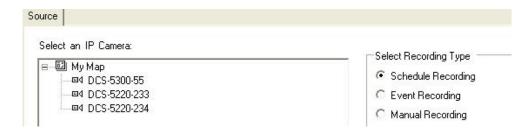
Select a task and click Next to continue.



Video Recording Backup

Follow the steps below for Video Recording backup. Refer to page 45 to verify that your video recording path is correct.

Select an IP camera from the tree structure and select a recording type. Click Next to continue.



Choose a start and end date and time. Click Next to continue.



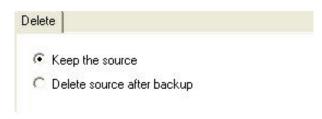
Click Browse to select a directory to save the backup files.



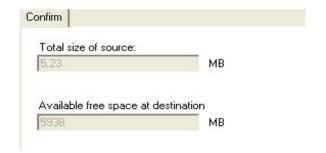
You can make a new folder by clicking Make New Folder or you can select an existing folder and click OK to continue.



When the backup is complete, you can choose to Keep the source or Delete the source after backup. Click Next to continue.



Verify that the information is correct and click Yes to start the backup process.



When backup is complete, click OK to return to the system configuration screen.

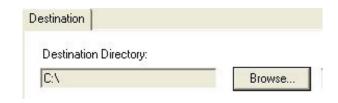


System Database Backup

Follow the steps below for the System Database backup.

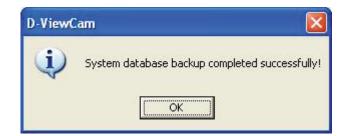
Click Browse to select a directory to save the backup files. Click Next to continue.

You can make a new folder by clicking Make New Folder or you can select an existing folder and click OK to continue.





When backup is complete, click OK to return to the system configuration screen.



Quick Settings

This setting will apply to all cameras. For user convenience, the system provides four different recording methods for a user to choose.

24/7 Continuous Recording - This setting will record all IP cameras 24 hours a day and 7 days a week continuously. **Note:** This recording arrangement will need larger disk space.

24/7 Economic Recording - This setting will record anytime when motion is detected. **Note:** This setting may consume a large amount of your CPU resources.

Office Hours Only - The scheduled recording time is Monday through Friday from 8:00 AM to 6:00 PM and will start recording when motion is detected.

Non-Office Hours Only - The scheduled recording time is Monday through Friday from 6:00 PM to 8:00 AM and will start recording when motion is detected.



Notes:

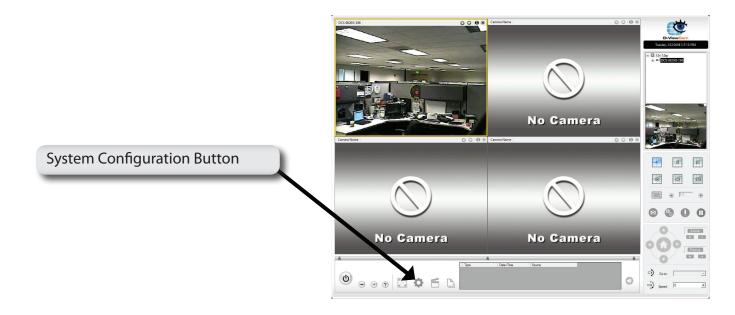
If these quick settings do not meet your recording schedule, you may set up a custom schedule for each IP camera. Please refer to page 61 for more information.

Excluding 24/7 Continuous Recording, other schedule recording types can be activated ONLY when the image motion detection window is created on your cameras.

Expert Mode

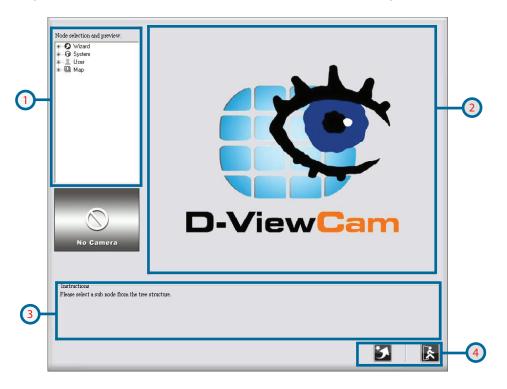
Expert mode is similar to wizard mode. These two modes differ in the amount of available settings. Wizard mode offers minimal amount of settings, while expert mode provides comprehensive options and settings that you can modify. To access Expert Mode, follow the steps below:

- **Step 1** Move your mouse pointer to the bottom of the screen if the Setting and Search Area is hidden.
- **Step 2 -** The Setting and Search Area will appear automatically.
- **Step 3 -** Click the System Configuration button and select the Expert Mode button. The system will bring up the expert mode configuration panel.



Main Screen Interface

Expert mode is for more advanced use with comprehensive configuration options.



Area No.	Area Name	Description	
1	Node selection and preview Area	 Wizard: Provides access to the Wizard functions System: This setting is more concerned with the whole system management, such as Event Action, Storage Setting, Email Server Setting and Database Backup User: The system only provides five user accounts, one administrator account and four user accounts. Map: The default map is called My Map, you can build your own maps and assign devices to any map as you wish. 	
2	Operation Area	Display system configuration UI according to function selected in Area 1	
3	Instruction Area	Display help information for operations in Area 2	
4	Button Area	Change to "Wizard Mode" button, "Save" and "Exit" button	

Follow these steps to configure Expert Mode.

STEP 1	STEP 2	STEP 3
Select a node in Area 1	Area 2 will change according	Use button in Area 4 to activate
	your selection in Area 1	the setting

Wizard

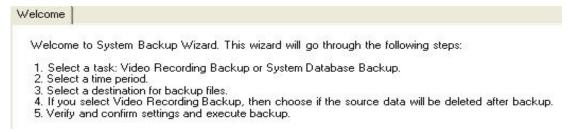
This wizard is the same as Wizard Mode (explained previously), which is designed to allow a user to quickly set up a D-ViewCam system with few simple clicks. This wizard is recommended to quickly set up a working D-ViewCam system. Click on the button of the wizard you wish to begin.

Add Camera Wizard

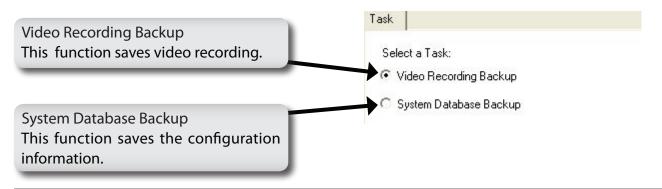
To add a new IP camera, please refer to page 11.

System Backup Wizard

There are two system backup types, Video Recording Backup and System Database Backup. Click Next to continue.



Select a task and click Next to continue.



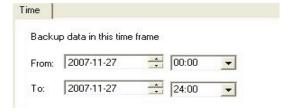
Video Recording Backup

Follow the steps below for Video Recording backup. Refer to page 45 to verify that your video recording path is correct.

Select an IP camera from the tree structure and select a recording type. Click Next to continue.



Choose a start and end date and time. Click Next to continue.



Click Browse to select a directory to save the backup files.



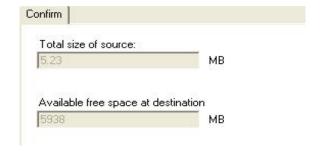
You can make a new folder by clicking Make New Folder or you can select an existing folder and click OK to continue.



When the backup is complete, you can choose to Keep the source or Delete the source after backup. Click Next to continue.



Verify that the information is correct and click Yes to start the backup process.



When backup is complete, click OK to return to the system configuration screen.



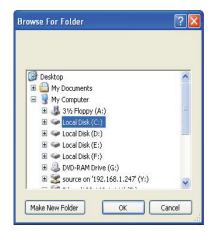
System Database Backup

Follow the steps below for System Database backup.

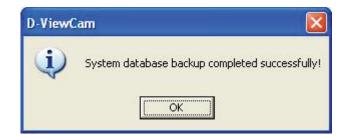
Click Browse to select a directory to save the backup files. Click Next to continue.

You can make a new folder by clicking Make New Folder or you can select an existing folder and click OK to continue.





When backup is complete, click OK to return to the system configuration screen.



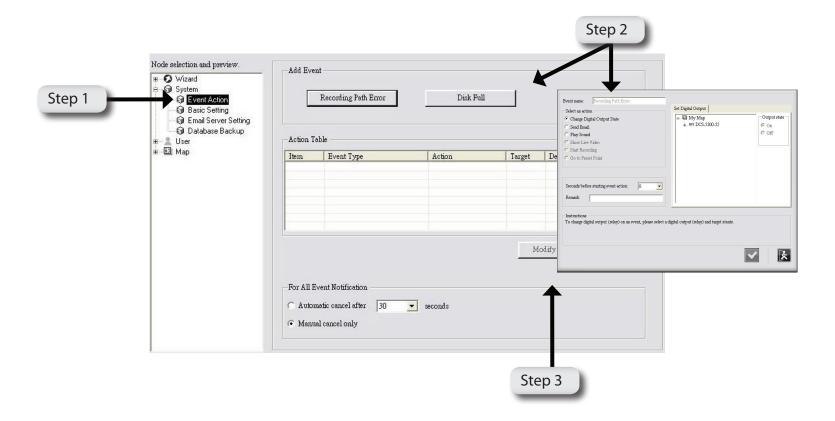
System

In system configuration, you can set the Event Action, Storage Setting, E-mail Server Setting and Database Backup.

Event Action

Follow these steps to set event actions for Recording Path Error or Disk Full system events. For device event actions, please refer to page 57.

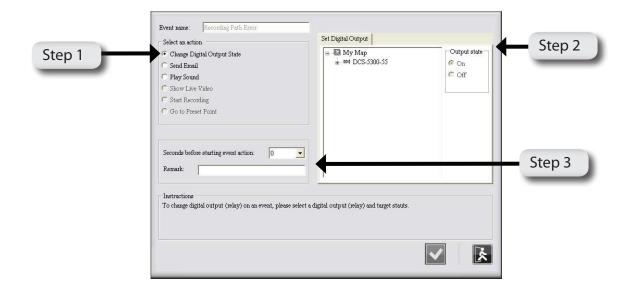
- **Step 1 -** Select the Event Action from the Node selection and preview area.
- **Step 2 -** Choose an event from Add Event. The system will show the Event Action List Table window. For help with the settings, please refer to pages 42, 43, and 44.
- **Step 3 -** After you have finished setting the event action, the action's configuration will be displayed on the Action Table. You can use the Modify or Remove button to modify or remove the settings.



Event Action List Table Change Digital Output State

This setting will trigger the devices that connect to the system, such as alarm lights and sirens. When an event occurs, you can change the device status (available for digital output only). Follow the steps below to configure the digital output state.

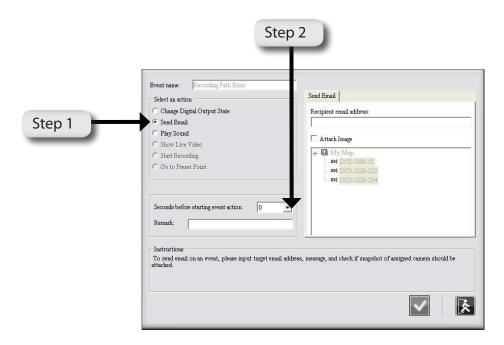
- **Step 1 -** Select the action Change Digital Output State and set the digital output.
- **Step 2 -** Change the output state to on or off.
- **Step 3 -** Seconds before starting event action means the delayed time before the event action is executed. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired. Click K to activate the setting.



Send E-mail

This setting will send email to the specified accounts indicating the type of event, as well as attaching an image taken while the event occurred. Follow the steps below to configure Send Email.

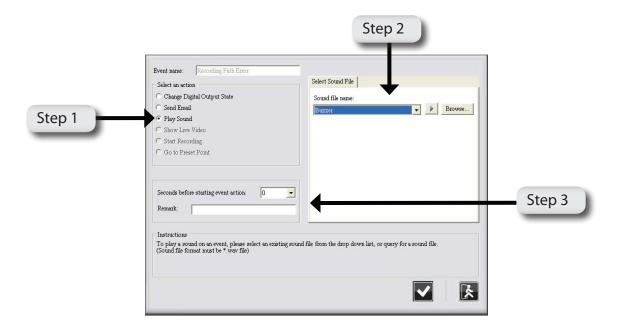
- **Step 1 -** Select the action Send Email and enter the email address. Check the Attach image if you want the system to send the image(s) taken from the selected IP camera.
- **Step 2 -** Seconds before starting event action means the delayed time before the event action is executed. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired. Click K to activate this setting.



Play Sound

This setting will play a sound for the specified accounts indicating the type of event when the event occurred. Follow the steps below to configure Play Sound.

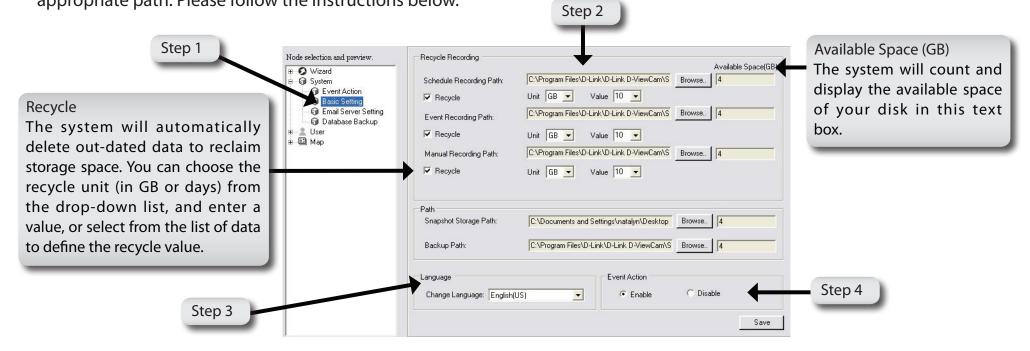
- **Step 1 -** Select the action Play Sound.
- **Step 2 -** You can select a sound from the drop-down menu or you can select your own sound file by clicking the Browse button and choosing a Wave file (.wav). You can test the sound file by clicking the Play Sound button.
- **Step 3 -** Seconds before starting event action means the delayed time before the event action is executed. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired. Click K to activate the setting.



Basic Setting

- **Step 1** Select Basic Setting from the tree menu.
- **Step 2 -** Assign recording paths for schedule recording, event recording, manual recording, snapshot recording and backup.
- **Step 3** You can change the system language to English, Chinese Traditional or Chinese Simplified.
- **Step 4** Enable or Disable the event action function. Click Save to save your settings.

The system will detect whether the assigned recording path exists. If not, the system will inform you to change it to an appropriate path. Please follow the instructions below.



Note: Please configure the recording path for the scheduled event and manual recording options differently from D-ViewCam.

Note: It is recommended to leave enough work space (around one hour of schedule recording space) for the temporary file created by the schedule and event recording.

Note: D-ViewCam keeps the live video alive whether or not the video is being recorded.

- 1. This feature provides continuous video display, even if an external storage (such as NAS) stops working.
- 2. D-ViewCam won't check the available recording space when an external storage (such as NAS) stops working.

Email Server Setting

This function is used to configure your email sever settings, which will be used to send event notifications.

- **Step 1** Select Email Server Setting from the tree menu.
- **Step 2 -** Input the email server information.

Server Name/IP: Input your email server name of your email provider. Example: mail.test.com or an IP address, such as 192.168.1.1.

Username: Input your email account username.

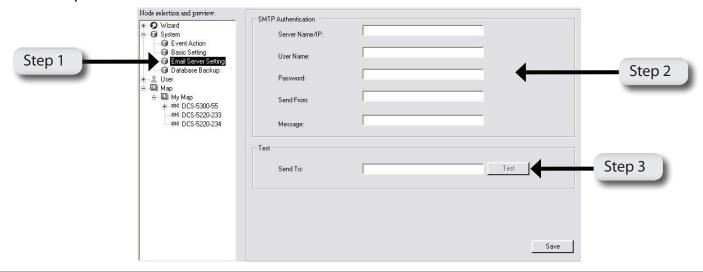
Password: Input your email account password.

Send From: Insert sender email address. Example: sender@mail.test.com

Message Subject: Insert a subject for your email message. This message will send to your email once an event

is detected. Example: An alarm occurs in the kitchen.

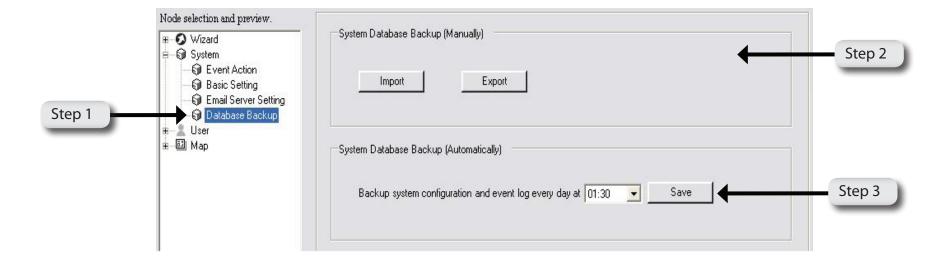
Step 3 - Click the Test button to test the setting, which will send an email using the current setting. Then click Save to activate this setup.



Database Backup

The database backup function saves all system settings and the event log. You can set a time when the system will execute a database backup automatically on a daily basis. Follow the steps below.

- **Step 1** Select Database Backup from the tree menu.
- **Step 2 -** You can click Import to restore predefined system settings, or Export to save or backup your current setting for future use.
- **Step 3 -** Set the time by using the drop-down menu, for when the system will backup the system data on a daily basis. Click Save to activate this setup.



User

D-ViewCam provides five user accounts, one administrator account and four normal user accounts.

Administrator

Only an administrator can modify these settings. Follow the steps below to set up an administrator's account.

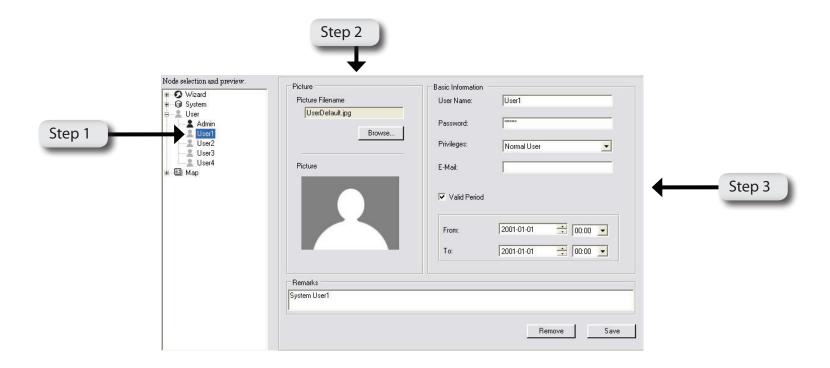
- **Step 1** Select Administrator from the tree structured menu.
- **Step 2 -** You can click the Browse button to upload a picture for the administrator.
- **Step 3** Enter or change the user's Basic Information. Then click Save to activate this setup.



Normal User

The administrator may manage up to four normal user accounts. You can modify or remove all these accounts but can not add more than four accounts. To modify the user(s) accounts, follow the steps below.

- **Step 1** Select User1 from the tree structured menu.
- **Step 2 -** You can upload a picture for the user, as well as enter or modify the user's Basic Information and privilege setting here. A normal user can be administrator if he/she receives administrator's privilege. You can adjust the user's valid time and then click Save to activate this setup.

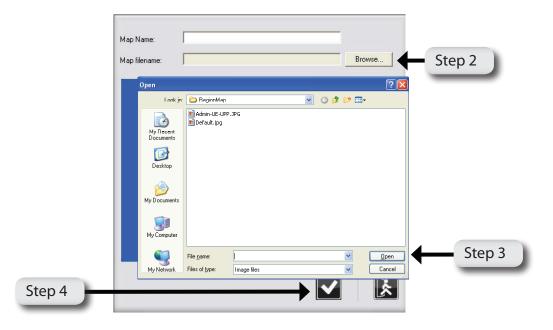


My Map

My Map is the default map for the system. You can build your own map(s) by adding it into My Map, and assign it to your device(s). Follow below steps to add a map.

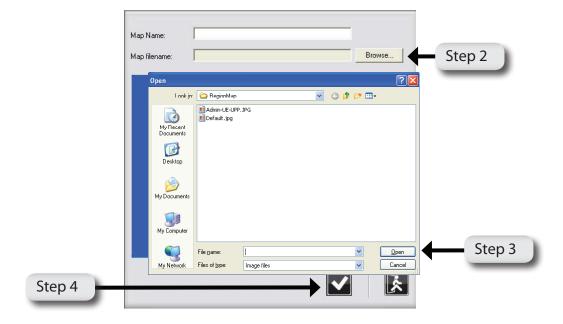
Add a Map

- Step 1 Click the dd Map button.
- Step 2 Input a map name or browse to locate the desired map filename.
- **Step 3 -** Select an image file and click Open.
- **Step 4 -** Click OK to save the setting. The new map will be added to the tree menu on the left.



Modify Map

- Step 1 Click the
- Modify Map button
- **Step 2** Click Browse to locate the desired image file or input the image filename directly.
- **Step 3 -** Select an image file and click Open.
- **Step 4** Click DK to save the setting. The modified map will be updated to the tree menu on the left.

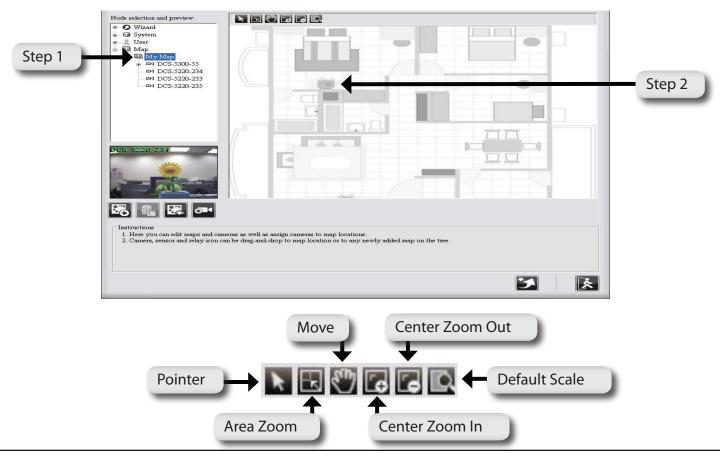


Placing Device to eMap

- **Step 1** Select the My Map icon at the Node Selection and Preview Area. The selected eMap will be displayed in the Map Display area.
- **Step 2 -** Drag the device icon (of the selected camera) from the Node Selection and Preview Area, and then drop it onto the eMap Display Area. Right click the device icon, a pop-up window will indicate the direction where the IP camera is facing.

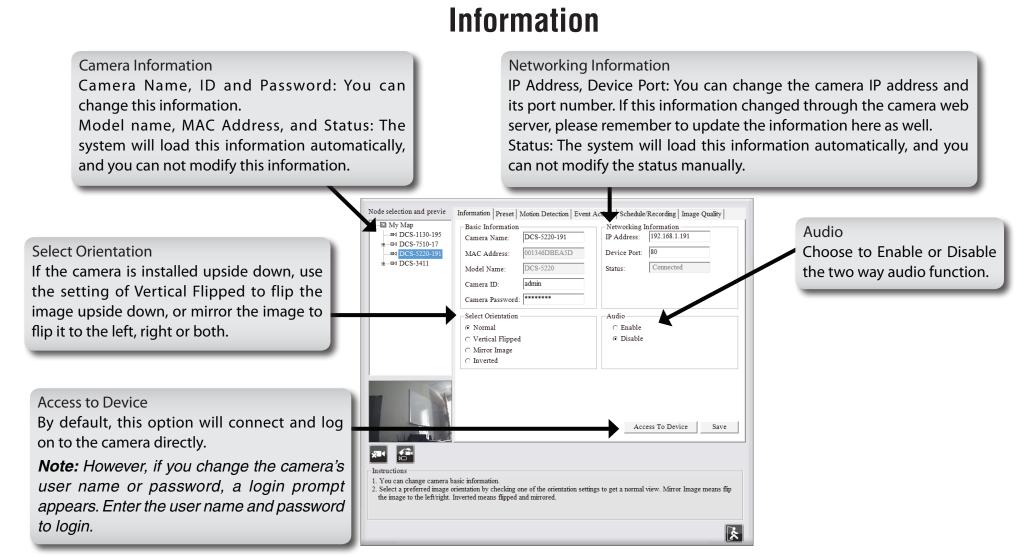
Double-click the device icon placed in the e-Map interface to bring up the device web server.

Note: All devices can be deleted by right clicking the device icon in the eMap interface and then by clicking the **Delete** button.



Device Setting

Device setting can be configured in Expert Mode. If the device is disconnected, the device settings such as preset, motion detection, and image quality will be disabled. The following section will explain the details of device setting.

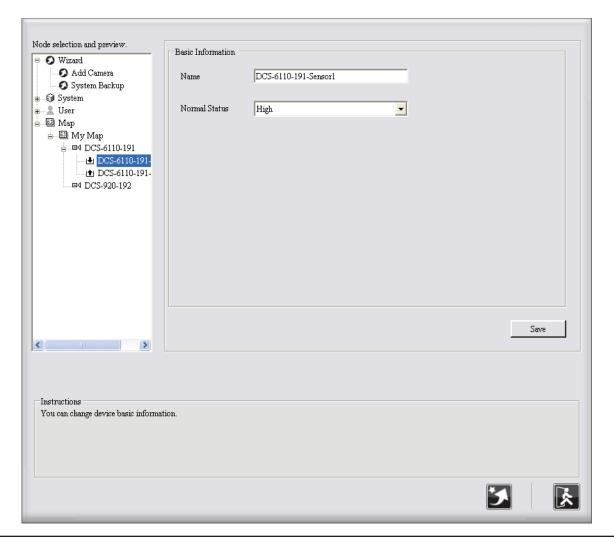


Note: If you change the device information, it would result in short-term interruption of schedule recording.

DI/DO Setting

To configure the camera's sensor and relay, expand the camera node from the Node selection and preview, then select the Sensor or Relay node.

You can re-name the sensor/relay and define the normal status for the Sensor or Relay on the sensor/relay page. The Sensor and Relay will be triggered when the status is different from its normal state.

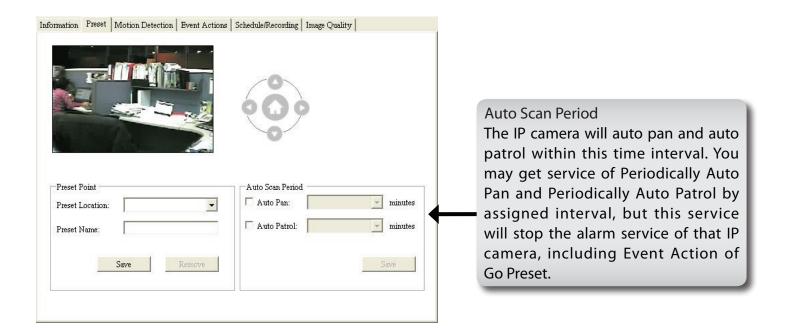


Preset Point

Preset Location specifies where the IP camera should point. Preset Name specifies the position name of the pointer. Follow the step below to set the Preset Point.

- **Step 1** Use the PT Control interface to adjust the direction of the IP camera. Choose a number in the Preset Location field, and enter a name for this pointer in the Preset Name text box.
- **Step 2 -** Click Save and the newly added preset name will show up in the Preset Location field (you can also add other preset points in the same way).

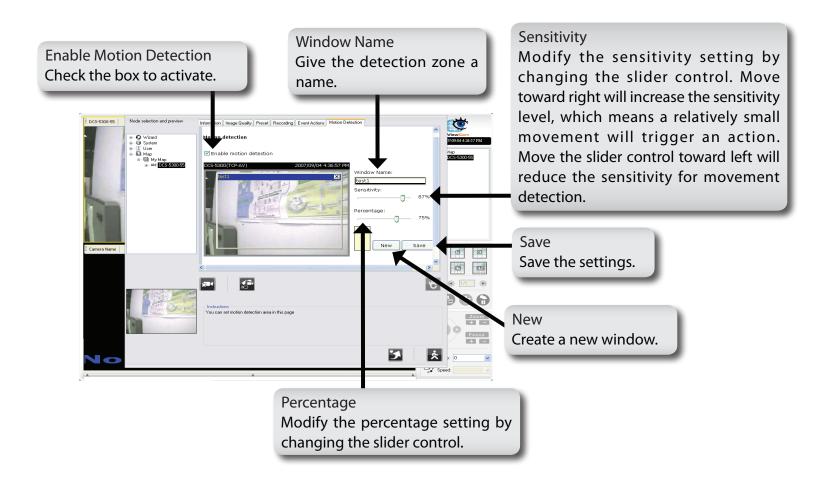
Note: To remove a preset, select the Preset Location and click **Remove**.



Motion Detection

To detect specific area motion detection, you have to define at least one detection zone. Follow the steps below.

- **Step 1** Click the New button and a small window will appear on the screen, you can drag the mouse to draw a detection zone. You may define more than one zone on the screen by repeating the same process.
- **Step 2 -** Adjust the window to define the detection zone.
- **Step 3** Input a window name, then click the Save button.

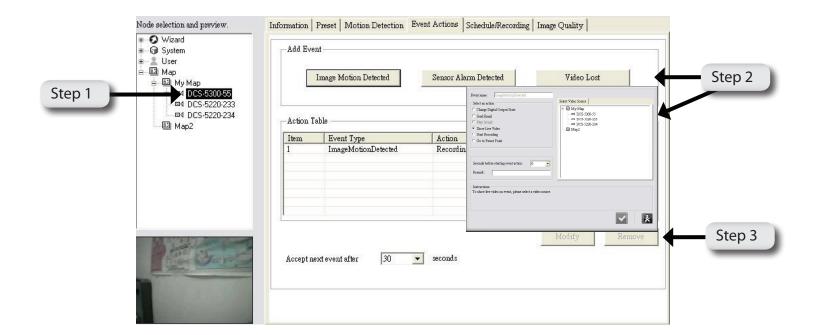


Event Actions

These event actions are more related to the device events, such as Image Motion Detected, Sensor Alarm Detected, and Video Lost. For system event action setting, please refer to page 40. Follow the steps below.

- **Step 1** Select the Device Icon from the Node selection and preview area.
- **Step 2 -** Choose an event from Add Event. The system will show the Set Event Action window. For help with the settings, please may refer to pages 42, 43, 44, 58, 59 and 60.
- **Step 3** After finishing setting the Event Action, the action's configuration will show on the Action Table. You can use the Modify and Remove buttons to modify or remove the settings.

Note: Accept next event after (seconds) means the time interval between the first event and next event that can be processed. Any event(s) that occurs during the interval will be ignored.



Event Action List Table

Show Live Video

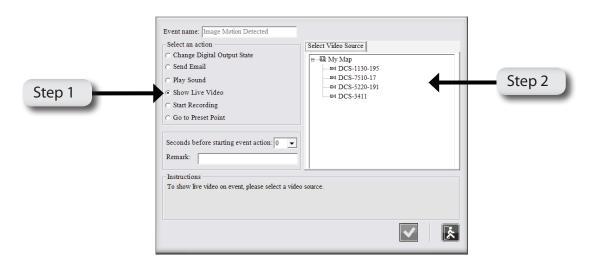
Follow the steps below to show live video.

- **Step 1** Select Show Live Video action.
- **Step 2** Select a video source. Then, Click



- 1. If only one event is triggered, the camera images will be displayed on the four split screens. They are arranged starting from up-left to up-right, low-left, and low-right.
- 2. If multiple events are triggered, live video will be displayed accordingly. If more than four cameras are triggered, the live video will be displayed rotational.

Note: Seconds before starting event action means the delayed time before executing the event action. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired.



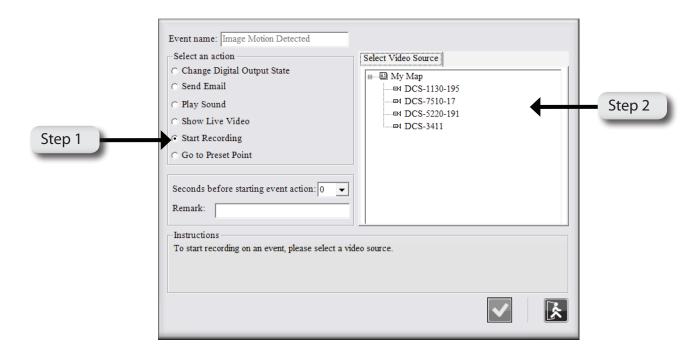
Start Recording

The event recording of a breached camera; event recording time is set by number of seconds.

- **Step 1** Select the Start Recording action.
- **Step 2** Select a video source. Click



Note: Seconds before starting event action means the delayed time before executing the event action. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired.

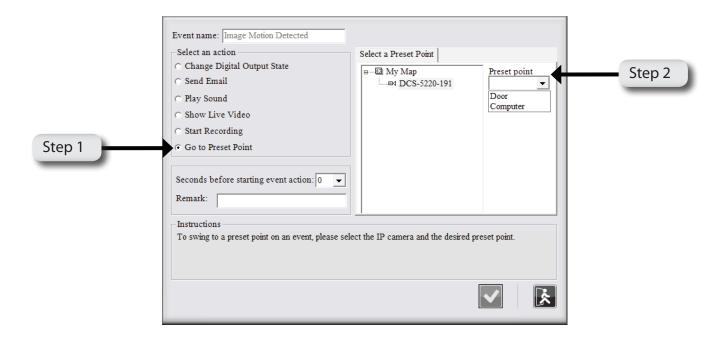


Go to Preset Point

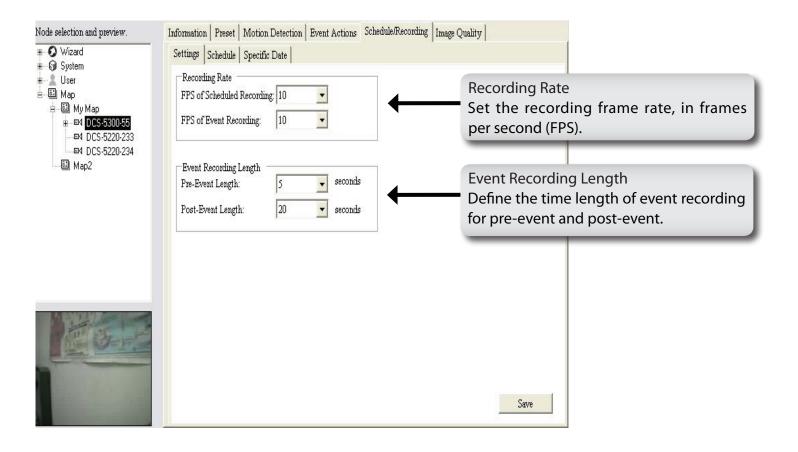
Turn to the preset location upon the motion triggering.

- **Step 1** Select the Go to Preset Point action.
- **Step 2** Select from the Preset Point field. When event is detected, the system will turn PT camera to the specified preset location. Then, click K to activate this setup.

Note: Seconds before starting event action means the delayed time before executing the event action. If you prefer NOT to start the event action immediately, you can set a wait time so that the action will start after the wait time has expired.



Schedule / Recording (Settings)



Schedule / Recording (Schedule)

Follow the steps below to set the schedule.

Step 1 - Select Set Scheduled Recording to schedule recording, or select Set Scheduled Event to schedule event recording.

Set Scheduled Recording

The system provides four Scheduled Recording types:

Disable: No video will be recorded for this schedule.

24/7: Video will always be recorded.

Select: Video will be recorded according to your schedule.

Economic: Video will only be recorded when motion is detected.

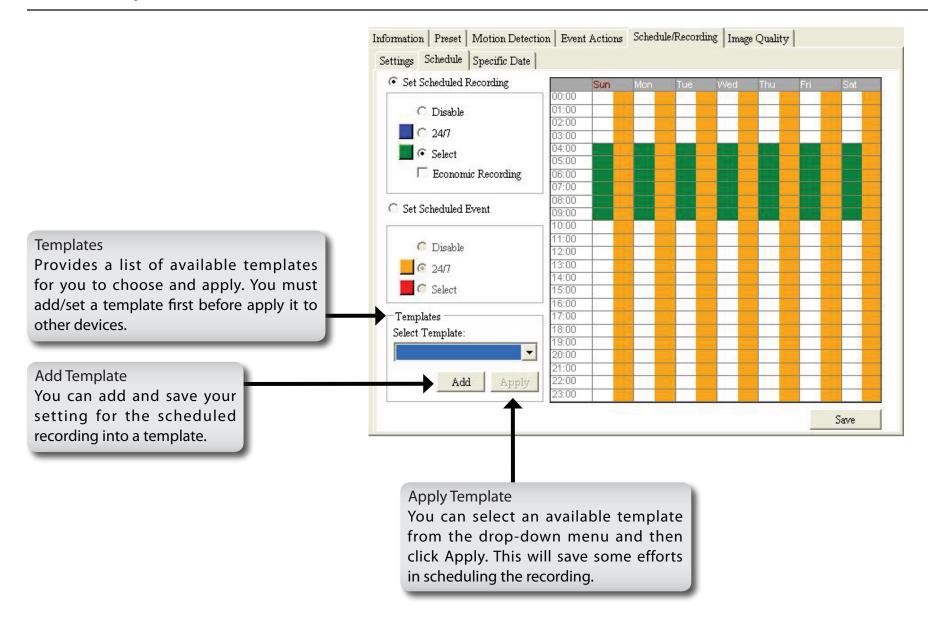
Set Scheduled Event Setting

Disable: When an event occurs, no video will be recorded.

24/7: When an event occurs, the video will always be recorded.

Select: When an event occurs, the video will be recorded according to your schedule.

Step 2 - Select the time or period when you want to schedule the recording. The activated block will be colored. To cancel or modify a schedule setting, click the colored block to deactivate it.



Schedule / Recording (Specific Date)

Follow the steps below to set a specific date.

- **Step 1** Select the start date and end date.
- **Step 2** Put a remark for the specific date.
- **Step 3** Click Add to add your specific date to the table on the right.
- **Step 4** If you want to modify the specific date, click a specific date from the table, then modify the date and remarks, and click Modify.
- **Step 5** Click Import/Export button to load or output the specific date.
- **Step 6** Select a specific date and click Remove to delete the specific date.

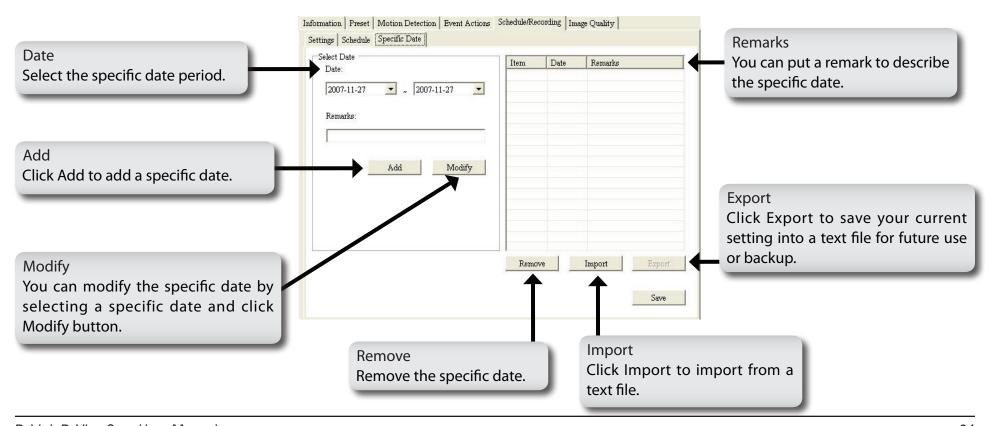
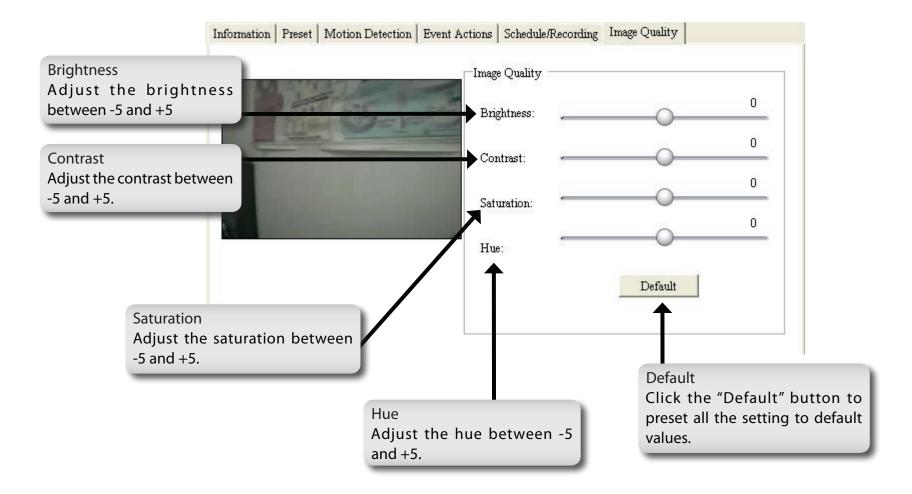


Image Quality

Below is a description of the Image Quality screen.

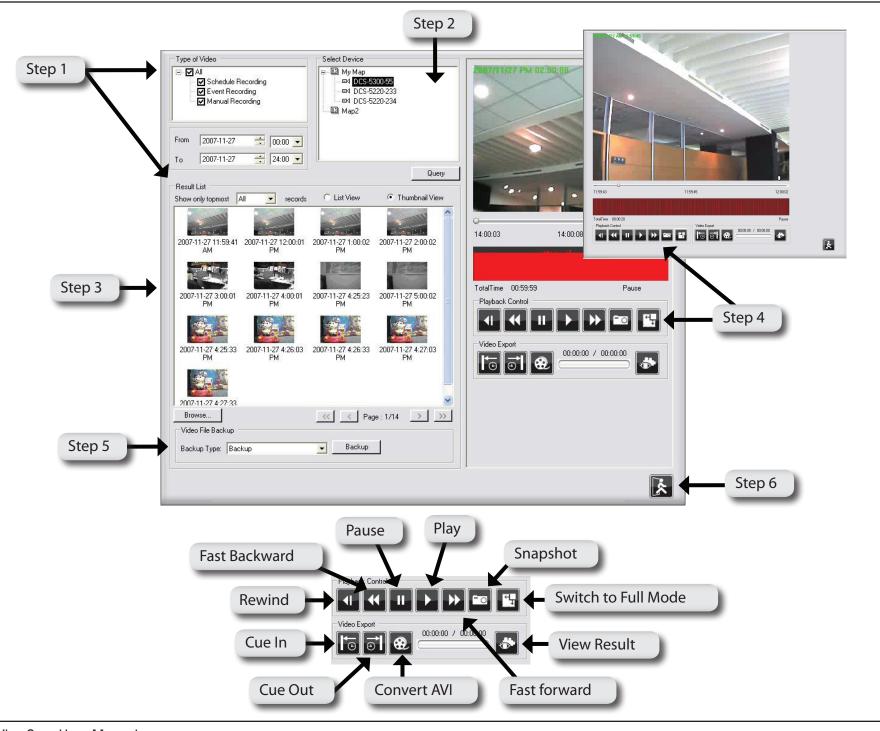


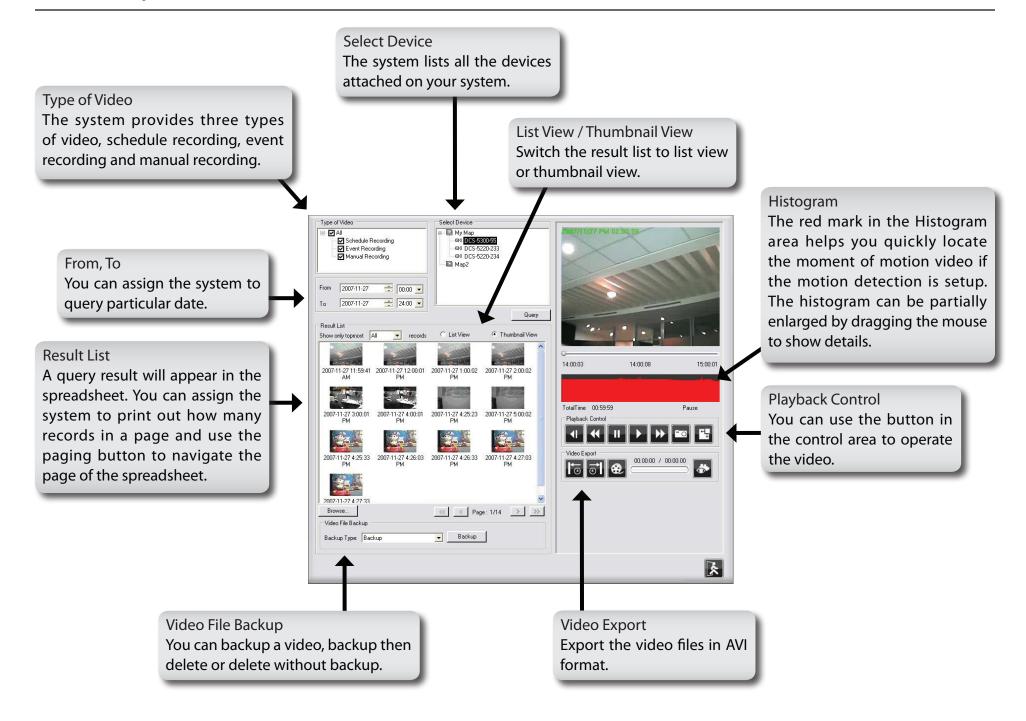
Playback

Video Search and Playback Management

The Video search and playback button allows you to playback recorded video through the schedule recording, event recording, manual recording, or all recordings. This function also provides additional features for exporting video files into AVI format. The playback speed can be specified with the control bar. Follow the steps below.

- **Step 1** Select the video type, start and end date.
- **Step 2** Select the device type, and then click Query.
- **Step 3** Double-click the file you want to playback from the result list.
- **Step 4** You can backup the video files by clicking the Backup button.
- **Step 5** You can use the buttons in the Playback Control area to playback the video. The system allows you to rewind, fast backward, stop/pause, fast-forward, snapshot an image, and play the video in full screen mode by clicking the Switch to full mode button (you may click the Switch to default mode to go back to video search and playback page.)
- **Step 6** Click Close button to return to the main screen.

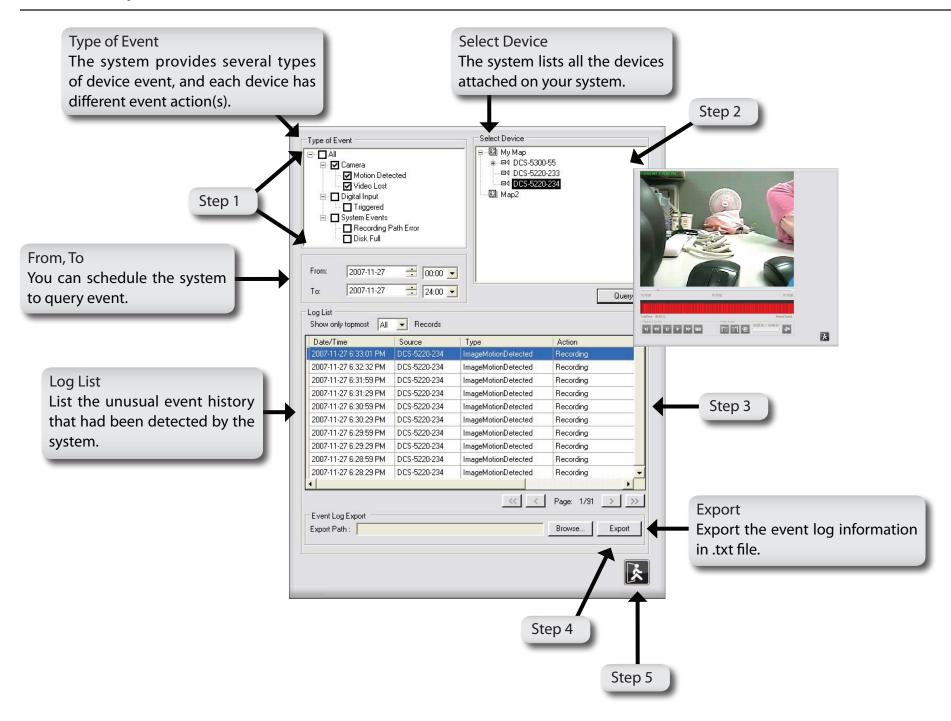




Event Search and Playback Management

The Event search and playback button allows you to select and query both the event(s) and camera(s), and playback the event(s) which has been recorded by the system. This function also provides additional features for exporting video files in AVI format, and exporting the event log information (Date/Time, Source, Type, Action, Relation Source and Context information) in .txt file. The playback speed can be specified with the playback control bar.

- **Step 1** Select the event type, start and end date.
- **Step 2** Select device type, and then click Query.
- **Step 3** If the result list has a recording file, double-click the list, then the system will pop up a video display page and playback the video. Click the Close button to return to the event search and playback page.
- **Step 4** You can export the log lists by clicking the Export button.
- **Step 5** Click Close button to return to main screen.



Frequently Asked Questions D-Link D-ViewCam Features

1. What is the difference between D-Link D-ViewCam and the traditional surveillance system?

D-Link D-ViewCam records video in MJPEG and MPEG4 formats, stores high quality image data on computer hard disks, and provides easy query and review of the stored video. Traditional surveillance systems use videotape for storage and review, which is hard to managed, time consuming and the recorded video will degrade over a period of time or usage.

2. Why use the D-Link D-ViewCam Intelligent Solution?

D-Link D-ViewCam is the bundled video surveillance system software that provides advanced security monitoring and device management functions to use with D-Link Internet cameras. This software uses IP technology to provide comprehensive management functions such as system controls, live video feeds and archived recordings.

3. We have security guards on duty 24 hours a day, 7 days a week. Do we still need D-Link D-ViewCam?

Security guards and camera surveillance systems can complement each other. Your security guards can catch thieves red-handed but not in other circumstances, such as if they are preoccupied with another task. D-Link's D-ViewCam can always automatically record events for review or to be used as evidence. Your surveillance cameras can connect to any I/O devices, and D-ViewCam can discreetly and timely alert your security guards of inadvertent events, allowing them to react to the situation in an effective manner.

4. What kind of network does D-Link D-ViewCam run on?

D-Link D-ViewCam runs on standard TCP/IP networks, such as a local area network (LAN), and over the Internet. If using Internet, a broadband DSL or cable modem connection is recommended to ensure good quality of video image is being transferred over the Internet.

5. How are multiple camera views displayed on the screen?

If you deploy several cameras and they are all displaying video at the same time, you have several options to arrange the display of these videos on your computer screen. One option is to reserve a major part of the screen to display the video from a single camera. Another option is to split the screen to show videos from multiple cameras. To switch the display from one camera to another, you can either manually select a camera, or have the system automatically display videos from all cameras in turn, called auto rotation.

6. Does D-Link D-ViewCam support cameras that have motion detection capability?

Yes. If the camera has motion detection function, D-ViewCam will take advantage of that. When the camera does not have motion detection capability, D-ViewCam will perform software motion detection for it, at the cost of system performance.

7. How do I estimate an adequate disk space to store the recorded video?

The Disk Space required can be calculated with these two formulas:

- 1. For MJPEG cameras: Frame Size x Frame per Second x Total Second, or
- 2. For MPEG4 cameras: Bit rate / 8 x Total second.

For example:

MJPEG cameras: Recording at medium quality CIF (10 Kbytes/frame) at 30 FPS for a week requires 173G Bytes/camera

MPEG4 cameras: Recording with bit rate at 64kbps (low quality CIF) for a week = 4.6 G Bytes/camera

Note: The data revealed here is only for reference. The real recording capacity depends on the view and environment.

8. Do I need a very powerful computer to run D-Link D-ViewCam?

Please refer to the System Requirements table on page 4. To monitor more than 16 cameras simultaneously, the quality of the live video display may depend on your hardware specification.

Note: If a mega pixel camera is used with the D-ViewCam application, the minimum system requirement should be raised to CPU: Intel P-4 3.4GhZ or above with 1GB of memory due to the resources required to process and store large amounts of image data.

9. Please describe the privilege-based access of D-Link D-ViewCam.

D-Link D-ViewCam uses a simple privilege control scheme to let users access the system and use different functions. A user can have administration privilege or normal user privilege.

10. Windows Vista operating system's user account control feature may interfere with the normal operation of the D-ViewCam application.

For Windows Vista users: please go to User Accounts and Family Safety > User Accounts > Turn User Account Control on or off, then uncheck the "Use User Account Control (UAC) to help protect your computer" checkbox. Restart your computer to validate the setting.

For additional information of User Account Control, please go to http://www.microsoft.com/windows/products/windowsvista/features/details/useraccountcontrol.mspx.

D-Link D-ViewCam Operation Video Image Configuration

1. How are video images stored?

Video images are compressed into MJPEG or MPEG4 format, and then stored on your computer hard disk or a designated network storage device.

2. What frame sizes does D-Link D-ViewCam use?

For MJPEG, each frame is approximately 14 to 15KB each. However, it also depends on your camera's specifications and setting.

3. What should I do when saving image configuration or image quality and the system pops up "Parameter setup error" message?

One of the following might cause this problem:

- 1. Camera is disconnected.
- 2. Network is unstable.
- 3. Firewall.

If you install D-ViewCam on a PC with firewall software running, the firewall software may reject some Internet packets, which are considered insecure. You need to turn off Internet Security or disable Personal Firewall in order to save image configure/ image quality of your camera. Remember to turn on Internet Security or enable Personal Firewall later to secure your system.

4. Can we change the FPS (frame per second) rate of a camera?

FPS is the number of image frames that a camera shoots in a video operation. For MJPEG file, you can set the FPS rate according to your requirement.

Note: Not all setting of your camera is available in D-ViewCam. The FPS rate that you set cannot exceed the maximum FPS rate of your camera. For MPEG4 format, you can change bit rate instead of FPS. Please make detail configurations on camera's web interface.

5. Which format could my recorded video file covert into?

D-Link D-ViewCam can convert the recorded video into AVI format with the available codec in your operating system.

Video Display

6. What should I do if there is no video display of the camera after I have just added it to D-ViewCam?

Please check to see if you correctly typed in the IP address of the camera. If you changed the default user name and password of the camera, you must input that information in D-ViewCam in Expert mode. The changed value will take effect after you re-login to D-ViewCam. Please refer to page 48 for changing the camera ID and Password.

7. Why isn't video displayed from the connected camera(s)?

The possible root causes:

- 1. The network is unstable
- 2. The workload is too heavy for your computer to handle.
- 3. Changing the camera's video parameters (by using the camera web server) in the middle of a D-ViewCam operation, can cause D-ViewCam to fail.

8. How do I record video in D-ViewCam?

D-Link D-ViewCam provides four different recording methods:

- 1. Manual recording (capture of video feed at the moment you command the system to).
- 2. Schedule recording (automatic recording according to the time periods that you set).
- 3. Event recording (automatic recording according to the event settings).
- 4. Motion detection recording in scheduled time. In the time periods you set, start recording only when motion is detected. This can make disk usage more economical.

9. Can I change the audio format at the camera web server while using two-way audio function?

No. Please make sure to complete all camera configurations at the camera web server before using the D-ViewCam application. Changing camera parameters using the camera web server in the middle of a D-ViewCam operation can cause D-ViewCam to fail.

10. Why does my computer screen always display Connecting or Disconnected?

For cameras determined to be offline, and when D-ViewCam is trying to reconnect, a "Connecting" status will appear on the display during the retry. If D-ViewCam fails to connect, a "Disconnected" status will appear on the display. If the connection is stable, but the video stream is non-existent, the reconnect interval will be within 30 seconds. If the connection fails, the reconnect interval will be within 60 seconds.

11. How to get a better image view in D-ViewCam?

D-ViewCam adopts drop frame to optimize the application performance. So if you want to get better image view, please consider below items:

- Disable the rotation mechanism.
- 2. For viewing MJPEG video format in CIF resolution, the video FPS display in D-ViewCam is adjusted according to the number camera displayed in the main screen. The higher the FPS, the smoother the motion will appear. 1-split screen display 30 FPS, 4/6/9/10/16-split screen, display 5 15 FPS. 32-split screen, display 1 FPS.
- 3. For viewing MPEG4/H.264 video format, adjust the image resolution to 640*480 and showed in 4-split screen. For the camera with the resolution larger than 1024*640, D-ViewCam will decode I-frame only.

Firewall

10. What about firewalls? Do they affect D-Link D-ViewCam?

If you use D-Link D-ViewCam on computers with Windows XP SP2 or any other applications with personal firewalls, please configure the firewall to allow D-Link D-ViewCam to pass through. Most the personal firewalls will automatically prompt you to permit D-ViewCam program to be used in the network.

11. What about firewalls like Nod 32 which has to be manually input to permit D-ViewCam installation?

If you use D-Link D-ViewCam on computers with Nod32 personal firewall, please configure the firewall manually after you have installed D-ViewCam as following steps:

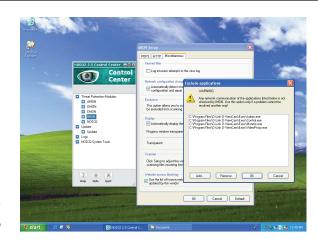
Click NOD32 antivirus system icon on the task bar to open it.



Select IMON > Setup > Miscellaneous > Exclusion > Edit > Add to C:\Program Files\D-Link D-ViewCam\Exes\Admin.exe, Control. exe, Monitor.exe, and VideoProxy.exe to the Exclude applications window.

Note: Paths depend on your software installation.

Note: D-ViewCam is not compatible with the ESET NOD32 anti virus version 2.7. Please upgrade your anti virus version to 3.0 and it is also recommended to stop the anti virus application while executing the D-ViewCam installation.

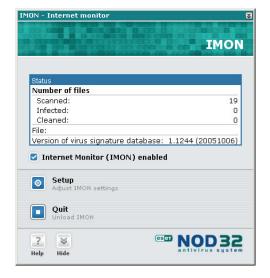


Click OK to exit Exclude applications window.

Click OK to exit IMON Setup window.

Click Ouit to unload IMON.

Click Start to load IMON



Event

12. How does the event management operate?

D-Link D-ViewCam can receive input from Motion Detection or Sensor (DI, or Device Input) to create an event. Then, the event can be used to trigger DO (Device Output), video recording, show live video, e-mail notification, play sound, and go to preset point (on cameras with Pan and Tilt functions).

13. How does event recording work?

It starts recording automatically according to your event settings.

14. In what format can I export the event report to?

D-ViewCam can export the event report in text format. Note that Microsoft Word 2000 is currently not supported.

15. When an event occurs, how do I know which camera it comes from?

Please look at the Event Notification Log in the main screen. The source column shows the event source.

16. How do I get event notifications?

D-Link D-ViewCam sends event messages in different ways, based on the event action setting of a camera. For example, if the event action is Email, the message will be sent by Email. For details, please refer to User's Manual of D-ViewCam

17. After I've changed the time or date of my computer system, the D-Link D-ViewCam event function does not seem to work anymore?

Please exit D-ViewCam then reboot your computer after you've changed your computer system's time and date. Then run D-ViewCam again. The event function should go back to normal.

Database

18. What's the purpose of database backup?

The configuration data, operating parameters and log data of D-ViewCam are stored in database. D-Link D-ViewCam can backup database periodically and automatically. So, you can restore it if the system is corrupted inadvertently.

19. What is the purpose of database restore function in D-Link D-ViewCam?

The database restore function is provided to safeguard your D-ViewCam program database in case if it is corrupted inadvertently. D-ViewCam can backup the database automatically but you have to restore the database manually. For details, please refer to D-ViewCam User's Manual.

Save and Copy to Setting

20. Why do we need to use "Save Setting" and "Copy to" functions in D-Link D-ViewCam?

These two functions are designed to let users configure cameras efficiently. Camera configurations such as: Area setting, map file, device ratio, configurations in Camera Setting, Image Alarm Setting, Preset, eMap location and sensor alarm setting can all be saved and copy to another camera. However, please remember to review the settings of the target camera after "copy to" to make sure all settings are correct and work as intended.

Storage Space Setting

21. What will happen when my hard disk or network storage device is running out of space?

When your hard disk or network storage device is approaching 90% full, and if you have enabled the Recycle function, the system will automatically start to delete the oldest recorded video on your hard disk or network storage to make space for the new files.

To prevent losing recorded video data, please remember to periodically back up your recorded video files and delete the unwanted ones.

For details on how to use this function, please refer to page 36.

22. How to configure the schedule recording, event recording, manual recording path?

To avoid system failure due to insufficient disk space, please configure the recording path for schedule, event and manual recording options differently from the D-ViewCam installation path.

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1. Xvid MPEG-4 video codec version 1.1.3 (www.xvid.org, GPL v2)

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