



# Digital Witness

## DVR Server Software User Reference Guide

*April 2008*

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## Introduction to Digital Witness's DVR Server Software

Each Digital Witness system consists of a Digital Video Recorder (DVR), 1-16 video surveillance cameras, a licensed version of the DVR Server software running on the DVR, one or more licensed versions of the DVR Remote Server Software running on separate PC's and connecting to the DVR remotely, and optional hardware and software such as a POS integration system.

The DVR Server software is the primary software engine that operates the Digital Witness DVR. The DVR Server software runs from the DVR and operates all of the DVR's primary functions, including maintaining the configurations for System cameras, displaying live images from the cameras, maintaining and controlling the recording capability of the cameras, configuring the storage for the retained images on the DVR, providing the search engine and tools for reviewing saved video, and causing the DVR to act as a network server for other computers to connect via the Remote Software.

### Delivery and Setup

This document assumes the DVR was properly configured upon delivery/installation, with the appropriate hardware installed and drivers recognized in the Windows® operating system hardware profile.

For additional information on hardware and software installation, contact Digital Witness Customer Service. The DVR requires specific hardware, software and configuration setup to function properly. Do not attempt to install hardware or server technology on new hardware.

### This Document

This document is designed as a reference for the Digital Witness DVR interface. For each section of the interface, an introduction is provided, followed by sections explaining navigation. In addition, fields, columns, buttons, and links are detailed.

## DVR Access

When you turn on the DVR, the server software launches automatically, displaying the Main Screen. When the DVR Server software is launched, the Main Screen displays. The Main Screen acts as the central navigation point for the DVR Server software, allowing you to view live images, log in, and access all search and settings screens.



The Main Screen is detailed in the “Main Screen Interface” section on page 4 of this document.

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**Access to most DVR functions, however, is dependent on logging into the system, which requires a user ID and password.** For example, if you want to search recorded video or access DVR utilities, you must be logged into the system.



### Log In to the DVR Server Software

Complete the following steps to log in to the system.

1. In the bottom right corner of the Main Screen, click the **Login** button. A login box displays.

Digital Witness  
Version 5.0 (Build 5.0.8.1, 0104)

USER NAME

PASSWORD

OK CANCEL

2. From the **User** list, select your user name.
3. In the **Password** field, enter your password.
4. Click the **OK** button.



If the user ID and password that you enter do not match or are not valid, a warning message displays. In most cases, you will need to enter your user ID or password again, making sure that spelling is correct and that you use the appropriate capitalization. If you are again unable to log in to the DVR, you should contact Digital Witness Customer Service.

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## DVR Interface

Three primary interface configurations are available, depending on whether you view live video, review archived video, or review archived video that is associated with POS transaction data.

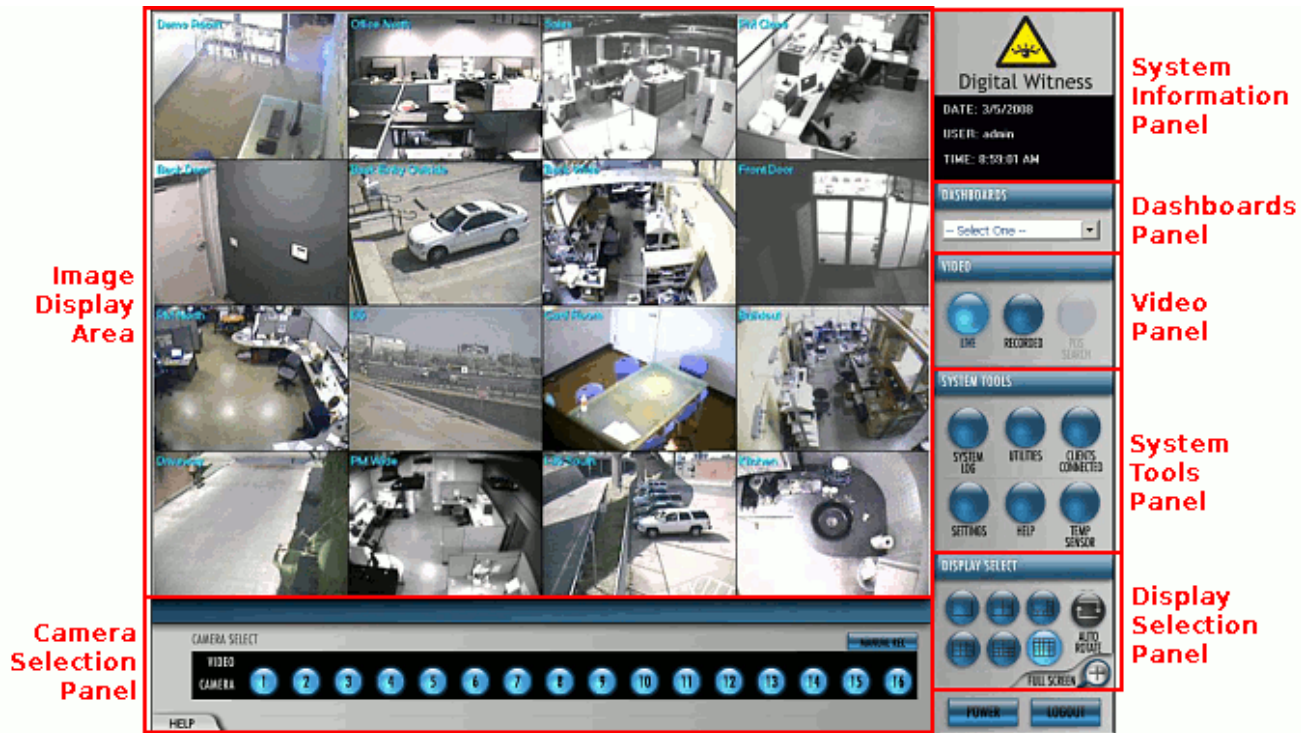
The interface configurations include the following:

- **Main Screen**—The Main Screen acts as the central navigation point for the DVR Server software, allowing you to view live images and to access all search and settings screens. The Main Screen is detailed in the “Main Screen” section on page 4 of this document.
- **Archived Video Screen**—The Archived Video Screen allows you to access and review recorded video and audio files, and provides the tools necessary to save and manipulate video. The Archived Video Screen is detailed in the “Archived Video Screen” section on page 54 of this document.
- **POS Search Screen**—The POS Search Screen allows you to search POS transaction data based on your criteria and to play archived video associated with transactions. The POS Search Screen is detailed in the “POS Search Screen” section on page 73 of this document.

## Main Screen

When the DVR Server software is launched, the Main Screen displays. The Main Screen acts as the central navigation point for the DVR Server software, allowing you to view live images and to access all search and settings screens.

The main screen is divided into several sections (indicated below), each providing access to different system functions.



The sections of the Main Screen include the following:

- **Image Display Area**—The Image Display Area displays live video from one or more cameras, allowing you to monitor your site real time. Refer to the “Image Display Area” section on page 6 of this document for detailed information. Additional controls that display on the Main Screen allow you to modify the display. These controls include the following:
- **Camera Selection Panel**—The Camera Selection panel allows you to select one or more specific cameras to view live. Refer to the “Camera Selection Panel” section on page 6 of this document for detailed information.
- **Display Selection Panel**—The Display Selection panel allows you to control the on-screen camera display configuration when in live mode. Refer to the “Display Selection Panel” section on page 8 of this document for detailed information.



- **System Information Panel**—The System Information panel provides general information about the DVR. Refer to the “System Information Panel” section on page 9 of this document for detailed information.
- **Dashboards Panel**—The Dashboards panel allows you to select a specific dashboard to display. Refer to the “Dashboards Panel” section on page 10 of this document for detailed information.
- **Video Panel**—The Video panel displays options for viewing live video and for searching recorded video. Refer to the “Video Panel” section on page 12 of this document for detailed information.
- **System Tools Panel**—The System Tools panel allows you to complete a variety of tasks on the DVR, such as viewing the system log, accessing utilities, and modifying system settings. Refer to the “System Tools Panel” section on page 13 of this document for detailed information.

## Image Display Area

The Image Display Area displays live video from one or more cameras, allowing you to monitor your site real time.

You can manipulate the feed for an individual camera as follows:

- **Left-Click**—Left-clicking an individual camera selects the camera.
- **Double-Left-Click**—Double-clicking an individual camera increases the camera view to fill the Image Display Area. Double-clicking the camera view again returns the Image Display Area to normal view.
- **Right-Click**—Right-clicking an individual camera displays the Settings window, providing access to a limited number of camera settings.

Additionally, two panels of the Main Screen are used to control the view in the Image Display Area. These sections include the Camera Selection panel and the Display Selection panel. These panels are described in the sections that follow.

## Camera Selection Panel

Camera selection options on the Main Screen allow you to select one or more specific cameras to view live. These options also allow you to monitor activation and manual recording indications for all cameras.



A camera number is highlighted when the camera feed is visible in the Image Display Area, based on the display selection.

### Camera Selection





To select a specific camera, simply click the camera number. Depending on your display selection, the camera view in the Image Display Area may or may not change. For example, if all camera views are currently displayed, selecting a specific camera will not change the display. If, however, you have limited the display to a single camera view, selecting a camera changes the view.



### Camera Activation

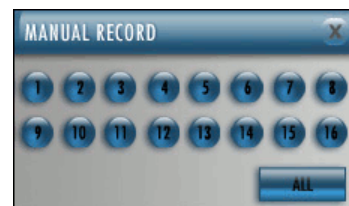
An indicator may display above each camera number to indicate camera activation, based on your camera settings (as described in the “Settings: Time Schedule Tab” section on page 27 of this document, and in the “Advanced Settings: POS Settings Tab” section on page 38 of this document).

Indicators that can display include the following:

-  **Full** This indicates that full recording has been initiated for the camera.
-  **Sensor** This indicates sensor activation for the camera.
-  **Motion** This indicates motion activation for the camera.
-  **Manual** This indicates that manual recording has been initiated for the camera. Refer to the “Manual Camera Recording” section below for additional information.


### Manual Camera Recording

The **Manual Rec** button allows you to select one or more cameras on which to initiate manual recording. Manually recorded video is saved just as video that is recorded automatically and can be accessed in the video archive.



Manual recording cannot be initiated on cameras for which POS transaction data capture is activated. For additional information about POS camera settings, refer to the “Advanced Settings: POS Settings Tab” section on page 38 of this document.

When you click this button, the **Manual Record** box displays, allowing you to select the specific camera(s) from which to record.

When manual recording is initiated, a **Manual** icon () displays above the camera number. Selecting the camera(s) a second time on the **Manual Record** box stops recording.

## Display Selection Panel

Display selection options on the Main Screen allow you to control the on-screen camera display configuration when in live mode.

### Screen Split

Click the screen icons to display 1, 4, 9 (Wide), 9, 10, or 16 cameras in the Image Display Area.



The initial display setting (the setting enabled when the DVR is booted) is based on the option selected from the **Initial Display Mode** list on the **System** tab of the **Settings** window. This option is detailed in the “Settings: System Tab” section on page 33 of this document.



### Auto Rotate

Click this button to automatically rotate the Image Display Area between individual cameras or sets of cameras, based on the Screen Split option currently selected (described above).

### Full Screen

Click this button to increase the size of the Image Display Area to the full screen, based on the Screen Split option currently selected (described above). The panels on the right side of the Main Screen and on the bottom of the Main Screen continue to display until you move the mouse onto the Image Display Area, at which point the panels disappear to expose the entire screen. To display a panel again while in full screen mode, hover the mouse over the panel area. Press the **Esc** key to return to normal (not full screen) display.



## System Information Panel

System information, including the current date/time and the active user, is displayed beneath the Digital Witness logo in the top right of the Main Screen. This panel provides general information about the DVR.

The following fields display in this section:

Field	Description
<b>Date</b>	This is the current system date. This date (along with the current time) is used in the video time stamp for all recorded video. Refer to the “Changing the System Date/Time” section below for information about setting/changing the date.
<b>User</b>	This is the user name of the active user (the user currently logged in to the DVR).
<b>Time</b>	This is the current system time. This time (along with the current date) is used in the video time stamp for all recorded video. Refer to the “Changing the System Date/Time” section below for information about setting/changing the time.



### Changing the System Date/Time

Complete the following steps to set or change the system date/time.

1. Close the DVR Server software.
2. In the Windows task bar, double-click the time (bottom right corner). The **Date and Time Properties** dialog box displays.
3. Click the **Date & Time** tab.
4. In the *Date* section of the tab, set the current date.
5. In the *Time* section of the tab, set the current time.
6. Click the **OK** button to save your changes.
7. On the Windows desktop, double-click the DVR Server software icon to launch the DVR Server. If the DVR Server software is not running, cameras will **not** record video.

## Dashboards Panel

The Dashboards panel allows you to select a specific dashboard report to display.

Dashboards reports are video management reports designed to provide quick access to video based on specific criteria, but without the need to spend time searching through potentially large amounts of recorded video. Dashboards are the best way to take advantage of the DVR's recorded video, allowing you to set up reports based on events that are most important to you.

Access to dashboard reports is dependent on availability and on user permissions. Reports only display if they have been set up in the system. Setting up dashboard reports is described in the “Settings: User Manager Tab” section on page 30 of this document. Additionally, access to reports that have been set up is based on user permissions, as described in the “Settings: Dashboards Tab” section on page 46 of this document.

When you select a dashboard from this panel, the panel refreshes to display a list of all dashboard reports that have been generated and are available for viewing.

You can create any combination of up to three (3) report types on a camera-by-camera basis. The three types of dashboard reports available for each camera include the following:

- **Incident Tracking Report**—The *Incident Tracking* report displays 12, 24, or 48 thumbnail snapshots of motion on a specific camera during a specified time period, allowing you to review each video segment recorded when the camera was activated. The thumbnail display is followed by a list of additional activations, providing a complete look at camera activation. Each thumbnail and list is hyperlinked. Clicking a link displays the associated video clip on the Archived Video Screen.
- **Statistical Sampling Report**—The *Statistical Sampling* report displays six (6) or nine (9) thumbnail snapshots, providing a random representation of motion recorded during a specified time period on a specific camera.
- **POS Exception Report**—The *POS Exception* report displays six (6) or nine (9) thumbnail snapshots of POS exceptions for a specific camera/register, allowing you to quickly review anomalies that might indicate an issue that you should pursue further. Exception types that can be reported on a per-camera basis include the following: Cancel Sale, Cash Out, Clock In, Clock Out, Coupon, Discount, No Sale, Paid Out, Recall, Refund, Training Mode, and Void. The report includes a list of POS transaction exceptions. Each exception is displayed as a hyperlink that, when clicked, will display the archived transaction video that is associated with the exception. Below the list of exceptions, video sampling





thumbnails display a random representation of the motion recorded video between the start and end times chosen for the camera.

## Launch a Dashboard

Complete the following step to display a dashboard

- In the Dashboards panel, select the dashboard from the list. The dashboard displays. When you click a thumbnail or link on the report, the Archived Video Screen displays and you can play the video using full playback controls. When you are finished reviewing the clip, you can click the **Close Screen** button to return to the report.

## Video Panel

The Video panel displays options for viewing live video and for searching recorded video. Video options include the following:

- **Live**—Click the **Live** button to display live video from one or more cameras in the Image Display Area. This allows you to monitor your site real time. Refer to the “Image Display Area” section on page 6 of this document for information about modifying the image display.
- **Recorded**—Click the **Recorded** button to display the Archived Video Screen. The Archived Video Screen allows you to access and review recorded video and audio, and provides various tools for saving and distributing video. Refer to the “Archived Video Screen” section on page 54 of this document for detailed information about reviewing archived video/audio.
- **POS Search**—Click the **POS Search** button to display the POS Search Screen, which allows you to search through POS transactions based on certain criteria. This feature includes the associated video recording related to the transaction. Refer to the “POS Search Screen” section on page 73 of this document for detailed information about searching POS transaction data.



## System Tools Panel

System tools allow you to complete a variety of tasks on the DVR, such as viewing the system log, accessing utilities, and modifying system settings.

System tools include the following:

- **System Log**—This tool allows you to view and print a complete activity log of DVR operations. Refer to the “System Tools: System Log” section on page 14 of this document for detailed information.
- **Utilities**—System utilities allow you to complete several tasks using the DVR Server, including listening to live audio, manipulating P/T/Z cameras, and creating video backup CDs. Refer to the “System Tools: Utilities” section on page 15 of this document for detailed information.
- **Clients Connected**—This tool provides an indication that one or more users are currently connected to the DVR using the Remote Software. Refer to the “System Tools: Clients Connected” section on page 21 of this document for detailed information.
- **Settings**—This tool allows you to configure DVR cameras and to adjust the overall configuration of the DVR Server software. Refer to the “System Tools: Settings” section on page 22 of this document for detailed information.
- **Help**—This tool provides access to system documentation, e-mail support, and live chat support. Refer to the “System Tools: Help” section on page 53 of this document for detailed information.

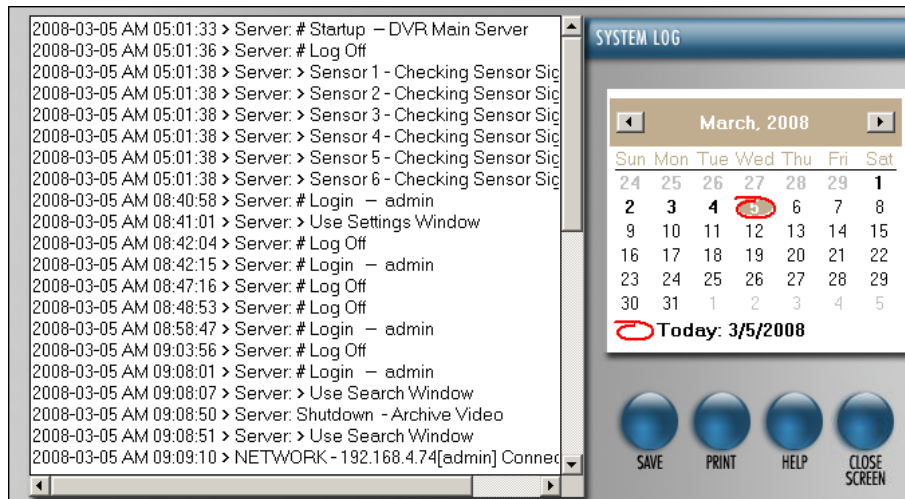


## System Tools: System Log

The **System Log** screen details all operations of the DVR Server software, creating a complete activity log that can be saved or printed.



To access the **System Log** screen, users must be assigned the “Access System Log” right. Refer to the “User Manager Tab” section on page 30 of this document for detailed information about assigning user rights.



The following sections, fields, and buttons display on this screen:

Section/Field/Button	Description
<b>[Log]</b>	This section displays log details.
<b>Calendar</b>	Click a date on the calendar to display the system log for that date. Each day for which a system log has been generated is displayed in bold text. Use the <b>Left/Right Arrow</b> buttons to navigate to the appropriate month.
<b>Save</b>	Click this button to save the system log for the date currently selected on the calendar. When you click this button, the Windows <b>Save As</b> dialog box displays, allowing you to and save the log on either a local drive or a network drive. The save format is text (TXT), which can be e-mailed or opened in most word processing applications.
<b>Print</b>	Click this button to print the system log for the date currently selected on the calendar. When you click this button, the Windows <b>Print</b> dialog box displays, allowing you to select the appropriate printer and initiate the printing process.
<b>Help</b>	Click this button to display online Help for the DVR Server software. Refer to the “Online Help” section on page 53 of this document for detailed information regarding online Help.
<b>Close Screen</b>	Click this button to close the <b>System Log</b> screen.



## System Tools: Utilities

System utilities allow you to complete several tasks using the DVR Server. These utilities include the following:

- **Audio Utility**—The Audio utility allows users to toggle between audio listening zones and to adjust the audio volume. Refer to the “Utilities: Audio” section below for detailed information.
- **Pan/Tilt/Zoom Utility**—The Pan/Tilt/Zoom utility allows users to control pan/tilt/zoom cameras directly from the DVR interface. Refer to the “Utilities: Pan/Tilt/Zoom” section on page 16 of this document for detailed information.
- **Backup Utility**—The Backup utility allows users to manually back up a day’s worth of data for one or more cameras to either CD-ROM disks or to a local or network hard disk. Refer to the “Utilities: Backup” section on page 17 of this document for detailed information.

### Utilities: Audio

The Audio utility allows users to toggle between audio listening zones and to adjust the audio volume. This feature works in conjunction with camera views. To listen to live audio, select a camera with the associated audio zone.

The following controls and buttons display on this screen:

Control/Button	Description
<b>Volume + / -</b>	Use this slider control to adjust the volume. Slide the control to the left ( - ) to reduce the volume, and slide the control to the right ( + ) to increase the volume.
<b>Mute</b>	Click this button to mute or resume audio.
<b>Live Audio</b>	Click the appropriate camera to listen to associated live audio.
<b>Close</b>	Click this button to close the <b>Audio</b> utility.



## Utilities: Pan/Tilt/Zoom

The Pan/Tilt/Zoom utility allows users to control pan/tilt/zoom cameras directly from the DVR interface. This interface will work in tandem with connected hardware controllers and web users.

The following controls and buttons display on this screen:

Control/Button	Description
<b>Camera</b>	Click the <b>Up</b> and <b>Down Arrow</b> buttons to select the P/T/Z camera that you want to control. The selected camera number displays between the buttons.
<b>Power</b>	Click this button to toggle the P/T/Z camera power on and off.
<b>[Directional Controls]</b>	Click the directional control buttons to pan (rotate) the P/T/Z camera.
<b>Zoom</b>	Click the <b>Up</b> and <b>Down Arrow</b> buttons to zoom the camera view in and out. The <b>Down Arrow</b> button zooms the camera view out. The <b>Up Arrow</b> button zooms the camera view in.
<b>Auto Pan</b>	Click this button to initiate automatic panning of the P/T/Z camera.
<b>Close</b>	Click this button to close the <b>Pan/Tilt/Zoom</b> utility.





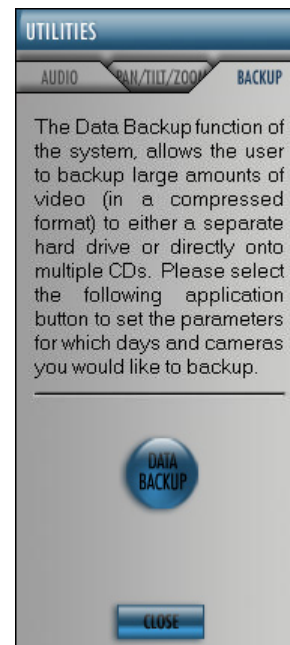
## Utilities: Backup

The Backup utility allows users to manually back up a day's worth of data for one or more cameras to either CD-ROM disks or to a local or network hard disk. You can view the data in the locations by using a backup viewer that is backed up along with the data.

This utility also allows the user to restore backup data to the DVR.

The following controls and buttons display on this screen:

Control/Button	Description
<b>Data Backup</b>	Click this button to display the <b>Backup Utility</b> window, which allows you to complete a manual data backup.
<b>Close</b>	Click this button to close the <b>Backup</b> utility.



### Completing a Manual Backup to CD

Complete the following steps to manually back up data to CD-ROM disks.

#### Before You Begin

Depending on the amount of data being backed up, the backup process may require multiple CD-ROM disks. Make sure that you have several blank, writeable CDs available.

#### Complete the Backup Process

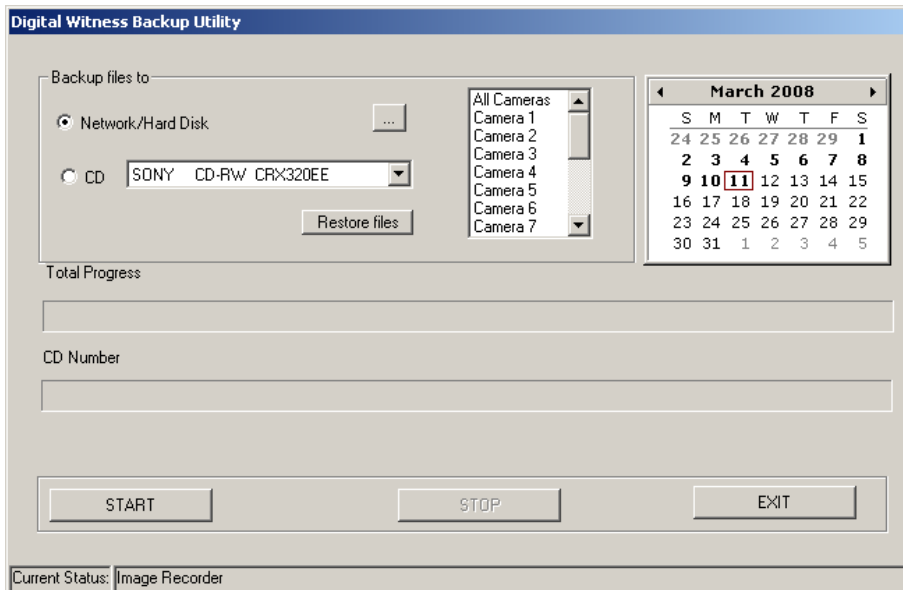
1. Insert a blank, writeable CD-ROM disk in the DVR CD-ROM drive.



If prompted by the operating system to select to explore the disk, close the Windows Explorer window. If prompted by the operating system to select a burn option, cancel the prompt.

2. On the DVR Main Screen, in the *System Tools* section, click the **Utilities** button. The *Utilities* section, **Audio** tab displays.
3. Click the **Backup** tab.

- Click the **Data Backup** button. The **Backup Utility** window displays.



- In the *Backup Files To* section, select the **CD** option.
- From the CD drive list, select the CD drive that you want to use to back up data.
- From the camera list, select the “All Cameras” option or the specific camera for which you want to back up data.
- On the calendar, click the date for which you want to back up data.
- Click the **Start** button.
- If the backup process requires more than one (1) CD-ROM disk, insert subsequent disks when prompted.

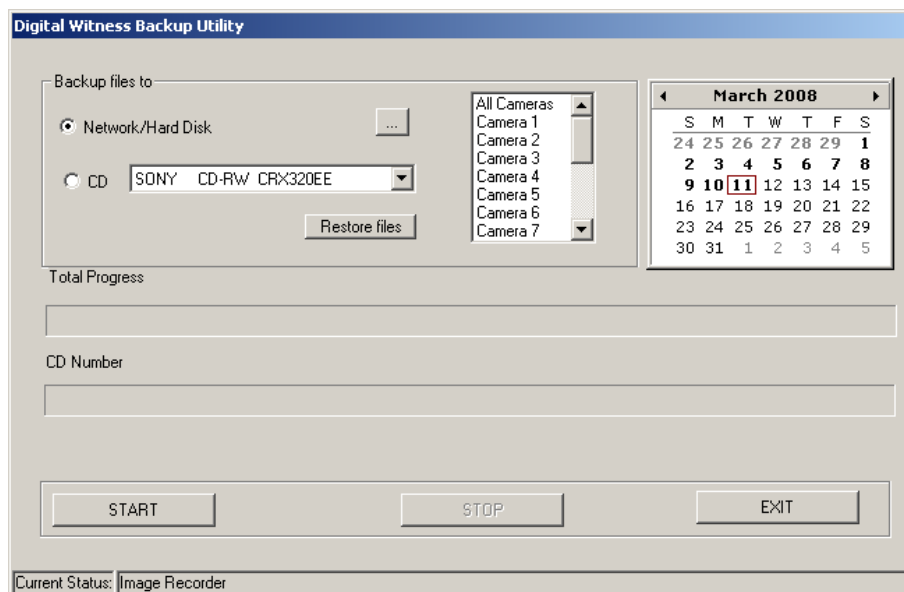
## **Completing a Manual Backup to a Hard Disk**


Complete the following steps to manually back up data to a local or network hard disk.

- On the DVR Main Screen, in the *System Tools* section, click the **Utilities** button. The *Utilities* section, **Audio** tab displays.
- Click the **Backup** tab.



- Click the **Data Backup** button. The **Backup Utility** window displays.



- Select the **Network/Hard Disk** option.
- Click the **Browse** button (  ). A file selection dialog box displays.
- Navigate to the local or network location in which you want to back up data, and click the **OK** button.
- From the camera list, select the “All Cameras” option or the specific camera for which you want to back up data.
- On the calendar, click the date for which you want to back up data.
- Click the **Start** button.




## Restore Backup Data

Complete the following steps to manually back up data to a local or network hard disk.

- On the DVR Main Screen, in the *System Tools* section, click the **Utilities** button. The *Utilities* section, **Audio** tab displays.
- Click the **Backup** tab.
- In the *Backup Files To* section, click the **Restore Files** button. The **DW\_Restore** dialog box displays.

4. In the **Restore From** field, enter the local or network path where the backup data is stored.



If you are not sure where the backup data is stored, click the **Browse** button (  ) to display a file selection dialog box, which will allow you to navigate to and select the data that you want to restore.

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5. Click the **Restore** button.



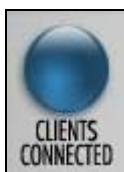
## System Tools: Clients Connected

The **Clients Connected** tool provides an indication that one or more users are currently connected to the DVR using the Remote Software.

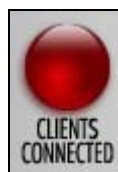


This tool is only available if the Network Connectivity Enabled option is checked on the **Settings** window, **System** tab. This setting is described on page 35 of this document.

When a user is connected remotely, the **Clients Connected** button flashes red, providing a visual indication of the connection.

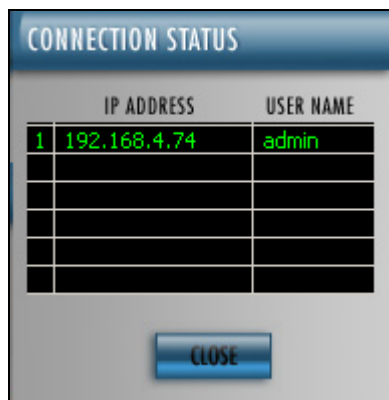


**No Remote Connections**



**Remote Connections**

Clicking the button displays a **Connection Status** screen lists details about each user currently connected to the DVR.



The following columns display on this screen:

Column	Description
<b>[Connection Number]</b>	This column displays a number indicating connection order. Each remote connection is numbered sequentially, based on connection time.
<b>IP Address</b>	This column displays the IP address of the user connected to the DVR.
<b>User Name</b>	This column display the DVR user name under which the connected user is currently logged in on the DVR.

## System Tools: Settings

The **Settings** window allows you to configure DVR cameras and to adjust the overall configuration of the DVR Server software.

This window can be accessed in two different ways:

- **Settings Window (System)**—Clicking the **Settings** button on the Main Screen displays the **Settings** window, with access to all settings tabs.
- **Settings Window (Camera)**—Right-clicking an individual camera view on the Main Screen displays the **Settings** window, with access to a limited number of settings tabs.

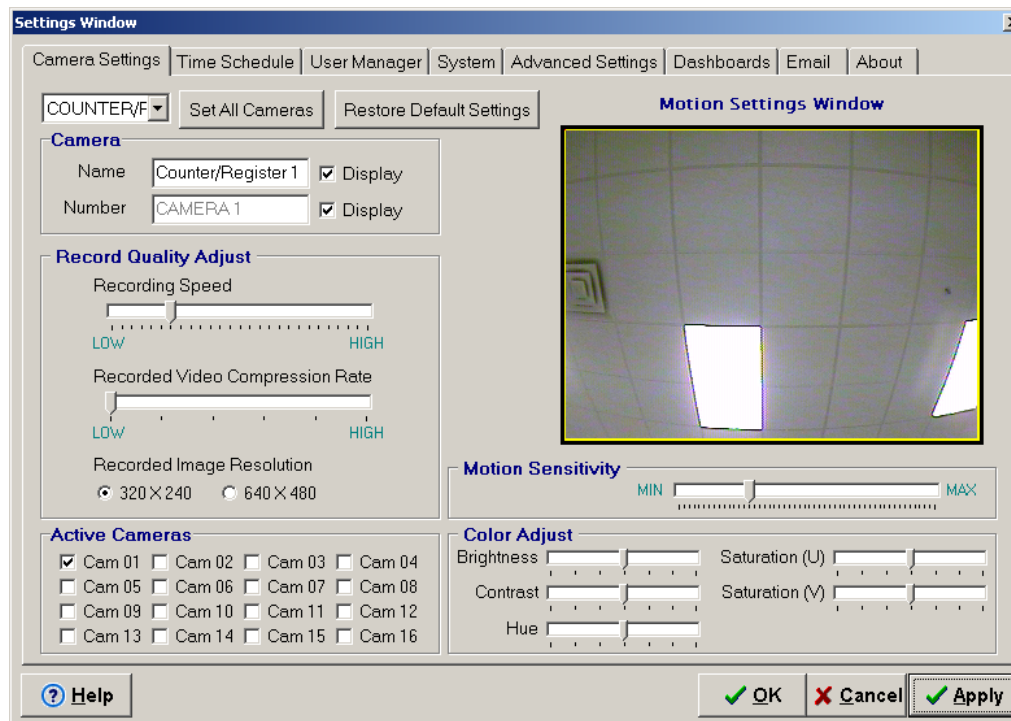
Settings are organized by tabs, which are displayed across the top of the **Settings** window and provide access to all settings that control how the DVR and the DVR Server software functions.

- **Camera Settings Tab**—This tab displays the primary settings used to configure each camera. Refer to the “Settings: Camera Settings Tab” section on page 23 of this document for detailed information.
- **Time Schedule Tab**—This tab is used to configure and customize the recording schedule. Refer to the “Settings: Time Schedule Tab” section on page 27 of this document for detailed information.
- **User Manager Tab**—This tab is used to set up DVR users. Refer to the “Settings: User Manager Tab” section on page 30 of this document for detailed information.
- **System Tab**—This tab allows you to establish general DVR settings, including startup/shutdown options, network options, initial display mode, storage device, and storage options. Refer to the “Settings: System Tab” section on page 33 of this document for detailed information.
- **Advanced Settings Tab**—This tab provides access to settings related to options DVR functions, such as POS, P/T/Z, sensors, TV, audio, and temperature settings. Refer to the “Settings: Advanced Settings Tab” section on page 37 of this document for detailed information.
- **Dashboards Tab**—This tab allows you to create video management reports, which provide quick access to video based on specific criteria, but without the need to spend time searching through potentially large amounts of recorded video. Refer to the “Settings: Dashboards Tab” section on page 46 of this document for detailed information.
- **Email Tab**—This tab allows you to establish outbound mail server details and to set up e-mail addresses for report distribution purposes. Refer to the “Settings: Email Tab” section on page 49 of this document for detailed information.
- **About Tab**—This tab provides information about the DVR Server software, and provides a link to the Digital Witness web site where online assistance is available. Refer to the “Settings: About Tab” section on page 51 of this document for detailed information.



## Settings: Camera Settings Tab

The **Camera Settings** tab displays the primary settings used to configure each camera. Use this tab to set the camera caption, establish motion detection zones and sensitivity, set recording quality, and adjust the picture quality settings for the camera.



### Motion Settings

Motion settings determine the visible area of the camera view that should be enabled for motion detection and image recording. The default setting is one motion detection zone that encompasses the entire camera display area. The DVR software will only record images when motion is detected within a motion detection zone. If no zone is set, no motion will be detected and no recording will occur. A motion detection zone is displayed as a yellow box on the screen. To create a motion detection zone, left click and drag the mouse across the camera view. The resulting yellow rectangle is a motion detection zone. To erase a motion detection zone, right click on the motion detection zone. Up to five (5) motion detection zones can be set for each camera. Creating a sixth motion detection zone will replace the first motion detection zone created, etc.

Keep the following information in mind when defining a detection zone:

- **Customizing Motion Detection Zones**— Motion detection zones should be carefully customized and edited for each camera to avoid recording unwanted video images. When customizing zones, exclude ceiling fans, electronic screens and lights (including PC monitors, TV's, digital clocks, and blinking lights on phones, microwaves, VCR's, etc.) trees and bushes, flags/wind chimes, and passing vehicles in high traffic areas. Customizing the motion detection screen will dramatically enhance the capabilities of the motion detection recording system.

- **Sunlight/Shadows**—In areas receiving natural light, shadows caused by changing sunlight conditions will periodically activate recording (both for indoor and outdoor cameras). This is particularly noticeable during sunrise and sunset as lighting conditions change. Decreasing motion sensitivity settings or eliminating walls and other “shadow areas” from motion detection zones will help reduce this occurrence.

**Tab Access**

This tab can be accessed in two different ways:

- **Settings Window (System)**—Clicking the **Settings** button on the Main Screen displays the **Settings** window, with access to all settings tabs. When you access the **Camera** tab in this manner, you can establish settings for one camera, multiple cameras, or all cameras.
- **Settings Window (Camera)**—Right-clicking an individual camera view on the Main Screen displays the **Settings** window, with access to a limited number of settings tabs. When you access the **Camera** tab in this manner, you can establish settings only for the selected camera.

The following fields and buttons display on this tab:

Field/Button	Description
<b>[Camera]</b>	Check the check box to the left of the camera number if the camera should be active. <b>This list is not enabled if you accessed the Camera tab by right-clicking a camera view on the Main Screen.</b>
<b>Set All Cameras</b>	Click this button to apply the current camera settings to all active cameras. <b>This button is not available if you accessed the Camera tab by right-clicking a camera view on the Main Screen.</b>
<b>Restore Default Settings</b>	Click this button to revert the camera(s) to default settings.

The following fields display in the *Camera* section of the tab.

<b>Name</b>	Enter the name for the camera (such as “Store Room” or “Cash Register”). The name that you enter will display in the upper left corner of the camera in the Image Display Area.
<b>Display</b>	Check this check box if the name entered in the <b>Name</b> field should be displayed in the upper left corner of the camera view in the Image Display Area.
<b>Number</b>	This field displays the number identifying the camera currently selected in the <b>[Camera]</b> list. This number is displayed for informational purposes only.
<b>Display</b>	Check this check box if the camera number should be displayed in the upper left corner of the camera view in the Image Display Area.



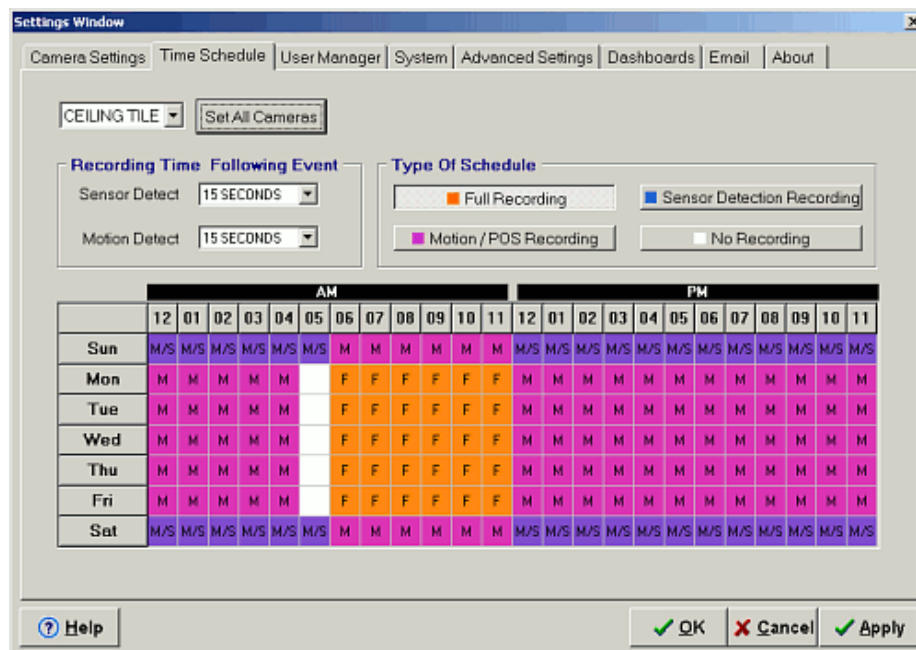
Field/Button	Description
The following fields display in the <i>Record Quality Adjust</i> section of the tab.	
<b>Recording Speed</b>	Use this setting to adjust overall recording speed from 1 frame per second (fps) up to 30 fps. The DVR has the capacity to record activity at 30 fps, per camera (equivalent to the speed of the human eye). These speeds lead to clearer, more accurate video; however, since each frame occupies a finite amount of space on the system hard drive, higher recording speeds will fill the DVR's hard drive more quickly. Lower fps counts capture less activity, leading to choppy "slow-motion like" motion; however, lower counts lead to more efficient hard drive utilization, allowing more days/weeks worth of video to be recorded on the DVR.
<b>Recorded Video Compression Rate</b>	Use this setting to adjust the video compression rate. The DVR utilizes a number of compression techniques to meet customized needs. Low compression settings will lead to clearer and more accurate video, but each image will occupy more hard drive space. High compression settings will lead to video that is not as clear; however, overall image size will be smaller, making more room available on the hard drive.
<b>Recorded Image Resolution</b>	The DVR Server software also allows the cameras to record in different resolution sizes. Generally, 320x240 will be adequate for general system use (most monitors are 320 resolution). Again, higher resolution images require more hard drive space, limiting the overall amount of video that can be stored and reduces the number of video frames that can be recorded by 50%.
The following field displays in the <i>Active Cameras</i> section of the tab.	
<b>Active Cameras</b>	Select the active cameras. The DVR uses this information to verify whether a camera is working. If no active cameras are selected, the DVR will not report any trouble if it occurs.
The following field displays in the <i>Motion Settings Window</i> section of the tab.	
<b>Motion Settings Window</b>	If appropriate, modify the motion detection zone(s). The default setting is one motion detection zone that encompasses the entire camera display area. The DVR software will only record images when motion is detected within a motion detection zone. If no zone is set, no motion will be detected and no recording will occur. A motion detection zone is displayed as a yellow box on the screen. Refer to the "Motion Settings" section on page 23 of this document for additional information about motion settings.
The following field displays in the <i>Motion Sensitivity</i> section of the tab.	
<b>Motion Sensitivity</b>	Set the sensitivity for motion detection. Maximum sensitivity causes recording to be activated when the slightest amount of movement is detected in the motion detection zone(s). Minimum sensitivity causes recording to be activated only when significant and sustained amounts of movement are detected in the motion detection zone(s).

Field/Button	Description
The following fields display in the <i>Color Adjust</i> section of the tab.	
<b>Color Adjustments:</b> <b>Brightness,</b> <b>Contrast, Hue,</b> <b>Saturation (U), and</b> <b>Saturation (V)</b>	Adjustment the camera color variables, as appropriate. These variables include brightness, contrast, hue, and U/V saturation. It is recommended that you check color adjustments at different times of the day and under different lighting conditions in order to balance the settings for optimal viewing and recording during all desired times and under all conditions.
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.



## Settings: Time Schedule Tab

In order to establish recording on the DVR, a time schedule for the camera must be set. The **Time Schedule** tab is used to configure and customize the recording schedule. By default, the DVR all cameras are set for 24/7 motion-based recording.



### Tab Access







This tab can be accessed in two different ways:

- **Settings Window (System)**—Clicking the **Settings** button on the Main Screen displays the **Settings** window, with access to all settings tabs. When you access the **Time Schedule** tab in this manner, you can establish a recording schedule for one, multiple cameras, or all cameras.
- **Settings Window (Camera)**—Right-clicking an individual camera view on the Main Screen displays the **Settings** window, with access to a limited number of settings tabs. When you access the **Time Schedule** tab in this manner, you can establish a recording schedule only for the selected camera.

### Recording Schedule Grid

This tab is divided into two sections, the top section displaying settings and the bottom section displaying a recording schedule grid that allows you to quickly determine, day by day and hour by hour, your established recording options (described in detail in the field definition list).

The following colors/codes are displayed on the recording grid for each hour:

-  Full Recording
-  Motion-Based/POS Recording
-  Motion-Based/POS (based on site hours)
-  Sensor-Based Recording
-  Motion-Based/POS Recording and/or Sensor Detection Recording
-  No Recording

The following fields and buttons display on this tab:

Field/Button	Description
<b>[Camera]</b>	This is the camera for which you want to modify the recording schedule. When the <b>Time Schedule</b> tab is displayed by right-clicking on an active image, this field is disabled. Only the active camera can be scheduled.
<b>Set All Cameras</b>	Click this button to apply the current time schedule settings to all active cameras. When the <b>Time Schedule</b> tab is reached by right clicking on an active image, this button does not display. Only the active camera can be scheduled.
The following fields display in the <i>Recording Time Following Event</i> section of the tab.	
<b>Sensor Detect</b>	This is the amount of time that recording is desired after a sensor activation event. The DVR will continue to record video for the selected amount of time following the last moment of motion detection or sensor activation.
<b>Motion Detect</b>	This is the amount of time that recording is desired after a motion activation event. The DVR will continue to record video for the selected amount of time following the last moment of motion detection or sensor activation.
The following fields display in the <i>Type of Schedule</i> section of the tab.	
<b>Full Recording</b>	Click this button and then select hours on the schedule grid during which full recording should take place (meaning that the camera(s) is recording constantly). Each hour set to record constantly is displayed on the schedule grid in orange with the letter "F."



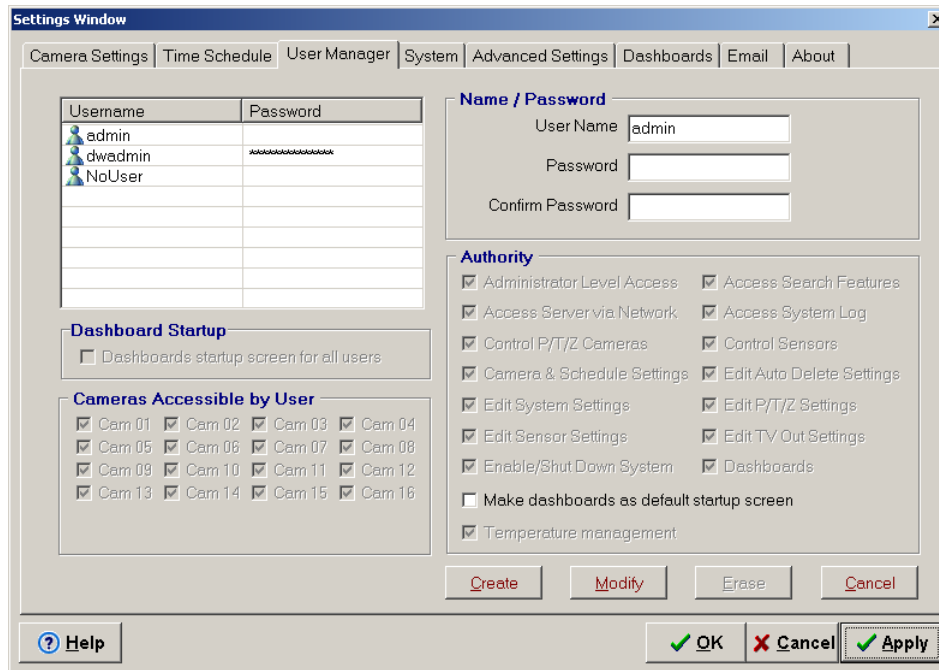
<b>Field/Button</b>	<b>Description</b>
<b>Sensor Detection Recording</b>	Click this button and then select hours on the schedule grid during which sensor-based detection should take place. Each hour set for sensor recording is displayed on the grid in blue with the letter “S.” When Sensor-Based Recording is selected to replace Motion-Based Recording (or vice-versa), the grid displays a blue square with an “M/S” designation. This indicates that recording will take place when either motion is detected or a corresponding sensor is activated. In order to choose only Motion-Based Recording or only Sensor-Based Recording, select No Recording to clear the time slot, and then select either Motion-Based Recording or Sensor-Based Recording.
<b>Motion/POS Recording</b>	Click this button and then select hours on the schedule grid during which motion-based detection should take place. Each hour set for motion recording is displayed on the grid in pink with the letter “M.” When Sensor-Based Recording is selected to replace Motion-Based Recording (or vice-versa), the grid displays a blue square with an “M/S” designation. This indicates that recording will take place when either motion is detected or a corresponding sensor is activated. In order to choose only Motion-Based Recording or only Sensor-Based Recording, select No Recording to clear the time slot, and then select either Motion-Based Recording or Sensor-Based Recording.
<b>No Recording</b>	Click this button and then select hours on the schedule grid during which no recording should take place. When no recording is set, the DVR will not record <i>any</i> activity, regardless of any other DVR settings.

The following fields display at the bottom of the **Settings** window.

<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

## Settings: User Manager Tab

The **User Manager** tab is used to set up DVR users. Setting up a user involves assigning a user name and password and establishing the authority level for each user.



### Understanding User Authority

Access (authority) rights, which are assigned on a user-by-user basis, determine a user's rights on the DVR. This allows you to set up users with maximum access to the system, as well as users with limited access to the system.

The DVR Server software includes a default “Admin” user name with no password. The user name and password can be changed for “Admin,” but the authorization settings for this user cannot be modified.

The DVR Server software includes numerous authority settings, which allows each DVR to be customized for unique and specific needs. These authority settings include the following:

- **Administrator Level Access**—Grants the user full system authority.
- **Access Server Via Network**—Allows the user access to the DVR via the Remote Software.
- **Control P/T/Z Cameras**—Allows the user to control any pan/tilt/zoom cameras that are attached to the System.
- **Camera & Schedule Settings**—Allows the user to access and edit the settings found on the Camera and Time Schedule Screens.
- **Edit System Settings**—Allows the user to access and edit the settings found on the System Screen.



- **Edit Sensor Settings**—Allows the user to access and edit the settings found on the **Sensor Manager** tab.
- **Enable/Shut Down System**—Allows the user to turn off and exit the DVR Server software using the **Power** icon on the Main Screen.
- **Make Dashboards as Default Startup Screen**—
- **Access Search Features**—Allows the user to access the **Search Screen** and to review saved video.
- **Access System Log**— Allows the user to access the DVR system log.
- **Control Sensors**—Allows the user to physically control any sensors that are attached to the DVR.
- **Edit Auto Delete Settings**—Allows the user to modify delete settings.
- **Edit P/T/Z Settings**—Allows the user to access and edit the settings found on the **Pan/Tilt** tab.
- **Edit TV Out Settings**—Allows the user to access and edit the settings found on the **TV Options** tab.
- **Dashboards**—Allows the user to view dashboard report.

The following fields and buttons display on this tab:

Field/Button	Description
<b>Username</b>	This column displays the user name for each user currently available in the system. Selecting a user's name allows you to modify the user's settings.
<b>Password</b>	This column displays an encrypted password for the corresponding user listed in the <b>Username</b> column.

The following fields display in the *Dashboard Setup* section of the tab.

<b>Dashboards Startup Screen for All Users</b>	Check this check box if you want a dashboard report to display as the default screen for all users when logging in to the DVR.
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The following fields display in the *Cameras Accessible By User* section of the tab.

<b>Cameras Accessible by User</b>	Check the check mark next to each camera that the user is allowed to view and access. If a camera is not selected, the user will not be able to see live images from the camera, and will not have access to the camera for any of the other authorized features (such as search, editing, sensors, P/T/Z, etc.).
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When no users are logged in to the DVR, the system will only display live images of those cameras that are accessible for **all** users.

Field/Button	Description
The following fields display in the <i>Name/Password</i> section of the tab.	
<b>User Name</b>	Enter a unique user name for the user. This user name, in combination with the user's password, will allow the user to access DVR functions, such as settings. The user name/password combination also allows the user to access the DVR using Remote Software.
<b>Password</b>	Enter a unique password for the user. This password, in combination with the user name, will allow the user to access DVR functions, such as settings. The user name/password combination also allows the user to access the DVR using Remote Software.
<b>Confirm Password</b>	Enter the user's password again to confirm spelling. This password must match exactly the password that you enter in the <b>Password</b> field (described above).
The following fields display in the <i>Authority</i> section of the tab.	
<b>Authority</b>	Check the check mark next to each access right that should be assigned to the user. Refer to the "Understanding User Authority" section on page 30 of this document for a description of each right.
<b>Create</b>	Click this button to save a new user. The user is assigned the settings that are displayed at the time this button is clicked, though the settings can be modified.
<b>Modify</b>	After selecting an existing user from the user list and modifying the user's settings, click this button to save changes.
<b>Erase</b>	After selecting an existing user from the user list, click this button to remove the user from the system.
<b>Cancel</b>	Click this button to cancel changes to an existing user's profile or to cancel changes made for a new user.
The following fields display at the bottom of the Settings window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.



## Settings: System Tab

The **System** tab allows you to establish general DVR settings, including startup/shutdown options, network options, initial display mode, storage device, and storage options.

### Understanding DVR Storage Capacity

One of the most important things to understand about the DVR is the storage capacity, which is the amount of recorded video/audio that is maintained on the system at any given time. The actual capacity is determined by the size of the hard disk(s) on which video is recorded, though there is not necessarily a set amount (in days) of video/audio. Assuming that you do not want to limit the amount of stored data to a specific number of days (which is an option on this tab), the amount of stored data will vary at any given time. This is due to fluctuations in 1) the number of cameras attached to the system; 2) the type of cameras attached to the system (color images require more drive space); 3) the presence of audio connections and activity (video files with audio require more drive space); 4) the amount of activity taking place within the view of the cameras; and 5) the resolution, compression rate and frames per second settings of the retained images.

By default, the DVR will record continuously and will overwrite existing data when the storage hard disk(s) is full. However, there are two recording options available when the storage hard disk(s) reaches maximum capacity:

- **Overwrite Oldest Video Files**—This option causes the DVR to erase the oldest files on the system and replace those files with the newest recorded video/audio. This is the recommended setting.
- **Stop Recording**—This option causes the DVR to stop recording when the storage hard drive(s) is full, thereby preserving the oldest files but ceasing to record the newest activity.

The following fields and buttons display on this tab:

Field/Button	Description
<b>Company Name</b>	The company name defaults based on the DVR computer name and cannot be changed.

The following fields display in the *Window Startup/Shutdown* section of the tab.

**Auto Run After Window Startup** Select this option to force the DVR Server software to automatically launch every time the power is turned on to the DVR or it is restarted. **It is strongly recommended that this feature be activated.**

**Auto Logoff User After XX Minutes** Select this option to force the DVR Server software to automatically log out a user after a defined period of inactivity. Selecting this feature reduces the risk that an unauthorized user is able to utilize portions of the system by piggybacking off of an authorized user name and password. Auto Log Off will not shut down the DVR Server software. The DVR Server software will continue to run and video will still be recorded pursuant to the parameters that have been set. However, users will not be able to access the DVR Server software until they log back in.

**Auto Turn Off Display After XX Minutes** Selecting this option disables the display of video in the Image Display Area (in live mode) after the number of minutes that you select. When video is disabled based on this option, video can be re-enabled simply by moving the cursor over the cameras in the Image Display Area.

**Upon Exiting** Select the appropriate option to indicate actions that should be taken when the DVR Server software is closed. Options include the following:

- **Only Shut Down DW Server**—Select this option to turn off the DVR Server software, but leave the DVR running. This feature should be selected if the system administrator needs to access certain control panels, etc. within the DVR.
- **Shut Down DW Server & DVR**—Select this option to turn off the DVR Server software and force the DVR to reboot and restart, thus clearing all temporary files.
- **Shut Down DW Server & Reboot DVR**—Select this option to turn off the DVR Server software and shut down off the DVR.

The following fields display in the *Network* section of the tab.

**Network Connectivity Enabled** Check this check box if users should be allowed to connect to the DVR through the Remote Software.



Field/Button	Description
<b>Show Clients Connected to DVR</b>	Check this check box if you want to enable notification of remote connectivity to the DVR. When a user is connected remotely, the Clients Connected button on the Main Screen flashes red, providing a visual indication of the connection. Clicking the button displays a <b>Connection Status</b> screen, which lists details about each user currently connected to the DVR. Refer to the “System Tools: Clients Connected” section on page 21 of this document for additional information.
<b>Simultaneous Remote Connections</b>	Specify the maximum number of users that can access the DVR simultaneously through the Remote Software. The system allows for an unlimited number of simultaneous users. However, the broad band connection sending information to remote users will be divided in proportion to the number of simultaneous users, thereby impacting the broad band speed available to each such user.
<b>Local Network IP</b>	The DVR Server software automatically detects the IP address assigned to the DVR. This information is provided for informational purposes only. Remote users will need this IP address information in order to connect to the DVR through the Remote Software. If you need to change the IP address, please contact Digital Witness Customer Service.

The following fields display in the *Display Mode* section of the tab.

<b>Initial Display Mode</b>	This option determines the default on-screen camera display configuration for live mode when the DVR is booted.
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The following fields display in the *Storage Devices* section of the tab.

<b>Select Hard Drive</b>	This section allows you to select the DVR hard drives that should be allocated to saving recorded video. Since the DVR Server software is the only program running on the DVR, all available hard drives should be selected, <b>with the exception of the C: drive. C: should NEVER be selected as a storage option. Doing so will cause system instability.</b>
<b>Hard Drive Size</b>	This percentage indicates the amount of space on all <i>selected</i> hard drives that is full.
<b>Save Directory</b>	This field displays the name of the folder or directory into which saved files will be stored on the available hard drives.
<b>Reserve Hard Disk Space</b>	Adjust this setting to indicate the amount of space reserved on the dedicated hard drives for system actions other than the automatic storage of video and audio files. This provides the DVR with the memory it needs to operate and to create temporary and back-up files, and provides space on the hard drives to permanently save selected video and audio clips. In most applications, the lowest setting available (1,000 MB) will be sufficient for these purposes. However, if it is anticipated that multiple files will be permanently saved and stored directly on the DVR, then higher reserve settings will be needed.

Field/Button	Description
The following fields display in the <i>No. Of Days to Store Video</i> section of the tab.	
<b>Maximum</b>	Select this option if you want to store the maximum number of days worth of video on the DVR. Refer to the “Understanding DVR Storage Capacity” on page 33 of this document for additional information.
<b>Fixed</b>	Select this option if you want to store video for only a set number of days. Refer to the “Understanding DVR Storage Capacity” on page 33 of this document for additional information.
<b>[Days]</b>	If you select the <b>Fixed</b> option (described above), select the number of days for which you want to store video. Refer to the “Understanding DVR Storage Capacity” on page 33 of this document for additional information.

The following fields display in the *When Hard Drive Reaches Maximum Capacity* section of the tab.

<b>Overwrite Oldest Video Files</b>	This option causes the DVR to erase the oldest files on the system and replace those files with the newest recorded video/audio. This is the recommended setting. Refer to the “Understanding DVR Storage Capacity” on page 33 of this document for additional information.
<b>Stop Recording</b>	This option causes the DVR to stop recording when the storage hard drive(s) is full, thereby preserving the oldest files but ceasing to record the newest activity. Refer to the “Understanding DVR Storage Capacity” on page 33 of this document for additional information.

The following fields display at the bottom of the **Settings** window.

<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.



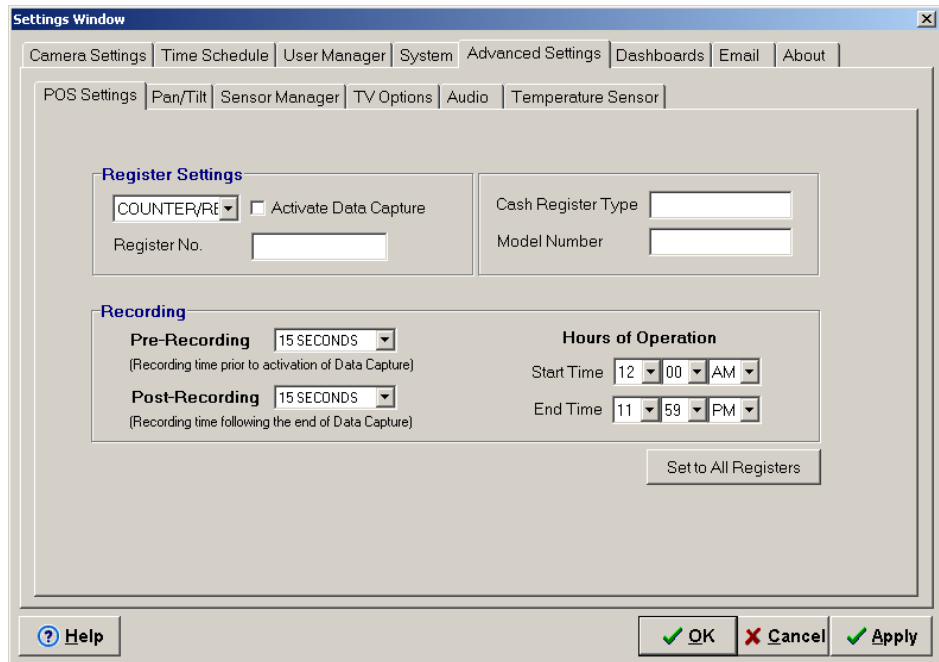
## Settings: Advanced Settings Tab

This tab is organized in a series of sub-tabs, each of which provide access to settings related to optional DVR functions.

- **POS Settings Tab**—This tab provides the means to configure the POS features of the DVR Server software. Refer to the “Advanced Settings: POS Settings Tab” section on page 38 of this document for detail information.
- **Pan/Tilt Tab**—This tab provides options to configure pan/tilt/zoom cameras that are incorporated into the system. Refer to the “Advanced Settings: Pan/Tilt Settings Tab” section on page 40 of this document for detail information.
- **Sensor Manager Tab**—This tab is used configure all of the output sensors that are connected to the DVR. Refer to the “Advanced Settings: Sensor Manager Settings Tab” section on page 42 of this document for detail information.
- **TV Options Tab**—This tab allows you to configure an optional television/security monitor output. Refer to the “Advanced Settings: TV Options Tab” section on page 43 of this document for detail information.
- **Audio Tab**—This tab allows you to configure optional audio inputs on the DVR. Refer to the “Advanced Settings: Audio Tab” section on page 45 of this document for detail information.

## Advanced Settings: POS Settings Tab

The **POS Settings** tab provides the means to configure the point-of-sale (POS) features of the DVR Server software. To use the POS features, POS hardware must be connected to your POS equipment.



The following fields and buttons display on this tab:

Field/Button	Description
<b>[Camera]</b>	Select the camera for which you want to configure POS settings.
<b>Activate Data Capture</b>	Check this check box to activate POS data capture on the selected camera.
<b>Register No.</b>	Enter the number identifying the register with which the selected camera is associated.
<b>Cash Register Type</b>	Enter the type of register (such as the register manufacturer) with which the selected camera is associated.
<b>Model Number</b>	Enter the manufacturer’s model number of the register with which the selected camera is associated.

The following fields display in the *Recording* section of the tab.

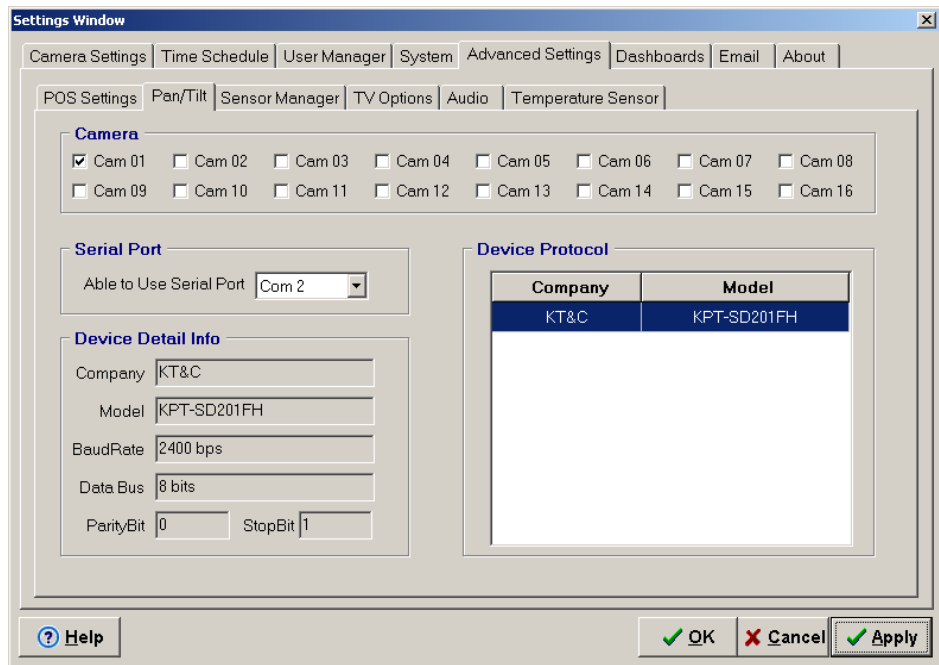
<b>Pre-Recording</b>	Select the amount of video, recorded prior to a POS transaction that should be associated with the transaction. When you view recorded video for a specific transaction, this indicates how many seconds or minutes ahead of the transaction that the video will start playing. Options include the following: 5 Seconds, 15 Seconds, 30 Seconds, 1 Minute, 2 Minutes, 5 Minutes, 10 Minutes, 30 Minutes, and 60 Minutes.
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<b>Field/Button</b>	<b>Description</b>
<b>Post-Recording</b>	Select the amount of video, recorded after a POS transaction that should be associated with the transaction. When you view recorded video for a specific transaction, this indicates how many seconds or minutes after the transaction that the video will play. Options include the following: 5 Seconds, 15 Seconds, 30 Seconds, 1 Minute, 2 Minutes, 5 Minutes, 10 Minutes, 30 Minutes, and 60 Minutes.
<b>Hours of Operation: Start Time</b>	Select the time at which the site opens. This information does not affect POS functionality, but is used for exception reporting purposes.
<b>Hours of Operations: End Time</b>	Select the time at which the site closes. This information does not affect POS functionality, but is used for exception reporting purposes.
<b>Set to All Registers</b>	Click this button to assign the POS settings that are currently displayed on the tab to all registers connected to the DVR.
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

## Advanced Settings: Pan/Tilt Tab

The **Pan/Tilt** tab provides options to configure pan/tilt/zoom cameras that are incorporated into the system. Pan/tilt/zoom cameras are mechanized cameras that allow users to manipulate the camera view from the computer keyboard, panning the camera right or left on an X-axis, tilting it up and down on a Y-axis, and zooming in or out the camera lens.



The following fields and buttons display on this tab:

Field/Button	Description
<b>Camera</b>	Check the appropriate check boxes to indicate which system cameras are P/T/Z cameras.

The following fields display in the *Serial Port* section of the tab.

<b>Able to Use Serial Port</b>	Select the DVR serial port through which the P/T/Z camera(s) is connected.
--------------------------------	--

The following fields display in the *Device Detail Info* section of the tab.

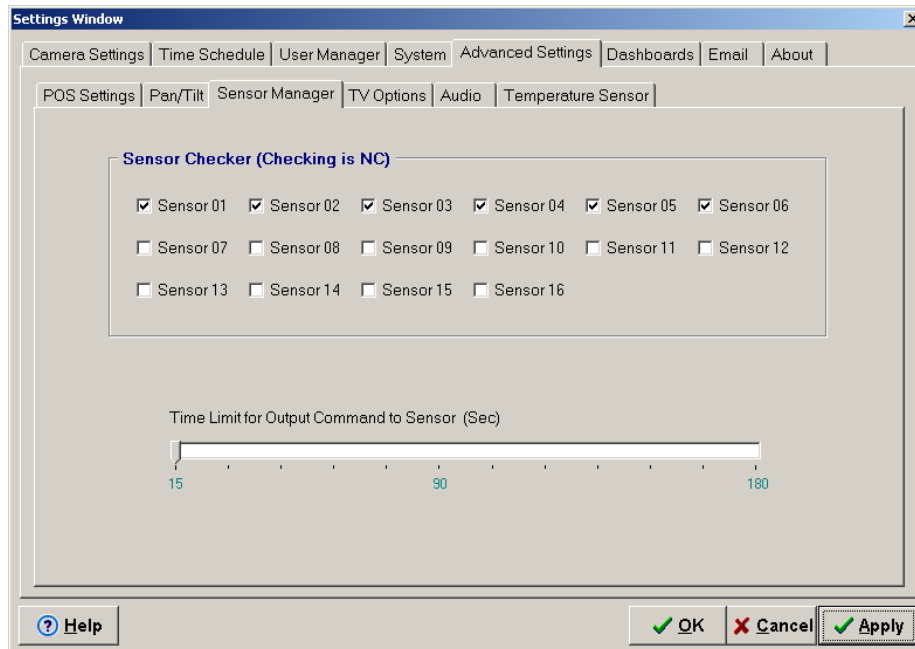
<b>Device Detail Info</b>	This section details the protocol (operating) information with respect to the selected P/T/Z camera. This is provided for informational purposes only, in order to assist system administrators in properly installing P/T/Z cameras.
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Field/Button	Description
The following fields display in the <i>Device Protocol</i> section of the tab.	
<b>Device Protocol</b>	This section displays protocol information for all available P/T/Z cameras. Since P/T/Z cameras have multiple operational controls, the operating instructions for these cameras must be interfaced with the DVR through a protocol. The DVR Server software maintains protocol information for some of the most popular P/T/Z cameras. If a required camera is not available on the Device Protocol list, contact Digital Witness Customer Service for information on obtaining and installing the protocol for the P/T/Z camera.
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

## Advanced Settings: Sensor Manager Tab

The **Sensor Manager** tab is used configure all of the output sensors that are connected to the DVR.



The following fields and buttons display on this tab:

Field/Button	Description
<b>Sensor Checker (Checking is NC)</b>	Check or clear the check box next to each sensor that is connected to the DVR, based on the type of sensor. Non-NC sensors (not checked) are sensors that send a constant signal upon activation. NC sensors (checked) send a single signal upon activation. The correct sensor setting must be selected to ensure correct functioning of output sensors.
<b>Time Limit for Output Command to Sensor (Sec)</b>	Select the amount of time that the DVR will send a signal to a corresponding output sensor.

The following fields display at the bottom of the **Settings** window.

<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

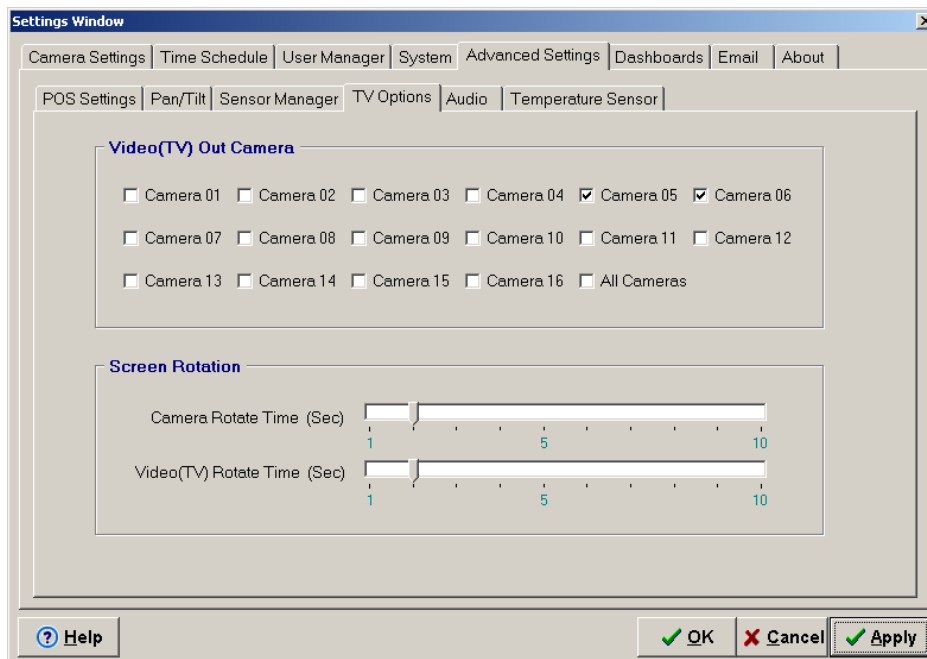


## Advanced Settings: TV Options Tab

The **TV Options** tab allows you to configure an optional television/security monitor output. A television or security monitor may be connected to the DVR to view live camera images over the monitor (in addition to PC viewing). The TV output displays one camera image at a time, and can be set to display one camera permanently or to rotate between up to 16 cameras.



Recorded images cannot be accessed via the TV Out feature.



The following fields and buttons display on this tab:

Field/Button	Description
<b>[Cameras]</b>	Check the check box next to each camera that should be output to a television monitor. Selecting a single camera will send a continuous signal from the camera to the monitor. Selecting two (2) or more cameras will cause the system to rotate between the selected signals, based on the <b>Video Rotate Time</b> setting.
<b>Camera Rotate Time (Sec)</b>	If more than one camera is selected, set the amount of time that a camera image (or set of cameras) will be displayed on the Main Screen before rotating to the next camera (or set of cameras) when the <b>Auto Rotate</b> button is enabled.
<b>Video(TV) Rotate Time (Sec)</b>	If more than one camera is selected, set the rotation speed at which camera signals should rotate in the video output. This determines the amount of time that an individual camera signal will be displayed on the television monitor before the next camera signal is displayed.

Field/Button	Description
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

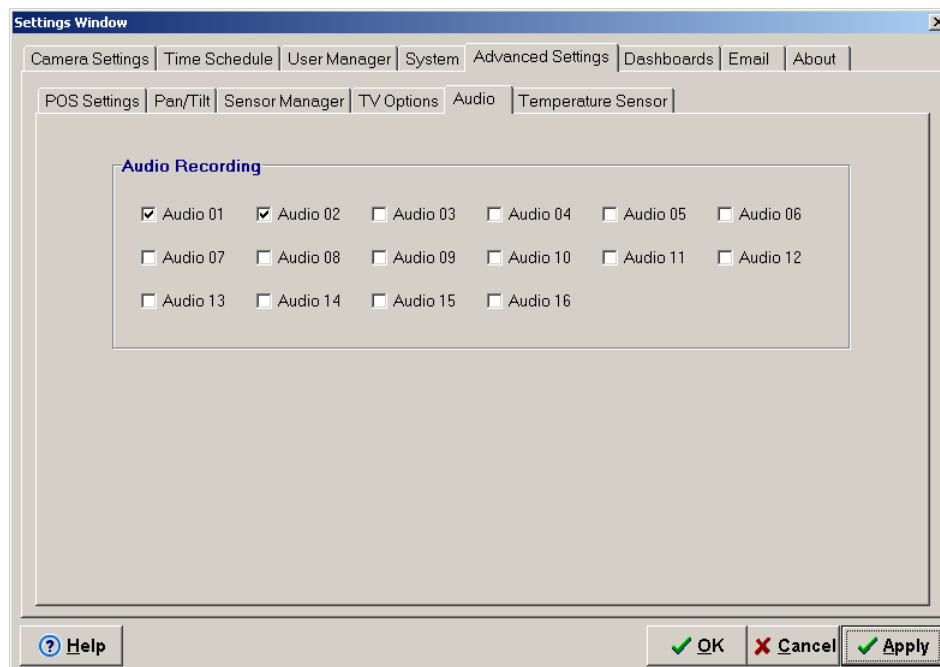


## Advanced Settings: Audio Tab

The **Audio** tab allows you to configure optional audio inputs on the DVR. One or more microphone may be connected to the DVR to listen to live sound over the live video screen or to recorded sound on the archive screen.



Microphones are required before any sound is heard with the DVR Server software.



The following fields and buttons display on this tab:

Field/Button	Description
[Cameras]	Check the check box next to each camera that corresponds to an installed microphone(s).

The following fields display at the bottom of the **Settings** window.

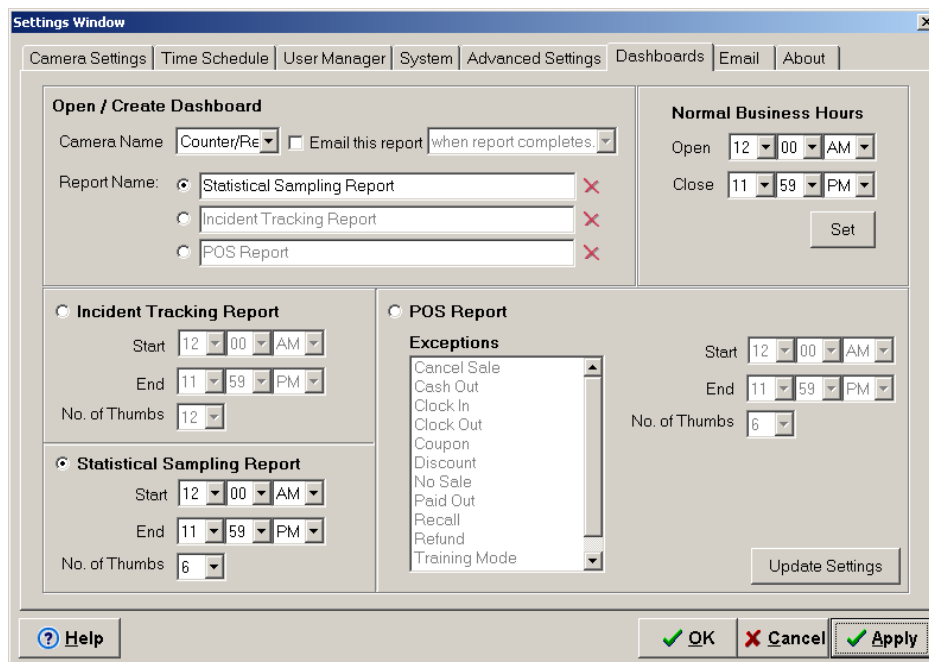
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

## Settings: Dashboards Tab

Dashboards are video management reports designed to provide quick access to video based on specific criteria, but without the need to spend time searching through potentially large amounts of recorded video. Dashboards are the best way to take advantage of the DVR's recorded video, allowing you to set up reports based on events that are most important to you.



Refer to the “Dashboards Panel” section on page 10 of this document for additional information about dashboard reports and how the reports are displayed by users.



The **Dashboards** tab allows you to create any combination of up to three (3) report types on a camera-by-camera basis. The three types of dashboard reports available for each camera include the following:

- **Incident Tracking Report**—The *Incident Tracking* report displays 12, 24, or 48 thumbnail snapshots of motion on a specific camera during a specified time period, allowing you to review each video segment recorded when the camera was activated. The thumbnail display is followed by a list of additional activations, providing a complete look at camera activation. Each thumbnail and list is hyperlinked. Clicking a link displays the associated video clip on the Archived Video Screen.
- **Statistical Sampling Report**—The *Statistical Sampling* report displays six (6) or nine (9) thumbnail snapshots, providing a random representation of motion recorded during a specified time period on a specific camera.
- **POS Exception Report**—The *POS Exception* report displays six (6) or nine (9) thumbnail snapshots of POS exceptions for a specific camera/register, allowing you to quickly review anomalies that might indicate an issue that you should pursue further. Exception types



that can be reported on a per-camera basis include the following: Cancel Sale, Cash Out, Clock In, Clock Out, Coupon, Discount, No Sale, Paid Out, Recall, Refund, Training Mode, and Void. The report includes a list of POS transaction exceptions. Each exception is displayed as a hyperlink that, when clicked, will display the archived transaction video that is associated with the exception. Below the list of exceptions, video sampling thumbnails display a random representation of the motion recorded video between the start and end times chosen for the camera.

The following fields and buttons display on this tab:

Field/Button	Description
<b>Camera Name</b>	Select the camera for which you want to define a dashboard report. The cameras available in this list are the cameras that are set as active on the “Settings: Camera Settings Tab” of the <b>Settings</b> window.
<b>Email This Report</b>	Check this check mark if dashboard reports should be delivered in e-mail format upon completion. The e-mail recipients are those recipients defined on the “Settings: Email Tab” of the <b>Settings</b> window.
<b>Report Name</b>	Select one of the report options, and enter the name of the report as it should display in the <b>Dashboards</b> panel.

The following fields display in the *Normal Business Hours* section of the tab.

<b>Normal Business Hours: Open</b>	Set the start time for your normal hours of operation. Include the time spent before the doors actually open. For instance, if your doors open at 10:00 am but the employees actually come in at 8:00 am, set your Open time for 8:00 am. This is a global setting for all cameras.
<b>Normal Business Hours: Closed</b>	Set the end time for your normal hours of operation. Include the time spent after the doors actually close. For instance, if your doors close at 10:00 pm but the employees actually leave at 11:00 pm, set your close time for 11:00 pm. This is a global setting for all cameras.

The following fields display in the *Incident Tracking Report* section of the tab.

<b>Incident Tracking Report</b>	Selecting this option if you want to create an <i>Incident Tracking</i> report. Selecting this option enables setup options for this type of report.
<b>Start</b>	Select the starting time for the time period during which data should be included for the <i>Incident Tracking</i> report for the camera.
<b>End</b>	Select the ending time for the time period during which data should be included for the <i>Incident Tracking</i> report for the camera.
<b>No. of Thumbs</b>	Select the number of thumbnail images that you want to include on the <i>Incident Tracking</i> report. Options include 12, 24, and 48.

Field/Button	Description
The following fields display in the <i>Statistical Sampling Report</i> section of the tab.	
<b>Statistical Sampling Report</b>	Select this option if you want to create an <i>Statistical Sampling</i> report. Selecting this option enables setup options for this type of report.
<b>Start</b>	Select the starting time for the time period during which data should be included for the <i>Statistical Sampling</i> report for the camera.
<b>End</b>	Select the ending time for the time period during which data should be included for the <i>Statistical Sampling</i> report for the camera.
<b>No. of Thumbs</b>	Select the number of thumbnail images that you want to include on the <i>Statistical Sampling</i> report. Options include 6 and 9.
The following fields display in the <i>POS Report</i> section of the tab.	
<b>POS Report</b>	Select this option if you want to create a <i>POS Exception</i> report. Selecting this option enables setup options for this type of report.
<b>Exceptions</b>	Select the exception types that should be included on the report when it is generated. To select multiple exception types, hold down the <b>Control</b> key on your keyboard as you click each exception type.
<b>Start</b>	Select the starting time for the time period during which data should be included for the <i>POS Exception</i> report for the camera.
<b>End</b>	Select the ending time for the time period during which data should be included for the <i>POS Exception</i> report for the camera.
<b>No. of Thumbs</b>	Select the number of thumbnail images that you want to include on the <i>POS Exception</i> report. Options include 6 and 9.
<b>Update Settings</b>	Click this button to save setting changes without closing the <b>Settings</b> window.
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.



## Settings: Email Tab

The **Email** tab allows you to establish outbound mail server details and to set up e-mail addresses for report distribution purposes.



Outbound mail server details are dependent on the Internet Service Provider (ISP) used at your location.

In addition to a primary e-mail address, up to three (3) additional e-mail addresses can be established in the system.

The screenshot shows the 'Settings Window' with the 'Email' tab selected. The window is divided into several sections:

- User Information:** Fields for 'Your Name' and 'E-mail Address'. A checkbox for 'My outgoing SMTP server requires authentication' is present.
- Logon Information:** Fields for 'User Name' and 'Password'.
- Test Settings:** A 'Test Account Settings...' button and a note: 'After filling out the information on this screen, we recommend you to test your account settings by clicking the button below. (Requires network connection)'.
- Server Information:** Fields for 'Outgoing Mail Server (SMTP)' and 'Server Port (SMTP)' (set to 25). A checkbox for 'This server requires an encrypted connection (SSL)' is present.
- Recipients Information:** Three fields for 'E-mail Address 1', 'E-mail Address 2', and 'E-mail Address 3'.

Buttons at the bottom include 'Update', 'OK', 'Cancel', and 'Apply'. A 'Help' button is also visible in the bottom left corner.

The following fields and buttons display on this tab:

Field/Button	Description
<b>Your Name</b>	Enter the name of your primary site administrator or manager, the person typically responsible for DVR management.
<b>E-mail Address</b>	Enter your site's primary e-mail address. This address, along with all recipients defined in the <i>Recipients Information</i> section, will be used for all e-mail activity initiated from the DVR.

The following fields display in the *Server Information* section of the tab.

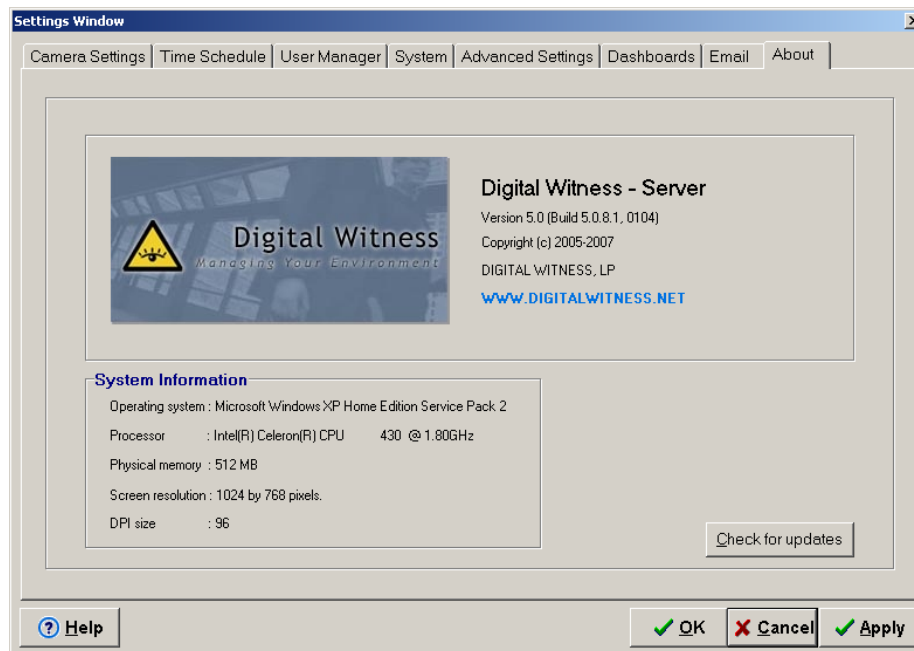
<b>Outgoing Mail Server (SMTP)</b>	This is the IP address or URL of the SMTP server, such as "mail.yourcompany.com."
<b>Server Port (SMTP)</b>	This is the number of the port through which outbound mail is processed on the SMTP server.

Field/Button	Description
<b>This Server Requires an Encrypted Connection (SSL)</b>	Check this check box if the SMTP server requires an encrypted connection (secure server link) for e-mail message distribution.
<b>My Outgoing SMTP Server Requires Authentication</b>	Check this check box if the SMTP server requires authentication for outbound e-mail message distribution. If this option is checked (enabled), you should also complete the <b>User Name</b> and <b>Password</b> fields (described below) in the <i>Logon</i> section of the tab.
The following fields display in the <i>Logon Information</i> section of the tab.	
<b>User Name</b>	If the SMTP server requires outbound authentication (the <b>My Outgoing SMTP Server Requires Authentication</b> check box is checked), enter the user name that should be used for authentication purposes.
<b>Password</b>	If the SMTP server requires outbound authentication (the <b>My Outgoing SMTP Server Requires Authentication</b> check box is checked), enter the password that should be use for authentication purposes.
The following fields display in the <i>Recipients Information</i> section of the tab.	
<b>E-mail Address 1</b>	This is the first of three possible e-mail addresses to which generated messages should be sent. When you test e-mail settings by clicking the <b>Test Account Settings</b> button (described below), a test message is sent to this address.
<b>E-mail Address 2</b>	This is the second of three possible e-mail addresses to which generated messages should be sent. When you test e-mail settings by clicking the <b>Test Account Settings</b> button (described below), a test message is sent to this address.
<b>E-mail Address 3</b>	This is the third of three possible e-mail addresses to which generated messages should be sent. When you test e-mail settings by clicking the <b>Test Account Settings</b> button (described below), a test message is sent to this address.
The following fields display in the <i>Test Settings</i> section of the tab.	
<b>Test Account Settings</b>	Click this button to test the e-mail account settings. This will generate a test e-mail message that is sent to the defined user and to all defined recipients.
<b>Update</b>	Click this button to save setting changes without closing the <b>Settings</b> window.
The following fields display at the bottom of the <b>Settings</b> window.	
<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.



## Settings: About Tab

The **About** tab provides information about the DVR Server software, and provides a link to the Digital Witness web site where online assistance is available.



The following sections and buttons display on this tab:

Section/Button	Description
<b>[DVR Server Information]</b>	This section displays information about the DVR Server software, such as the version number and the build number.
<b>System Information</b>	This section displays DVR system information, such as the operating system, processor type, amount of memory, and the screen resolution.
<b>Check for Updates</b>	Click this button to check for DVR Server software updates. When you click the link, the <b>Live Update</b> dialog box displays, allowing you to view and select updates, patches, and fixes to download.

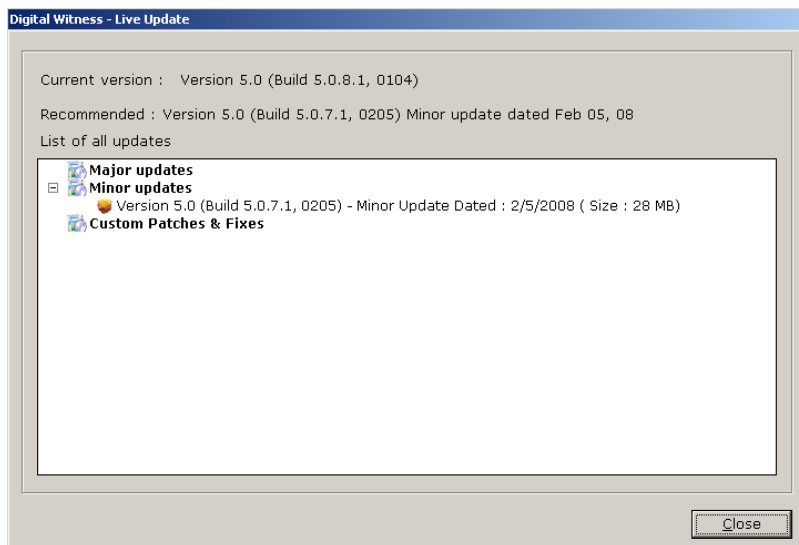
The following fields display at the bottom of the **Settings** window.

<b>Help</b>	Click this button to display online Help.
<b>OK</b>	Click this button to save setting changes and close the <b>Settings</b> window.
<b>Cancel</b>	Click this button to close the <b>Settings</b> window without saving settings that have been changed.
<b>Apply</b>	Click this button to save setting changes without closing the <b>Settings</b> window.

## Updating DVR Server Software

Complete the following steps to check for and download software updates.

1. On the Main Screen, click the **Settings** button. The **Settings** window displays.
2. Click the **About** tab.
3. Click the **Check for Updates** button. The **Live Update** dialog box displays.

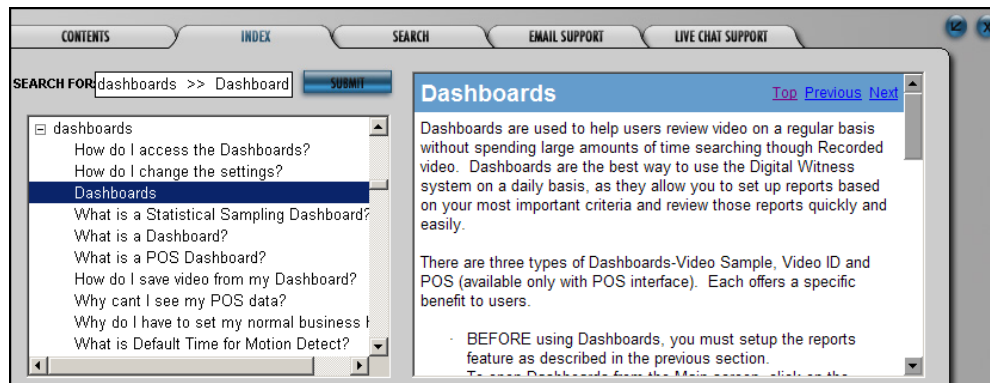


4. Expand the tree navigation menu to review updates and patches that are available to download.
5. Click the update or patch that you want to download. A confirmation prompt displays.
6. Click the **Yes** button. The download process initiates automatically.
7. Follow all prompts to install the update or patch.



## System Tools: Help

The online Help provides quick access to system documentation, e-mail support, and live chat support.



### Displaying Online Help

Complete the following steps to display online Help.

- On the Main Screen, click the **Help** button. The **Help** window displays.

OR

Click the **Help** button on any screen or window on which the button displays.

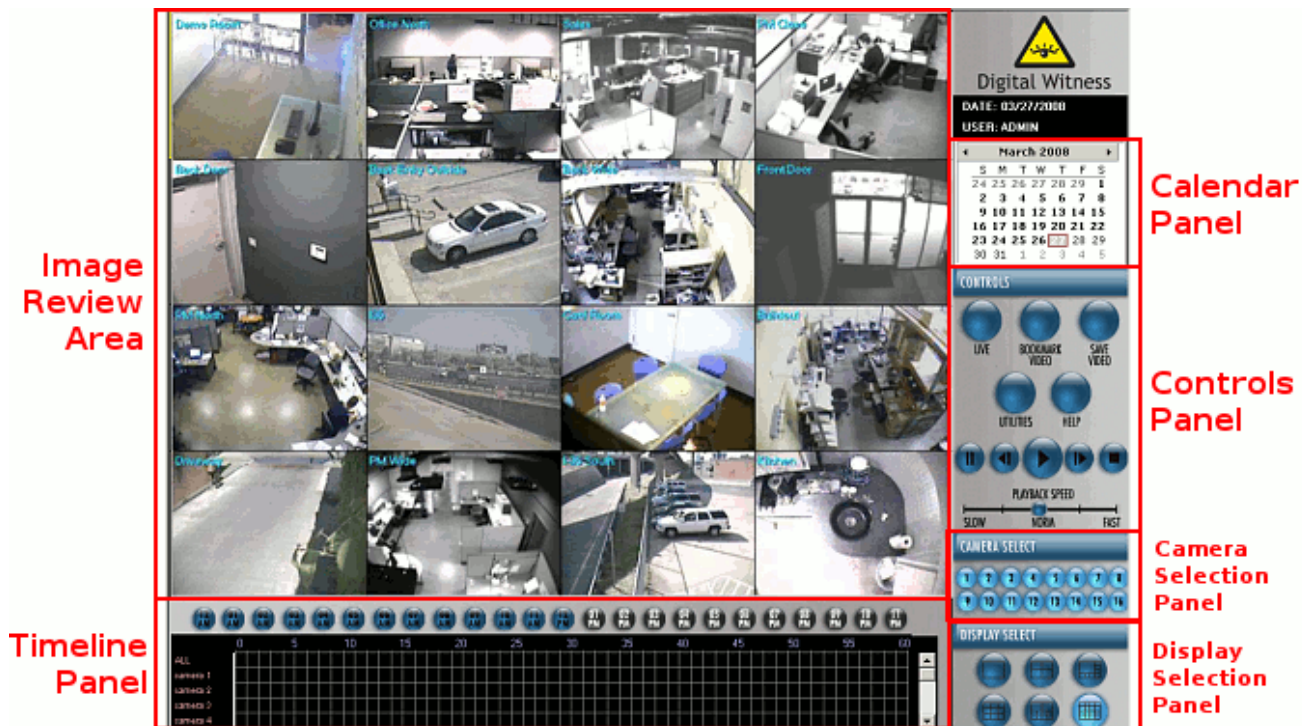
## Archived Video Screen

Click the **Recorded** button to display the Archived Video Screen. The Archived Video Screen allows you to access and review recorded video and audio files, and provides the tools necessary to save and manipulate video.



The DVR Server software will continue to operate and record on-going activity while users are reviewing previously recorded video in the Archived Video Screen.

The Archived Video Screen is divided into several sections (indicated below), each providing access to different system functions.



The sections of the Archived Video Screen include the following:

- **Image Review Area**—The Image Review Area displays recorded video from one or more cameras, allowing you to review your site’s video history. Refer to the “Image Review Area” section on page 56 of this document for additional information.
- **Timeline Panel**—The Timeline panel displays video event indicators, allowing you to pinpoint and initiate recorded video playback for a specific hour or minute. Refer to the “Timeline Panel” section on page 57 of this document for additional information.
- **Calendar Panel**—The Calendar panel is used to select the calendar day for which you want to view recorded video. Refer to the “Calendar Panel” section on page 56 of this document for additional information.



- **Controls Panel**—The Controls panel allows you to complete a variety of tasks when reviewing archived video on the DVR. Refer to the “Controls Panel” section on page 58 of this document for additional information.
- **Camera Selection Panel**—The Camera Selection panel allows you to select one or more specific cameras from which to view recorded video. Refer to the “Camera Selection (Archive) Panel” section on page 72 of this document for additional information.
- **Display Selection Panel**—The Display Selection panel allows you to control the on-screen camera display configuration when in recorded mode. Refer to the “Display Selection (Archive) Panel” section on page 72 of this document for additional information.

## Image Review Area

The Image Review Area displays recorded video from one or more cameras, allowing you to review your site’s video history.

You can manipulate the playback for an individual camera as follows:

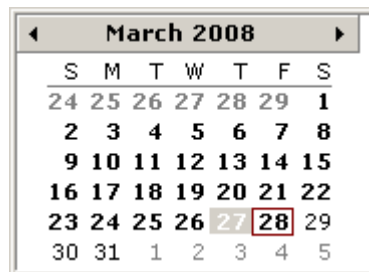
- **Double-Left-Click**—Double-clicking an individual camera increases the camera view to fill the Image Review Area. Double-clicking the camera view again returns the Image Review Area to normal view.
- **Click-and-Drag**—To digitally zoom in on a portion of recorded video, click the **Pause** button during playback, then left click and drag to create a zoom box within the original image. Release the left button and the original image will be replaced with a digitally-enlarged view of the image. Click the **Play** button, and the video will resume playback, but zoomed to the view locked into the zoom box. Left click on the zoomed image to return to the original image size. The zoom feature is limited by the recorded resolution of the archived video.

Several panels of the Archived Video Screen are used to control the view in the Image Review Area. These panels are described in the sections that follow.

## Calendar Panel

Use the Calendar panel to select the calendar day for which you want to view recorded video.

The DVR categorizes all recorded video by date, time, and camera. This categorization makes it very easy to quickly review several hours or days of retained video, or, conversely, to pinpoint a review to the exact minute in which suspected activity took place.



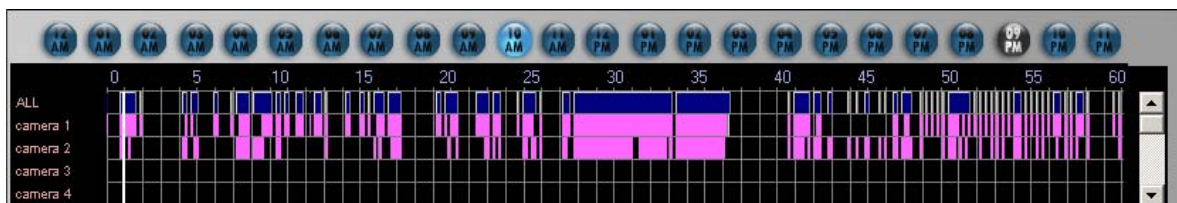
The Calendar panel displays one month at a time. Use the left and right toggle bars at the top of the calendar to move forward or backward, one month at a time.

To select a day for review, click on the day. Dates shown in bold reflect days in which recorded video is available. Dates shown in regular font are days for which no recorded video is available. Dates shown in gray reflect days from prior or subsequent months, which overlap a week from the displayed month. (To review video associated with these dates, use the left and right toggle bars to display the appropriate month.)



## Timeline Panel

The Timeline panel displays video event indicators, allowing you to initiate recorded video playback for a specific hour or minute of the day selected in the Calendar panel (described in the “Calendar Panel” section on page 56).



The **Hour** buttons (labeled “12 AM” through “11 PM” across the top of the panel) allow you to select a specific hour. Selecting an hour displays a visual indication on the camera rows of each minute for which recorded video exists.

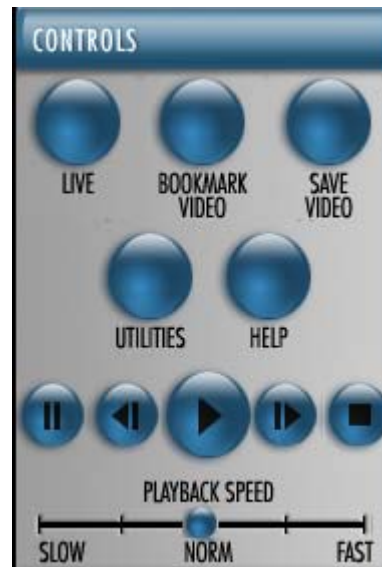
Shading on the timeline rows indicate recorded video as follows:

- Blue shading on the top row indicates each minute of the selected hour for which recorded video exists for any camera.
- Pink shading on the individual camera rows indicate each minute of the selected hour for which recorded video exists for the individual camera.
- Dark blue shading on the individual camera rows indicate each minute of the selected hour for which recorded video with POS data overlay exists for the individual camera.

## Controls Panel

The Controls panel allows you to complete a variety of tasks when reviewing archived video on the DVR. These tasks include the following:

- **Live**—The **Live** button closes the Archived Video Screen and displays the Main Screen.
- **Bookmark Video**—The **Bookmark Video** button displays the Bookmark window, which allows you to create electronic “bookmarks” for recorded video. Refer to the “Controls Panel: Bookmark Video” section on page 59 of this document for additional information.
- **Save Video**—The **Save Video** button displays the Save window, which allows you to save still images and to convert recorded audio into a distributable format. Refer to the “Controls Panel: Save Video” section on page 63 of this document for additional information.
- **Utilities**—The **Utilities** button displays the Audio utility, which allows you to control audio volume when playing recorded video/audio. Refer to the “Controls Panel: Utilities” section on page 71 of this document for additional information.
- **Help**—The **Help** button provides access to system documentation, e-mail support, and live chat support. Refer to the “System Tools: Help” section on page 53 of this document for detailed information.
- **Playback Controls**—The playback control buttons allow you to control recorded video playback. Refer to the “Controls Panel: Playback Controls” section on page 71 of this document for additional information.



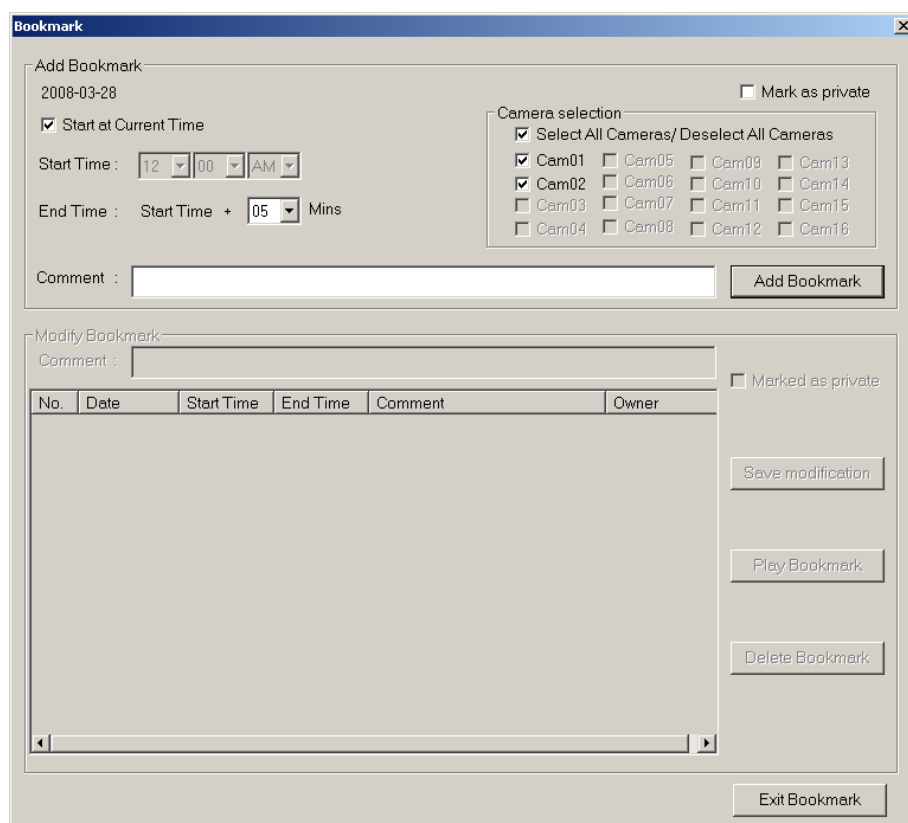


## Controls Panel: Bookmark Video

The **Bookmark Video** button displays the **Bookmark** window, which allows you to create electronic “bookmarks” for recorded video. Doing so allows you to quickly access specific segments of recorded video at a later time.



Bookmarking a video segment protects the video from being erased if your DVR is set to overwrite video files as the video storage hard drive(s) is filled. Refer to the “Understanding DVR Storage Capacity” section on page 33 of this document for additional information about storage settings.



The following fields, buttons, and columns display on this window:

Field	Description
<b>Date</b>	This is the date on which the video that you are reviewing on the Archived Video Screen was saved on the DVR.
<b>Start at Current Time</b>	Select this option to set the start time for the bookmark to the time at which you clicked the <b>Bookmark video</b> button. This option is selected by default when the <b>Bookmark</b> window opens. If you want to set a different starting time for the bookmark, clear the check from the check box, and complete the <b>Start Time</b> field (described below).
<b>Start Time</b>	Select the start time for the bookmark. These options are disabled if the <b>Start at Current Time</b> option (described above) is checked.

Field	Description
<b>End Time</b>	Select the number of minutes from the selected start time at which to set the end of the bookmark. Options include 1 to 60 minutes. The default is 5 minutes.
<b>Comment</b>	Enter a comment about the bookmark. This comment should describe the bookmark in a way that will make it easy to locate the bookmark in the bookmark list.
<b>Mark as Private</b>	Check this check box if the bookmark should only be available to you. If you do not check this option, the bookmark will be available to all DVR users.
<b>Camera Selection</b>	Check each camera from which recorded video should be associated with the bookmark. When a bookmark with multiple camera selections is played, playback is simultaneous from all cameras. The “Select All Cameras/Deselect All Cameras” option check or clears the check from all cameras.
<b>Add Bookmark</b>	Click this button to add the bookmark to the system.
<b>Comment</b>	This field displays the comments, if any, entered for the selected bookmark, and allows modification of the comment.
<b>Marked as Private</b>	This option indicates whether the selected bookmark is private, and allows the option to be changed. A check indicates that the selected bookmark is saved as private. If not checked, the selected bookmark is public.
<b>No.</b>	This column displays a numbered list indicating the order in which each bookmark was added to the system, providing a unique identification of each bookmark. When a bookmark is deleted, saved bookmarks do not re-number.
<b>Date</b>	This column displays the date on which the video associated with the bookmark was originally recorded.
<b>Start Time</b>	This column displays the time of the bookmark.
<b>End Time</b>	This column displays the end time of the bookmark.
<b>Comment</b>	This column displays comments entered about the bookmark, providing identification of the bookmark.
<b>Owner</b>	This column displays the user name under which the bookmark was added to the system.
<b>Save Modification</b>	Click this button to save changes to the selected bookmark.
<b>Play Bookmark</b>	Click this button to play the video associated with the selected bookmark.
<b>Delete Bookmark</b>	Click this button to delete the selected bookmark.
<b>Exit Bookmark</b>	Click this button to close the <b>Bookmark</b> window.



## **Bookmark Recorded Video**

Complete the following steps to set a bookmark.

1. Use the panels on the Archived Video Screen to pinpoint the video that you want to bookmark.
2. Click the **Pause** button at the point where you want to actually set the bookmark (meaning the point at which video should start when you play back the bookmark).
3. Click the **Bookmark Video** button. The **Bookmark** window displays.
4. Modify the bookmark settings, as appropriate. Refer to the field definition list starting on page 59 of this document for detailed information about the settings.
5. Click the **Add Bookmark** button. The bookmark is listed in the *Modify Bookmark* section of the window.

## **Modify a Bookmark**

Complete the following steps to modify a bookmark.

1. Click the **Bookmark Video** button. The **Bookmark** window displays.
2. In the *Modify Bookmark* section of the window, click the bookmark that you want to modify.
3. Modify the **Comment** and the **Marked as Private** options, as appropriate.
4. Click the **Save Modification** button. A confirmation prompt displays.



---

The **Save Modification** button is disabled until you modify the bookmark.

---

5. Click the **OK** button to save the modification.

## **Play a Bookmark**

Complete the following steps to play a bookmark.

1. Click the **Bookmark Video** button. The **Bookmark** window displays.
2. In the *Modify Bookmark* section of the window, select the bookmark that you want to play.
3. Click the **Play Bookmark** button. The **Bookmark** window closes, and the video is loaded in the Image Review Area and begins to play.
4. Use the playback controls to review the video.

## Delete a Bookmark

Complete the following steps to delete a bookmark.

1. Click the **Bookmark Video** button. The **Bookmark** window displays.
2. In the *Modify Bookmark* section of the window, select the bookmark that you want to delete.
3. Click the **Delete Bookmark** button. A confirmation prompt displays.
4. Click the **OK** button. The bookmark is deleted.



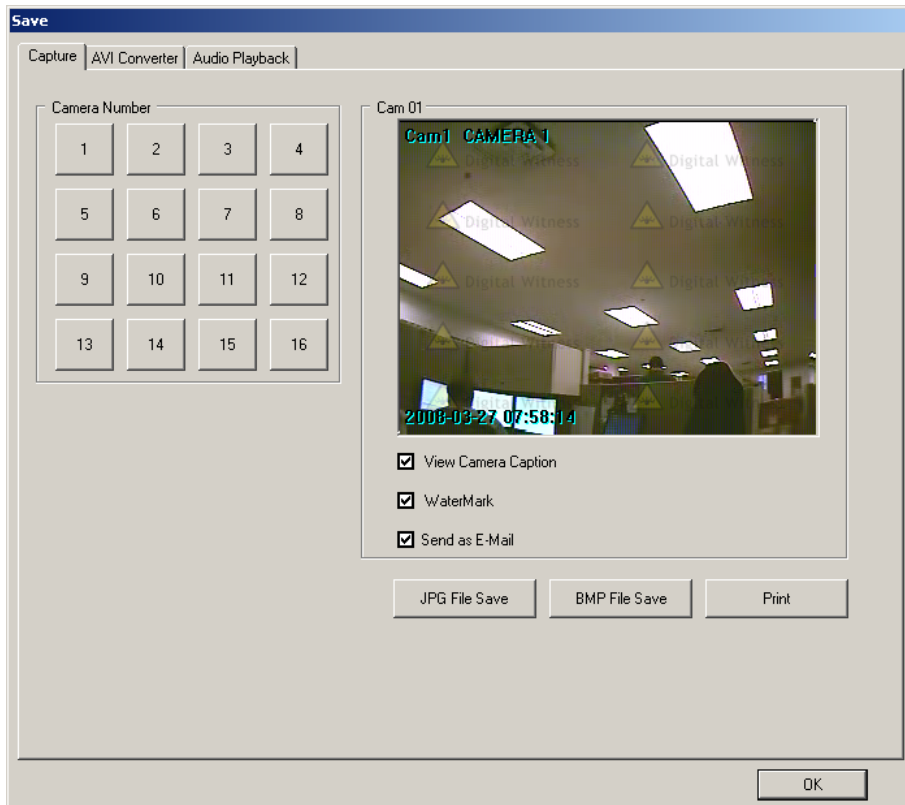
## Controls Panel: Save Video

The **Save Video** button displays the **Save** window, which allows you to complete several tasks when reviewing archived video, including capturing still images, converting/burning video in a distributable format, and playing/burning recorded audio. The window is divided into three tabs, as follows:

- **Capture**—This tab allows you to capture, modify, and distribute still images from archived video. Refer to the “Save Window: Capture Tab” section on page 64 of this document for additional information.
- **AVI Converter**—This tab allows you to convert archived video to AVI format for distribution. Refer to the “Save Window: AVI Converter Tab” section on page 67 of this document for additional information.
- **Audio Playback**—This tab allows you to play archived audio and save archived video/audio in AVI format. Refer to the “Save Window: Audio Playback Tab” section on page 69 of this document for additional information.

## Save Window: Capture Tab

The **Capture** tab allows you to capture still images from archived video, as well as to save, print, or distribute the images.



The following fields and buttons display on this window:

Field/Button	Description
<b>Camera Number</b>	Click the camera button to display the video frame that is currently displayed for the camera in the Image Review Area.
<b>View Camera Caption</b>	Check this check box to display camera caption overlay on the still image. Caption overlay imprints the video time, date, camera number, and camera caption on the still image.
<b>Watermark</b>	Check this check box to display a watermark overlay on the still image to prove that the image has not been tampered with or edited. If the image is later altered, the watermark will also be altered, thereby nullifying the image. Watermarking is useful when saving images that will be used in legal proceedings. You cannot change the watermark image.
<b>Send as E-Mail</b>	Check this check box if you want to be prompted to e-mail the still image after it has been saved or printed.



Field/Button	Description
<b>JPG File Save</b>	Click this button to save the still image in JPG format. JPG formatted images are typically smaller than BMP formatted images (unless watermarking is applied). The JPG format is specifically designed for photo-quality images.
<b>BMP File Save</b>	Click this button to save the still image in BMP format.
<b>Print</b>	Click this button to print the still image to a local or network printer.
<b>OK</b>	Click this button to close the <b>Save</b> window.



## Save a Still Image

Complete the following steps to save and optionally e-mail a still image from recorded video.

1. Use the panels on the Archived Video Screen to pinpoint the image that you want to save.
2. Click the **Pause** button at the point where you want to actually capture an image.
3. Click the **Save Video** button. The **Save** window displays.
4. Click the **Capture** tab.
5. In the *Camera Number* section, click the camera number from which you want to capture a still image. The video frame displays.
6. Optionally, check the **View Camera Caption** check box, which displays camera caption overlay on the still image.
7. Optionally, check the **Watermark** check box, which displays a watermark on the still image.
8. Optionally, check the **Send as E-Mail** check box, which will prompt you to attach the image to an e-mail message.
9. Click either the **JPG File Save** button or the **BMP File Save** button, based on the format in which you want to save the image. The **Save As** dialog box displays.
10. Navigate to the local or network location in which you want to save the image.
11. Modify the file name, as appropriate.
12. Click the **Save** button. A confirmation message displays.

13. Depending on whether you selected the **Send as E-Mail** option when you completed Step 8 of this procedure, complete the appropriate step(s) below.
  - If you did **not** select the option in Step 8 to send the image as an e-mail attachment, click the **OK** button. The image is saved.
  - If you selected the option in Step 8 to send the image as an e-mail attachment, click the **Yes** button.

## **Print a Still Image**

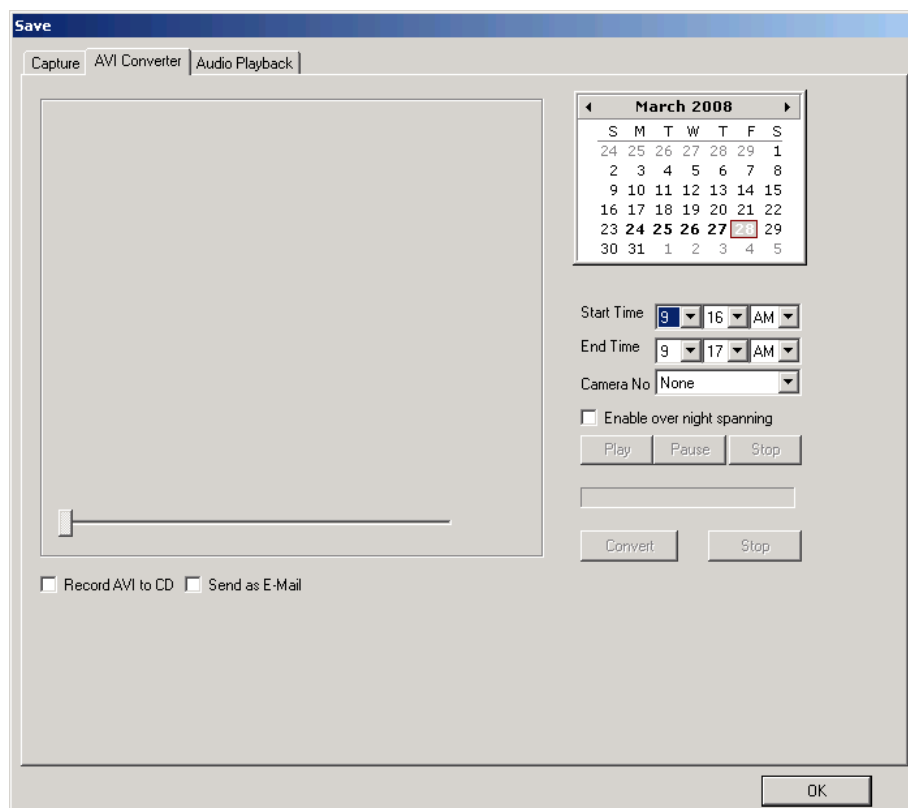
Complete the following steps to print and optionally e-mail a still image from recorded video.

1. Use the panels on the Archived Video Screen to pinpoint the image that you want to save.
2. Click the **Pause** button at the point where you want to actually capture an image.
3. Click the **Save Video** button. The **Save** window displays.
4. Click the **Capture** tab.
5. In the *Camera Number* section, click the camera number from which you want to capture a still image. The video frame displays.
6. Optionally, check the **View Camera Caption** check box, which displays camera caption overlay on the still image.
7. Optionally, check the **Watermark** check box, which displays a watermark on the still image.
8. Optionally, check the **Send as E-Mail** check box, which will prompt you to attach the image to an e-mail message.
9. Click the **Print** button. The **Print** dialog box displays.
10. Select the printer on which you want to print the still image.
11. Set the printer properties, as appropriate.
12. Click the **Print** button.
13. Depending on whether you selected the Send as E-Mail option when you completed Step 8 of this procedure, complete the appropriate step(s) below.
  - If you did **not** select the option in Step 8 to send the image as an e-mail attachment, click the **OK** button.
  - If you selected the option in Step 8 to send the image as an e-mail attachment, click the **Yes** button.



## Save Window: AVI Converter Tab

The **AVI Converter** tab allows you to convert archived video to AVI format for local viewing or distribution via e-mail or CD. AVI is the standard video format used by web browsers and PC-based video players, allowing the saved video clip to be opened and played in any standard web browser.



The following fields and buttons display on this window:

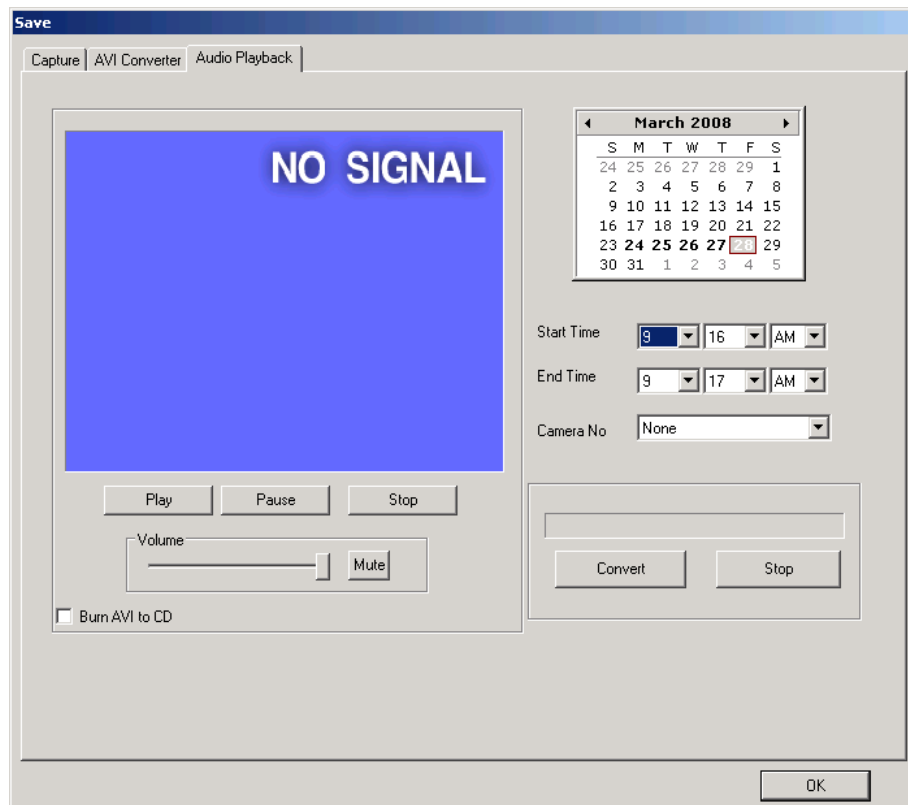
Field/Button	Description
<b>Record AVI to CD</b>	Check this check mark if you want to be prompted to burn the AVI file to CD once the conversion process is complete.
<b>Send as E-Mail</b>	Check this check mark if you want to be prompted to send the AVI file as an e-mail attachment once the conversion process is complete.
<b>[Calendar]</b>	Use the Calendar to select the calendar day for which you want to convert archived video. The Calendar panel displays one month at a time. Use the left and right toggle bars at the top of the calendar to move forward or backward, one month at a time. To select a day for review, click on the day. Dates shown in bold reflect days in which recorded video is available. Dates shown in regular font are days for which no recorded video is available. Dates shown in gray reflect days from prior or subsequent months, which overlap a week from the displayed month. (To review video associated with these dates, use the left and right toggle bars to display the appropriate month.)
<b>Start Time</b>	This is the start time for the desired clip.

<b>Field/Button</b>	<b>Description</b>
<b>End Time</b>	This is the end time for the desired clip. It is strongly recommended that the total duration of video clips remain below approximately 10 minutes. This is largely due to the fact that exported AVI clips can be quite large and difficult to transfer among computers. Smaller AVI files are easier to manage and share.
<b>Camera No</b>	This is the camera number from which you want to save a clip.
<b>Enable Overnight Spanning</b>	Check this check mark if you select start and end times that span from one day until the next (in other words, start/end times that include midnight.)
<b>Play</b>	Click this button to play the video in the preview area.
<b>Pause</b>	Click this button to pause video playback in the preview area.
<b>Stop</b>	Click this button to stop video playback in the preview area.
<b>Convert</b>	Click this button to initiate the conversion process. (If this button is not enabled, try pausing or stopping the video playback.)
<b>Stop</b>	Click this button to stop (cancel) the conversion process.
<b>OK</b>	Click this button to close the <b>Save</b> window.



## Save Window: Audio Playback Tab

The **Audio Playback** tab allows you to play archived audio and save archived video/audio in AVI format.



The following fields and buttons display on this window:

Field/Button	Description
<b>Play</b>	Click this button to play the video in the preview area.
<b>Pause</b>	Click this button to pause video playback in the preview area.
<b>Stop</b>	Click this button to stop video playback in the preview area.
<b>Volume</b>	Use this sliding control to adjust audio volume during playback in the preview area.
<b>Mute</b>	Click this button to mute audio during playback in the preview area.
<b>Burn AVI to CD</b>	Check this check mark if you want to be prompted to burn the AVI file to CD once the conversion process is complete.

<b>Field/Button</b>	<b>Description</b>
<b>[Calendar]</b>	Use the Calendar to select the calendar day for which you want to convert archived video/audio. The Calendar panel displays one month at a time. Use the left and right toggle bars at the top of the calendar to move forward or backward, one month at a time. To select a day for review, click on the day. Dates shown in bold reflect days in which recorded video is available. Dates shown in regular font are days for which no recorded video is available. Dates shown in gray reflect days from prior or subsequent months, which overlap a week from the displayed month. (To review video associated with these dates, use the left and right toggle bars to display the appropriate month.)
<b>Start Time</b>	This is the start time for the desired clip.
<b>End Time</b>	This is the end time for the desired clip. It is strongly recommended that the total duration of video clips remain below approximately 10 minutes. This is largely due to the fact that exported AVI clips can be quite large and difficult to transfer among computers. Smaller AVI files are easier to manage and share.
<b>Camera No</b>	Select the camera from which you want to create an AVI clip.
<b>Convert</b>	Click this button to initiate the conversion process. (If this button is not enabled, try pausing or stopping the video playback.)
<b>Stop</b>	Click this button to stop (cancel) the conversion process.
<b>OK</b>	Click this button to close the <b>Save</b> window.



### Controls Panel: Utilities

The **Audio** utility allows you to control audio volume when reviewing recorded video/audio.

The following controls and buttons display on this screen:

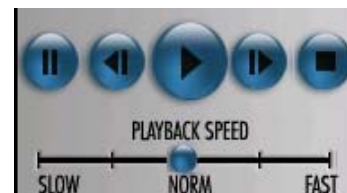


Control/Button	Description
<b>Volume + / -</b>	Use this slider control to adjust the volume. Slide the control to the left ( - ) to reduce the volume, and slide the control to the right ( + ) to increase the volume.
<b>Mute</b>	Click this button to mute or resume audio.
<b>Close</b>	Click this button to close the <b>Audio</b> utility.

### Controls Panel: Playback Controls

Playback controls allow you to control recorded video playback.

The following controls and buttons display on this screen:



Control/Button	Description
<b>Pause</b>	Click this button to pause video playback on all cameras.
<b>Rewind</b>	When playing video, click this button to reverse video playback on all cameras. The <b>Playback Speed</b> (described below) determines the speed at which video plays. When video playback is paused, clicking this button plays the previous frame of video.
<b>Play</b>	Click this button to play video or to resume video playback. The <b>Playback Speed</b> (described below) determines the speed at which video plays.
<b>Fast Forward</b>	When playing video, click this button to fast forward video playback on all cameras. The <b>Playback Speed</b> (described below) determines the speed at which video plays. When video playback is paused, clicking this button advances the video by a single frame.
<b>Stop</b>	Click this button to stop video playback on all cameras.
<b>Playback Speed</b>	This setting determines the speed of video playback. The settings range from Slow to Norm (normal) to Fast.

## Camera Selection Panel

Camera selection options on the Archived Video Screen allow you to select one or more specific cameras from which to view recorded video.

To select a specific camera, simply click the camera number. Depending on your display selection, the camera view in the Image Review Area may or may not change. For example, if all camera views are currently displayed, selecting a specific camera will not change the display. If, however, you have limited the display to a single camera view, selecting a camera changes the view.



## Display Selection Panel

Display selection options on the Archived Video Screen allow you to control the on-screen camera display configuration when in recorded mode.

### Screen Split

Click the screen icons to display 1, 4, 9 (Wide), 9, 10, or 16 cameras in the Image Display Area.



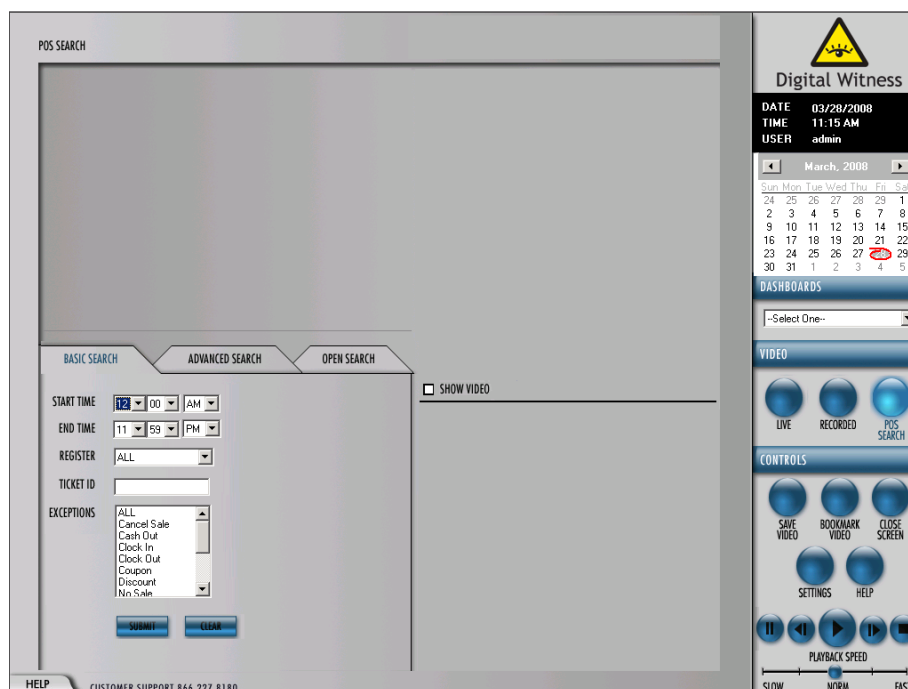


## POS Search Screen

The **POS Search Screen** allows you to search point-of-sale transaction data, to drill down into individual transaction details, and to view video that is associated with the individual transaction.

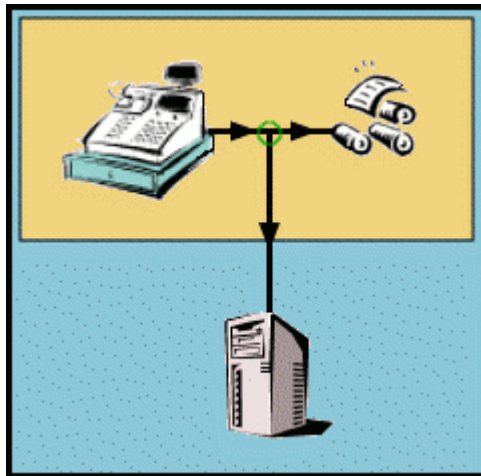


POS search functionality is only available if you purchased the POS Interface System for the DVR. Additionally, the POS Search button used to access the POS Search Screen is only enabled if one or more cameras are set up for POS transaction data overlay. Refer to the “Advanced Settings: POS Settings Tab” on page 38 of this document for additional information about DVR POS settings.



### Understanding POS Data

Data that can be searched is captured directly from your existing POS system. When POS data is transferred from a register to a POS device, the data is captured by the DVR and overlaid on the video being recorded from the same register. This provides you with a video reference that includes actual transaction data.



Since data comes directly from the POS system, the data that is available to search/display will vary according to the POS system.

### POS Search Screen Navigation

The following fields and buttons display on the **Basic Search** tab of this screen:

Field/Button	Description
<b>Start Time</b>	Select the starting time for the period of transaction(s) that you want to search.
<b>End Time</b>	Select the ending time for the period of transaction(s) that you want to search.
<b>Register</b>	Select either ALL or a single register ID number. This will show all current and previous register ID numbers. (Register IDs are created during the initial configuration of the POS interface.)
<b>Ticket ID</b>	To search solely by the unique transaction ID (the reference number for the transaction/receipt), enter the number here. This will disregard all other search criteria and just search for this transaction.
<b>Exceptions</b>	Use this feature to filter for only specific transaction types (such as voided or discounted sales). Choosing ALL will filter the search for only transactions with an exception. Multiple selections can be made.
<b>Submit</b>	Click this button to initiate a POS search.
<b>Clear</b>	Click this button to clear search results and refresh the screen.



The following fields and buttons display on the **Advanced Search** tab of this screen:

<b>Field/Button</b>	<b>Description</b>
<b>Start Time</b>	Select the starting time for the period of transaction(s) that you want to search.
<b>End Time</b>	Select the ending time for the period of transaction(s) that you want to search.
<b>Department</b>	Where available, select a particular department. (Departments are created during the initial configuration of the POS interface and are limited to certain POS types.)
<b>Product</b>	Where available, select a particular product. (Products are created during the initial configuration of the POS interface.)
<b>Register</b>	Select either ALL or a single register ID number. This will show all current and previous register ID numbers. (Register IDs are created during the initial configuration of the POS interface.)
<b>Employee</b>	Select ALL or choose a specific employee.
<b>Exceptions</b>	Use this feature to filter for only specific transaction types (such as voided or discounted sales). Choosing ALL will filter the search for only transactions with an exception. Multiple selections can be made.
<b>Payment Amount</b>	Use this feature to filter for only transactions that are over, equal to, or below a certain dollar amount. Choose the appropriate radio button and then input the dollar amount. Only one option can be searched at a time.
<b>Payment Method</b>	The standard selections are Cash, Check, Credit Card, Debit, or Gift Certificate. Only one may be chosen at a time.
<b>Submit</b>	Click this button to initiate a POS search.
<b>Clear</b>	Click this button to clear search results and refresh the screen.

The following fields and buttons display on the **Open Search** tab of this screen:

<b>Field/Button</b>	<b>Description</b>
<b>Start Time</b>	Select the starting time for the period of transaction(s) that you want to search.
<b>End Time</b>	Select the ending time for the period of transaction(s) that you want to search.
<b>Ticket ID</b>	To search solely by the unique transaction ID (the reference number for the transaction/receipt), enter the number here. This will disregard all other search criteria and just search for this transaction.
<b>Register</b>	Select either ALL or a single register ID number. This will show all current and previous register ID numbers. (Register IDs are created during the initial configuration of the POS interface.)
<b>Employee</b>	Select ALL or choose a specific employee.
<b>Submit</b>	Click this button to initiate a POS search.
<b>Clear</b>	Click this button to clear search results and refresh the screen.



## Search POS Transaction Data

Complete the following steps to search POS transaction data.

1. On the Main Screen, click the **POS Search** button. The POS Search Screen displays.
2. From the calendar, select the date for which you want to search transaction date.
3. Click the appropriate tab, based on the type of search that you want to complete.
4. Complete the search criteria. Refer to the field definitions starting on page 74 of this document for specific details about search options.
5. Click the **Submit** button.



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