

# VMS

## Installation Manual

For VMS 2.9 & Above



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## EXPLANATION OF GRAPHICAL SYMBOLS

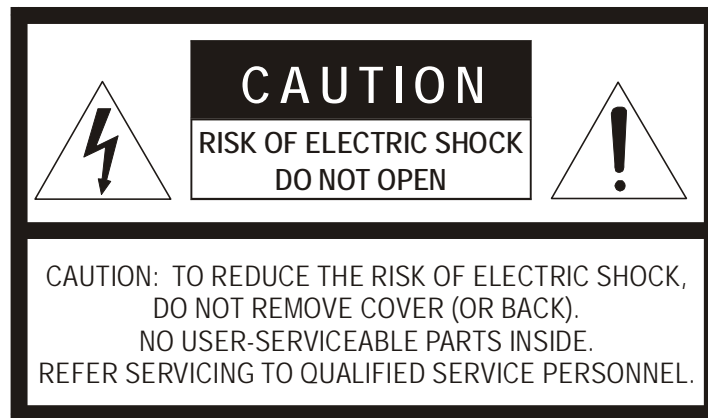
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**WARNING:** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.



**CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.



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## TECHNICIAN NOTES

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**WARNING:** Only authorized technicians trained by Openeye should attempt to repair this DVR unit. All troubleshooting and repair procedures that may be shown are for reference and minor repair only. Because of the complexity of the individual components and subassemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard. And any indications of component replacement or printed wiring board modifications may void any warranty.



**WARNING:** TO REDUCE THE RISK OF ELECTRICAL SHOCK OR DAMAGE TO THE EQUIPMENT:

- DO NOT DISABLE THE POWER GROUNDING PLUG. THE GROUNDING PLUG IS AN IMPORTANT SAFETY FEATURE.
  - PLUG THE POWER CORD INTO A GROUNDED (EARTHED) ELECTRICAL OUTLET THAT IS EASILY ACCESSIBLE AT ALL TIMES.
  - DISCONNECT THE POWER FROM THE COMPUTER BY UNPLUGGING THE POWER CORD.
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# **SECTION 1: INTRODUCTION**

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## **1.1 PRODUCT DESCRIPTION**

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VMS software is Network DVR Management Software, a powerful utility that allows 100 or more DVR units to be controlled using one computer. This software allows you to view live video; search saved video, edit and configure setup on each DVR, and import maps of buildings and other locations.

The VMS software was specifically designed as an Enterprise software solution.

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## **1.2 PC Requirements**

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### **1.2.1 VMS MINIMUM REQUIREMENTS**

Due to the Hardware intensive nature of the VMS software, there are some minimum PC requirements.

- Pentium IV 2.0 GHz+ (or Equivalent)
- 1000MB System Memory
- DirectX 8 or Higher
- Compatible Video Card (ATI Preferable)
- Internet or LAN Connection (56K, DSL, Cable Modem, T1, ISDN, etc.)
- TCP/IP Installed
- Microsoft® Windows® 2000, or XP Operating System
- 1024 X 768 Display Resolution
- 16 Bit Color Depth or Better

### **1.2.2 VMS RECOMMENDED REQUIREMENTS**

- Pentium IV 3.0 GHz+ (or Equivalent)
- 1000MB+ System Memory
- DirectX 9 or Higher
- Compatible Video Card (ATI Preferable)
- Internet or LAN Connection (DSL, Cable Modem, T1, ISDN, etc.)
- TCP/IP Installed
- Microsoft® Windows® 2000, or XP Operating System
- Multi-Monitor Support
- 1024 X 768 Display Resolution
- 32 Bit Color Depth



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## 1.3 INSTALLING THE VMS SOFTWARE

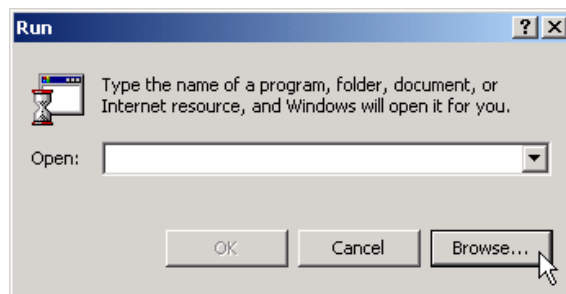
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Once the VMS CDROM is located, make sure that the PC is turned ON and follow these steps to install the software.

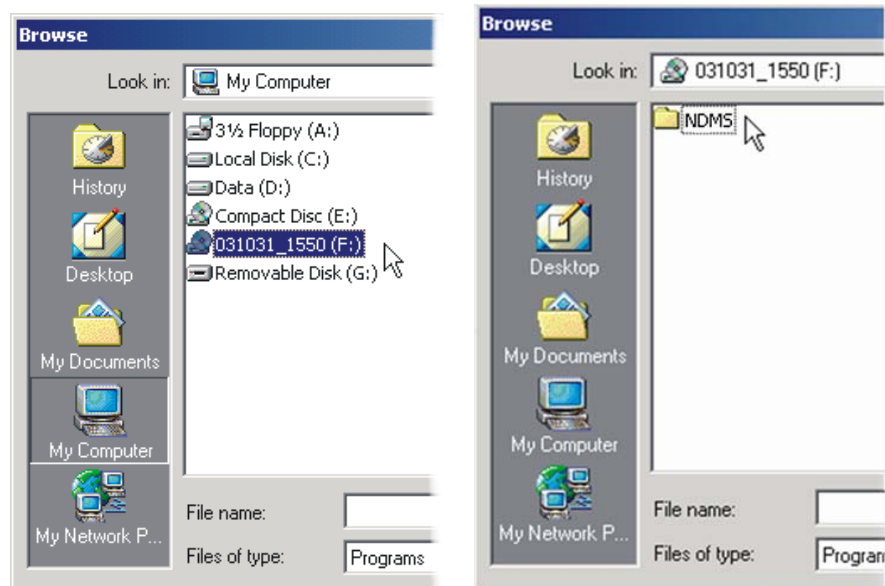
1. Insert the VMS CDROM into the CD drive.
2. If the CD Drive is set to auto run, wait for the **VMS Setup** screen to appear. (Once it appears, go directly to Step 3.)

If the Setup program does not automatically start, or if you wish to start it yourself:

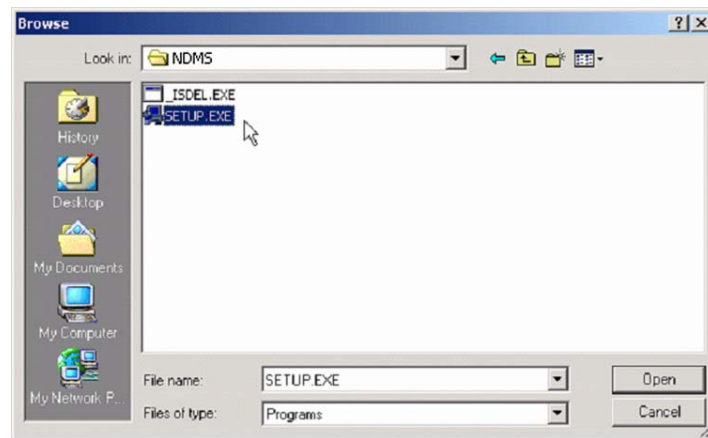
- a. Select Start → Run.
- b. When the **Run** dialog box opens, select **Browse** and navigate to **My Computer**.



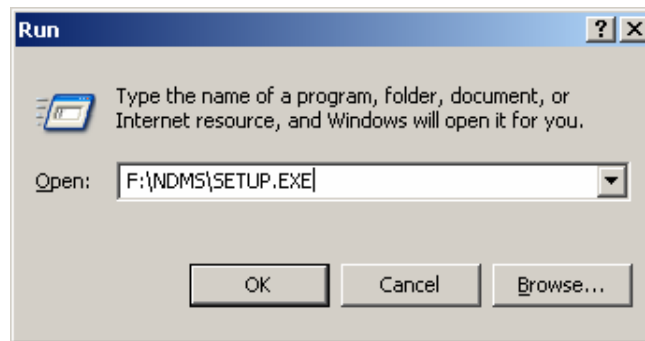
- c. Locate the CD drive and double-click on it to display contents of the CDROM, then double-click on the VMS directory to display contents of the directory.



- d. Double-click **SETUP.EXE** (or click once and select **Open**).



- e. The Run window will fill in the path and file name for the Setup application. Press **OK** to run Setup.



3. The **Setup** program will begin by determining the destination folder for installing the VMS software. Press **Next >** to accept the default location.
4. Select the Program Folder in which the program icons should be used. The default setting is to create an VMS folder for the icons. Press **Next >** to accept the default setting.
5. The Setup process will notify you when VMS is installed. Press Finish to complete Setup and close the installer window.

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## 1.4 RUNNING THE APPLICATION


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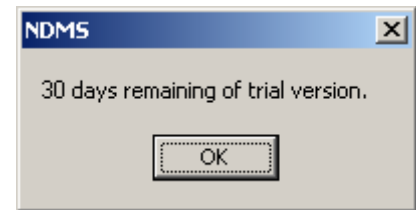
To run the VMS software, select **Start → Programs → VMS**.

Until the software is registered, a reminder will display that this is a trial version.

To register the software, select **About → Register VMS** from the main menu to get the Registration Key #. Call 1-866-446-3595 with the following:

- Company Name
- Company Phone Number
- Email address for notification of updates
- Registration Key #
- Serial Number (S/N) from box or CD case label

Click on the  to close the **About → Register VMS** window. Once you have called and received an Authorization Code, return to **About → Register VMS**, enter the Authorization Code and select **Register** to complete the registration process.



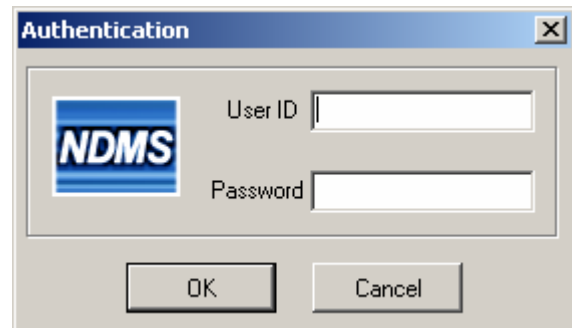
## 1.5 LOGGING IN

Each time the VMS software is started, a login box appears forcing the user to login with a user account.

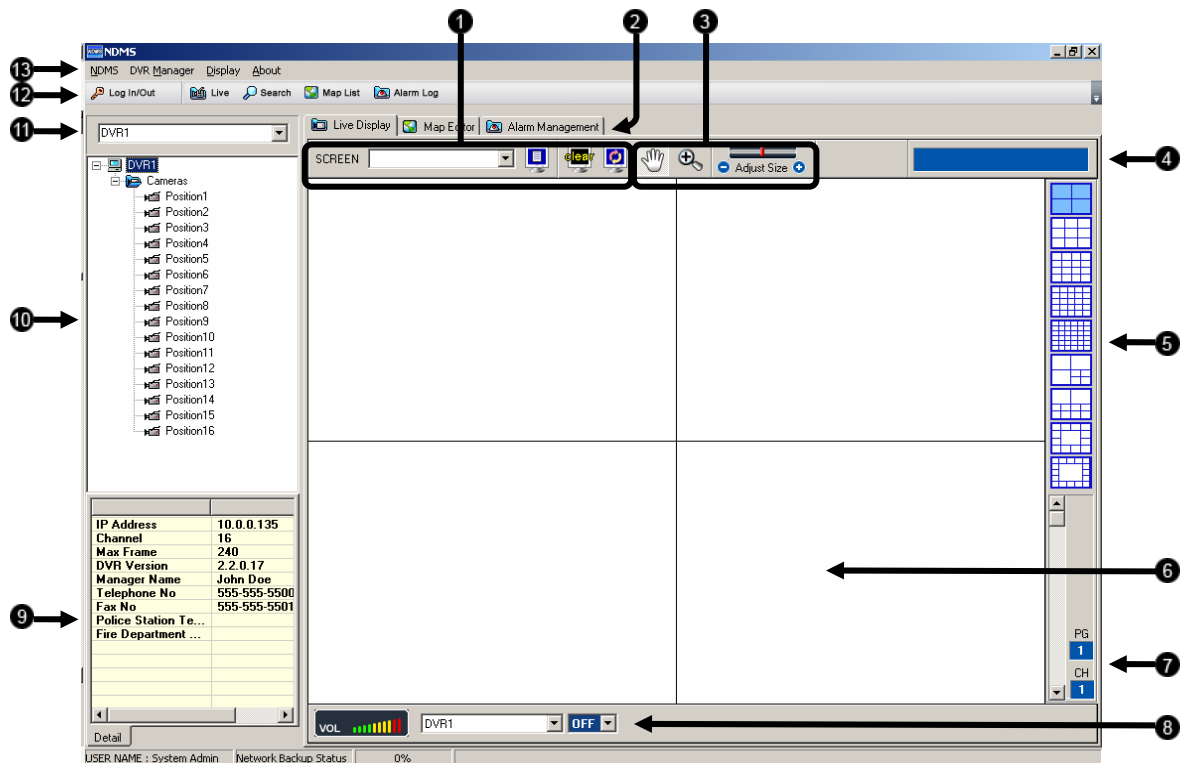
If logging in for the first time, use this login:

USER ID: **administrator**  
PASSWORD: **<none>**

Once entered the VMS software will finish loading.






## 1.6 MAIN DISPLAY SCREEN

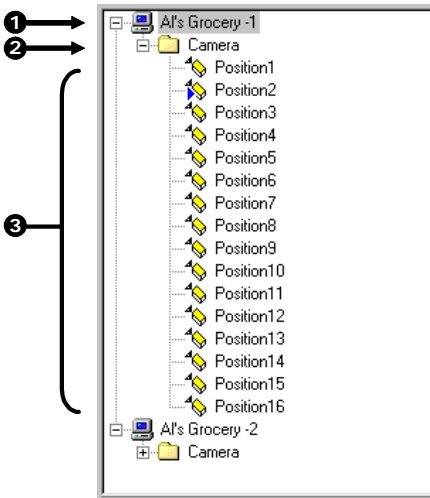


<b>1</b>	<b>Screen Toggle</b>	Allows creation and viewing of additional screens. A Screen is a customizable collection of (up to) 36 cameras. Multiple screens may be created.
<b>2</b>	<b>Screen Tabs</b>	Organize the open Windows. Multiple screens may be open (such as MAPs, Log Viewer, Live View, and Search) change to them by simply clicking on the tabs.
<b>3</b>	<b>Additional Options</b>	These are additional options such as ZOOM, DRAG, and RESIZE.
<b>4</b>	<b>Selected Camera</b>	Displays information about the camera currently selected.
<b>5</b>	<b>Screen Division Buttons</b>	Allows the viewing one or more sets of cameras at a time.
<b>6</b>	<b>Camera Display Area</b>	Displays up to 36 cameras. The user can move cameras around simply by dragging it to a new square.
<b>7</b>	<b>Page/Channel</b>	Each 36 Camera view can be separated into multiple split screens. These screens are called pages (ex. The 4x4 split would have a total of 9 Pages). The Channel is simply the order of the camera in the 36 Channel Camera view.
<b>8</b>	<b>Audio Control</b>	
<b>9</b>	<b>DVR Detail Information</b>	
<b>10</b>	<b>Connection Window</b>	Displays all the current DVRs setup on the VMS software.
<b>11</b>	<b>DVR Selector</b>	
<b>12</b>	<b>Toolbar</b>	This toolbar contains the most frequently used options, such as Search, Maps, Alarm Log, etc.
<b>13</b>	<b>Menu Options</b>	The Menu Options contain all the available options for configuring and viewing cameras.

## 1.7 CONNECTION WINDOW

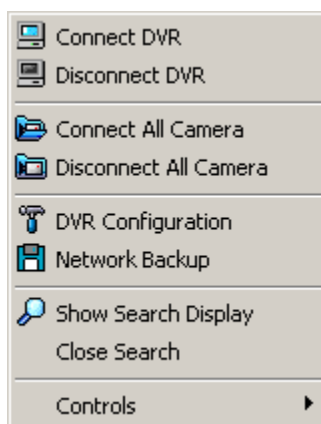
The Connection window displays the current DVRs configured in the Site List. The DVRs can be displayed with all the cameras showing or can have the cameras minimized.

1	<b>DVR Site</b>	Displays the Site Name of the DVR. To hide the cameras select the + or – next to the icon	
2	<b>Camera Folder</b>	Displays the folder that contains the Cameras	
3	<b>Cameras</b>	Displays the cameras attached to the DVR unit.	
			Camera not being displayed
			Camera currently being displayed
			Camera offline



The screenshot shows a tree view of the Connection Window. It lists two DVRs: 'Al's Grocery -1' and 'Al's Grocery -2'. Under each DVR, there is a 'Camera' folder. Under 'Al's Grocery -1', there are 16 camera positions (Position1 to Position16). Under 'Al's Grocery -2', there is a 'Camera' folder. Arrows 1, 2, and 3 point to the DVR Site, Camera Folder, and Cameras respectively.

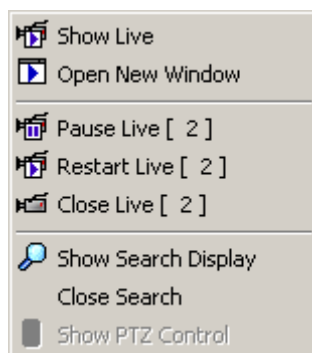
Right clicking on the DVR brings up several options:



<b>Connect DVR</b>	Opens a connection to the DVR. A connection is required before viewing cameras on the DVR.
<b>Disconnect DVR</b>	Closes an Open connection to the DVR.
<b>Connect All Camera</b>	Connects to all camera channels on the DVR.
<b>Disconnect All Camera</b>	Disconnects all camera channels on the DVR.
<b>DVR Configuration</b>	Opens setup on the select DVR unit
<b>Network Backup</b>	Opens the BACKUP window which allows the operator to locally save video which is located on the DVR
<b>Show Search Display</b>	Opens the search window with the current DVR already selected.

<b>Close Search</b>	Closes a currently open search window.
<b>Controls</b>	Displays the Control Outputs for the select DVR and allows activation of them.

Right clicking on a camera in the Connection Window brings up several options:



<b>Show Live</b>	Places the selected camera onto the MAIN DISPLAY AREA.
<b>Show New Window</b>	Open the selected camera in its own window.
<b>Pause Live</b>	Pauses the selected camera on its current image.
<b>Restart Live</b>	Begins playing the video that has been paused.
<b>Close Live</b>	REMOVES THE CAMERA FROM THE MAIN DISPLAY AREA
<b>Show Search Display</b>	Opens the search window with the current DVR already selected.
<b>Close Search</b>	Closes a currently open search window.
<b>Show PTZ Control</b>	Opens the PTZ controller.

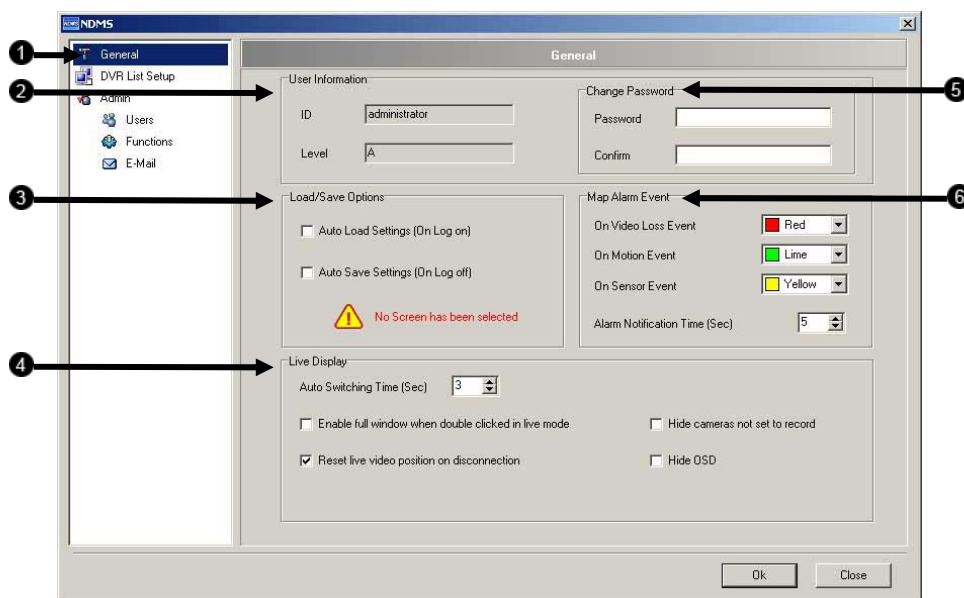
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## SECTION 2: SETUP

### 2.1 DVR OPTIONS SETUP

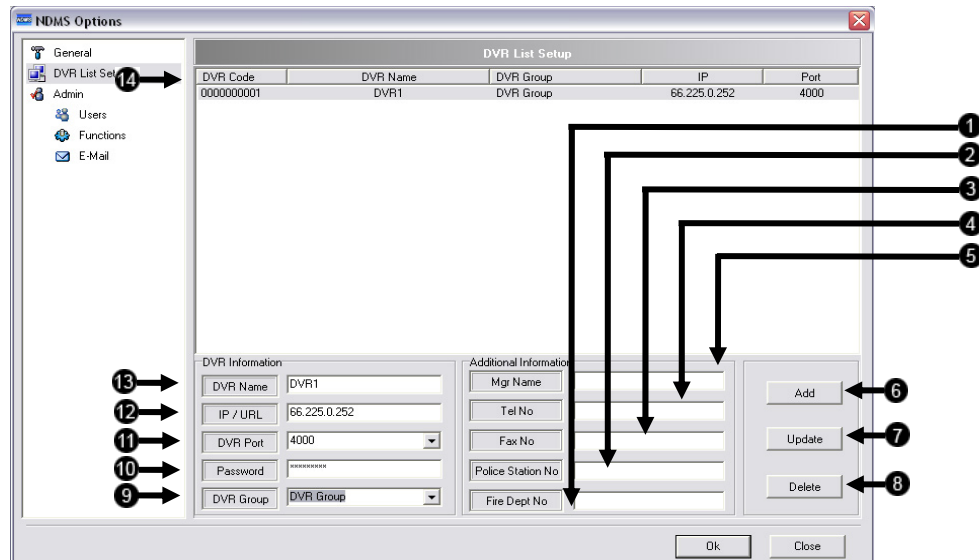
The Options Menu is where you may configure connection and user settings.



1	<b>Menu</b>	Menu of configurable options.
2	<b>User Information</b>	Displays current user information.
3	<b>Load/Save Options</b>	Auto load and save options when logging on and off.
4	<b>Live Display</b>	Configure live display options.
5	<b>Change Password</b>	Change the password of current user logged on.
6	<b>Map Alarm Event</b>	Configure Map Alarm Event Options.

## 2.2 DVR LIST SETUP

As many as 100 DVR units can be connected to the VMS at any given time.



1	<b>Fire Dept No</b>	Number of Fire Dept. local to DVR.
2	<b>Police Station No</b>	Number of Police Station local to DVR.
3	<b>Fax No</b>	Fax number of the DVR location.
4	<b>Tel No</b>	Telephone number of the DVR location
5	<b>Mgr Name</b>	Name of the Manager of the DVR or DVR Location.
6	<b>Add</b>	Saves the settings after adding a new site.
7	<b>Update</b>	Saves any settings that have been edited.
8	<b>Delete</b>	Deletes a current site
9	<b>DVR Group</b>	Name of the group that the DVR unit is a part of.
10	<b>Password</b>	Administrator password to the DVR unit.
11	<b>DVR Port</b>	Used to enter the port that the DVR uses to transfer the data. The port is specified inside the Communication setup on the DVR.
12	<b>IP/URL</b>	Specifies the IP Address of the DVR. Used to connect to the DVR.
13	<b>DVR Name</b>	Name used to easily identify the DVR unit. i.e., Exxon E Sprague
14	<b>DVR List</b>	Displays the current list of added DVRs.

### 2.2.1 ADDING A NEW SITE

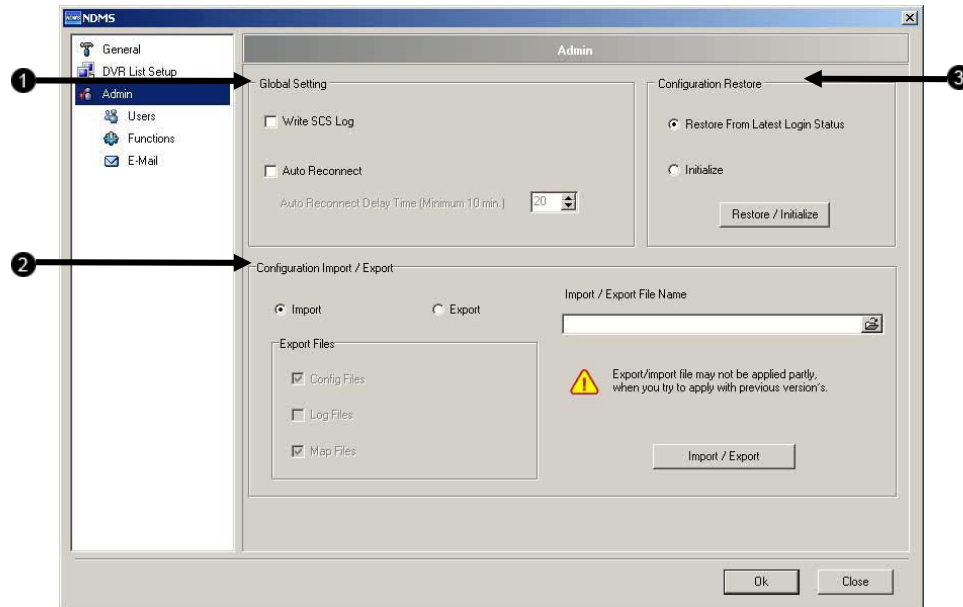
1. Select VMS → VMS → DVR List Setup.  
The DVR List Setup window will open.
2. Enter all required information for the new DVR.
3. When finished entering the information select the **Add** button.
4. Press **OK** to close the window.

### 2.2.2 EDITING A SITE

1. Select VMS → VMS → DVR List Setup.  
The DVR List Setup window will open.
2. Select the Site you want to edit from the **DVR List** (Section 2.2).
3. Edit any information you wish to change.
4. When finished entering the information select the **Update** button.
5. Press **OK** to close the window.

## 2.3 DVR ADMIN SETUP

The Options Menu is where you may configure connection and user settings.



1	<b>Global Settings</b>	Configure global DVR settings
2	<b>Configuration Import/Export</b>	Import or export Configuration, Log, or Map Files to or from the DVR.
3	<b>Configuration Restore</b>	Restore and initialized the last configuration in effect upon login.

### 2.3.1 CONFIGURING IMPORT / EXPORT OVERVIEW

Creating the custom settings for this application may take some time depending on the number of DVR units involved and the complexity of maps, etc. The import/export features provide the option to perform set up once and reuse the settings when desired. This option may need to be used when:

- Using multiple stations –** It may be practical to import settings if more than one station is used.
- Installing new software versions –** Upgrading to a newer software version sometimes forces the deletion of settings.
- Windows / Software Failure –** Windows may become unstable for a number of reasons (viruses, incompatible software, etc).

### 2.3.2 EXPORTING SETTINGS

1. Select the **Export** radio button.

2. Select the desired location and options to export.
3. Press **OK** to export.

### 2.3.3 IMPORTING SETTINGS

1. Select the **Import** radio button.
2. Select the location of the file to import.
3. Press **OK** to export.

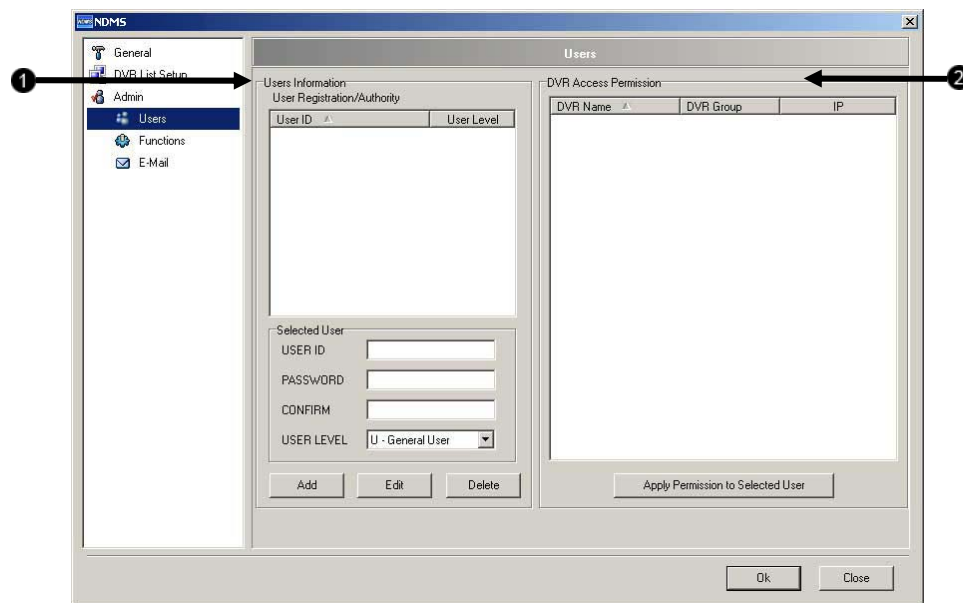
### 2.3.4 RESTORING / INITIALIZING SETTINGS

1. In the **Configuration Restore** box select the **Initialize** option to delete all current settings and replace them with the newest changes -or- Select **Restore from Latest Login Status** to replace the current configuration with an automatically saved Backup configuration saved at startup)
2. Click **Restore/Initialize**

## 2.4 USER MANAGEMENT

The VMS allows user privileges to be defined. User privileges are defined using two groups, **General users** and **Power users**. The General Users group has fewer privileges than the Power User group. Inside the Functions Wizard window, the groups can be custom-defined according to a preset series of options.

### 2.4.1 EDITING USERS



1	<b>User Information</b>	Enter and Edit user accounts.
2	<b>DVR Access Permissions</b>	View DVRs you may provide access permissions to.

### 2.4.2 CREATING USERS

1. In the **User** window, enter a username in the **USER ID** box.
2. Enter and confirm the **PASSWORD**.
3. Select a **USER LEVEL** (G for General User or P for Power User).
4. Click **Add**
5. The user just created is now listed in the **DVR Access Permission** window.
6. **OK** to return to the main screen.

### 2.4.3 EDITING A USERS PASSWORD AND GROUPING LEVEL

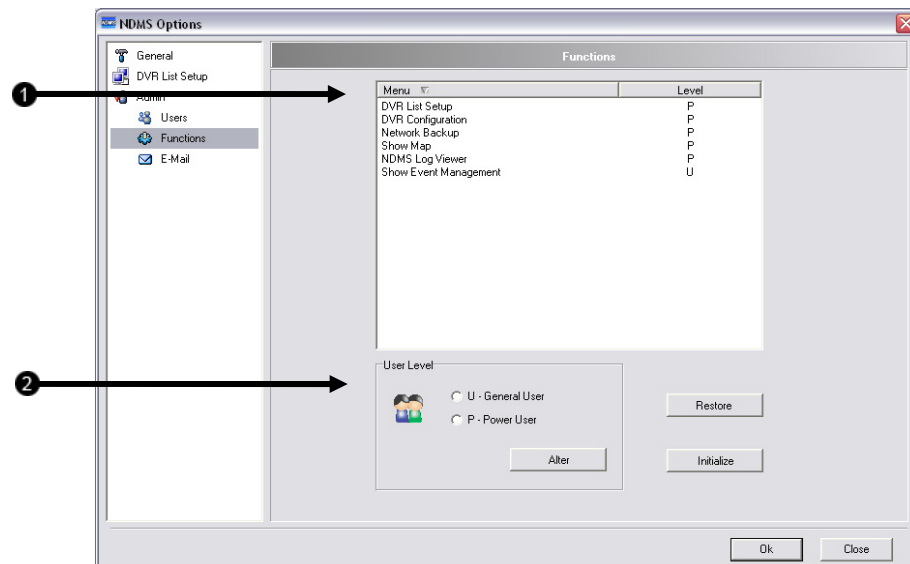
1. Click on the user you wish to edit.
2. Perform the desired changes.
3. Click **edit** to make the changes permanent.

### 2.4.4 APPLYING DVR PERMISSIONS TO USERS

1. Select the user you wish to provide permissions
2. Check the checkboxes next to DVRs in the DVR Access Permission Window you wish the user to have access to.
3. Click the **Apply Permission to Selected User** button.

## 2.5 FUNCTIONS

To open the VMS options select **VMS→VMS Options**.



1	Functions List	List all DVR function you may assign User Levels to.
2	User Level	Sets the user level for a given function.

### 2.5.1 APPLYING A USER LEVEL TO A FUNCTION

1. Select the function you wish to apply a user level to
2. Set the user level as either General or Power.
3. Click the **Alter** button.
4. Click **Restore** to return all Functions to their previous state.
5. Click **Initialize** to confirm and save changes to Function levels.



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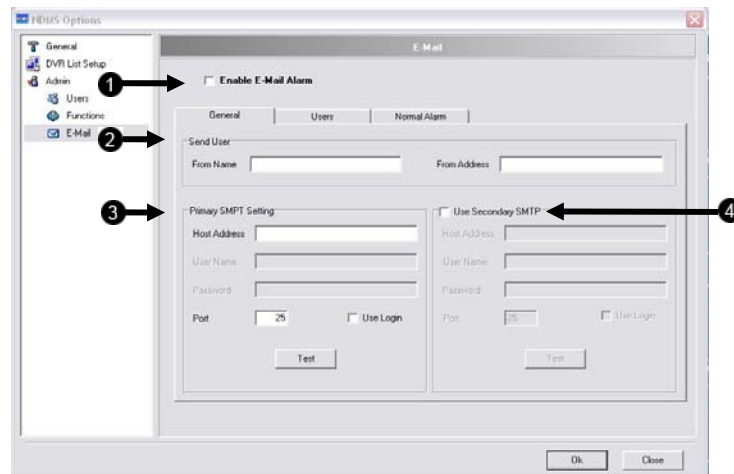
## 2.6 MAIL SETUP

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The E-Mail window allows you send e-mail alerts to users based on alarm events.

### 2.6.1 GENERAL E-MAIL SETUP

The General Tab on the E-mail Setup Window allows you to enable e-mail alarms and configure e-mail settings.



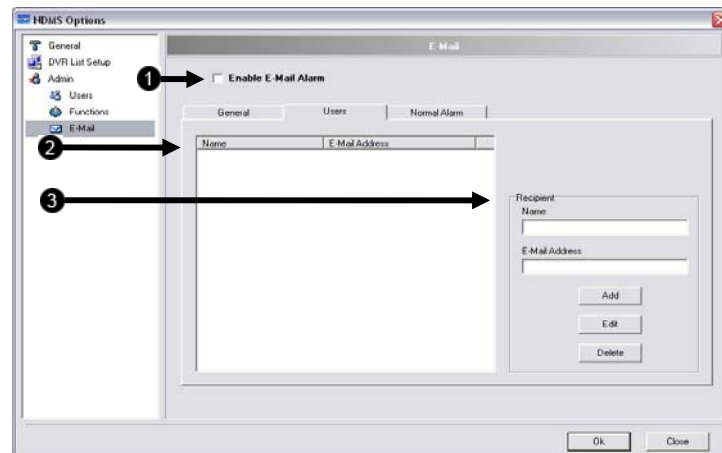
1	<b>Enable E-Mail Alarm</b>	Enables the E-Mail Alarm option.
2	<b>Send User</b>	Sets the name and address used for sending E-Mails.
3	<b>Primary SMTP</b>	Primary SMTP information settings.
4	<b>Secondary SMTP</b>	Secondary SMTP information settings.

#### 2.6.1.1 Enabling E-Mail Alarm

1. Check the **Enable E-Mail Alarm** box.
2. Enter the From Name and E-Mail address you wish to use.
3. Enter the **Primary SMTP** Settings and click **Test**.
4. Enter the **Secondary SMTP** settings if they are available and click **Test**.

## 2.6.2 GENERAL EMAIL SETUP (USER)

The User Tab on the E-mail Setup Window allows you to specify recipients of e-mail alerts.



1	<b>Enable E-Mail Alarm</b>	Enables the E-Mail Alarm option.
2	<b>E-Mail Recipients</b>	Displays all users set to receive e-mail notifications of alarm events.
3	<b>User Management</b>	Allows add, edit, and delete e-mail recipients.

### 2.6.2.1 CREATING A USER

1. Enter the Users name into Name text box.
2. Enter the E-Mail address you wish alarm alerts to be sent to.
3. Click **Add**

### 2.6.2.2 EDITING A USER

1. Select the **User** you wish to edit.
2. Edit the users name or E-Mail address.
3. Click **Edit**.

### 2.6.2.3 DELETING A USER

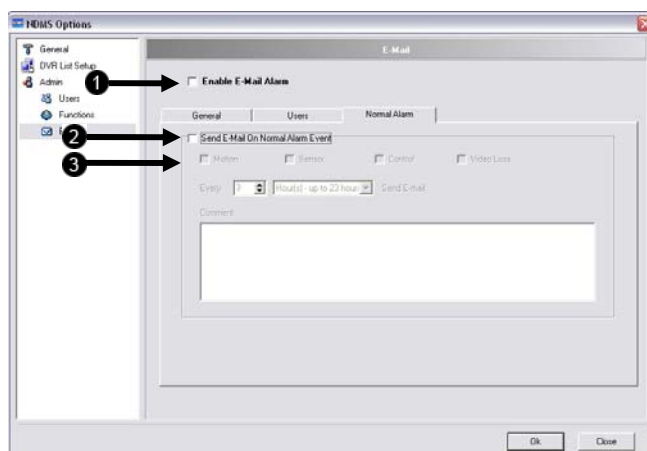
1. Select the **User** you wish to delete.
2. Click **Delete**.

### 2.6.2.3 ACTIVATING A USER

1. Select the checkbox next to the **User** you wish to receive e-mails.

### 2.6.3 GENERAL EMAIL SETUP (NORMAL ALARM)

The Normal Alarm Tab on the E-mail Setup Window allows you to enable e-mail alarms to be sent when normal alarm events occur.



1	<b>Enable E-Mail Alarm</b>	Enables the E-Mail Alarm option.
2	<b>Send On Alarm</b>	Activates the send e-mail on Normal Alarm event feature.
3	<b>Event Selections</b>	Selects which Alarm Events will trigger an e-mail.

## SECTION 3: VMS BASICS

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### 3.1 CONNECTING TO A DVR AND VIEWING VIDEO

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Once the DVR has been added as a Site, connecting to it is easy.

#### 3.1.1 CONNECTING TO A DVR AND VIEWING VIDEO

1. Right-click on a DVR inside the Connection Window and select the **Connect DVR** option. Icons representing cameras will be displayed beneath the DVR in the Connection Window.
2. To view a camera, drag its icon into the Live Display Screen.

#### 3.1.2 MOVING CAMERAS AROUND ON SCREEN

To move cameras around, drag them from one frame to another on the screen.

#### 3.1.3 REMOVING A CAMERA FROM LIVE VIEW

Right-Click on the camera and select Close.

---

### 3.2 MULTIPLE SCREEN DIVISIONS

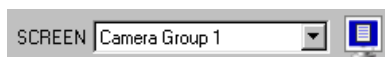
---

The VMS software allows the operator to create several groups of cameras and customize the organization of the cameras. These screens can be selected from the SCREEN dropdown menu.

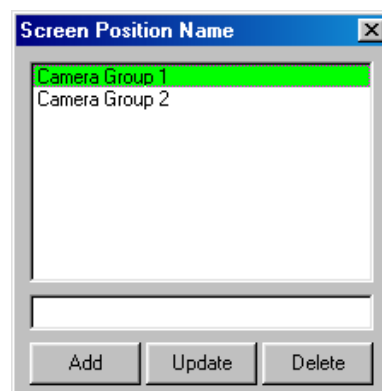
Each Screen can contain up to 36 different cameras, and the Screen Division buttons will affect only the selected screen. Screen names are saved by opening the VMS Options and selecting the **Save Live Display Settings** button. If the **Auto Save on Log-In** and **Auto Save on Exit** options are checked then simply Log-Off or Close VMS to save the settings.

#### 3.2.1 CREATING MULTIPLE SCREENS

1. Click the **blue Monitor icon** next to the **SCREEN** dropdown list to open the **Screen Position Name** window.



2. Type a name into the text field, then select **Add**.
3. Continue adding as many new Screens as necessary.



### 3.3 ADVANCED OPTIONS

Some advanced options are available



1	<b>Hand</b>	The hand is selected by default. This option allows the operator to drag live cameras from one location to another.
2	<b>ZOOM</b>	When this option is selected dragging the mouse around a portion of the video will zoom in on the image. Zoom out by right-clicking on the image and selecting <b>original size</b> .
3	<b>Adjust Size</b>	Deletes a selected map from the <b>Map Manager</b> .

Right-clicking on the video will bring up the available options.

<b>Start</b>	Begins playing the video that has been paused.	
<b>Pause</b>	Pauses the selected camera on its current image.	
<b>Original Size</b>	Zooms out to its default size.	
<b>All Original Size</b>	Zooms all cameras out to their default size.	
<b>Extended Size</b>	Extends the selected camera to the maximum available size within the current window.	
<b>Real Size</b>	Resizes the selected camera to its original true size.	
<b>Show New Window</b>	Opens the selected camera in its own window.	
<b>Entire Screen / Normal Screen</b>	Maximizes the current camera view to Full Screen (eliminating everything but the video). To return the regular screen right-click again and choose <b>Normal Screen</b> .	
<b>Open Search</b>	Opens the search window with the current DVR already selected.	
<b>Show PTZ Control</b>	Opens the PTZ controller	

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## 3.4 USING MULTIPLE WINDOWS (TABS)

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The VMS software can now have multiple windows open at any given time. The organization of these windows is done by using Tabs, and by clicking on a given tab you can jump from one window to another.



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## 3.5 MULTIPLE MONITOR SUPPORT

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Multiple monitors may be used with the VMS Software. This can be beneficial if keeping the Map Editor open, the Search window open, and the Live View open at the same time.

Most Microsoft Operating Systems support multiple monitors but your Video Card may need to be upgraded to support more than one display. Contact your local computer vendor or IT Director for more information.

### 3.5.1 USING MULTIPLE MONITORS

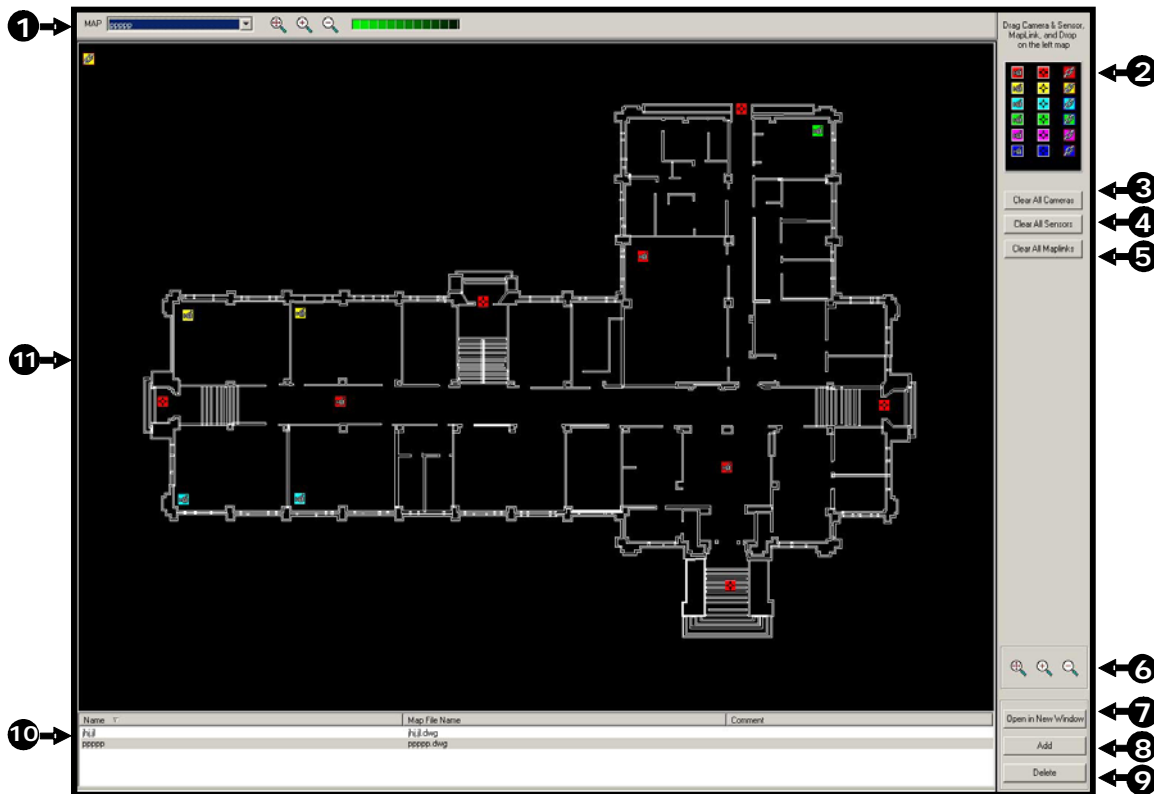
1. Click on a **Tab**.
2. With the mouse still over the **Tab**, hold down the left mouse button and drag the **Tab** to another monitor.
3. Maximize the Tab by selecting the **Maximize** button on the top right corner of the window.

NOTES:

## SECTION 4: MAPS

### 4.1 MAP OVERVIEW

The VMS software is capable of importing maps and associating cameras and sensors to locations on the map, as well as linking maps together. This feature was designed to allow users to quickly identify alarm zones and view the associated video.



1	<b>Map Chooser</b>	Select a map to view it on screen.
2	<b>Camera, Sensor, and Link Icons</b>	Displays Icons that can be dragged onto a map to represent cameras, sensors, or create map links.
3	<b>Clear All Cameras</b>	Clears any cameras that have been placed on the map.
4	<b>Clear All Sensors</b>	Clears any sensors that have been placed on the map.
5	<b>Clear All Maplinks</b>	Clears any maplinks that have been placed on the map.
6	<b>Zoom Controls</b>	This option resizes the map to its original size.
7	<b>Open in New Window</b>	Opens the selected Map in a new window.
8	<b>Delete</b>	Deletes a selected map from the <b>Map List</b> .
9	<b>Add</b>	Click to import a map to the <b>Map List</b> .
10	<b>Map List</b>	Displays all maps currently loaded. Used for add, delete, and Open in New Window features.
11	<b>Zoom Controls</b>	These options adjust the size of the map being displayed.



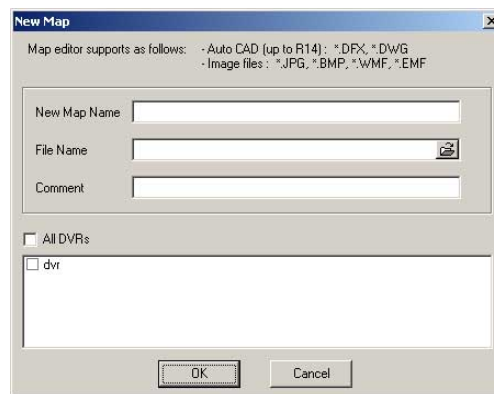
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## 4.2 IMPORTING A MAP

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Import as many maps as you wish. The Maps when imported are listed in alphabetic order. When the need arises for several maps to be imported, it is suggested that they be named in a manner that will allow for easy location.

1. Select **Map List** button at the top of the screen or the Map Editor tab if it is already open.
2. Click the add button in the lower right hand corner of the screen to open the **New Map** window.



4. Enter a name into the **New Map Name** field. Use a name that will quickly identify the map you import.
5. Select the browse icon in the **File Name** field to open a **Browse** window.
6. Find the file to import. Supported file types are as follows:  
  
AutoCAD files (up to R14) – DXF, DXF, DWG  
Standard Image Files – JPG, BMP, EMF, WMF
7. Select the DVR or DVRs the map will be available to.
8. Press **OK**. The new map should now be displayed in the **Map List**.



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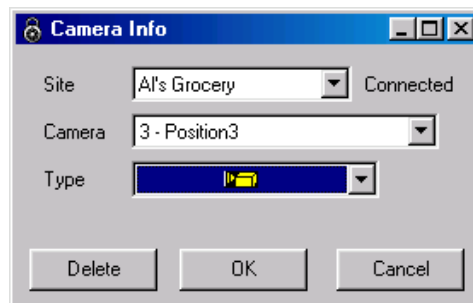
## 4.3 PLACING CAMERAS, SENSORS AND LINKS ONTO A MAP

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Placing cameras, sensors, and links on a map allows easy identification of locations where cameras and alarms are located, as well as the ability to link between multiple area maps.


### 4.3.1 ATTACHING CAMERAS AND SENSORS

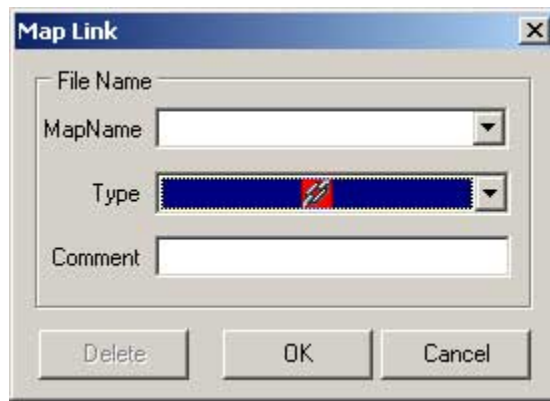
1. Select **Display → Show Map**  
The **Map Editor** window will open.
2. Select a map from the **Map List**. The map should now be displayed.
3. Drag a colored camera  or sensor  icon onto the map.  
Releasing the cursor will open the **Camera (or Sensor) Info** window.



4. Use the dropdown menu to select a **Site**.
5. Use the dropdown menu to select a **Camera (or Sensor)**.
6. Use the dropdown menu to select the **Type of Camera (or Sensor)**.
7. Press **OK**. The **Camera (or Sensor) Info** window will close.

### 4.3.2 ATTACHING MAP LINKS

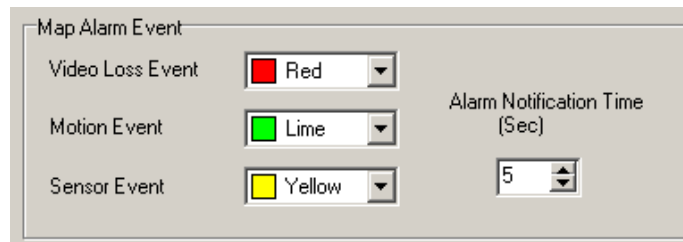
1. Select **Display → Show Map**  
The **Map Editor** window will open.
2. Select a map from the **Map List**. The map should now be displayed.
3. Drag a colored link  icon onto the map.  
Releasing the cursor will open the **Link Info** window.



4. Use the dropdown menu to select a **Map**.
5. Use the dropdown menu to select a **Type**.
6. Press **OK**.

### 4.3.3 CHANGING ALARM COLORS

The colors of the 3 types of alarms can be customized. This may be necessary depending on the color of the Map you are using. The customizable alarms are for Video Loss Alarms, Motion Alarms, and Sensor Alarms. The Alarm Time may also be adjusted.



1. Open the VMS Options: **VMS → VMS Options**.
2. Change the Map Alarm Event options.

### 4.3.4 VIEWING VIDEO WHEN ALARM IS ACTIVATED

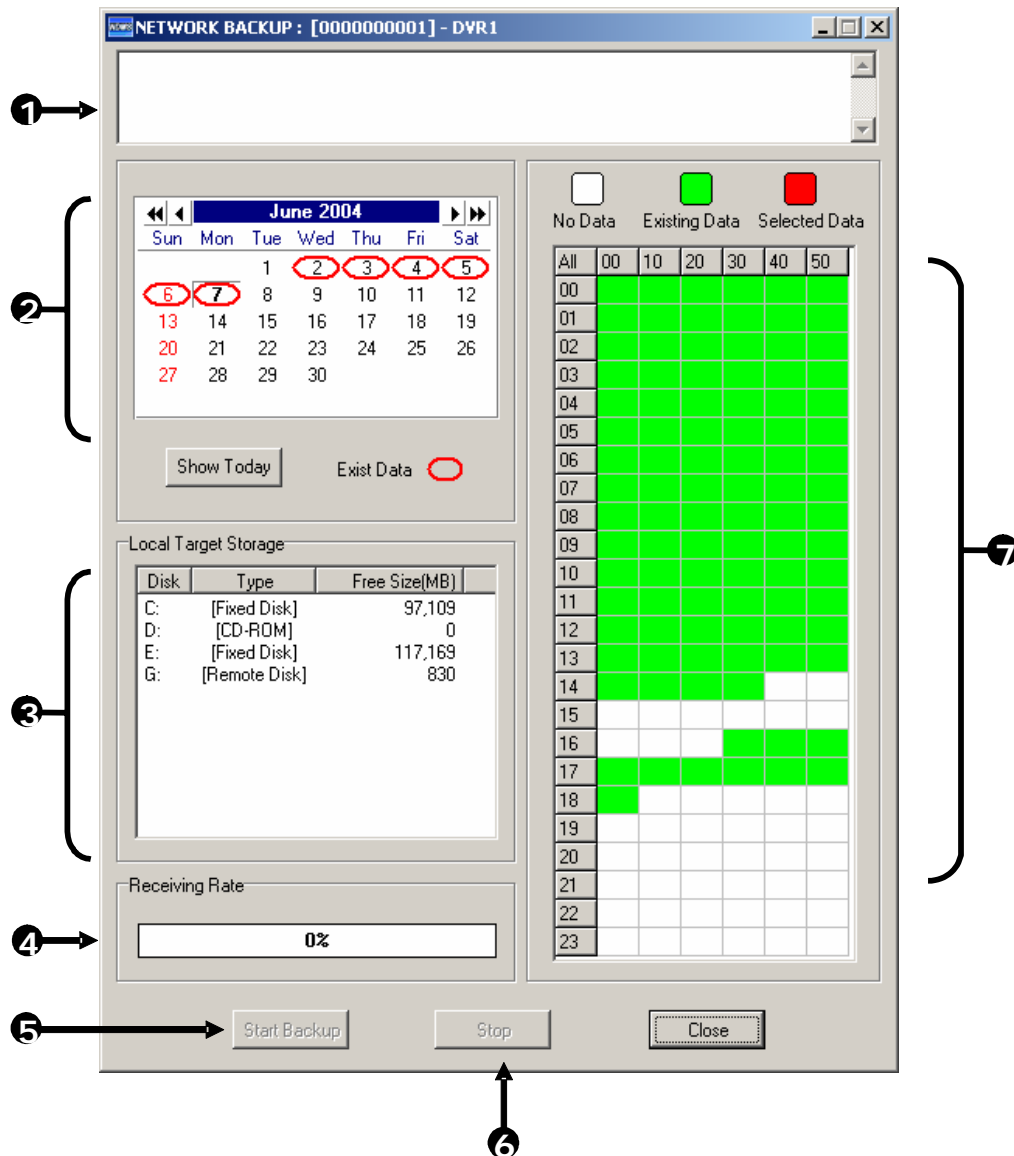
When Alarms are activated on a map colored circles will flash on and off around the Sensor/Camera icon. These will continue until the alarm is deactivated.

To view the camera associated with the alarm, double-click on the Sensor/Camera icon. A window will open with the camera displayed.

## SECTION 5: NETWORK BACKUP

### 5.1 BACKUP OPTIONS OVERVIEW

The **Backup Options** window allows the operator to select the video to save along with the location to which the backup will be saved.



1	<b>Error Message</b>	This box displays any problems encountered with the current selected options. For example: If the amount of video selected exceeds the storage capacity of the CD-RW Disc, a message will be displayed.
2	<b>Select Day</b>	(Calendar) Used to select the day. If video is recorded on a given day, the day will be circled in red. The <b>Current</b> day is always highlighted in red.
3	<b>Select Backup</b>	Displays available backup locations. If a formatted CDR

	<b>Media</b>	or CD-RW disc is inserted, the drive letter and the amount of free storage on the disc will appear. To view all the available Hard Drives on the DVR put a check in the <b>Fixed HDD</b> box. This will include all mapped network drives.
<b>4</b>	<b>Receiving Data</b>	(Status bar) Indicates the progress of the backup.
<b>5</b>	<b>Start Backup</b>	Begins the backup process
<b>6</b>	<b>Stop</b>	Stops a backup that is in process
<b>7</b>	<b>Hour / Minute</b>	A 24-hour clock is used for the Hour/Minute chart. This is broken down into 10 minute increments. The color coded boxes represent either, No data, Recorded Data, or Selected Data. (See the Description Box.) Select a time by clicking on one the boxes. Deselect it by clicking on the box again.

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## 5.2 BACKING UP TO A HARD DRIVE

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1. Select **DVR Manager → Network Backup**.  
The Network Backup window will open.
2. Select the day using the **Select Day** calendar.
3. Select the time(s) to backup by clicking on the desired blocks.  
The blocks will turn red when selected.  
To deselect the blocks, simply click on them again.
4. Select a **Target Storage** device.
5. Press the **Start Backup** button.

If the amount of video exceeds the storage capacity of the media being used, an error message will be displayed inside the **Error Message** box. If this happens, reduce the amount of video that is being exported or select another media device that has a larger storage capacity.

Once the **Start Backup** button is pressed, the **Receiving Rate** will begin showing the progress.

## SECTION 6: SEARCH

### 6.1 SEARCH OVERVIEW (STANDARD SEARCH)

The VMS Software has several options that allow easy searching through, to find, a particular section of video. From Motion indexing and Sensor indexing to calendar views showing which days have recorded video; the VMS Software is designed to help find what you're looking for quickly.

There are 2 types of Search Windows that can be opened.

<b>Standard Search:</b>	This search window provides for searching only one DVR at a time; however, more options such as Preview Search, etc. are available.
<b>Multiple Search:</b>	Allows searching video from multiple DVRs simultaneously.



<b>1</b>	<b>Audio Buffer</b>	In order to ensure audio plays smoothly when playing it remotely, the audio must first be buffered. This means that several seconds of audio are stored locally before actually playing it.
<b>2</b>	<b>Preview Search</b>	The Preview search is a Search option that allows a narrowing down recorded video in a 24 Hour period. It breaks down a single day into 24 images, one image for each hour of the day (The images are taken from the first second of each hour). When an image is selected, the 'hour' chosen is then broken down into 6 images, one image for every 10 minute increment. Finally when another image is selected, 10 images are displayed, one for every minute within the 10 minute period. From this point, the selected image can be applied to the Main Search.
<b>3</b>	<b>Save</b>	Saves a selected image as a JPG file or saves a video clip in an AVI format.
<b>4</b>	<b>Sync</b>	This option synchronizes the video to the real time. This option may discard frames in order to achieve this synchronization.
<b>5</b>	<b>Zoom</b>	This option provides zoom control in and out, for the selected camera.
<b>6</b>	<b>Speed</b>	Increases and decreases the playback speed.
<b>7</b>	<b>Audio Control</b>	Allows selection of audio channels and audio volume.
<b>8</b>	<b>Play Controls</b>	Used to view selected video Frame by Frame, Normal Speed, and Fast Forward.
<b>9</b>	<b>Date</b>	Opens a calendar window to select a day on which to perform a search.
<b>10</b>	<b>Search Date and Time</b>	Displays the Date and Time of the video being played.
<b>11</b>	<b>Hour / Minute Control Bar</b>	Select the hour by pressing the appropriate button. Select the minute using the sliding bar.
<b>12</b>	<b>Camera Select Buttons</b>	This option toggles to the Camera buttons.
<b>13</b>	<b>Screen Division Buttons</b>	This option toggles to the Screen Division buttons.

---

## 6.2 PERFORMING A BASIC SEARCH

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Performing a basic search involves simply selecting the date, the time, the camera, and pressing play.

1. Right-click on a DVR or camera and select **Show Search Display** or click **Display → Show Search Display**.
2. Click the **DATE** button and select a day from the calendar.
3. Click an **HOUR** button to select an hour.
4. Select one or more **Cameras**.
5. Click **Play**.

Video can now be played forwards, backwards, and frame-by-frame.

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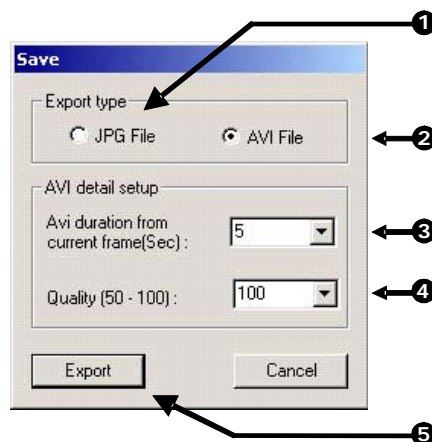
## 6.3 SAVE TO JPG OR AVI

---

These selections allow for export of single images in the JPG file format or save video clips in an AVI format. Both JPG and AVI file formats are the most commonly used graphical formats today. Virtually every computer offers some type of support for these file formats and therefore make them the most ideal formats to use.

**JPG:** The format (.jpg) is optimized for compressing full-color or grayscale photographic images. JPG images are 24-bit (16.7 million color) graphics. JPG is used to export a single image or frame.

**AVI:** AVI image data can be stored uncompressed, but it is typically compressed using a Windows-supplied or third party compression and decompression module called a codec. AVI files save a video clip.





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## 6.3 SAVE TO JPG OR AVI, CONTINUED

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1	<b>JPG File</b>	Export a single image or frame.
2	<b>AVI File</b>	Save a video clip.
3	<b>AVI Duration</b>	Enter duration (in seconds) for recording the AVI file. Although 5 seconds is the longest displayed, a manual time may be entered. There is no limit to the size of AVI that may be exported.
4	<b>Image Quality</b>	It may be necessary to reduce the overall size of an AVI file; for example, to email to someone. AVI file sizes can be reduced by reducing the image quality. By reducing the image quality, the AVI video appears more pixilated. When size is not an issue, setting quality to 100 is highly recommended.
5	<b>Export</b>	Begins the saving process. Cancel closes the window without exporting.

---

## 6.4 PRINTING AN IMAGE

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The DVR can print a recorded image to a local or network printer.

1. From the Search screen, stop on the image to print. Double-click the image.

NOTE: Only one camera can be selected at a time for this function to work.

2. Click on the Print button. A Print Options window appears. Depending on the printer being used, there may be several printing options available. Refer to the printer manual for more information.
3. Press the Print button to print the selected images.

NOTE: The message "NO DEFAULT PRINTERS INSTALLED" will display if no printer is installed.

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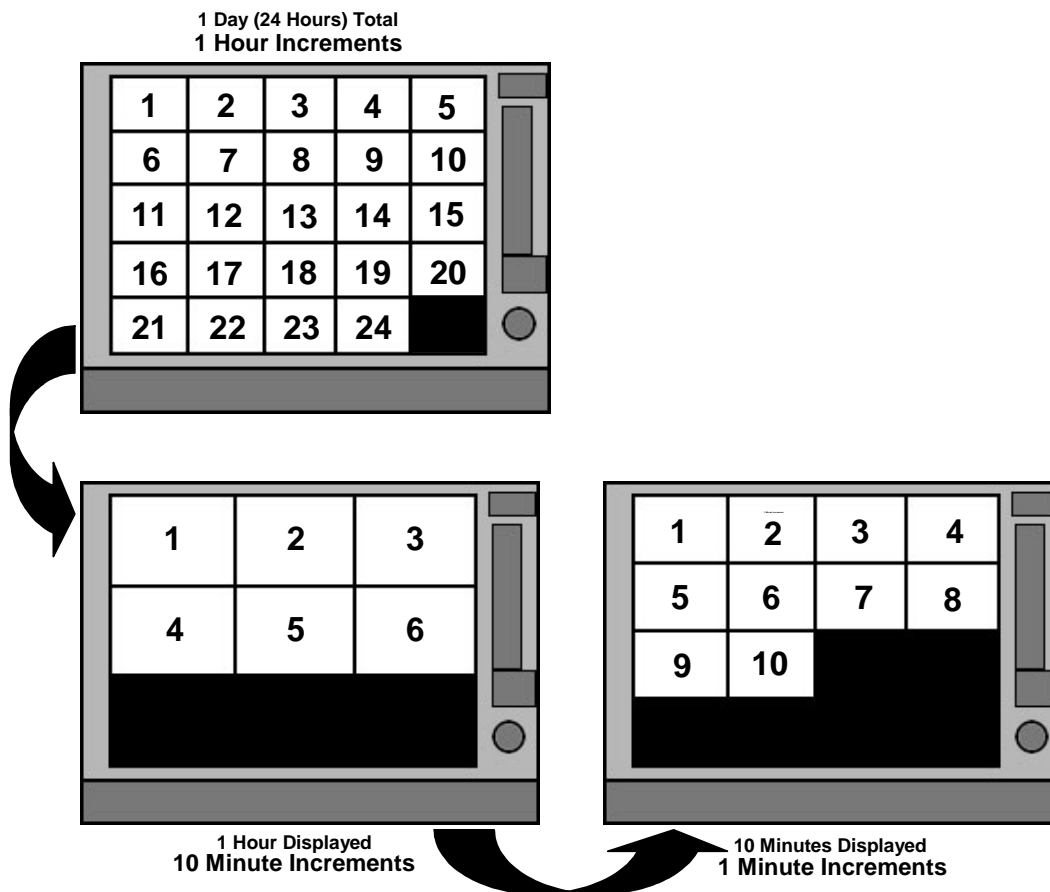
## 6.5 PREVIEW SEARCH

---

The Preview Search can be used in a number of circumstances to quickly find an exact moment where an event (such as a theft) occurred. The Preview Search basically gives a 24 Hour visual overview of a single camera by separating a 24 hour period (1 day) into 24 images, one image for each hour of the day. The search can then be further narrowed down into ten minute increments and one minute increments by simply selecting one of the images displayed. The example below shows how the Preview Search functions.

## 6.5 PREVIEW SEARCH, CONTINUED

- The first screen has 24 images displayed. Each image represents the first second of each hour. If there is no image recorded during that period, nothing will be displayed.
- Double-click on an image to select an hour. A new screen appears with 6 images, each one representing a 10 minute segment of video.
- Double-click on an image to select a 10-minute segment. The final screen appears with the 10 minute segment broken into 1 minute increments (10 images).



### 6.5.1 PERFORMING A PREVIEW SEARCH

1. Select a single camera by either turning off all cameras but one or by double-clicking a displayed image to make it the only displayed on the screen.
2. Select **Preview Search** and 24 images are displayed. If there is no recorded video during a portion of the day, "No Image" will be displayed in place of an image.
3. Refine the search by selecting (double-clicking) an image and 6 images are displayed. Move back to the previous 24 image view by right clicking on an image.
4. Refine the search further by selecting (double-clicking) an image and 10 images are displayed. Move back to the previous 6 image view by right clicking on an image.

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## 6.5 PREVIEW SEARCH, CONTINUED

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5. Double-click on an image to display a 1-minute segment of video.  
Move back to the previous 10 image view by right clicking on an image.
6. Use the **Play** controls to play the video.
7. To apply the current image to the **Main Search** (exit out of Preview search with the current image still selected), deselect the **Preview Search** button

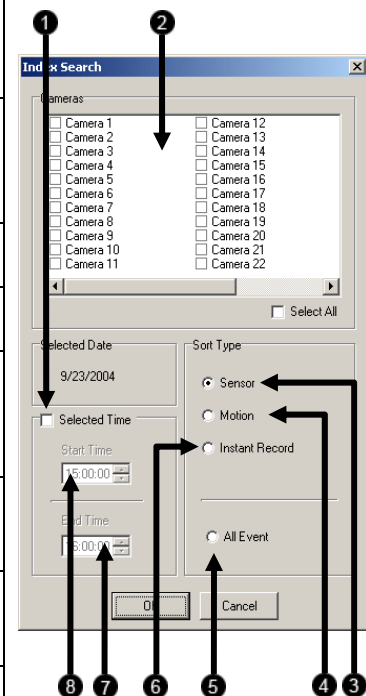
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## 6.6 INDEX SEARCH

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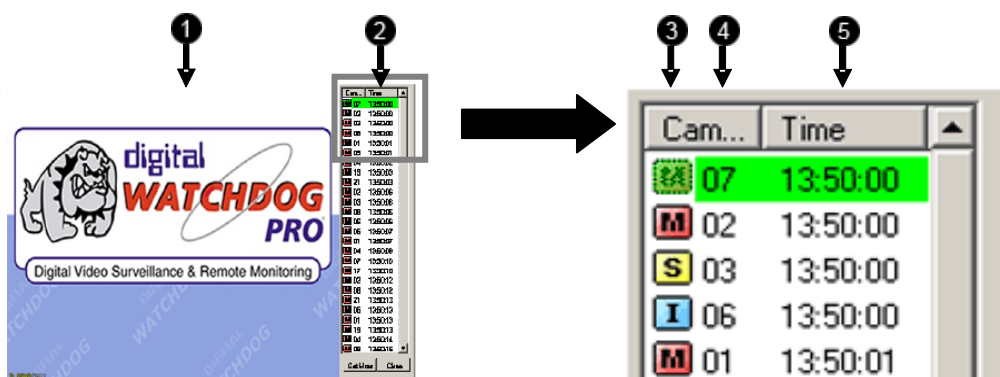
Using the **Index Search** can greatly decrease the amount of time spent searching through saved video. The Index Search allows a user to perform a search based on criteria such as Sensor, Motion and Instant Record events.

1	<b>Select Time</b>	The default search time is 24 Hours. If this option is select then a Start Time and End Time must be entered.
2	<b>Multiple camera search</b>	Select one or more cameras to search.
3	<b>Sensor</b>	Searches on Sensor Events
4	<b>Motion</b>	Searches on Motion Events
5	<b>All Event</b>	Searches on all events (sensor, motion, instant recording) for the selected camera(s).
6	<b>Instant Record</b>	Searches on Instant Record Events
7	<b>End Time</b>	Specifies the End Time for the Index Search
8	<b>Start Time</b>	Specifies the Start Time for the Index Search.



## 6.6.1 PREFORMING AN INDEX SEARCH

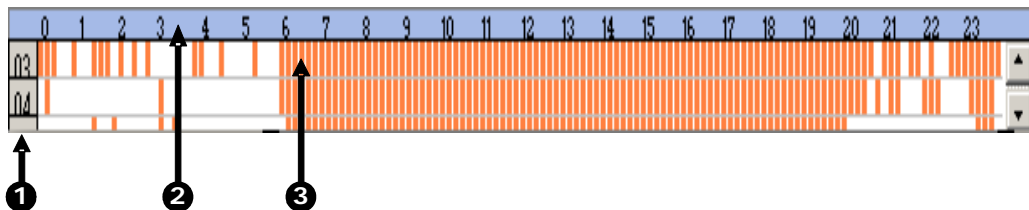
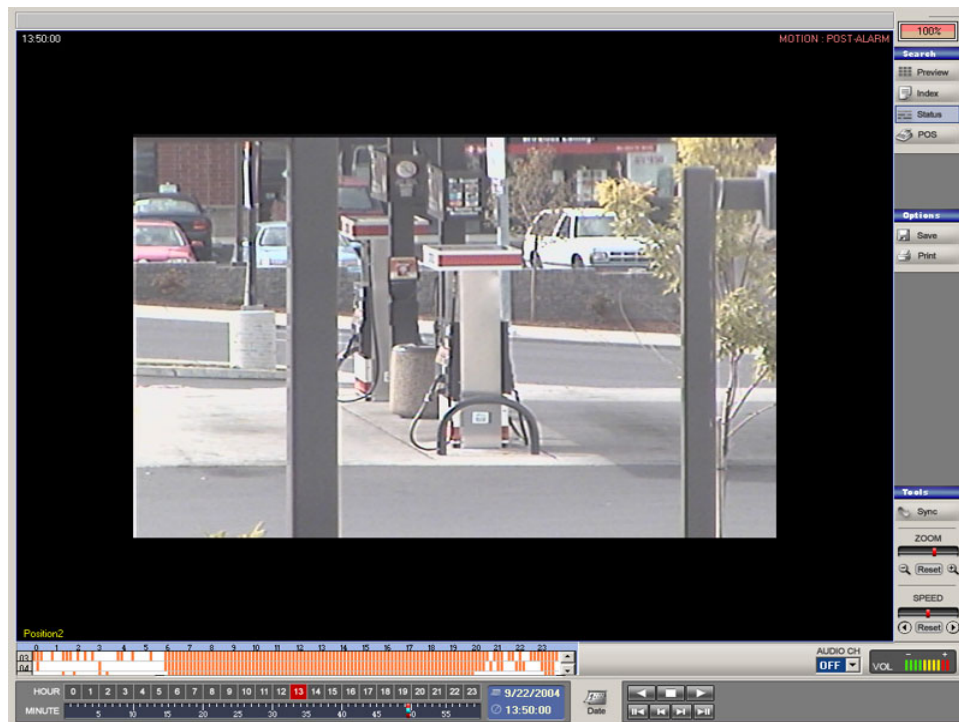
1. Select the **Index Search** button. The Index Search Option box will open.
2. Select one or more cameras (or check the All Cameras option).
3. Select an event to search (sensor, motion, instant record) or select the All Event option.
4. Press **OK**. There may be a delay while results are returned.  
Results will be displayed in a column on the left side of the screen.  
If no results are found, "NO IMAGE FOUND" will appear in the column.
5. Once the results are displayed, double-click on any one to search through them.
6. Once the desired image is found, apply it to the Main Search by selecting the **Close** button at the bottom of the results column.



1	<b>Image Display Area</b>	Where Search results images are displayed.
2	<b>Search Results</b>	Displays the results of the search. Each line represents a segment of video.
3	<b>Type</b>	Displays event type: <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; background-color: red; color: white; padding: 2px 5px; margin-right: 5px;">M</div> <div>Motion Event</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; background-color: yellow; color: black; padding: 2px 5px; margin-right: 5px;">S</div> <div>Sensor Event</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; background-color: blue; color: white; padding: 2px 5px; margin-right: 5px;">I</div> <div>Instant Record Event</div> </div>
4	<b>Camera Number</b>	Camera number of the returned result.
5	<b>Time</b>	Time of the result.

## 6.7 STATUS SEARCH

The Status Search option displays video in graph format.



1	Camera	Displays the cameras in linear format. Scroll down using the scroll bar on the right.
2	Hours	The hours 0-23 (24 hours) are listed.
3	Recording Block	Displays in blue where video is recorded. Areas of no recording are displayed in white.

### 6.7.1 PREFORMING A STATUS SEARCH

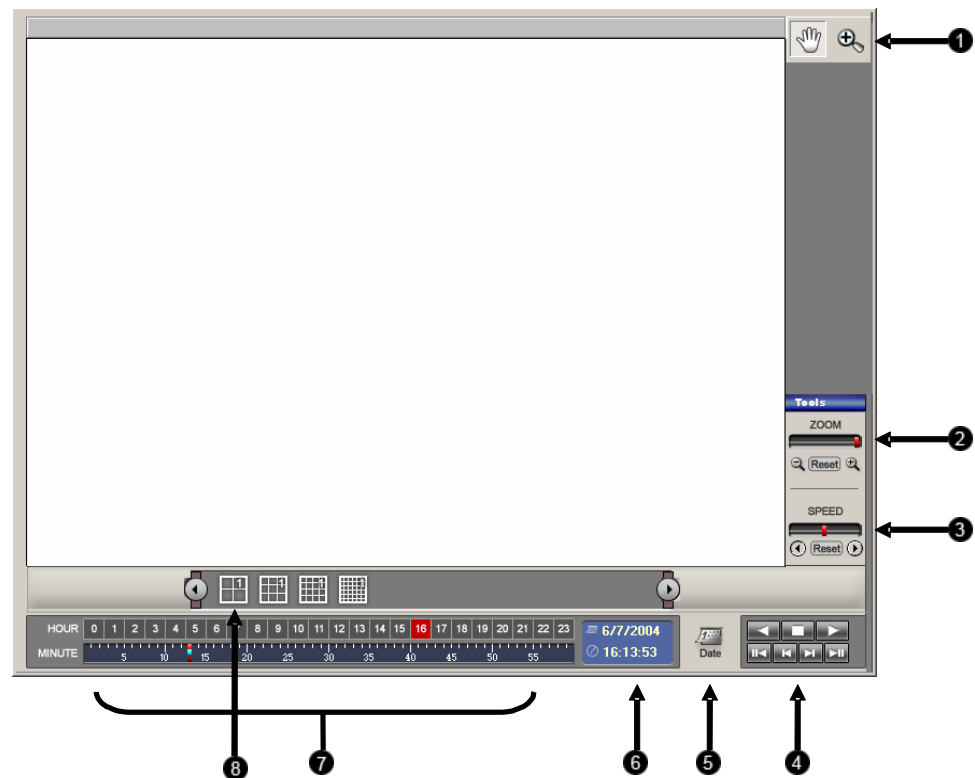
1. Select the **Status Search** button to open the Status Search window.
2. Use the mouse to click on an area of the blue recording block.  
Only one camera can be displayed at a time.

## 6.8 MULTIPLE SEARCH

The Multiple Search window allows you to search video from multiple DVRs simultaneously.

**Standard Search:** This search window allows only one DVR at a time to be searched. This option, however, gives you more search options (such as Preview Search, etc)

**Multiple Search:** Provides for searching video from multiple DVRs simultaneously.



1	<b>Zoom</b>	This provides zoom control in and out, for the selected camera.
2	<b>Play Controls</b>	Used to view selected video Frame by Frame, Normal Speed, and Fast Forward.
3	<b>Date</b>	Opens a calendar window to select a day on which to perform a search.

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## 6.8 MULTIPLE SEARCH, CONTINUED

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4	<b>Search Date and Time</b>	Displays the Date and Time of the video being played
5	<b>Hour / Minute Control Bar</b>	Select the hour by pressing the appropriate button. Select the minute using the sliding bar.
6	<b>Screen Division Buttons</b>	This option toggles to the Screen Division buttons.

### 6.8.1 Performing a Multiple DVR Search

Performing a Multiple DVR search is simple: Select the date, time, cameras, and then press play. Select cameras from different DVRs by dragging them from the Connection Window to the Search Window.

1. From the **Display** menu select the **Shiw Multiple Search** window.
2. Click the **DATE** button and select a day from the calendar.
3. Click and **HOUR** button to select and hour.
4. Drag one or more **Cameras** from the Connection Window to the Search window.
5. Click **Play**.

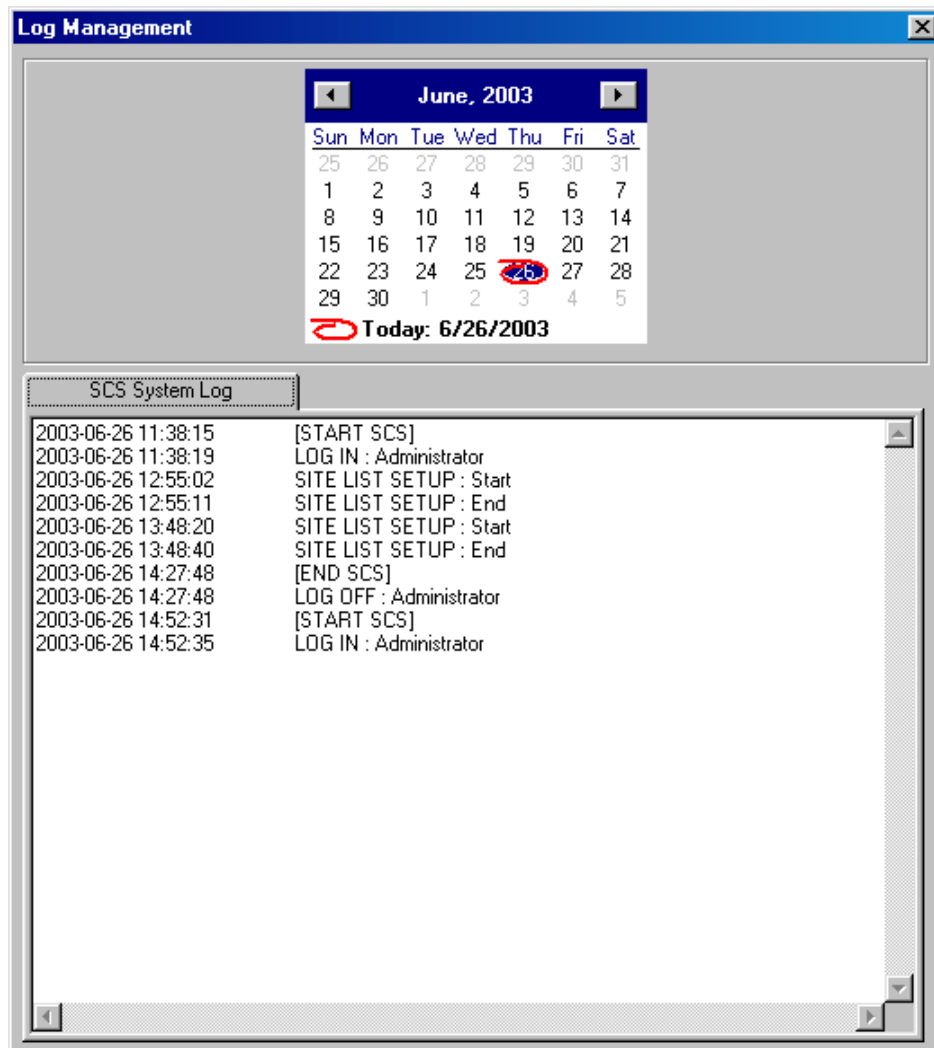
Video can now be played forwards, backwards, and frame-by-frame.



## SECTION 7: LOG FILES

### 7.1 VMS LOG

The **VMS Log** keeps track of when the software was opened and closed and who logged in/logged out.



## SECTION 8: EVENT MANAGEMENT

### 8.1 EVENT MANAGEMENT

The **EVENT Management** window is used to view different types of alarms that are coming from the DVR, including Video Signal Loss and Sensor alarms. Use the **Filter** button to filter through the different types of alarms.

By double-clicking an alarm entry, the search window will open with the associated DVR, camera, and time related to the event already selected.

The screenshot shows the EVENT Management window interface. Callout 1 points to the 'Log Date' dropdown menu. Callout 2 points to the 'Filter by Time' section, which includes 'Start Time' and 'End Time' dropdowns. Callout 3 points to the 'Alarm Event List' table. Callout 4 points to the 'Enable Filter' checkbox. Callout 5 points to the 'Apply Filter' button.

	NO	EVENT ON TIME	EVENT OFF TIME	DVR CODE	DVR NAME	SENDER NAME	EVENT TYPE
19				0000000001	DVR1	Control 15	CONTROL
18				0000000001	DVR1	Control 0	CONTROL
17	3:38:06 PM			0000000001	DVR1	Position16	BEEP
16	3:38:06 PM			0000000001	DVR1	Position15	BEEP
15	3:38:06 PM			0000000001	DVR1	Position14	BEEP
14	3:38:06 PM			0000000001	DVR1	Position13	BEEP
13	3:38:06 PM			0000000001	DVR1	Position12	BEEP
12	3:38:06 PM			0000000001	DVR1	Position11	BEEP
11	3:38:06 PM			0000000001	DVR1	Position10	BEEP
10	3:38:06 PM			0000000001	DVR1	Position9	BEEP
9	3:38:06 PM			0000000001	DVR1	Position8	BEEP
8	3:38:06 PM			0000000001	DVR1	Position7	BEEP
7	3:38:06 PM			0000000001	DVR1	Position6	BEEP
6	3:38:06 PM			0000000001	DVR1	Position5	BEEP
5	3:38:06 PM			0000000001	DVR1	Position4	BEEP
4	3:38:06 PM			0000000001	DVR1	Position3	BEEP
3	3:38:06 PM		<Disconnect>	0000000001	DVR1	Position2	BEEP
2				0000000001	DVR1	Control 15	CONTROL
1				0000000001	DVR1	Control 0	CONTROL

1	Log Date	Selects the Date of Alarm logs to view.
2	Filter Options	Filters alarm events based on selected criteria.
3	Alarm Event List	Displays alarm events.
4	Enable Filter	Displays Filter Options for filtering alarm events.
5	Apply Filter	Applies Filter Options to the Alarm Event List.

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