

## Table of Contents

1. Preface
2. Introduction
3. Specifications of IDS-DVR
  - 3.1 TechEye® Remote System Requirements
    - 3.1.1 Minimum Requirements
    - 3.1.2 Recommended Configuration
4. Installation and Setup
  - 4.1 Quick Setup Guides
    - 4.1.1 TechEye® 2004 and 12004T
    - 4.1.2 TechEye® 12008/12009
    - 4.1.3 TechEye® 12016 and 9016
5. Customizing Your DVR
  - 5.1 TechEye® Configuration Manager
    - 5.1.1 Recording Schedule
    - 5.1.2 Motion/Color Settings
    - 5.1.3 Maximum Recording Rates
    - 5.1.4 Description/PTZ Settings
    - 5.1.5 System
    - 5.1.6 Advanced Features
      - 5.1.6.1 Security
      - 5.1.6.2 Support for Modem Connections
      - 5.1.6.3 Dynamic IP Functions
      - 5.1.6.4 Email Functions
      - 5.1.6.5 Redundant Recording Feature
  - 5.2 Local Interface: Classic View
    - 5.2.1 Brightness
    - 5.2.2 Contrast
    - 5.2.3 Hue
    - 5.2.4 Back to Default
    - 5.2.5 Screen Views
      - 5.2.5.1 Guard Tour Features
    - 5.2.6 Selecting Cameras for Display
    - 5.2.7 Caption On/Off
    - 5.2.8 Local Playback
    - 5.2.9 Three Modes for Screen View
    - 5.2.10 Spot Composite Monitor Control
    - 5.2.11 Pan Tilt Zoom
    - 5.2.12 Video Lockout
      - 5.2.12.1 TV Output

### 5.2.13 Options Menu

#### 5.3 Local Interface: Alternative Browser

- 5.3.1 Lock / Unlock Cameras
- 5.3.2 Select Display Pattern
- 5.3.3 Select Colors
- 5.3.4 Adjust Capture Colors
- 5.3.5 Options

#### 6. Playback (Remote and Local)

##### 6.1 Graphic User Interface (GUI) for Playback

- 6.1.1 Playback Interface
  - 6.1.1.1 Full Screen Playback
  - 6.1.1.2 Extended Control Panel
- 6.1.2 Playback GUI-Statistics
- 6.1.3 Playback GUI-Image Adjustments
- 6.1.4 Bookmarks
- 6.1.5 Film Strip (Reel)
- 6.1.6 CD Writing (Local Only)
- 6.1.7 Video Export
- 6.1.8 Video Import

#### 7. Remote- TechEye® Integrated Remote Professional (Version 8.0)

##### 7.1 General Remote Viewer (Basic and Professional)

- 7.1.1 Address Book Configuration Menu
- 7.1.2 Remote PTZ (Camera Control)
- 7.1.3 Remote Status Log
- 7.1.4 Remote Connection Options
- 7.1.5 Remote Camera Selection and Layout

##### 7.2 Phone Connection Viewer (Basic and Professional)

- 7.2.1 Phone Connection Configurations
- 7.2.2 Camera Control
- 7.2.3 Message Log
- 7.2.4 Connection Options
- 7.2.5 Screen Configurations

##### 7.3 Alarm Trigger Informer (Professional Only)

- 7.3.1 Informer Connection Configurations
- 7.3.2 Informer Run Log
- 7.3.3 Informer Options
- 7.3.4 Informer Plan

#### 8. Frequently Asked Questions

## 1. Preface

Thank you for choosing the TechEye® digital video recorder (DVR) from Intelligent Digital Systems, LLC to satisfy your security and surveillance needs. This manual applies to the following units: 8 (TE 10008), 4 (TE 12004), 4 (TE 12004T), 9 (TE 12009), 16 (TE 9016) and 16 (TE 12016). We believe that you will find your TechEye® unit has the features and functions far superior to other DVR technology.

This manual has screen shots that were taken for the four-channel unit, model, TE12004.

All software functionality is identical for all TechEye® models.

### **Important Information:**

**Your IDS DVR is a dedicated computer. Loading of any other software products on this computer will void the warranty. The keyboard, mouse and monitor must be plugged directly into the DVR and should not be used with a switch. Please contact your dealer for service and support issues.**

## 2. Introduction

The TechEye® solution digitally records multiple cameras simultaneously, capturing up to 240 images per second. Simultaneous recording, playback and archiving provide a powerful solution for remote management and security needs. All TechEye® units come standard with keyboard, mouse and remote software. The TechEye® solution eliminates the need for management and maintenance of conventional VCR and multiplex units.

## 3. Specifications of IDS-DVR

- Video Input
  - 4 Channel Composite Video (NTSC)
  - 8 Channel Composite Video (NTSC)
  - 9 Channel Composite Video (NTSC)
  - 16 Channel Composite Video (NTSC)
- Video Output SVGA Monitor Outputs and Composite Spot (1 for the 4 channel, 2 for the 9 channel and 4 for the 16 channel systems)
- Recording Speed
  - TE 9016 180 images
  - TE 10008 200 images
  - TE 12004 240 images
  - TE 12008 240 images
  - TE 12009 240 images
  - TE 12016 240 images

## IDS-DVR

- Compression Method MPEG 4
- Compression Rate Average image size .3-1.5KB (MPEG 4 320x240)
- Number of Days Recording

HARD DRIVE	80GB			160GB			240GB			360GB		
# OF CAMERAS	4	9	16	4	9	16	4	9	16	4	9	16
Motion 25%	77	65	53	151	130	106	228	194	158	341	293	235
Motion 60%	32	27	22	63	54	44	95	81	66	142	122	98
Continuous 100%	19	16	13	37	32	26	56	48	39	84	72	58

- Dimensions
 

	L	W	H
TE 10008	16 ¼	14 ½	5 ½
TE 12004	16 ¼	14 ½	5 ½
TE 12008	19	17 ¼	6 ¼
TE 9016	19	17 ¼	6 ¼
TE 12009	19	17 ¼	6 ¼
TE 12016	21 ½	16 ¾	7

- Display Mode
  - TE 10008: 1, 4, 6, or 9 sub-screen split
  - TE 12004: 1 or 4 sub-screen split
  - TE 12008: 1, 4, 6, or 9 sub-screen split
  - TE 12009: 1, 4, 6, or 9 sub-screen split
  - TE 9016 1 or 4 sub-screen split
  - TE 12016: 1, 4, 6, 9, or 16 sub-screen split

- Display Speed
  - TE10008 200 images
  - TE 9016 200 images
  - TE12004 240 images
  - TE 12008 240 images
  - TE 12009 240 images
  - TE 12016 240 images

- Video Guard Tour Setting from 1 up to 50 seconds
- Playback Display Mode Single Camera Playback
- Recording Functions Continuous, View Only, Motion
- Pan/Tilt/Zoom Control Function for Pelco, Kalatel, Vicon, Ademco and Sensormatic
- Image Transfer Rate
  - PSTN: up to 30 images per second
  - BROADBAND: Maximum 150 images/sec
- Backup Auto/Manual with the DVD, Network Drive, CD-R (option on 4 channel unit)

## IDS-DVR

- Power AC 100V-240V, 50/60Hz
- Weight approximate
 

	Shipping Weight	
TE 10008 / TE12004	20lb	30lb
TE 12008 /9016/12009/12016	40lb	50lb
- Internet Bandwidth Utilizes less than 100K for 16 cameras
- Monitor must support 1280 x 1024 resolution (for 8/9/16 camera models)

### 3.1 TechEye® Remote System Requirements

### 3.1.1 Minimum Requirements

- Pentium II class machine, 400 Megahertz
- 64 Megabytes of RAM
- Windows media player 7.1
- Video card that supports Direct X 8.1
- 8 Megabyte video card that supports 800 x 600 (1024 x 768 for playback) at 16 bit color
- Windows class system, 98/ME/2000/XP
- 50 Megabytes of hard drive space

### 3.1.2 Recommended Configuration

- Pentium III class machine, 700 Megahertz or higher
- 128 Megabytes of RAM
- Windows media player 7.1
- Video card that supports Direct X 8.1
- 16 Megabyte video card that supports 1024 x 768 at 24 bit color
- Windows class system, 2000/XP
- 250 Megabytes of hard drive space

#### 4. Installation and Setup – Just 4 easy steps and you are up and running!

1. Plug cameras into the BNC connectors-The four-channel unit have channels 1-4 and the spot monitor is on the bottom. The nine-channel unit has 2 rows of BNCs, the first row is 1-4 and the spot is below, the second row is 5-8 and the spot is below, and the last channel is the priority channel. The sixteen-channel unit has 4 rows, the first row is 1-4 and the spot is below, the second row is 5-8 and the spot is below, the third row is 9-12 and the spot is below, and the fourth is 13-16 and the spot is below. Remember, boards 1-4 are closest to the VGA card (2 blue 15 pin female RS 232 connectors).
2. Plug keyboard, mouse and customer provided monitor (1280 x 1024

## IDS-DVR

resolution required).

3. Plug in the Ethernet or modem connection
4. Plug in the power cord

**The DVR should power up automatically. The DVR is working and recording.**

## 4. Installation and Setup

### 4.1 Intelligent Digital Systems Quick Setup Guide

#### 4.1.1 TechEye® 12004 and 12004T Models

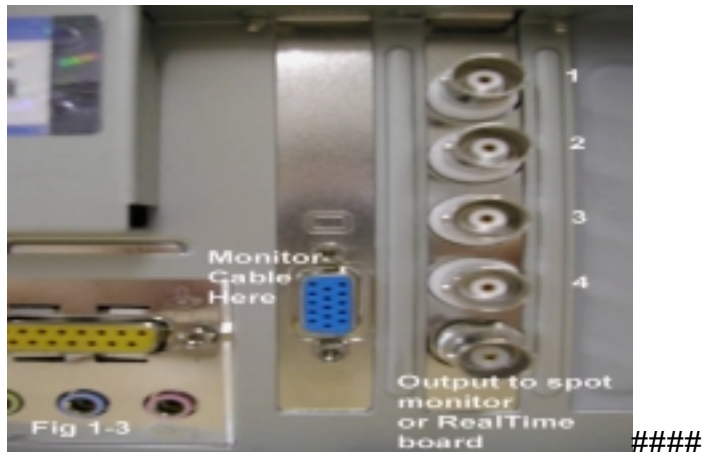
1. Unpack all components
2. Position TechEye® DVR near all camera leads
3. Attach mouse, keyboard, and network cables as shown below (Fig 1-1)



4. Attach modem line in bottom port as shown below (Fig 1-2)

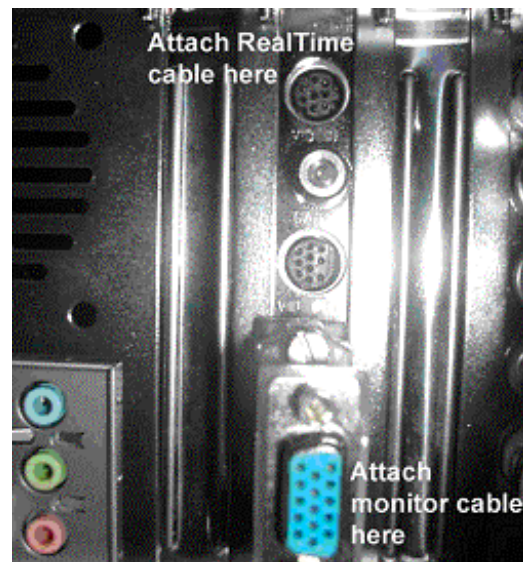
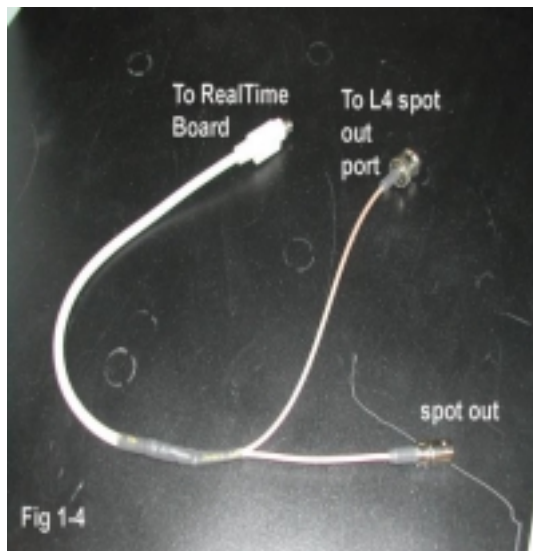


5. Attach camera leads to top 4 ports on L4 capture boards (Fig 1-3)
6. For Non Real-Time units attach monitor cable to port on video card (Fig 1-3)



####

7. For non-real-time units, attach A/C power cable and turn on unit; for real-time units, proceed to step 8.
8. Attach real-time cable (Fig 1-4) from top port in real-time board (Fig 1-5) to bottom port in L4 capture board.



9. Attach A/C power cable and turn on TechEye® DVR
10. Note: Factory default for Username and Password is:  
Username – TechEye® Password – 7129123
11. To change the network settings double click on the eye in the live viewer (at the bottom right) and select control panel from the menu

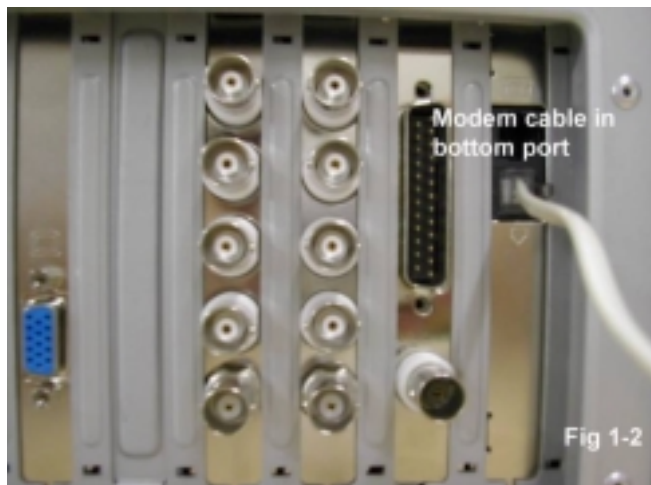
#### 4.1.2 TechEye® 12008/12009 Models

1. Unpack all components
2. Position TechEye® DVR near all camera leads
3. Attach mouse, keyboard, and network cables as shown below (Fig 1-1)



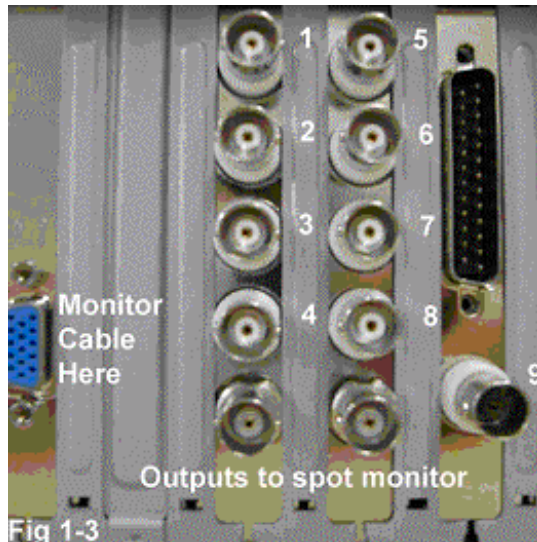


4. Attach modem line in bottom port as shown below (Fig 1-2)



5. Attach camera leads to top 4 ports on each L4 capture board (Fig 1-3)
6. Attach camera lead to port on M16 capture board (Fig 1-3)
7. Attach monitor cable to port on video card (Fig 1-3)





8. Attach A/C power cable and turn on TechEye® DVR (Fig 1-4)



9. Note: Factory default for username and password is:
  1. **Username – TechEye®**
  2. **Password – 7129123**
10. To change the network settings double click on the eye in the live viewer (at the bottom right) and select control panel from the menu

#### **4.1.3 TechEye® 12016 and 9016 Models**

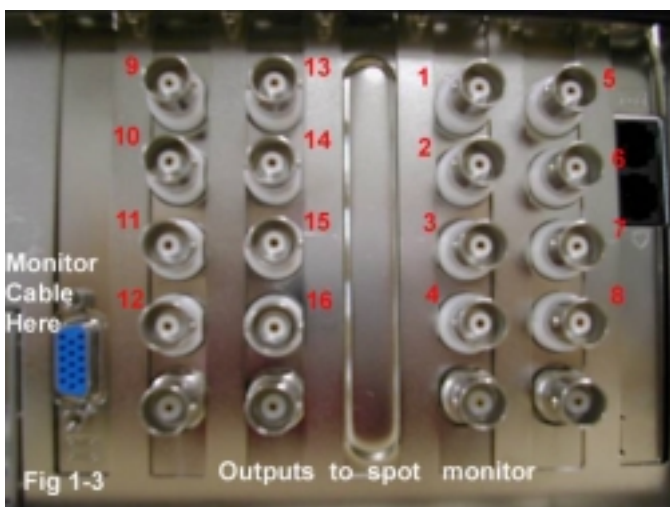
1. Unpack all components
2. Position TechEye® DVR near all camera leads
3. Attach mouse, keyboard, and network cables as shown below (Fig 1-1)



4. Attach modem line in bottom port as shown below (Fig 1-2)



5. Attach camera leads to top 4 ports on each L4 capture board (Fig 1-3)
6. Attach monitor cable to port on video card (Fig 1-3)



####

7. Attach A/C power cable and turn on TechEye® DVR (Fig 1-4)



8. Note: Factory default for username and password is:
  1. Username – TechEye®
  2. Password – 7129123
9. To change the network settings double click on the eye in the live viewer (at the bottom right) and select control panel from the menu

**Your DVR is already pre-configured with factory defaults. Caution should be used when changing any of the factory defaults. It is recommended that your dealer review changes.**

## 5. Customizing your DVR

**Note:** The TechEye® DVR automatically scans all drives during startup phase of recording. Additionally the same process takes place when the TechEye® DVR is turned on. This is a normal process designed to ensure hard drive integrity.

**5.1 TechEye® Configuration Manager** - From the local GUI, select TechEye® configuration manager by choosing the settings icon shown below.



### 5.1.1 Recording Schedule

The **Recording Schedule** is used to determine when the DVR records and the manner in which recording takes place. The DVR can be set to record during weekdays, weekends and holidays (or any combination) in order to meet the user's needs; the hours of the day can be specified as well. An example is provided below.

The type of recording is also modified in this field:



**Continuous** -The DVR records constantly all data it receives from the cameras according to schedule.

**Event** - The DVR records only motion specified by the user. See section 5.1.2 for details on how to configure motion.

**View Only** - Cameras can be viewed on the local DVR and via remote but not recording (archiving) takes place.

RECORDING SCHEDULE				
	Hour	Weekday	Weekend	Holiday
Cam 1	00 - 01	Continuous	Continuous	Continuous
Cam 2	01 - 02	Continuous	Continuous	Continuous
Cam 3	02 - 03	Continuous	Continuous	Continuous
Cam 4	03 - 04	Continuous	Continuous	Continuous
Cam 5	04 - 05	Continuous	Continuous	Continuous
Cam 6	05 - 06	Continuous	Continuous	Continuous
Cam 7	06 - 07	Continuous	Continuous	Continuous
Cam 8	07 - 08	Continuous	Continuous	Continuous
Cam 9	08 - 09	Continuous	Continuous	Continuous
Cam 10	09 - 10	Continuous	Continuous	Continuous
Cam 11	10 - 11	Continuous	Continuous	Continuous
Cam 12	11 - 12	Continuous	Continuous	Continuous
Cam 13	12 - 13	Continuous	Continuous	Continuous
Cam 14	13 - 14	Continuous	Continuous	Continuous
Cam 15	14 - 15	Continuous	Continuous	Continuous
Cam 16	15 - 16	Continuous	Continuous	Continuous
	16 - 17	Continuous	Continuous	Continuous
	17 - 18	Continuous	Continuous	Continuous
	18 - 19	Continuous	Continuous	Continuous
	19 - 20	Continuous	Continuous	Continuous
	20 - 21	Continuous	Continuous	Continuous
	21 - 22	Continuous	Continuous	Continuous
	22 - 23	Continuous	Continuous	Continuous
	23 - 24	Continuous	Continuous	Continuous

For example, here is how a user would set up the DVR for this schedule: record Monday – Friday between: 1:00 am- 8:00 am, Motion only, with Weekends set for continuous recording on the first 8 cameras, and motion for the remaining 8 cameras:

1. Select the **Recording Schedule** from the menu on the left
2. Under the **Weekday** column **WEEKDAY**, select (Highlight) the cell 01-02 (Military time for the time period 1 am till 2am). **00 - 01**
3. Drag down the list, holding the left mouse button down, until you reach the desired time cell 07-08 (the cells should change to a blue color if this is done properly). Now select the Event button **Event** and then the Apply all button, to make the changes to all 16 cameras (Event shows up as red in the cells). The remaining time for Weekday should then be set to **View Only**, and **Apply All** **Apply all** as well, using the same method. The first part of the schedule is completed.
4. Adjusting the Weekend schedule. First select **camera 1** (it says 1 and has a small camera icon) **1** and under the Weekend tab select the top cell. Holding the left mouse button down, drag carefully until you reach the bottom cell (23-24). Now select the continuous button. Now select **Apply** **Apply** not **Apply All**. **Apply all** Repeat this process (for cameras 2-8) until you have set up the first 8 cameras in this fashion. Follow the same procedure for the

## IDS-DVR

remaining cameras with the exception of selecting “Event” instead of **Continuous**. **Continuous** Do **not** hit “apply to all” here because the cameras have unique configurations. Select **Exit** to leave this menu.


The same method can be used to define holiday scheduling. See section 5.1.5 for how to set up holidays on your DVR.

### 5.1.2 Motion/ Color Setting


This options menu is used for configuring the motion and color recognition for each camera. This allows one to define specific motion regions for each camera. For example, a camera might be facing the rear door of a warehouse. Ideally, one does not want the motion from tree leaves blowing in the wind to cause positive motion reads, as this motion is generally deemed inconsequential. A better solution would be to highlight critical parts of the camera view and have the DVR detect motion only in those regions.


In order to define motion and color settings, make sure recording is defined for the respective camera. The cameras are listed on the left hand side of the dialog box. The default configuration for all cameras assumes motion across the entire field of vision. For each camera, the field of view is displayed in the center of the dialog box. Below this window there are five icons, which will be defined below.




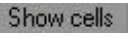
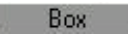
**Rectangular Box Tool**- this allows the user to define motion in a rectangular Box segment.

**Line Tool**- this allows the user to define motion along a line.

**Brush Tool**- this allows the user to brush on motion in paintbrush style.

**Flood Filler Tool**- this allows the user to fill a space outlined by lines or brushing (for instance filling in the contents of a circle).

**Eraser Tool**- this allows the user to erase any area previously defined in motion grids, and works based on method selected (Rectangle, Line, Brush etc...).

The **Show Cells**  button displays the entire grid in the field of view. It toggles on and off with the same button. Each square of the grid represents the smallest unit size for both defining motion and motion detection. The **Box**  button (also a toggle) displays regions as either transparencies or as a blend; either way displays motion detection regions defined to that camera.

The **Sensitivity Slider Bar** allows one to define the sensitivity of the motion detection process. This should generally be left at the factory default settings unless there is a specific reason for modification. Adjusting this to a higher number will reduce the chances of missing some subtle motion in the defined region, but can result in an unnecessary number of false motion reads (false positives) and can bog down the system. Setting this number too low can result in missing some essential motion in the defined region. Alternatively, motion sensitivity can be adjusted with the down arrow on the slider bar (double click on the slider automatically moves to the end of the bar).

**Color Recognition** is a subset of motion; motion must be detected for color recognition to work properly. Color regions for each camera can be defined in the same manner as motion detection. Use the **Set Color** button to select the desired color.

### Example: Setting up motion grids

- Select the camera that needs modification (1-16)
- Erase the current grids (motion fields) on that camera by first selecting the **Eraser Tool** (icon turns white), and then left clicking on the top left corner of the camera field. Holding down the mouse button, drag the red box from the top left corner to the bottom right corner and then release the button. This should erase all previous motion grids. Click the **Eraser Tool** again to un-toggle the eraser (icon turns black).
- Now select the desired tool type (box, line tool, paint etc.). In this instance we will use the **Line Tool**. Select the **Line Tool** by clicking on the appropriate icon.
- Move the mouse to the desired location on the camera field where the line should start. Holding down the left mouse button, drag the line as far as needed. Stop the line by releasing. This transparent red line will now report any motion that is detected along its path. Continue in the same fashion for any other regions on the screen that need to be defined. Press the **Box** button to make the motion regions show up as blue boxes.
- When finished with this camera, select the **Apply** button. If the regions you defined apply to all cameras, select **Apply all**.



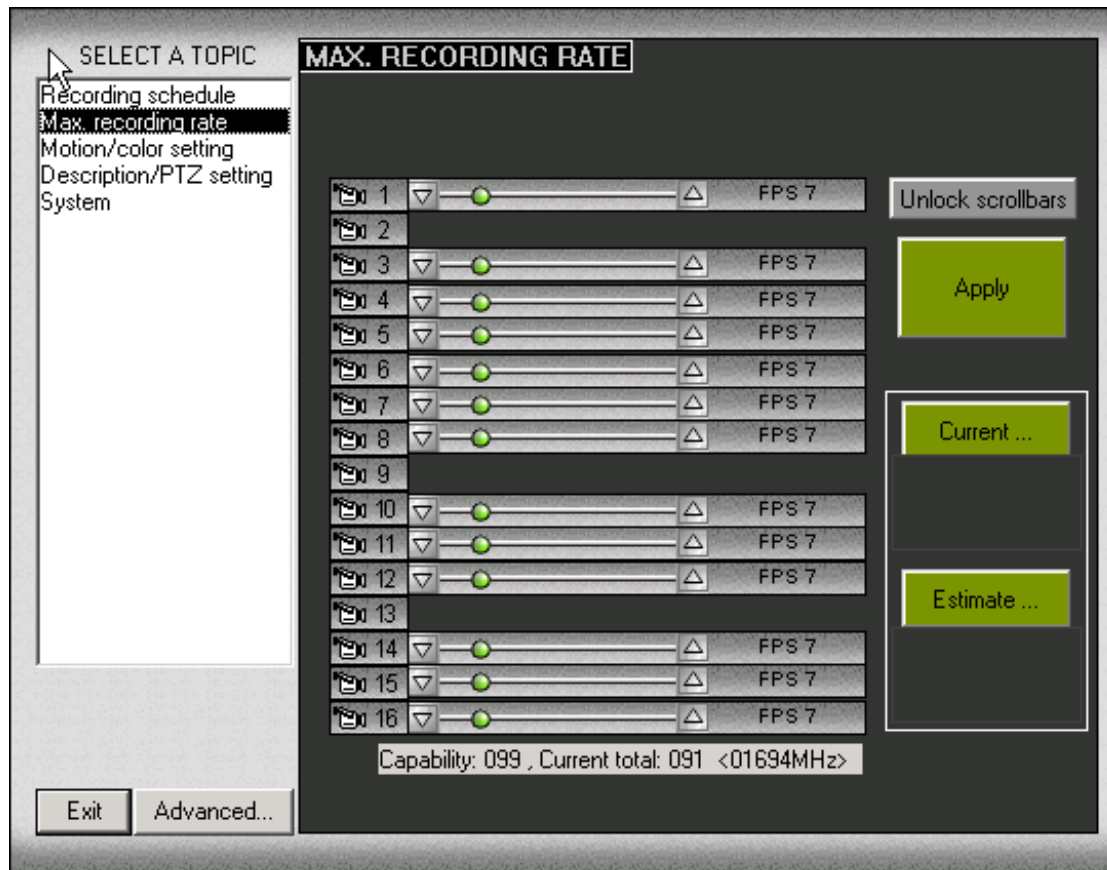
### 5.1.3 Maximum Recording Rate

This section will show how to define recording speeds for each of the DVR's cameras. There are several reasons for modifying the recording speeds for each camera. The first is to increase your DVR's "storage cycle", that is, the amount of time the DVR can store data before it begins to overwrite existing archived data. For example, if a DVR started to record on January 1<sup>st</sup> the hard drive might reach capacity on February 10<sup>th</sup>. At this point the hard drive will start overwriting the earliest data, starting with data from January 1<sup>st</sup>. The storage cycle for this DVR is roughly 41 days. Varying recording speeds can increase the storage cycle of your DVR, significantly.

A second advantage to variable recording rates involves conservation of frame rates. It allows the user greater flexibility regarding camera priority. A DVR can only process a finite number of frames in a given second. Using variable recording rates, one can assign high recording rates to important, mission critical cameras and offset this by lower frames for non-critical ones.

To adjust recording rates, select the **Max recording rate** option from the configuration menu. The DVR is set to a factory default where each camera gets the exact same frame rate (usually 120 divided by the number of cameras). To modify the default settings, select the **Enable automatic recording rate control**, toward the top of the dialog box. This will open up the adjustable frame scrollbars in the center of the screen. For variable speeds on each camera you will need to press the button for **Unlock scrollbars** first, before continuing. At this point you can drag each camera scrollbar to the desired frame speed, by selecting the small ball on the scrollbar and moving it into position. Repeat this process for each camera on your system (first select camera, then select frame rate). You can also use the up and down buttons on each side of the scrollbars to adjust the frame rates. After setting up your desired frame speeds, press the **Apply** button to make the settings take effect.

Two additional features are available on this page. The first is the **Current** button. Pressing this button before adjusting the recording speeds will give you some statistical information and an estimate of your current storage usage. The **Estimate** button allows the user to vary the frame rate settings and see how the change impacts storage times without actually making the changes.



#### 5.1.4 Description/PTZ Settings

DESCRIPTION / PTZ PROTOCOL					
Machine name		DVRTI		Description	
				TechEye DVR	
CAMERA	DESCRIPTION	PTZ=	PORT	ID	PROTOCOL
1	CHANNEL 1	COM1	00	00	PELCO
2	CHANNEL 2	COM1	00	00	
3	CHANNEL 3	COM1	00	00	
4	CHANNEL 4	COM1	00	00	
5	CHANNEL 5	COM1	00	00	
6	CHANNEL 6	COM1	00	00	
7	CHANNEL 7	COM1	00	00	
8	CHANNEL 8	COM1	00	00	
9	CHANNEL 9	COM1	00	00	
10	CHANNEL 10	COM1	00	00	
11	CHANNEL 11	COM1	00	00	
12	CHANNEL 12	COM1	00	00	
13	CHANNEL 13	COM1	00	00	
14	CHANNEL 14	COM1	00	00	
15	CHANNEL 15	COM1	00	00	
16	CHANNEL 16	COM1	00	00	

This configuration menu is used for setup and configuration of PTZ (Pan/Tilt/Zoom) cameras. The DVR machine name and description can also be assigned from this menu.

## IDS-DVR

The fields are defined below.

**Description:** Use this field to assign a name to the PTZ camera, such as “rear door”, or “front parking lot”.

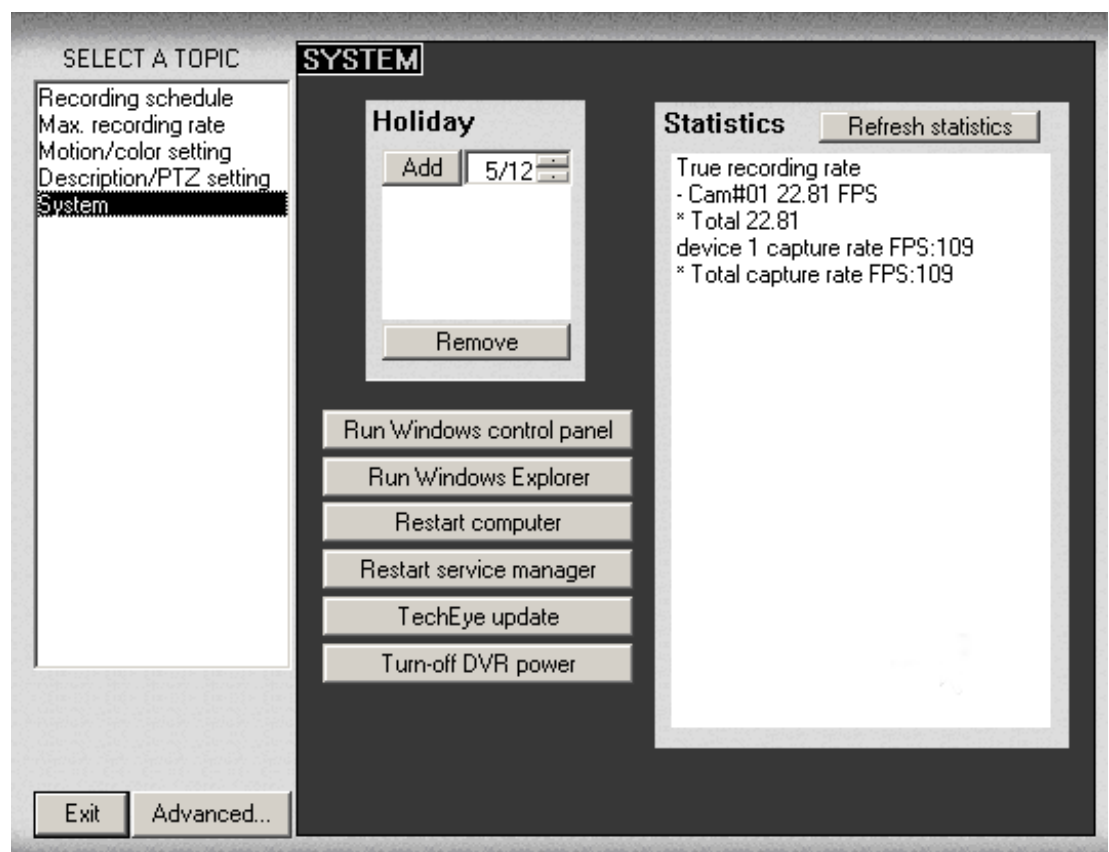
**PTZ Port:** This is the COM port (communications port) that the PTZ camera is physically connected to, usually COM 1 on most DVR's. Many PTZ cameras require a interface module to connect to the COM port directly, and the PTZ plugs into the module itself. A communications test, to see if the camera is properly communicating with the DVR, can be downloaded at <http://www.seeitlive.com/doc.asp>

**Camera ID:** This is where you assign the camera ID for each PTZ camera. Generally, each camera should have it's own unique ID. Mixing camera brands on the same COM port is not recommended. The camera ID is usually set by dip switches on the camera itself. Make sure the camera IDs match for both the PTZ camera and the software setting.



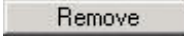
**Protocol:** PTZ cameras communicate on different protocols, depending on the manufacturer. IDS currently supports the following protocols: Kalatel, Vicon, Pelco D, and Kampro. In the drop down menu, select the appropriate protocol for the PTZ camera.

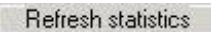
**Machine name,** or machine ID, is a security feature used for remote connections. It is five characters in length (to comply with alarm industry standards), and must be known by the remote user in order to connect to the DVR. The **Description** is optional, and used on various reports and printouts.

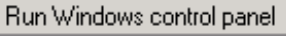
### 5.1.5 System



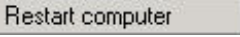
The **System** configuration panel provides a number of options, which will be described below. This includes real time statistics, holiday scheduling, and ways to update the TechEye® over the Internet.

**Holidays:** We can set up various holidays in the section. This menu relates directly to the recording schedule. Enter the month and date in the appropriate field, followed by clicking the **Add** button.   The up/down arrows buttons can be used as well. Follow these steps for each date; use the **Remove** button  to delete a holiday. Settings will be saved automatically when the menu is exited.

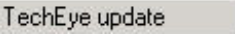
**Statistics:** The menu provides real time recording statistics for the DVR. Each camera is displayed, followed by the number of frames per second (denoted FPS). Higher numbers reflect greater smoothness in playback, at the price of decreased storage capacity. The frames are tallied at the bottom. Use the **Refresh statistics**  button to update the statistics.

**Run Windows Control Panel:**  Use this button to enter the Windows control panel. Control panel allows modifications to various configurations, such as network or display settings. Recommended only for advanced users.

**Run Windows Explorer:**  Allows access to the Windows desktop.

**Restart Computer:**  Pressing this button will open a pop up dialog box, asking to confirm the restart. If you select “yes”, the DVR will shutdown and restart properly. Recording will not occur until the restart is completed. Use this button if alterations to the configuration require a system restart to make the changes take effect.

**Restart Service Manager:**  Similar to **Restart Computer**, this option only restarts the DVR software without restarting the entire computer. Recording is paused momentarily during the brief restart.

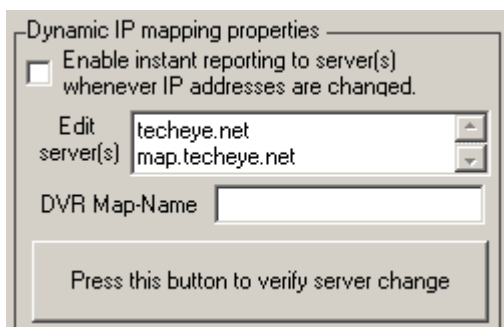
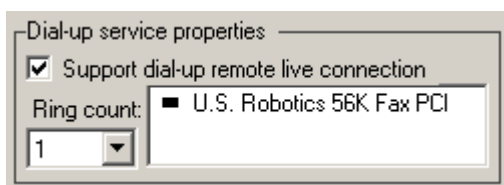
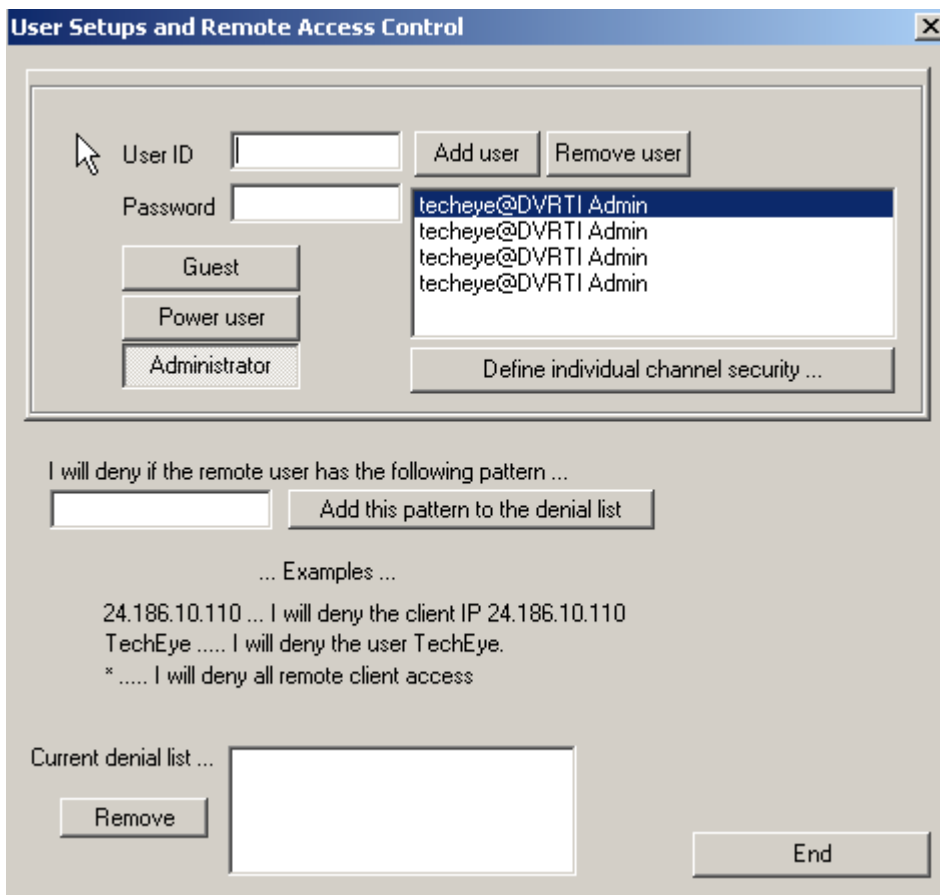
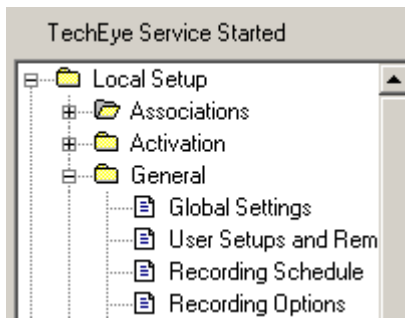
**TechEye® Update:**  Product enhancements will be available on the web. Select this option to automatically update the DVR to the latest software version. A high-speed Internet connection is required.

**Turn Off DVR Power:**  Turns off the DVR.

### 5.1.6 Advanced Features

**5.1.6.1 Security-** Three levels of security are available and five individuals can be assigned security status. This feature is located on the general screen, which is part of the TechEye® Advanced feature set shown below. Select user setup and remote access control to setup security. User ID's cannot be less than 6 digital or more than 7 digits.

## IDS-DVR



**5.1.6.2 Support for Modem Connections** – A list of all modems will appear in the list box, Select the modem you desire. Select the ring count, the number of rings before the modem picks up. Check Support dial-up remote live connection and the program will reboot.

**5.1.6.3 Dynamic IP** - Check the enable box in order to map any changes in IP addresses. Once this is enabled changes will automatically be communicated to the TechEye® net server.

Your name will become the replacement for all IP addresses. To establish your name, enter the name in the DVR Map Name and press the activation button.

Configure automatic daily email report

#### 5.1.6.4 Configure automatic daily email report – Brings up setup screen in order to configure email alerts.

Select the time range for which you desire a report of triggers (max 250 per day).

Select the cameras for which you want that report.

Select the daily reporting time to receive an email alert.

Complete the email address that will receive the alert.

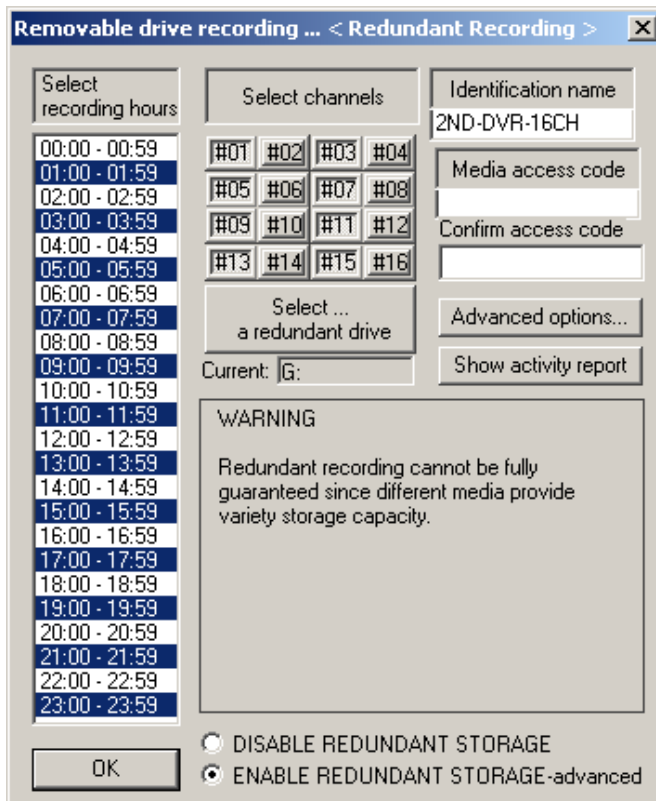
Authentication method-  
Contact your network administrator to determine the method required for your network. Additional information will be required for SMTP and POP3.

Complete the outgoing SMTP server/port parameters.

Select Enable this feature and email will be sent based on the parameters you have selected. You will receive a sample email once this is completed.



**5.1.6.5 Redundant Recording Feature** – This feature permits you to record video to 2 locations concurrently. The removable drive permits you to bring the data to any organization that requires it.



Select recording hours - Click on the group of hours that you desire.

Select channels - Select the cameras that you want to record redundantly.

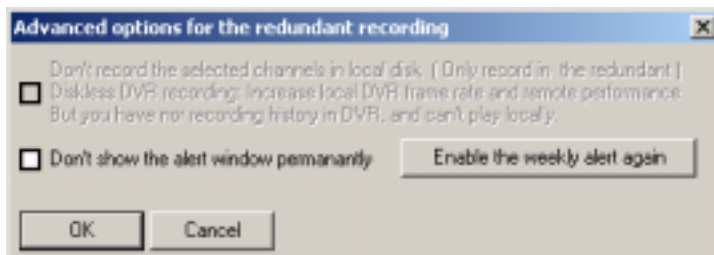
Select the redundant drive - This can be a USB disk, CD writeable, ZIP drive, or a network drive.



Current - Check that the status is correct.

Identification name – User Determined name used to create a unique redundant video file on the user chosen media. (Multiple DVR can record simultaneously to the same user determined media.)

Media Access Code – User determined password to protect access to the video.



Advanced options – When clicked, window opens allowing the user to either disable the warning window permanently or re-enable the weekly alert if it has been disabled for this week in the “WARNING - REDUNDANT RECORDING” popup.

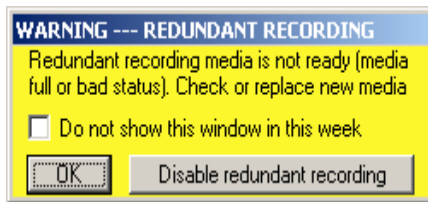


### WARNING - REDUNDANT RECORDING

This dialog will pop up when the access to the user determined redundant recording media has been lost.



## IDS-DVR



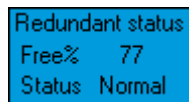
Do not show this window in this week – Check this option to disable this popup for the current week.

Disable redundant recording – Click this button to cancel redundant recording.



Show activity report – Click this button to view the statistics of the current redundant recording. (Units refer to number of video clips.)

Once all settings are configured, select enable or disable redundant storage and click ok.



When redundant storage is operating, the redundant status popup will appear in the lower right portion of the "Live Viewer", (popup can be dragged to user preferred location on screen.)

Popup background colors -

Blue - operating properly.

Red - access to redundant recording media has been lost.

Yellow – This occurs when a portion of the data transferred is lost due to the fact that the receiving media receives data at a slower rate than the DVR sends data.



**5.2 Local Interface** - The main screen permits you to navigate through the system. This gives you the full screen view.





**5.2.1 Brightness** - Adjust the brightness of the local GUI by clicking the up and down arrows.



**5.2.2 Contrast** - Adjust the contrast of the local GUI by clicking the up and down arrows.

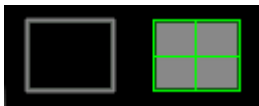


**5.2.3 Hue** - Adjust the hue of the local GUI by clicking the up and down arrows.



**5.2.4 Back to Default** - Return to the default settings for the brightness,

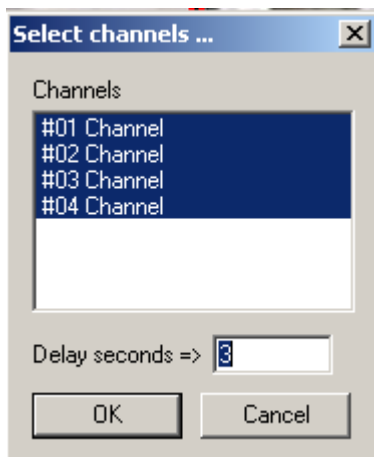
**5.2.5 Screen Views** - View from 1 to 16 cameras in a variety of configurations. Double click to select 1 of the 4 shots for full screen display.



TE12004	1 and 4 camera configurations
TE12008 12009	1, 4, 6,8 and 9 camera configurations
TE 12016	1, 4, 6, 9, and 16 camera configurations

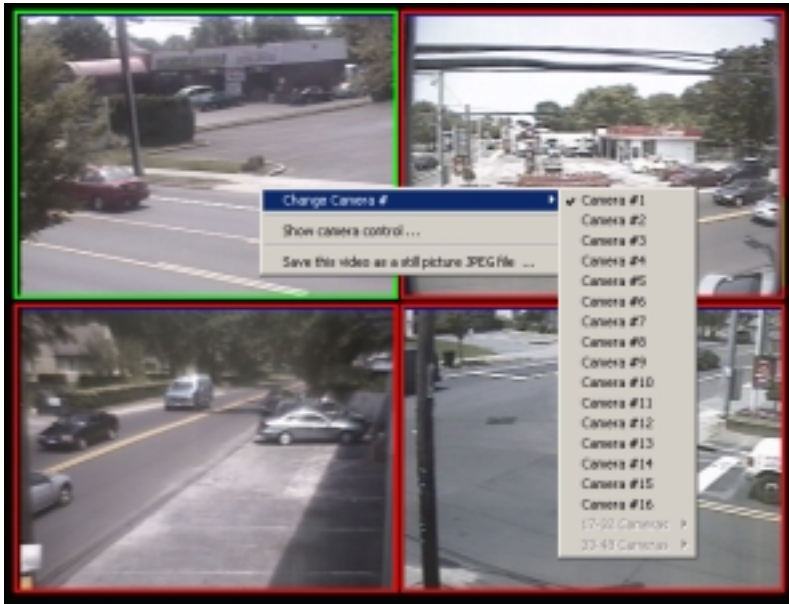


**5.2.5.1 Guard Tour Features** - Select the channels through which the system will sequence.



## 5.2.6 Selecting Cameras for Display

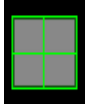
Switch from current cameras to different cameras for instant viewing. Right click to get popup menu. Only select the cameras that are installed on your TechEye® unit. If you want to select some of the cameras, hold down the CTRL key during the selection process and release the CTRL key when all selections are complete. The show camera control key brings up the PTZ camera.



**5.2.7 Caption On/Off** - Turn the captions (camera descriptions) on and off using this icon.



**5.2.8 Playback** - Takes you to the playback database.

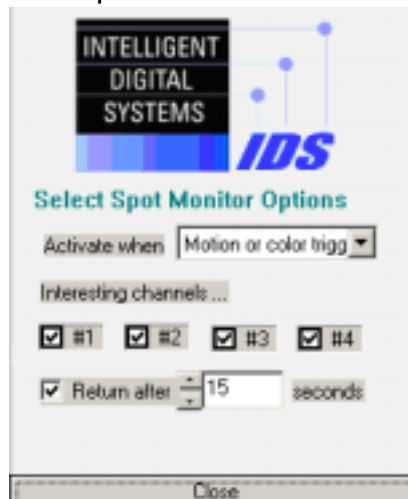


**5.2.9 Three Modes for Screen View** - Increase the size of the image to fill the screen with 5 adjustments available. Click on the quad box and cycle through 3 options from smallest image size- 320x240

(Native resolution the camera is recording), medium image size-640x480, and largest image size-1280x960.



**5.2.10 Spot Composite Monitor Control** - Permits you to display video on a composite video source automatically. Control activity on select cameras.



Display full screen and control activity on particular cameras. Select 1 of 3 options: no action, defined motion, any motion. Then select the cameras that are to be activated. #####logo



**5.2.11 Pan Tilt Zoom** - Adjust the pan-tilt-zoom camera direction manually, or set the PTZ camera to go to a saved preset position as a result of motion.



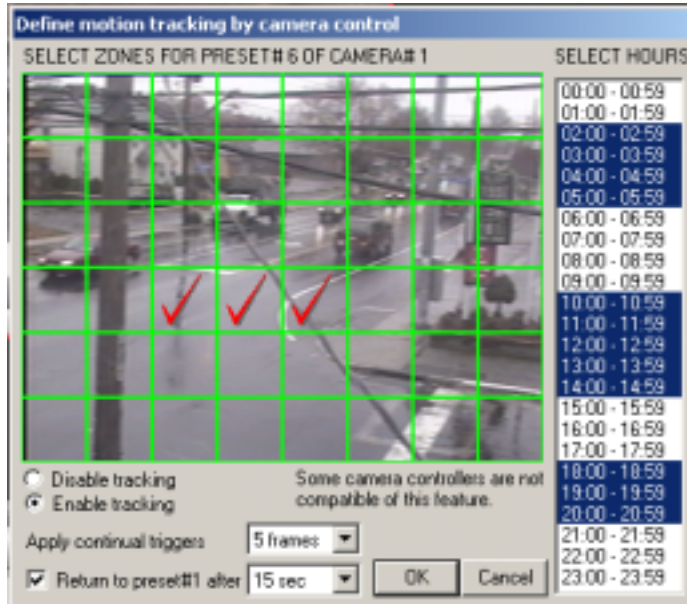
Select a preset – The DVR can support up to 15 PTZ presets per camera (the “#01” must be used as the default preset). A preset is a formerly determined camera position. To activate a preset position, select the desired preset number (1 – 15) and click the “preset” button.

In order to activate a preset position you must save it first.

To save a preset position, position the camera, select the desired preset number (1 – 15) and click the “save” button.

**PTZ tracking** – This feature enables the user to automatically activate a PTZ camera preset based on movement within a predefined area of the default PTZ camera preset.

After saving the preset position (default position can not be trackable), click on the “Track” button and the following dialog will be prompted.



Check your predefined area on the grid.

Select the “Enable tracking” option.

Select how many frames are required to activate this feature (5 – 95 frames).

**Return to...** - Checking this option returns the camera position to the default preset after user chosen amount of time (15 seconds - 25 minutes).

**Select Hours** – (At least one hour within a 24 hour period must be selected.) Highlight those hours in which the tracking will be operational and click ok.

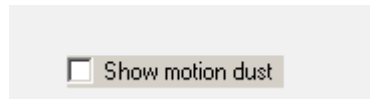
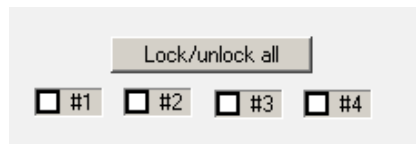
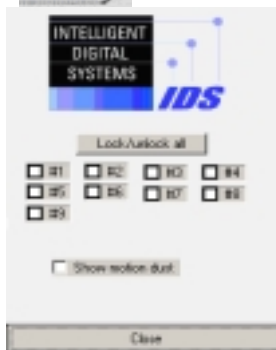
### Important Information

**If at anytime preset position “#01” is modified, all other presets will be deleted.**

**When the PTZ control dialog box is visible the automatic tracking is disabled.**



### 5.2.12 Video Lockout



#### 5.2.13.1 Select Cameras -

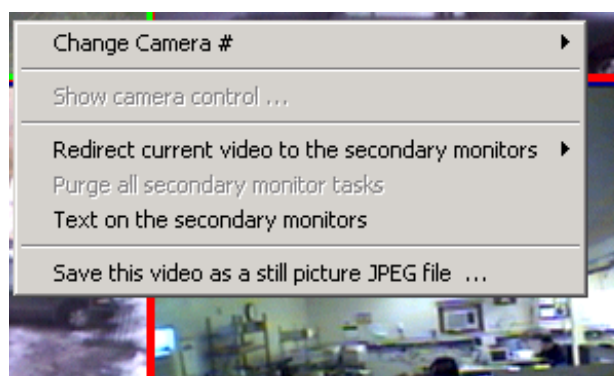
Select the cameras to be locally locked out, locally and remotely while still recording.

#### 5.2.13.2 Slow Motion Trail

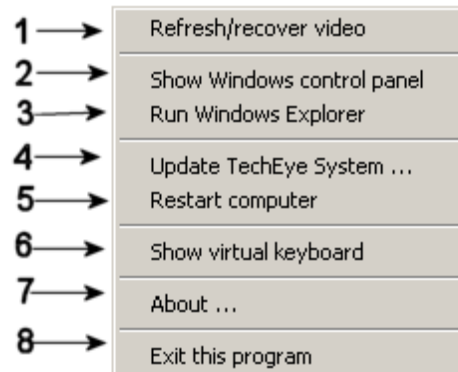
### 5.2.12.1 TV Output

Some TechEye® models include the option of directing video to a TV monitor. This offers several advantages. The first is allowing the option of recording video to a VCR. This is important for many local law enforcement agencies, which use tape for evidentiary purposes. When the video is output to secondary composite monitor, text can be added to the video that is being recorded on tape. Additionally, the secondary video source can be used as an additional spot monitor.

To access the TV output, be sure the additional monitor is attached before proceeding. To output secondary video from the DVR, right click on any empty spot on the live viewer. This should pull up a menu of options. Select "redirect current video to the secondary monitor". The video should now be displayed in both locations. Right clicking on the new video source will offer the option to add text to the video, both on the top and bottom of the screen.



### 5.2.13 Options Menu



1. **Refresh/Recover Video**- polls the capture card and attempts to recover any video signals that may have dropped.
2. **Show Windows Control Panel**- activates windows control panel.
3. **Run Windows Explorer**- activates windows explorer, gives access to the desktop
4. **Update TechEye™ System**- Update the current software. Advanced users only. Must have a broadband Internet connection. Start TechEye™ Update- activating this choice will automatically start the system updates from the Internet. Update by local disk-Insert CD and system will update based on the data on the disk. Special update identifier- IDS will contact you with data by disc or Internet to receive a special update. NOTE: All special updates will require the identifier to be input on the Special TechEye® Update screen.
5. **Restart Computer**- restarts the TechEye™ system to allows system changes to take affect.
6. **Show Virtual Keyboard**- provides a virtual keyboard that can be accessed by a a mouse
7. **About**- displays current software revision.
8. **Exit this program**-exit the local interface.

## 5.3 Local Interface: Alternate Browser

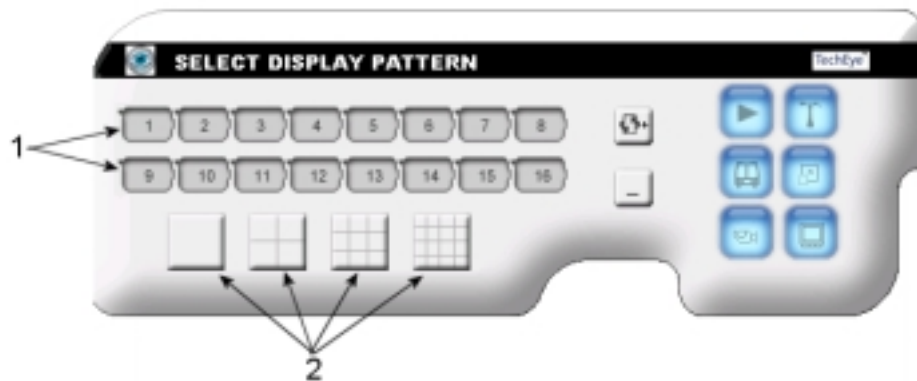
### 5.3.1 Lock / Unlock Cameras





1- Lock video from local viewing in this menu. Select the appropriate cameras to block; pressing it again reactivates the camera. Video that is locked is still recorded and can be viewed by a remote client.

### 5.3.2 Select Display Pattern



1- Select the number of cameras to display in the local viewer. Used primarily for instances where the numbers of cameras attached is less than the number of cameras available. For instance, if cameras inputs 10 through 16 are not available, select the 9-channel box to remove the unneeded camera outputs.

### 5.3.3 Select Colors



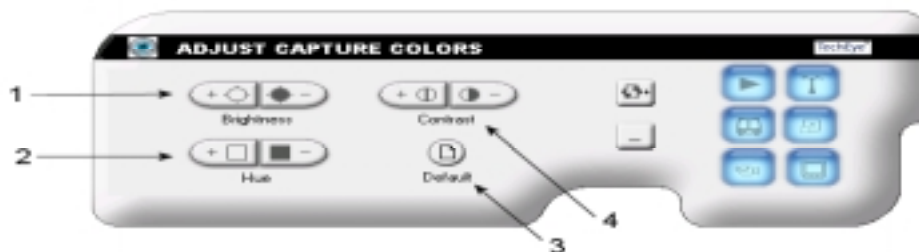
This menu controls the color configurations for the local viewer. From these colors a user can quickly determine each cameras recording schedule

- 1- **Text** Set the color for onscreen text (onscreen text such as date and time is set in the Options menu). There are 48 predefined colors and the user can define custom colors.
- 2- **Frame** Set the color for the border around each camera.
- 3- **Background.** Set the color for the backdrop behind the cameras (visible only if the cameras are not stretched to full screen size).



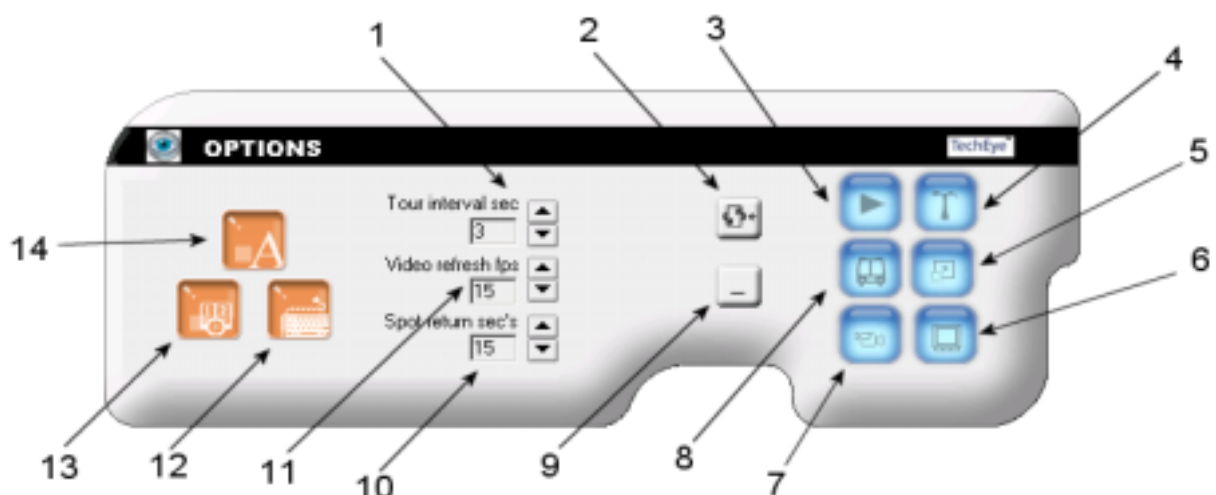
- 4- **Event Recording** Sets the camera border color for a camera configured to record on motion only.
- 5- **Constant Recording** Sets the camera border color for a camera configured to record continuously.

### 5.3.4 Adjust Capture Colors



1. **Brightness** Adjusts the local camera brightness. First select the camera that requires adjustment by selecting it from the live viewer. Now use the brightness controls to enhance the image display. Settings will be automatically saved.
2. **Hue** Adjusts the local camera hue (color or tint). First select the camera that requires adjustment by selecting it from the live viewer. Now use the Hue controls to enhance the image display. Settings will be automatically saved.
3. **Default** Restores all color settings to the factory defaults.
4. **Contrast** Adjusts the local camera contrast (balance between light and dark). First select the camera that requires adjustment by selecting it from the live viewer. Then use the Contrast controls to enhance the image display. Settings will be automatically saved.

### 5.3.5 Options



- 1- **Tour Interval** Set the tour interval length in seconds. Use the up and down arrow buttons to select the dwell time which can be anywhere from 1 to 50 seconds.
- 2- **Control Menu Manager** Used to scroll between the five menu displays to adjust

the various system configurations.

- 3- Playback Module.** Pressing this button will activate the playback module. Use this button to view archived video.
- 4- Configuration Manager** This activates the configuration manager to make additional system modifications such as recording options, schedules, and PTZ settings.
- 5- Video Size Toggle.** Adjusts the size of the camera display frames. Press several times to enlarge the video the full screen. Once the video reaches full screen size a further click of this button returns the video to the default state (dependent on screen resolution).
- 6- Spot Monitor Control** Used to configure various spot monitor settings.
- 7- PTZ Camera Controller.** Activates a PTZ controller for each applicable camera (press once for each PTZ camera defined). If PTZ cameras have not been defined you will get an error message to define them before proceeding.
- 8- Automatic Camera Switching.** Allows local viewer to toggle between each camera at full screen for a predefined period of time, moving from one camera to the next before repeating the cycle.
- 9- Minimize Control.** Hides the control panel and allows for full viewing of cameras. The control panel can be moved by left clicking (and holding) on any unused portion of the panel (any non button portion) and dragged to the desired location. It can then be minimized pressing this button. To re-activate the control panel, move the cursor to the bottom of the screen or right click on any location and select "show control panel".
- 10-Spot / Auxiliary Monitor Control** Used to configure spot monitor settings.
- 11-Local Display Rate** Adjusts the local display speed. A higher number leads to smoother local viewing. However, local display speeds and recording rates are inversely related to some extent. Raising the local display speed to high values can adversely affect the recorded video frame rate.
- 12-Virtual Keyboard** Used in situations where a physical keyboard is not present on the DVR. The mouse can be used to enter keystrokes through this virtual keyboard.
- 13-Show Time/Date** Displays the date and time on the local display. Can be toggled on and off.
- 14-Show Captions** Displays text on the local viewer such as camera number and description. Can be toggled on and off.

## 6. Playback (Remote and Local)

Previously recorded video can be retrieved by selecting the “TechEye® Remote Playback” icon from the desktop or start menu. Remote playback is only available on broadband connections. Telco is currently not supported.

### 6.1 GUI for Playback



#### 6.1.1 Playback Interface

The playback interface is identical to the one on the DVR, however some features are not available from a remote connection.



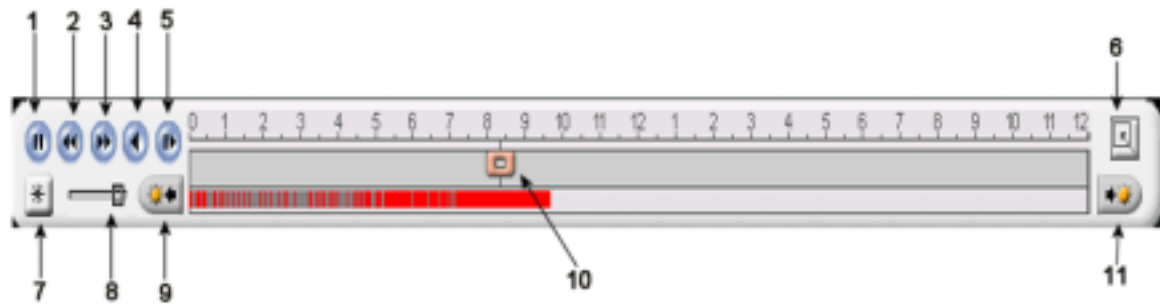
1. **Auto-Book Marking**- only available from the local machine (DVR). Double click on the TechEye® logo to see the available options. Enabling the auto-bookmark feature allows all motion events to be displayed in the bookmark log for review. Define a zone using the define search button and then enable auto- bookmark. Select the Start search button and motion events will automatically be logged (Note user must select the “continue bookmark” to have all events logged). Antialiasing can be removed from the full screen video in this menu.
2. **Instant Live Video**- remote sessions only. Allows one click access to live video for the current camera selected. Press once again to return the current playback session.
3. **Define Search**- local sessions only (DVR). Selecting this icon will superimpose a motion grid, which divides the video into 48 blocks. Multiple blocks can be selected for motion search. Select the Start Search button when the grids have been defined. Video will stop when motion is detected, and automatically rewind to just before the event takes place. Use the Auto-Book marking feature to enhance the search features (see #1 above).
4. **Start Search**- local sessions only. Starts the predefined search for motion events. See #3 above for more details.
5. **Timeline**- displays current time of video being displayed (at pointer location).
6. **Recording Status Bar**- indicates the current recorded state for the respective camera by time. Red indicates motion, white: no recording, and gray indicates

## IDS-DVR

recording without motion. A section of the status bar can become blue if highlighted by a mouse sweep. Blue indicates a region ready to be copied to some media (CD, network).

7. **Forward**- plays archived video back at normal speed. This may be faster or slower than real time, depending on the rate set by the video speed control (see #12 for more information). Press again to pause video.
8. **Fast Rewind**- rewinds video at a high speed. Press again to pause video.
9. **Fast Forward**- plays video forward at a high speed. Press again to pause video.
10. **Reverse**- rewinds video at normal speed. Press again to pause video.
11. **Single Frame**- advances video frame by frame for each mouse click.
12. **Video Speed Control**- controls the speed of video displayed in the viewer. Speed increases from right to left (the extreme right indicates maximum speed). Double click the small button to the left of the slider bar to hide the speed bar and restore the default forward speed (local only).
13. **Video Thumb Nails**- playback for any camera can be accessed by selecting the appropriate thumbnail. Grey indicates no camera or video for that port.
14. **Video Only**-displays full screen video. Press the escape key to leave this mode (or use the "X" at the top right corner). See section 6.1.1.1 for more details.
15. **Exit**- exits the playback interface.
16. **Toggle Screen**- rearranges the playback interface to allow a larger viewing area. Video becomes stretched. Press the toggle once again to restore the standard view.
17. **Refresh Video**- **Important! Video needs to be refreshed before any archived video can be displayed. Pressing this button loads the master database index to allow viewing of all available cameras**
18. **Image Adjustment**- activates a new menu with several additional options. Press once again to restore standard view. See section 6.1.3 for more details.
19. **Bookmark**-adds, removes, or go to a bookmark. See section 6.1.4 for more details.
20. **Video Pointer**- can be dragged to any part of the timeline to display video.
21. **Start of Day**- moves the pointer to the first recorded video for the current day.
22. **Film Strip**- brings up a frame-by-frame reel of the current video, showing the most recent eighteen frames of video. Press once again to restore standard view.
23. **End of Day**- moves the pointer to the last recorded video for the current day.
24. **Month Selection**- moves the month forward (right button) or backward (left button). Hold the mouse button down the pan several months.
25. **Calendar**- days that currently contain archived video will show up as **bold** on the calendar; non-bold means there is no video available for that day.

### 6.1.1.1 Full Screen Playback- Controls



1. **Forward**- plays archived video forward at normal speed. This may be faster or slower than real time, depending on the rate set by the video speed control (see #8 for more information). Press again to pause video.
2. **Fast Rewind**- rewinds video at a high speed. Press again to pause video
3. **Fast Forward**- plays video forward at a high speed. Press again to pause video.
4. **Reverse**- rewinds video at normal speed. Press again to pause video.
5. **Single Frame**- advances video frame by frame for each mouse click.
6. **Extended Control Panel**- see section 6.1.1.2 for more information. Press once again to hide the extended control panel.
7. **Bookmark**- add, remove, or go to a bookmark. See section 6.1.4 for more details.
8. **Video Speed Control**- controls the speed of video displayed in the viewer. Speed increases from right to left (the extreme right indicates maximum speed). Double click the small button to the left of the slider bar to hide the speed bar and restore the default forward speed (local only).
9. **Previous Day Video**.
10. **24 Hour Timeline**
11. **Next Day Video**.

#### 6.1.1.2 Extended Control Panel



1. **Address Book**- local and remote. Retrieves a list of stored bookmarks and allows



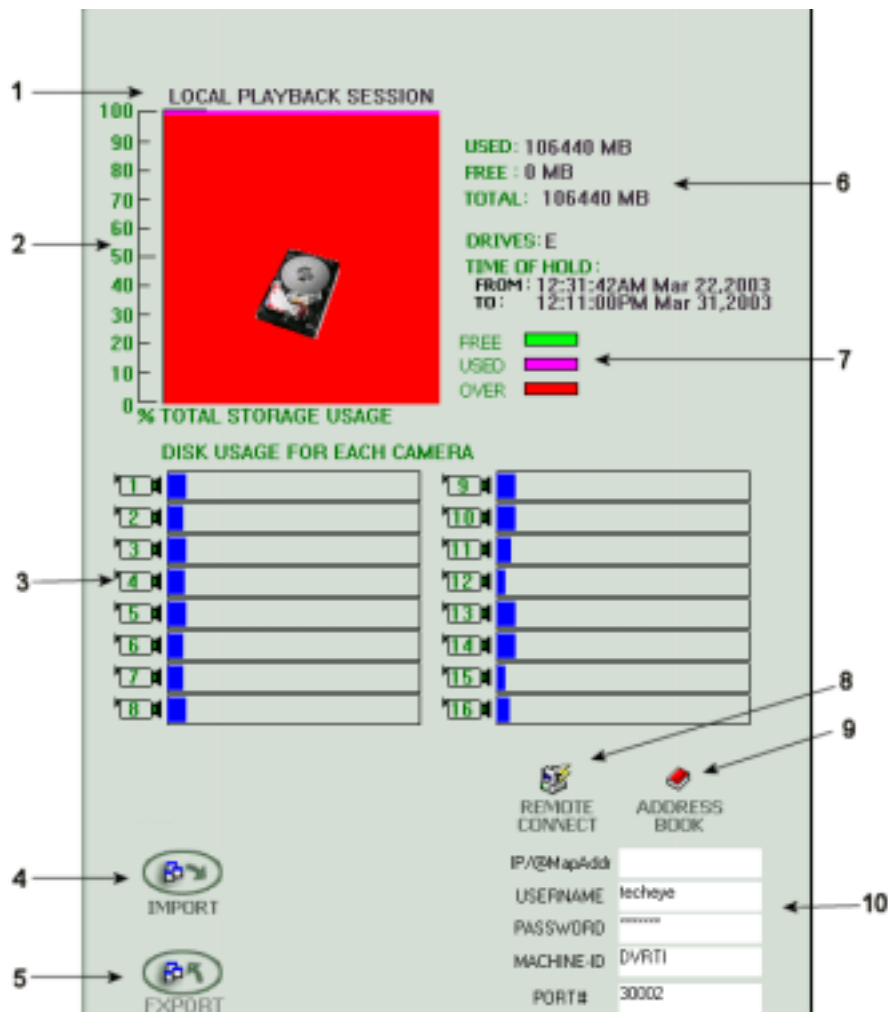
## IDS-DVR

for the addition, removal, or modification of these bookmarks. See section 6.1.9 for more details.

2. **Exit Program**- returns to the live viewer
3. **Refresh Video**- **Important! Video needs to be refreshed before any archived video can be displayed (local side only). Pressing this button loads the master database index to allow viewing of all available cameras**
4. **Video Thumbnails**- playback for any camera can be accessed by selecting the appropriate thumbnail. Grey indicates no camera or video for that port.
5. **No Video Thumbnail**- denoted by the gray color.
6. **Minimize**- hides extended control panel.
7. **Calendar**- dates, which contains video, are displayed in this menu. Double clicking the date will retrieve the video for that day.
8. **Instant Live Video**- remote sessions only. Allows one click access to live video for the current camera selected. Press once again to return the current playback session.
9. **Export Utility**- allows export of archived video to a second media (CDROM, network drive, etc.). See section 6.1.7 for details.

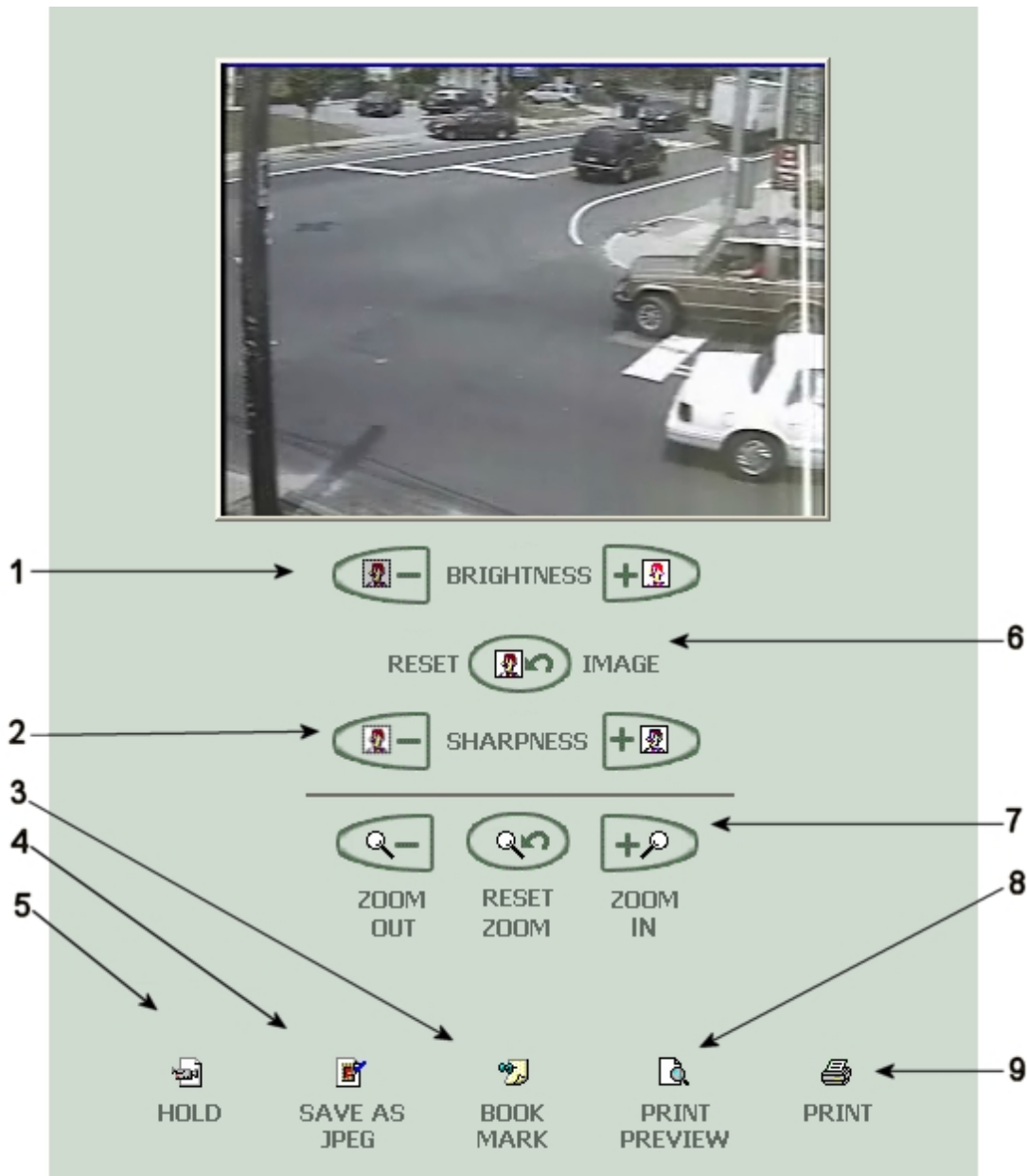
### 6.1.2 Playback GUI-Statistics

## IDS-DVR



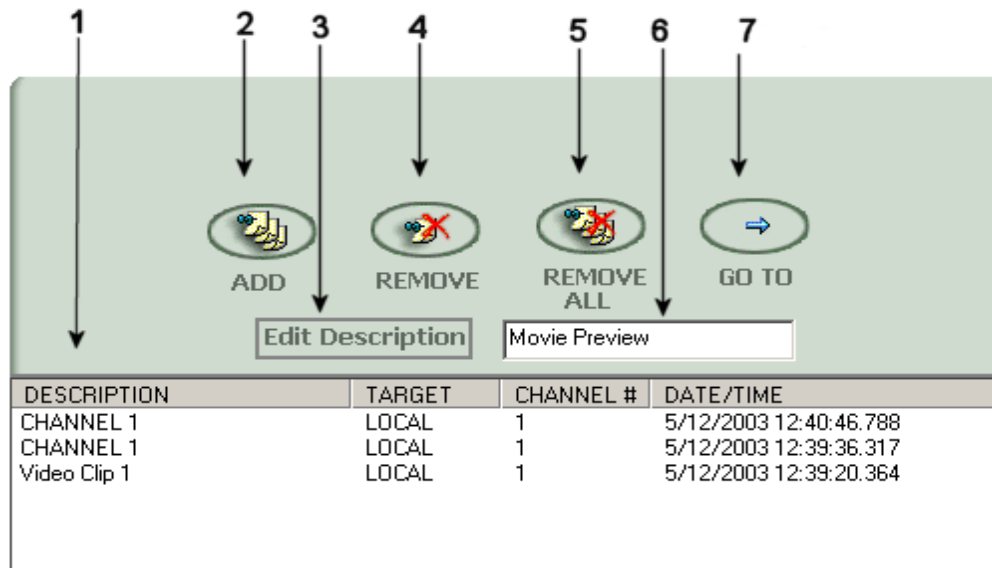
1. IP address for accessing the DVR
2. Total storage used
3. Disk usage for each camera
4. Import-Display video from external source (i.e. CD See section 6.1.8)
5. Export- Backup video for desired date and time. (See section 6.1.7)
6. Storage Information
7. Storage Legend
8. Remote Connection- Connect to remote DVR, once all information is completed
9. Add Bookmark - Create and add bookmarks for multiple DVR sites
- 10 Data required for single remote connection

### 6.1.3- Playback GUI-Image Adjustment



- 1 - Brightness Adjustment Control
- 2 - Sharpness Adjustment Control
- 3 - Bookmark the image
- 4 - Save the current image as a JPEG
- 5 - Hold-Freeze the image in order to manipulate it as needed
- 6 - Reset to original image
- 7- Digital Zoom
- 8- Print Preview
- 9-Print

### 6.1.4 Bookmarks



1. **List of all bookmarks-** double click to select desired bookmark once to access the bookmark.
2. **Add a bookmark-** select bookmark and press this button to add.
3. **Enter description-** select camera and press this button to change bookmark description. Be sure the name is already typed in text box.
4. **Remove bookmark-** select bookmark and press this button to remove.
5. **Remove all-** press this button to remove all bookmarks.
6. **Description box-** enter bookmark description in this text box.
7. **Go to-** select the desired bookmark. Press this once to access the bookmark.

**6.1.5 - Film Strip (Reel)-** Provides a frame-by-frame reel of the current video, showing the most recent eighteen frames of video. Press once again to restore standard view.

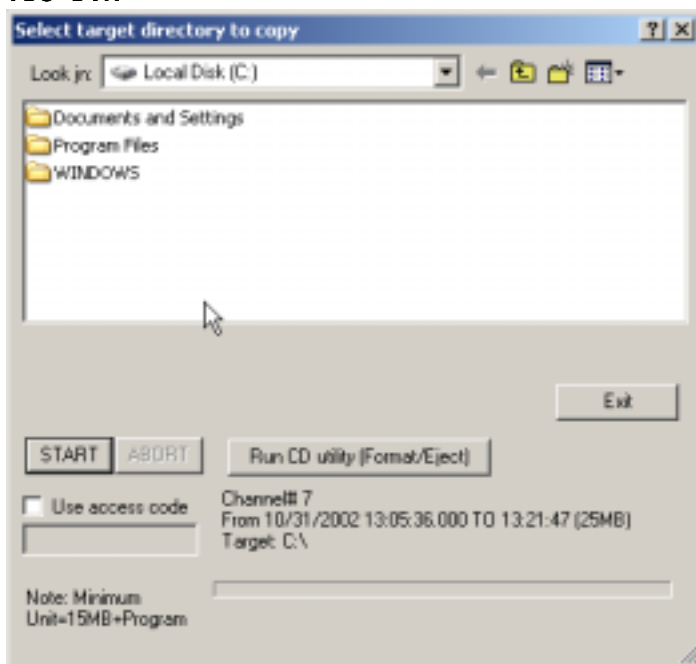
**6.1.6 - CD Writing** This feature enables the user to copy up to 3 hours of user designated previously stored video to a CD. (local video only).



To use the "TimeLine", below the video screen, point your mouse and left click at the starting time wished to be copied. Drag the mouse along the "TimeLine" until the chosen ending time is reached.

The selected time will now appear in blue and user will be prompted to either continue copying program (Yes) or discontinue (No).

## IDS-DVR

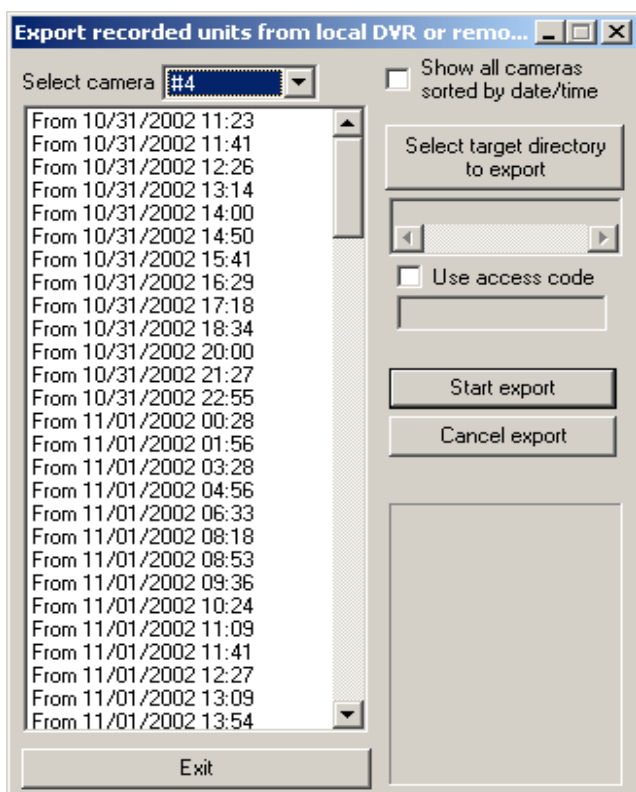


Select target directory to copy-  
Select the desired directory from the dropdown. (If you choose to use the access code, {password protection for your video}, then check the use access code box and enter your password.)

If you want to copy a video clip to a CD then click on Run CD utility to format your CD.

Then click Start and the copying process will begin.

**6.1.7 – Video Export** – Enables the user to export user determined segments of previously stored video. These segments can represent video from any camera, any date and any time. (This function works locally and remotely.)



Choosing video from one camera only, to export - Choose your desired camera from the “Select camera” dropdown box. All previously stored video segments from the chosen camera will appear in the list box.

Choosing video from multiple cameras to export – Check “Show all cameras...” All previously stored video segments from all cameras will appear in the list box sorted by date, time and camera.

Selecting video segment(s) – Left click on the desired segment(s) to highlight for export.

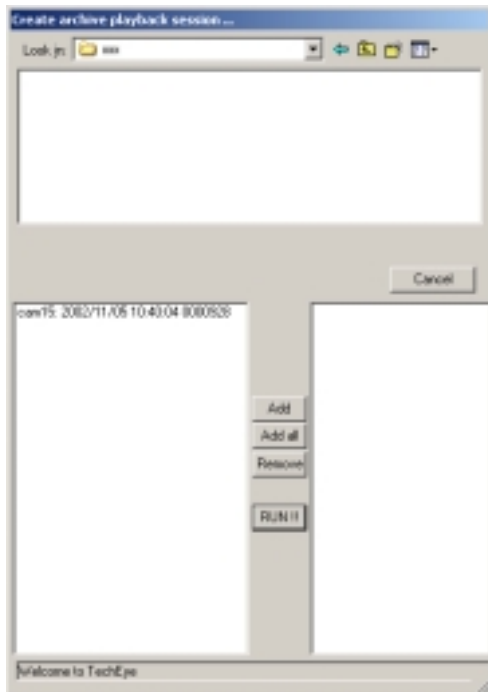
Click on “Select target directory...” to choose the video segment(s) destination.

(If you choose to use the access code, {password protection for your video}, then check the use access code box and enter your password.)

Left clicking on “Start export” begins the export process. As the video segments are being exported, TechEye® notifies the user as to the volume and speed of the data transfer. (This is for local and remote.) For local transfers only, a graph appears on the lower right hand of dialog window detailing the ongoing amount of the data transfer. ####

**6.1.8 - Video Import** – This feature enables the user to receive the video

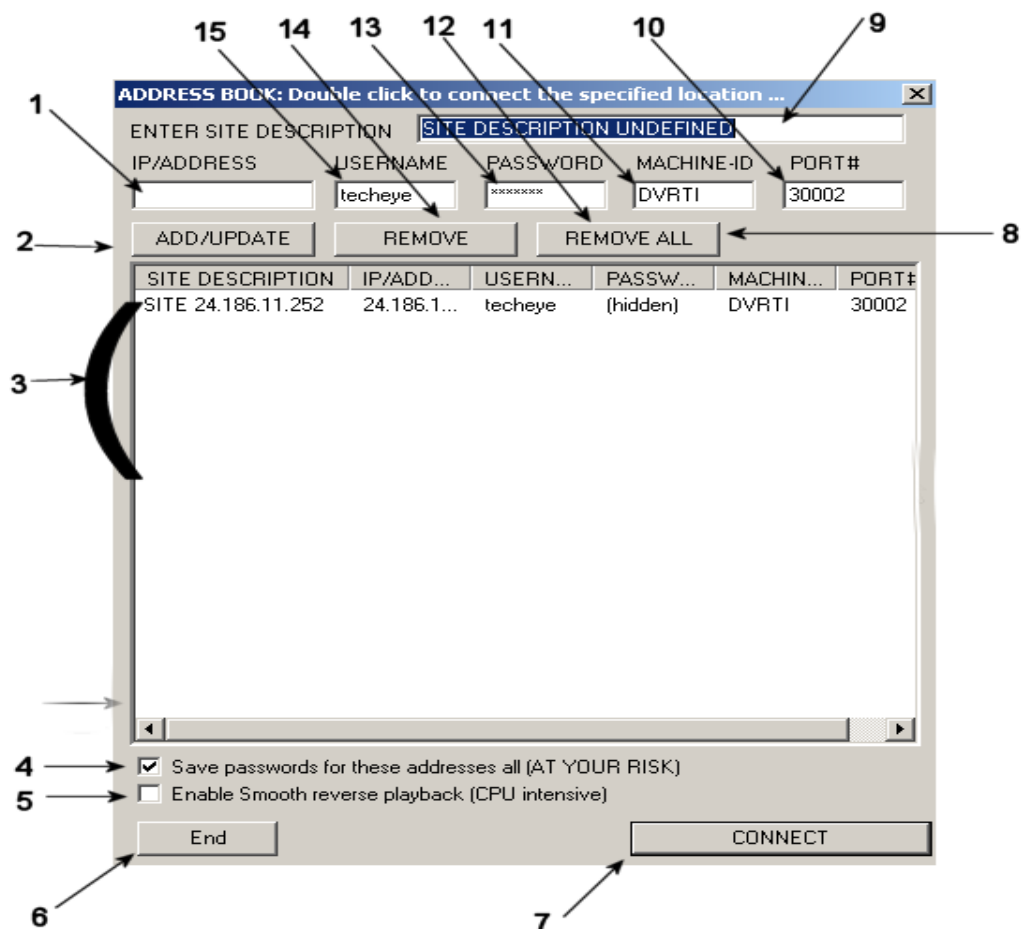
segments exported by the TechEye® DVR. This dialog window appears when the user click on the “Import” button on the TechEye® playback module.



Click on the “Look in” dropdown box to select the source of the video segment(s) being imported.

Once selected, a list of the video segment(s) will appear in the list box on the bottom left. Highlight the appropriate video segment(s) and click the “Add” button or click the “Add all” button to include all segments. The added segments will now appear in the list box on the right. To remove any added segment highlight and click on the “Remove” button. Once satisfied with the chosen segment(s), click on the “RUN” button and the import process will begin. (If the segment(s) has a password associated with it, a prompt will appear requesting the appropriate password.)

### 6.1.9 Address Book





## IDS-DVR

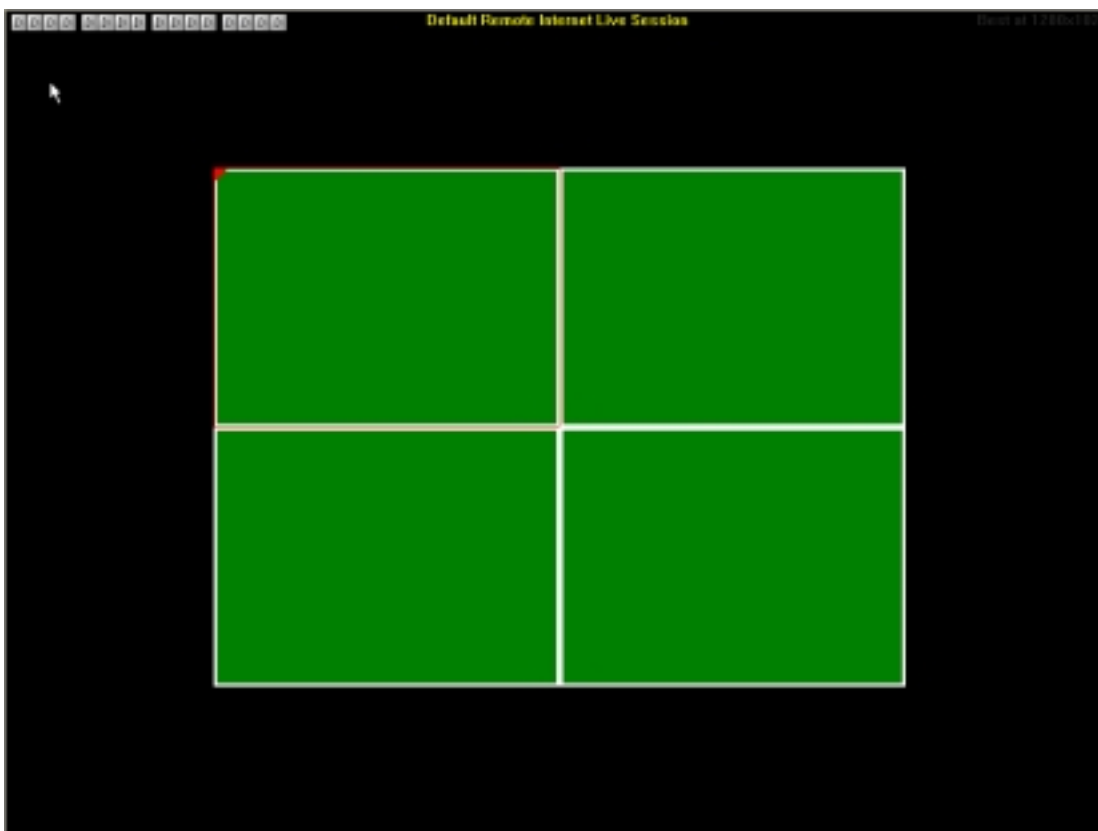
1. **IP Address-** enter the IP address of the designated site
2. **Add/Update-** Press this button after the credentials for a given site are entered. This will add entry to the address book
3. **Current Address-** list of current addresses currently saved in this address book.
4. **Save Password-** check this box to automatically save all passwords. Passwords will be displayed as stars in the list but it is advisable not to automatically save passwords for security purposes.
5. **Smooth Playback for Reversal-** allows for high-speed reversal of video playback. Recommended for high-end machines only.
6. **End-** Close the address book
7. **Connect-** press this button connect to the selected address.
8. **Remove All-** press this button to remove all addresses from the address book.####

## IDS-DVR

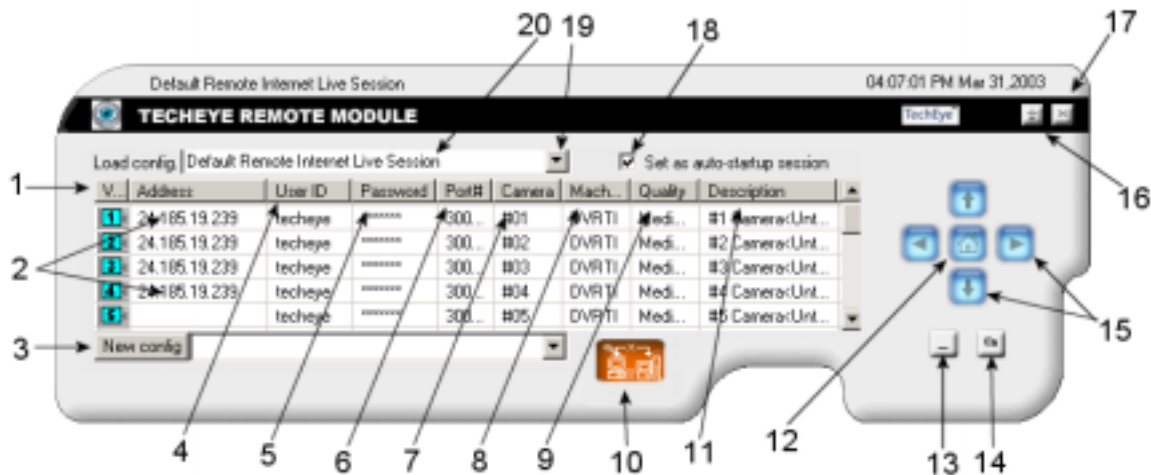
remote professional software, included with your DVR, provides streaming of video via Internet, local area network, or standard telephone lines. Users can view multiple DVR sites simultaneously and control video playback (broadband only). PTZ cameras can be controlled and presets can be accessed. Additionally, video can be exported to the remote machine and archived.

The TechEye® remote software includes the remote informer, which automatically displays video remotely from the DVR in the event of predefined motion, invoking customized sounds such as a siren or some other audible warning. The remote software can be accessed by pressing the “TechEye® Integrated Remote Pro” icon on the desktop. It will bring you to the menu displayed below.

**7.1 General Remote Viewer (Basic and Professional)** – View remote DVR sites. Each channel can be connected to a different camera. Channels do not have to be connected to the same DVR. However, the maximum number of connections is 16.



### 7.1.1 Address Book Configuration

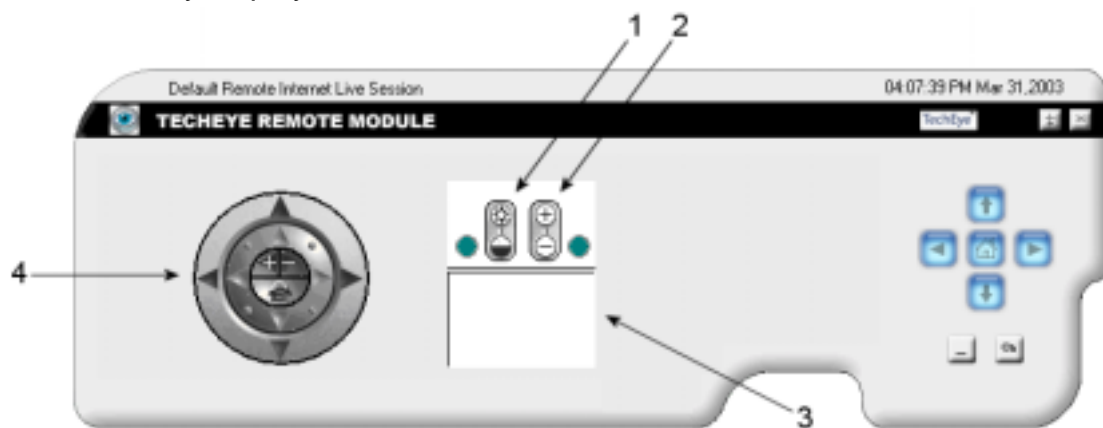


1. **Video** - activates or deactivates each respective camera.
2. **Address** - the location for entering the IP address or the domain name for each camera of the DVR.
3. **New Configuration** - enter a profile name for the DVR or DVR's you want to access.
4. **User ID** - enter the user ID specified in the respective DVR configuration.
5. **Password** - enter the password specified in the respective DVR configuration.
6. **Port Number** - enter the port used to access the DVR through a firewall. The default port is 30001 but can be modified in the TechEye® Service Manager at the DVR.
7. **Camera Number** - enter the desired camera number from the DVR. It's possible to access multiple camera sites at the same time, like camera 1 at DVR "A", and a camera 1 from DVR"B".
8. **Machine ID** - each DVR has a 5 digit unique machine ID. The default ID is DVRTI but can be changed in the TechEye® Service Manager of the DVR.
9. **Quality** - adjusts the quality of the incoming video. The default is medium; set lower when bandwidth is an issue, high can be used with most broadband connections.
10. **Connect / Disconnect** - after entering your configurations, press this button to connect to the remote DVR(s). Press once again to disconnect or use the button at (17).
11. **Camera Description** - each camera can be named and this name or description will be displayed on the live remote interface (remote side only).
12. **Address Configuration Home Page** - allows single click return to the remote Address page.
13. **Minimize Control Panel** - hides and docks the control panel to provide an unobstructed view of all cameras. To retrieve the control panel, move the mouse to the bottom left corner of the screen or right click on any location and select "Show/Hide control". This floating control panel can be moved to any desired

location on the screen by left clicking and holding the top of the control panel. It can then be dragged to any location. Release the mouse button when it reaches the desired location.

14. **Access Code** - add or change the access code. The access code grants or denies access to the remote software. To remove a previous access code, click this button and enter the new code as a blank space with no keystrokes.
15. **Next page / Previous page** - depressing the arrow key buttons scrolls to the various control panel functions which will be described below. Continuel clicking the same arrow key to return to the default page (or press the home key in the middle). The Up/Down arrows cycles through 3 modes: Telco, Remote Informer, and the default "Broadband Internet Live Session".
16. **Hide TechEye® Remote** - hides the entire remote software in the system tray. Will reappear when motion is detected in the camera fields.
17. **Exit** - terminates the TechEye® software.
18. **Auto Start Session** - check this box to make the current configuration the default startup session. When the TechEye® icon is selected from the desktop or program menu, the software will start and remote connections will automatically take place.
19. **Configuration Select Tab** - select to show all available saved configurations.
20. **Load Configuration** - see (19). Select the appropriate profile and hit the "connect button"(10) to start live viewing of this location(s).

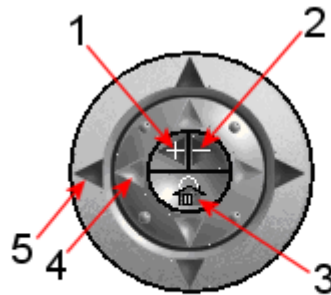
**7.1.2 Remote PTZ (Camera Control)** – Control the camera and video for the camera currently displayed.



1. **Brightness Control** - adjusts the brightness of the current camera (use the preview screen below the control and see the changes). The teal dot to the left resets the default brightness.
2. **Sharpness Control** - adjusts the clarity of the current camera (use the preview screen below the control and see the changes). The teal dot to the right resets the default sharpness.

## IDS-DVR

3. **Preview Window** - see how adjustments to brightness and sharpness affect the respective camera.
4. **Remote PTZ Controller** - adjust camera position, magnification, and presets. See diagram below for greater detail.



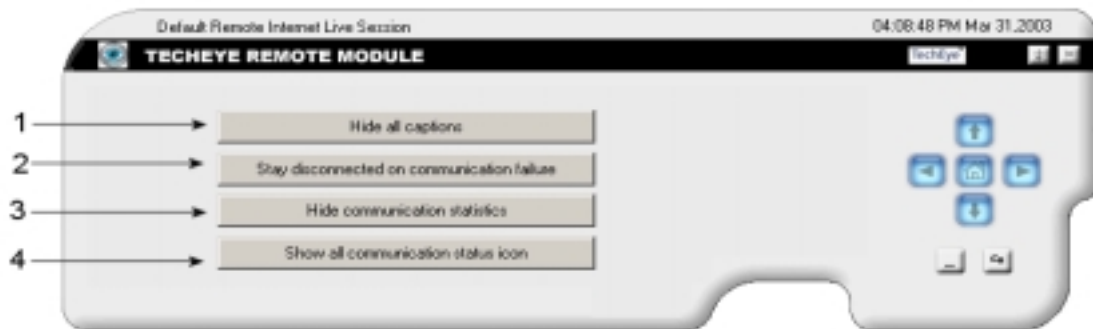
1. **Zoom In** - increase magnification (zoom in) of the designated camera.
2. **Zoom Out** - decrease magnification (zoom out) of the designated camera.
3. **Preset List** - displays a drop down list of current presets. A preset is a predefined camera position saved in the configuration of the DVR.
4. **Minor Pan Left** - performs a minor (small) pan left. Other arrows direct the camera in the designation of the camera.
5. **Major Pan Left** - performs a major (large) pan left. Other arrows direct the camera in the designation of the camera.

### 7.1.3 Remote Status Log



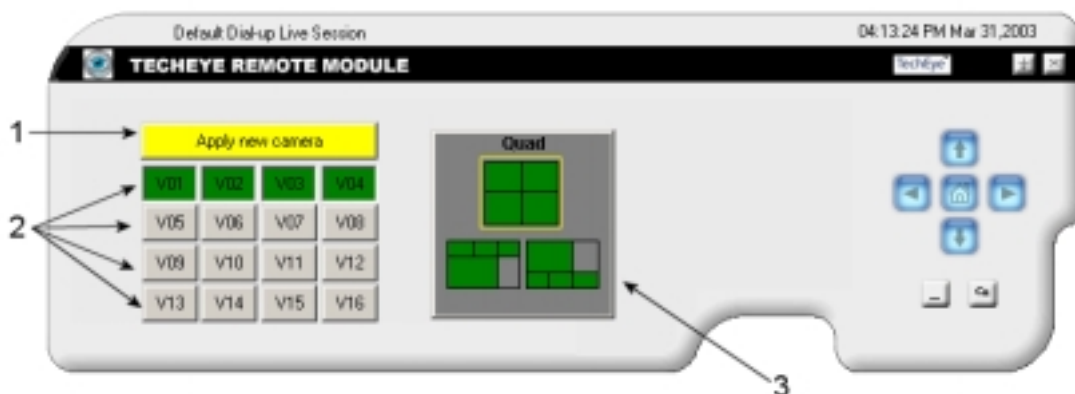
**Status Menu** -displays current communication status to the DVR. Various information such as connection status, machine ID, date and time etc...is provided. The information can be useful for troubleshooting the remote connection.

### 7.1.4 Remote Connection Options



1. **Hide/Show all Captions** - toggles the captions (on/off) for camera name and number displayed on the live video screen.
2. **Connection Status** - toggle for the status of the remote connection in the event of video loss. The remote connection can either attempt an automatic reconnect or can remain unconnected.
3. **Communication Statistics** -toggles the captions (on/off) that display video frame size and estimated bandwidth for each camera.
4. **Communication Status** - toggles the communication (on/off) icons on the top left portion of the display. Flashing triangles indicate activity for each respective camera. The faster the flashing, the more bandwidth used, a slow flashing indicates a poor network connection.

### 7.1.5 Remote Camera Selection and Layout



1. **Apply New Settings** - applies only to telephone connections. Press this button to apply any camera changes. This button will not appear for broadband connections as camera changes occur "on the fly".
2. **Camera On/Off Selection** - each number (Video 1-16) represents potential remote cameras that can be viewed (defined in the address book configuration). Select all 16 buttons to see the maximum number of cameras. Cameras not defined will show



## IDS-DVR

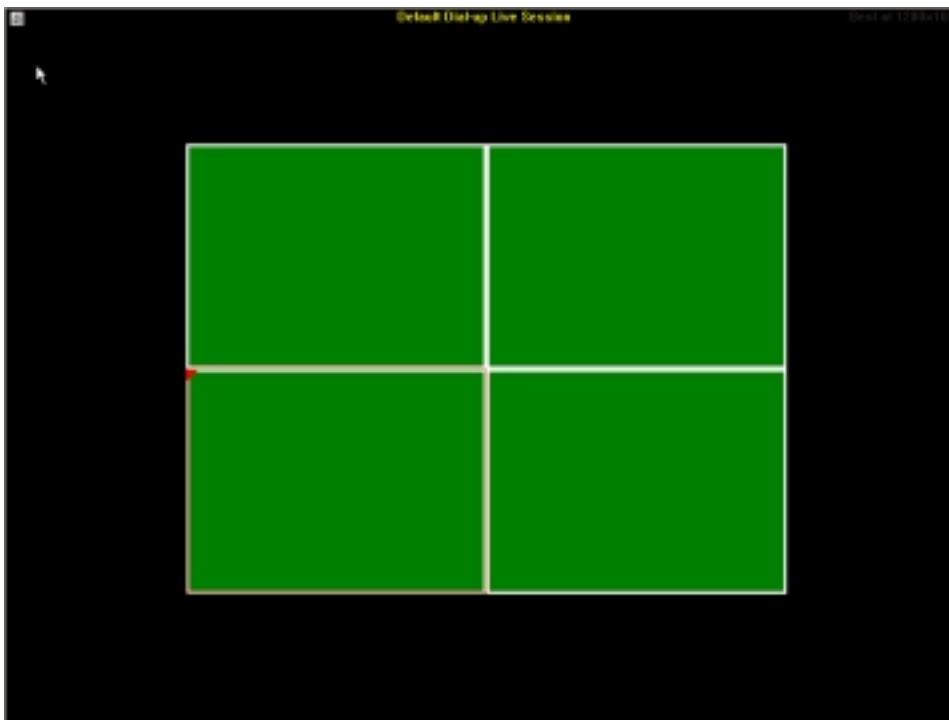
up as blank green video.

3. **Camera Layout-** adjusts various viewing layouts including single camera, full screen or large single view with other cameras present. Three layouts are available for each possible configuration for a total of 48 different configurations (1 – 16 \* 3).

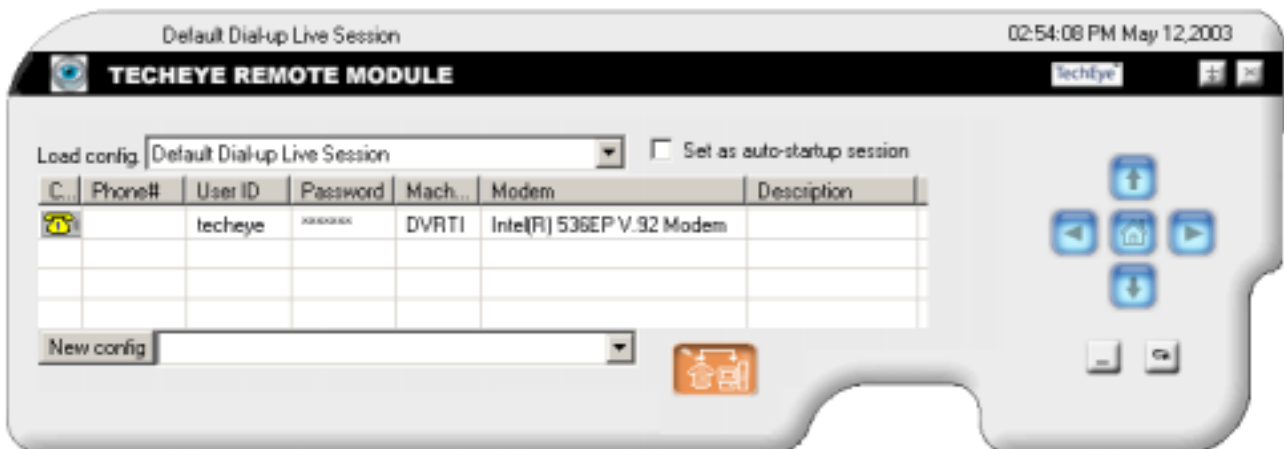
### **Sample Setup for remote access to a DVR - Broadband connection** (steps 1-5)

1. Start the remote viewer by double clicking the TechEye® Integrated Remote Pro (or Basic).
2. From the address configuration menu, enter a name for this profile in the new configuration dialog box. Now enter the IP address of the DVR or map name, followed by user ID, password, and machine ID (Port number, camera number, description, and video quality are generally optional).
3. Press the Connect button (orange button).
4. Video should be displayed shortly. You can now customize the captions and screen layouts and save this configuration as an auto startup configuration.
5. Close the viewer by pressing the “X” at the top right.

**7.2 Phone Connection Viewer (Basic and Professional)** - View the remote DVR site by phone line.



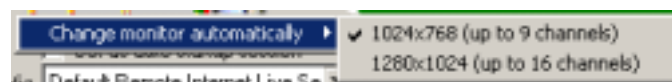
**7.2.1 Phone Connection Configurations** – Complete all connection properties: Phone Number, User ID, Password, Port Number, DVR Camera, Machine ID, Modem and the Description.



Note: The program is designed to automatically detect all modems installed on the computer. You will see them listed and see a picture of a phone. If you have more than one modem you will get more than one picture. Current version cannot support multiple connections with multiple modems. In order to connect with a different modem you will have to disconnect the first and then connect again with the second. This is done as follows: click on the phone picture, you will no longer be able to watch that modem, and unclick on the second and then connect again.

Set as auto-startup session – Check this box if you want the current configuration to automatically start when the program starts.

Right clicking on most areas of the window will bring up the following menu:



This menu enables you to change the display resolution, if needed.

**7.2.2 Camera Control** –Control the video for the current camera displayed on the small screen



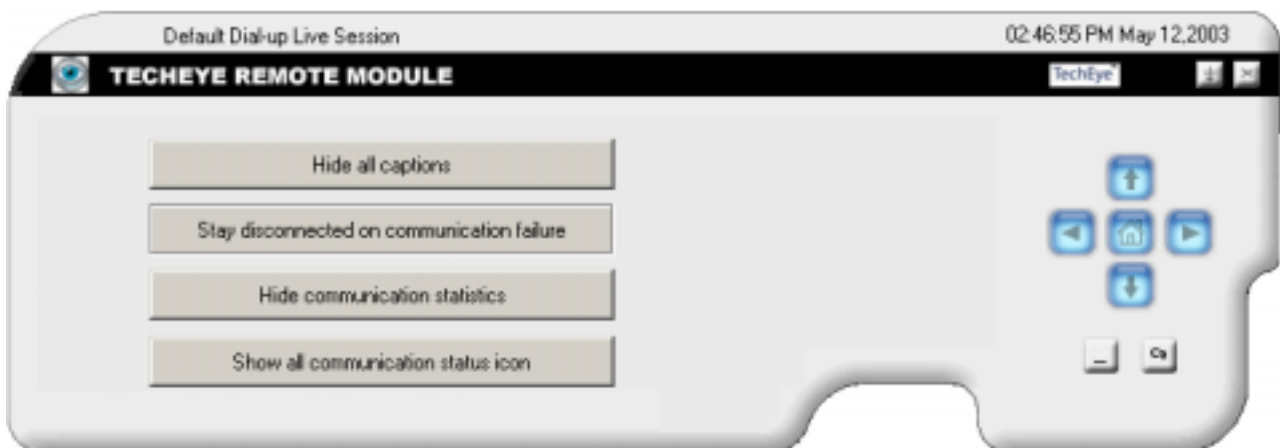
### 7.2.3 Message Log – Status report of connected cameras



Return to Dial-up Configuration – Go back to the configuration screen.

### 7.2.4 Connection Options – View and modify the current controls.

(Button shows the current settings, when the option is modified the caption and color will change.)



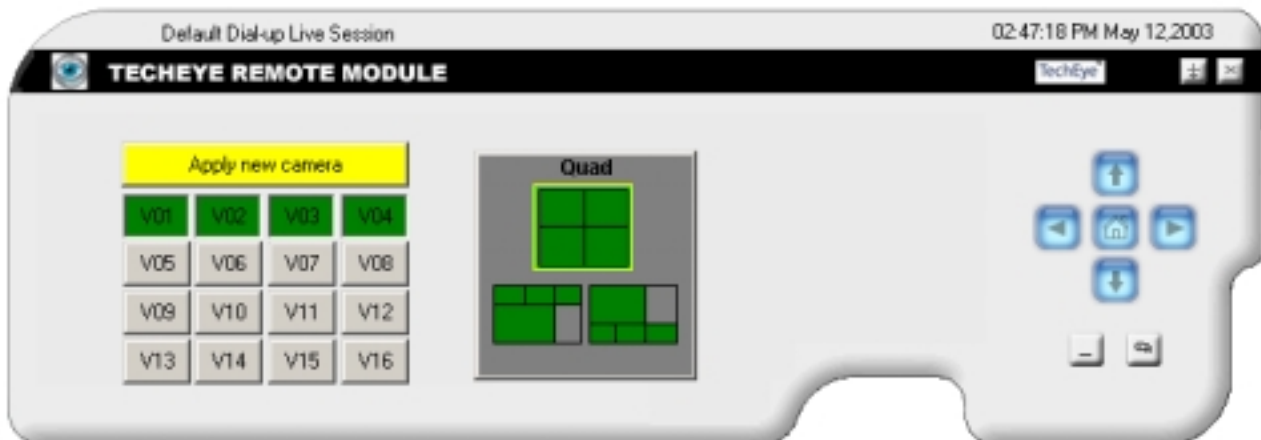
**Hide all captions** - The current setting is to not display the captions, click on this option if you would like to display the captions.

Stay disconnected on communication failure – Not Available

**Hide communication statistics** - ☐ The current setting is not to display the communication statistics, click on this option if you would like to display the connection and communication statistics.

**Show all communication status icon** - ☐ The current option will show all the connections and displays on the upper left corner of the display window, click this option if you would like to hide this connections icon. (Note: A still picture means no connection, or that modem is not selected to be displayed, a flashing picture mean connected and set to display.)

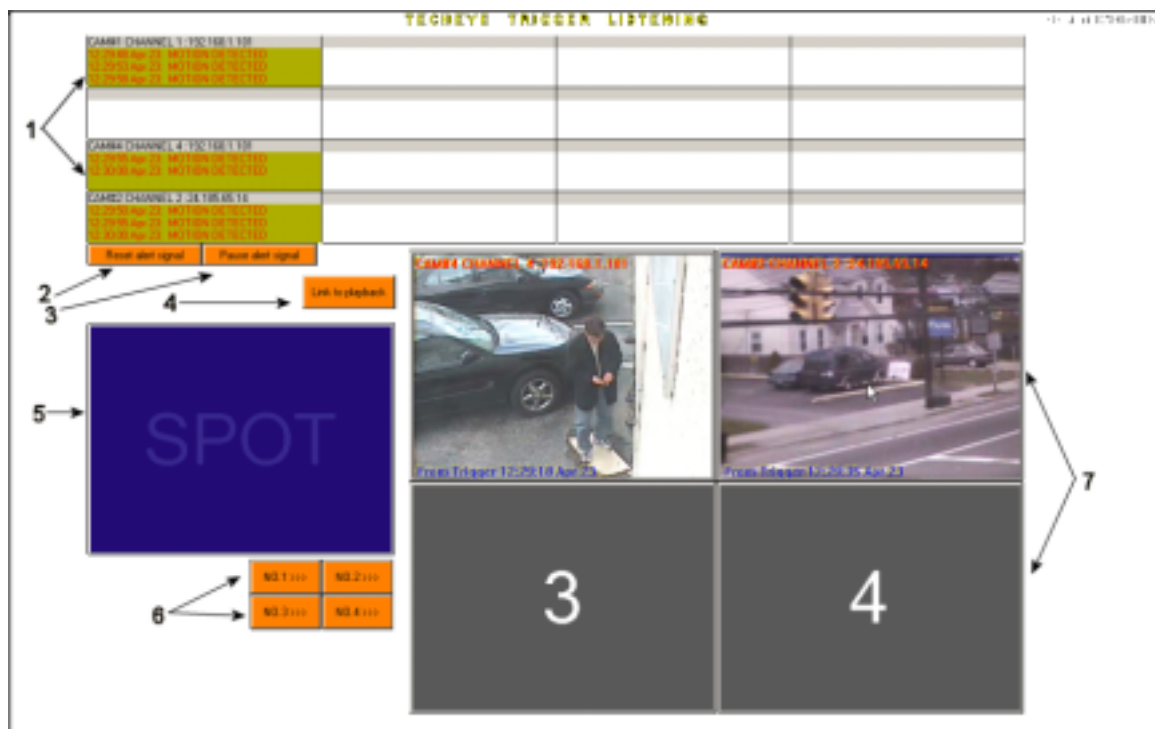
### 7.2.5 Screen Configurations – Control your channel selections and display.



Select how many and which of the channel you would like to see, then click on the apply new camera key. Then select one of the 3 modes of display.

### 7.3 TechEye® Informer (Professional Only)

The event Informer is a remote software application designed to alert the remote client when a motion event has occurred at the DVR. Instead of the user remotely accessing the DVR to check status, the DVR will automatically notify the user of a predefined event once it occurs. The software can reside in the system tray in a dormant state and activate on motion, complete with customized audible sounds and live video. It can be accessed by pressing the up arrow button from the remote menu.

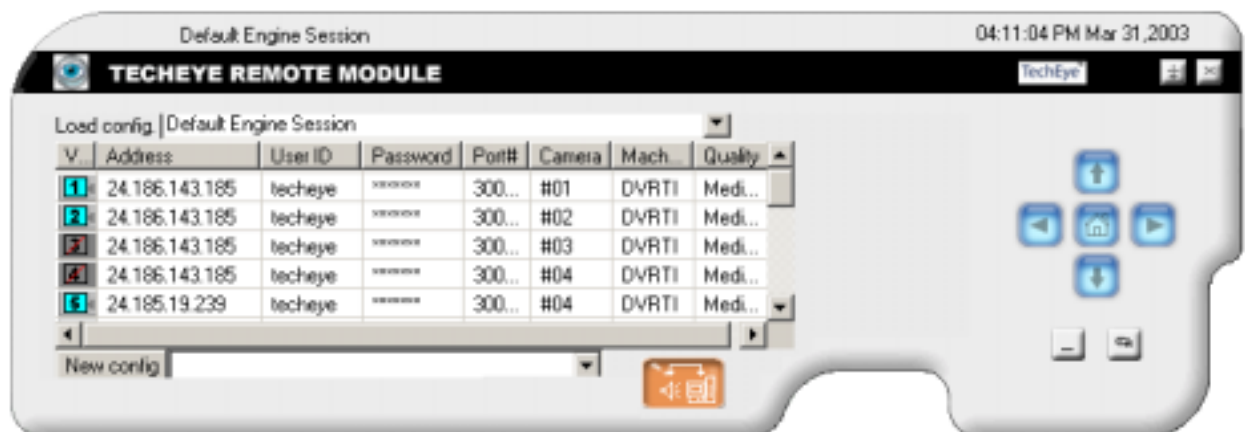


**Warning: Use of this feature when large amounts of motion are present can adversely affect the TechEye® DVR's performance**

1. **Alert Message Log-** displays motion events for each of the 16 available addresses. Each box can display the last three motion alerts. Double clicking any event in the log will close the informer and activate playback at or near the selected event.
2. **Reset Alert Signal-** stops any alert sounds until the next triggered event occurs.
3. **Pause Alert Signal-** toggles the enable/disable all alert sounds.
4. **Link to Playback-** closes the remote informer and activates the playback with video from the most recent event.
5. **Spot-** all incoming motion events will first appear in the spot window. From here it can be moved to any of the 4 output screens (see #6).
6. **Spot Outputs-** these four buttons correspond to the 4 spot outs (#7) labeled 1-4. Each of the 4 spots can display up to 16 cameras of video from one DVR. A single spot cannot display video for 2 more DVR's. If several cameras are assigned to a single spot the display will alternate between the different cameras, depending on the amount of motion.
7. **Informer Outputs-** displays the video from motion alerts defined by the user.

### 7.3.1 Informer Connection Configurations

Complete all connection properties: Address, User ID, Password, Port Number, DVR Camera, Machine ID and Picture Quality. Setup for this configuration is identical to the address book configuration. See section 7.11 for more details



Disconnect a video channel by clicking on the video channel number. Once disconnected, you will not be able to watch that channel. If you want to disconnect a channel after having been connected, it will not permit you to do so until you un-register and re-register.

To minimize the program click "-".

To exit this program click "X".

## IDS-DVR

- To start a new configuration, enter the new name next to the new config button, and then click on the new config.
- To load an existing configuration select it from the drop list and it will automatically load.
- To setup the program to be password protected, click on the people button and enter your password. The next time the program is activated it will prompt you for the password.
- To drag (relocate) the current window point your mouse at the caption and drag it.
- To hide the current window click on the arrow button. You can bring back the window by locating the mouse on the lower left corner.

### 7.3.2 Informer Run Log - Status report of connected cameras



### 7.3.3 Informer Options – View and modify the current controls.

(Note: Button shows the current settings, when the option is modified the caption and color will change.)

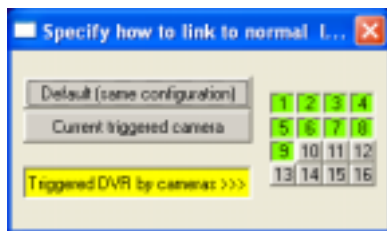


1. **Toggle button-** determines if the informer software registers immediately when the remote software is started. Default: Unregistered at startup
2. **Toggle button-** determines if the informer software remains visible when the remote software is started. If hidden, the Informer will still be displayed on the windows taskbar. Default: Show program on startup



## IDS-DVR

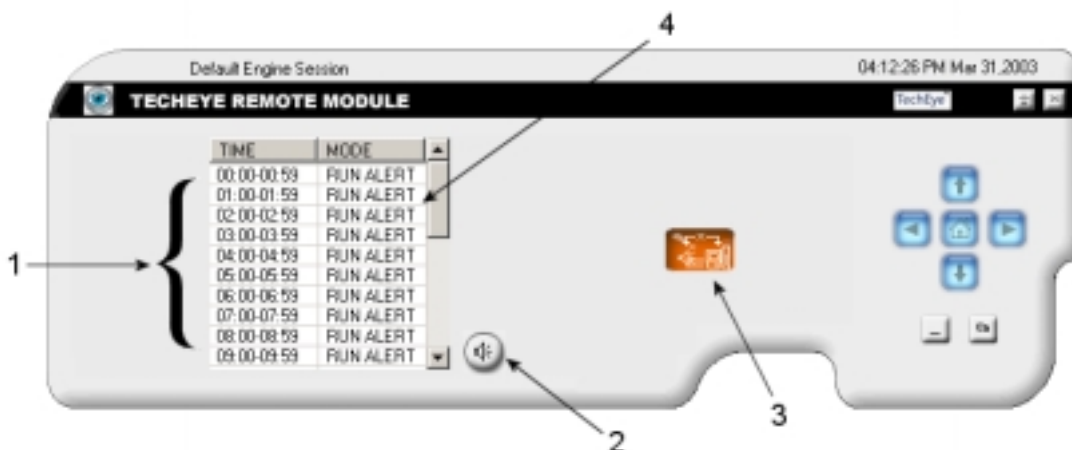
3. **Live Session Options-** configures which cameras are displayed when switching to the live viewer. Fast switching to the live viewer can be achieved by double clicking on any live video stream in the informer. Use the up arrow key to return to the informer. Default setting is to display all cameras from the selected video event. See picture below.
4. **Toggle button-** disables or enables a log file of all motion events detected by the informer. Default: Enabled. Use the View button to see the log.
5. **Toggle button-** enables or disables the status of the informer when a motion trigger is detected. Enabled allows the informer to appear and display from a hidden state when motion is detected. This option is used in conjunction with #2 above, where the informer is set to be hidden on startup.
6. **View Log-** see #4 for details on the log file.



Link to normal live session as ... - Click this button to define the channels you would like to view when you double click on the video image. The three options are: 1: Default – all the connections that the user specified to be monitored; 2: Current triggered camera - the current cameras that are triggered with motion; 3: Triggered DVR by cameras – define the cameras you want to see.

### 7.3.4 Informer Plan - Schedule the timing of the triggered motion cameras.

There are 3 mode: RUN, pops up the video without sounding an alarm; RUN ALARM – pops up the video with sounding an alarm; STOP – does nothing during the given period of time.



1. **Daily Schedule-** schedules the hours of the day to be informed of motion events, in military time. There are three modes, Run, Run Alert, and Stop. Run mode allows

## IDS-DVR

motion video events to display without sounding the alarm; Run Alert displays video and sounds the audible alarm. Stop mode displays no video and does not sound any audible alarms during the given period of time.

2. **Custom Sound Options**- select the desired audible alarm from the list of sounds files. Alternatively, custom sound files can be created and placed in this folder. A microphone is required to create custom sound files.
3. **Activate plan**- press this button to register the current plan.
4. **Alert Mode**- see #1 above for discussion of the three modes.

## 8. Frequently Asked Question

- *What is the average frame size for a TechEye® unit?*

Frame sizes vary based on a number of factors including the amount of motion or color in the individual frame. The range can be from as small as 300 Bytes to as much as 4000 Bytes. The average frame size is roughly 1000 Bytes (1 K).

- *What are the display and recording rates for the TechEye® L4?*

The TechEye® L4 has a maximum local display rate of 120 frames per second (240 images per second). The maximum theoretical recording rate is also 120 frames per second.

- *Does the Live Viewer need to be on the screen to ensure video is being recorded?*

No, the Live Viewer is strictly for local viewing. It has nothing to do with the recording of the video. In fact, if the TechEye® DVR is going to be placed in a location where there will be no local viewing; it is recommended that the Live Viewer be disabled in order to increase system performance (The Live Viewer has 20% CPU utilization).

- *What does a blue camera display mean?*

A blue camera indicated that the capture card is receiving no video signal on that particular channel. A gray camera display indicated an improperly associated channel, or a power failure to the capture board. In a Real-Time system, the channel will show a TechEye® when no video is present.

- *What is the difference between a Real-Time and standard TechEye® model?*

A Real-Time version of the TechEye® DVR allows incoming video to bypass the system bus and be displayed directly to the monitor in real time. This increases performance for both live and recorded video, while also lowering CPU utilization. Real-Time is the best option for local viewing because the video is displayed live.

- *What happens when all my hard disk space is used?*

When the hard drive is completely filled with stored video it begins to overwrite the oldest data. For instance, if your DVR recorded video from June 1 to August 1 before reaching capacity, it will begin to overwrite the data from June 1. The colors on the storage display

## IDS-DVR

indicated the hard drive's current status. Green is free space, pink is used space, and red indicates that video has been overwritten.

- *How long does it take to fill the hard drive?*

Storage times vary based on several factors including recording speed, amount of motion, recording sensitivity, etc. It also depends on the amount of hard disk space in the TechEye® DVR. A 4-channel DVR with 80 GB of hard disk space can run continuously for 21-30 days with moderate activity, or as little as 7 days with a DVD running full motion on all channels.

- *What are the colored boxes around each video channel?*

These colored boxes offer valuable information about each channel's status. Red indicates motion was detected in that channel, light green means that it is the selected channel; white indicated no recording is taking place, and teal denotes constant recording is set for that channel.

- *I need to set up my computer for remote access, how can I obtain my DVR's IP address?*

To obtain your DVR's IP address follow these instructions:

1. Press and hold down the Ctrl, Alt, and Del keys simultaneously. This will bring up the Windows Task Manager.
2. Select "File" then click on "New Task (Run..)"
3. Type "cmd" then click "OK"
4. This will bring up the command prompt. At this prompt, type "ipconfig" and hit "Enter" on your keyboard. The IP address of the DVR will be displayed (Note: this command prompt will only display the internal address of the DVR if a firewall is installed. You will need to access the DVR to obtain the external IP address.

- *How can I add a printer to the DVR?*

Double click on the TechEye® on the bottom left hand side of the live viewer, Select Show Windows Control Panel and add a printer.

- *I need to change some configurations or log on remotely to the DVR, what is my User ID and Password?*

Factory default the User ID is "TechEye®" and the Password is "7129123".

## IDS-DVR

- *How many User ID's and Passwords can I have?*

TechEye® supports up to 5 user ID's with 3 different levels of security. (Please refer to the manual on the security section.)

- *How can I have the DVR to send me an email?*

The TechEye® DVR can send email to a maximum of 10 email addresses. To do that go into the configuration, click the advanced option and click on the Configure automatic daily email button. Fill in the information and based upon your configuration an email will be sent to you.

- *What is an SMPT Server?*

The SMPT server is your email server provider. For more information contact your network administrator.

- *How long will the DVR record?*

Please refer to the chart in the manual in the specifications section. Note: recording time may vary based on the quality of the cameras and the motion settings.

- *How much storage space does the DVR have?*

The TechEye® DVR System comes standard with either 1 or 2 80GB Drives. Larger amounts are available. The maximum amount of capacity is 4 100GB Dives.

- *Can I View or Store the video Remotely?*

Yes the TechEye® Remote Software will allow you to view the video remotely both live and recorded; it can be viewed either by LAN, WAN, or the Internet. Telephone connection is also available on live view only. TechEye® DVR software allows you to record redundant video on a remote site or local external media (Zip Drive, CD Writer, etc.)

- *What are the TechEye® DVR recording modes?*

The TechEye® DVR system records based upon 3 options, Continuously, Motion triggered or view only.

- *Can I control my PAN/TILT ZOOM or Speed Dome cameras from the DVR?*

## IDS-DVR

Yes, The TechEye® DVR supports PAN/TILT ZOOM and Speed Dome Cameras; it can be controlled locally by clicking on the PTZ option, or remotely through the TechEye® Remote Software.

- *How many cameras can I record at once?*

TechEye® DVR System supports 4, 9 or 16 cameras to record at once.

- *What monitor do I need with this system?*

TechEye® DVR System needs a SVGA monitor that can support a 1280 X 1024 resolution.

- *When I playback the video does the TechEye® System still record?*

Yes, the TechEye® DVR System will always record whether you are playing back video or in the setup mode.

- *When viewing quad or other layouts can I specify which camera I want to see?*

Yes, the user can define which of the cameras should be displayed in that layout.

- *When a camera detects a motion can the TechEye® DVR display that camera alone?*

Yes, the TechEye® 4 channel versions have the capacity to show motion in a full view.

- *I can't get the playback to start what do I do?*

Playback on the local side needs to be started by clicking the refresh button. On the remote side the user needs to configure the IP connection and click the connect button.

- *Can I copy a part of the playback video?*

Yes, TechEye® DVR lets you highlight a part of the video and copy that period of time onto a Writeable CD. You can also save or print still pictures from playback.

- *Can I change the quality of recording on each individual camera?*

Yes, TechEye® will let you configure each individual camera from 3-30 frames per second.



## IDS-DVR

- *Can I setup my own motion grids?* Yes, TechEye® will let you configure your own motion setup zones.