Software IP Video Control Center v1.4.03

User Manual

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Intended use

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at *www.gesecurity.com*.

FCC compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Contents

Preface

This is the GE *Software IP Video Control Center User Manual* for models GEC-IPH-POE, GEC-IPH-24VA, GEC-IPH-24VA-P, GEC-IPH-DN-POE, GEC-IPH-DN-24VA, GEC-IPH-DN-24VA-P, GEC-IPDRH-POE, GEC-IPDRH-24VA, GEC-IPDRH-24VA-P, GEC-IPDRH-DN-24VA, and GEVC-IPDRH-DN-24VA-P.

This document includes an overview of the product and detailed instructions explaining:

- the basic requirements necessary to use your IP video control center; and
- how to use your IP video control center.

There is also information describing how to contact technical support if you have questions or concerns.

To use this document effectively, you should have the following minimum qualifications:

- a basic knowledge of network configuration

Read these instructions and all ancillary documentation entirely before installing or operating this product. The most current versions of this and related documentation may be found on our website.

Conventions used in this document

The following conventions are used in this document:

Bold	Menu items and buttons.
Italic	Emphasis of an instruction or point; special terms.
	File names, path names, windows, panes, tabs, fields, variables, and other GUI elements.
	Titles of books and various documents.
Blue italic	(Electronic version.) Aperients to cross-references, related topics, and URL addresses.
`Monospace`	Text that displays on the computer screen.
	Programming or coding sequences.

Safety terms and symbols

These terms may appear in this manual:

CAUTION: *Cautions* identify conditions or practices that may result in damage to the equipment or other property.

WARNING: *Warnings* identify conditions or practices that could result in equipment damage or serious personal injury.

Chapter 1 Using IP video control center

This chapter provides an overview of your software IP utility, including minimum hardware/software requirements and steps you need to perform before you begin installing, configuring, and using your software.

In this chapter:

Product overview

IP video control center provides the software interface that enables you to use and maximize the effectiveness of your IP video camera. The IP video control center is an easy-to-use interface that requires minimal training, and consists of three primary screens to perform core functions:

- Camera and software setup.
- Viewing and recording live video.
- Video search and playback.

System requirements

Table 1 shows the minimum system requirements for IP video control center

Table 1. System requirements

Component	Requirement
CPU	Intel Pentium-4 3 Ghz or above (FSB 800)
RAM	>1 GB DDR2-533 memory
Motherboard	915 chipset or above
VGA display card	ATI PCI-Express Card (128 MB onboard ATI MX300)
LAN card	10/100 Mbps (Intel chipset)
OS	Windows XP SP2 or Windows 2000 with SP4 or above
IDE HDD	Seagate 40 GB 7200 RPM
CD-ROM	32X
Utilities	FFDShow, DirectX 9.0b or later hardware acceleration (install these utilities from your product CD)
Video resolution	SVGA or XGA with 1024 x 768 resolution, 32-bit color

Start IP video control center

To start IP video control center, do the following:

1. Doubleclick the IP video control center icon on the desktop or select the program from your Start menu. After you doubleclick the icon, a user ID/password prompt appears.

   Note: Note: To avoid problems and conflicts in the video subsystem, run only one IP video control center at a time. Do not run multiple IP video control center's simultaneously.

2. Enter your user ID and password to log on. The default user ID is *Admin*. The password is *123456*.

Version number

In some versions of IP video control center, the version number is found at the upper left. It reads a name/number similar to *GE Security 1.36.04.04*. If this information is not present, click on the GE icon at the upper left of your screen. A dialog box appears along with the version number and release date.

Setup

The IP video control center consists of three primary screens: *Preview, Playback* and *Setup* (*Figure 1*). Each of these functions, with the proper configuration and setup, enable your control center to properly operate your camera.

Figure 1. Preview tab

Preview screen

This screen automatically appears when you click on your IP video control center. *Table 2* shows what each preview function does.

Table 2. Preview screen functions

Name	Function
IP Video control center version	This panel displays relevant information about your version of IP video control center.
Active media manager	This panel operates on the active media window.
Media window	This window links to the media source, including a live video stream from network or video stream from file.
Media quick-launch	Indicates the listing of connected media source; by clicking the button, the chosen media source activates.
View manager	Changes different view template.
Playback panel	Changes to playback mode.
Setup panel	System configuration and setups.
Camera information	Lists the technical information about your camera.
Quad control panel	During connection to an IP quad server, you may use this panel to control the video display.
PTZ control panel	Sends PTZ command to a device.

Playback screen

To use the playback screen, click the *playback* tab on your main menu (*Figure 2*).

Figure 2. Playback tab

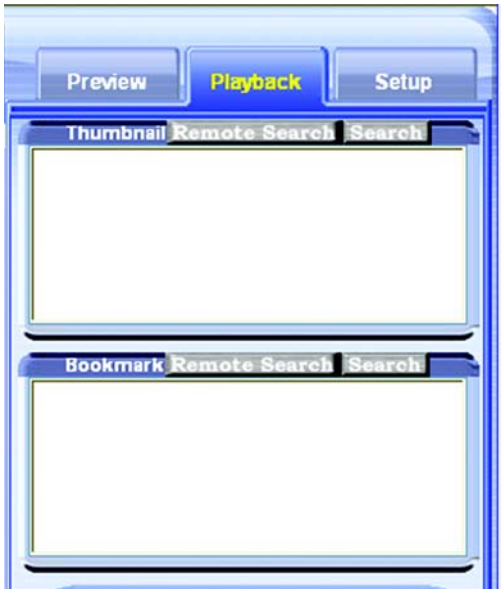


Table 3 shows what each *playback* function does.

Table 3. Playback screen functions

Name	Function
Thumbnail	This window lists the thumbnail files you capture.
Bookmark	This window lists the bookmark files.
Remote search	Remote search searches for recorded data on an NVR. You can set up a channel (in camera setup, when you choose the type of device) to point to a camera on the NVR, allowing you to search remotely.
Search	Searches for data in your IP video control center files.
Media playback panel	Media playback panel contains basic and advanced operation over media files, which include play forward, rewind, play speed, frame-by-frame play forward, and rewind.

Leftclick any viewing window to enlarge it. In setup mode, you may enlarge any viewing window by leftclicking it. To enable or disable a tool bar, click the right mouse.

Setup screen

To use the setup screen, click the *setup* tab on your main menu (*Figure 3*).

Figure 3. Setup tab

Table 4 shows what each setup screen function does.

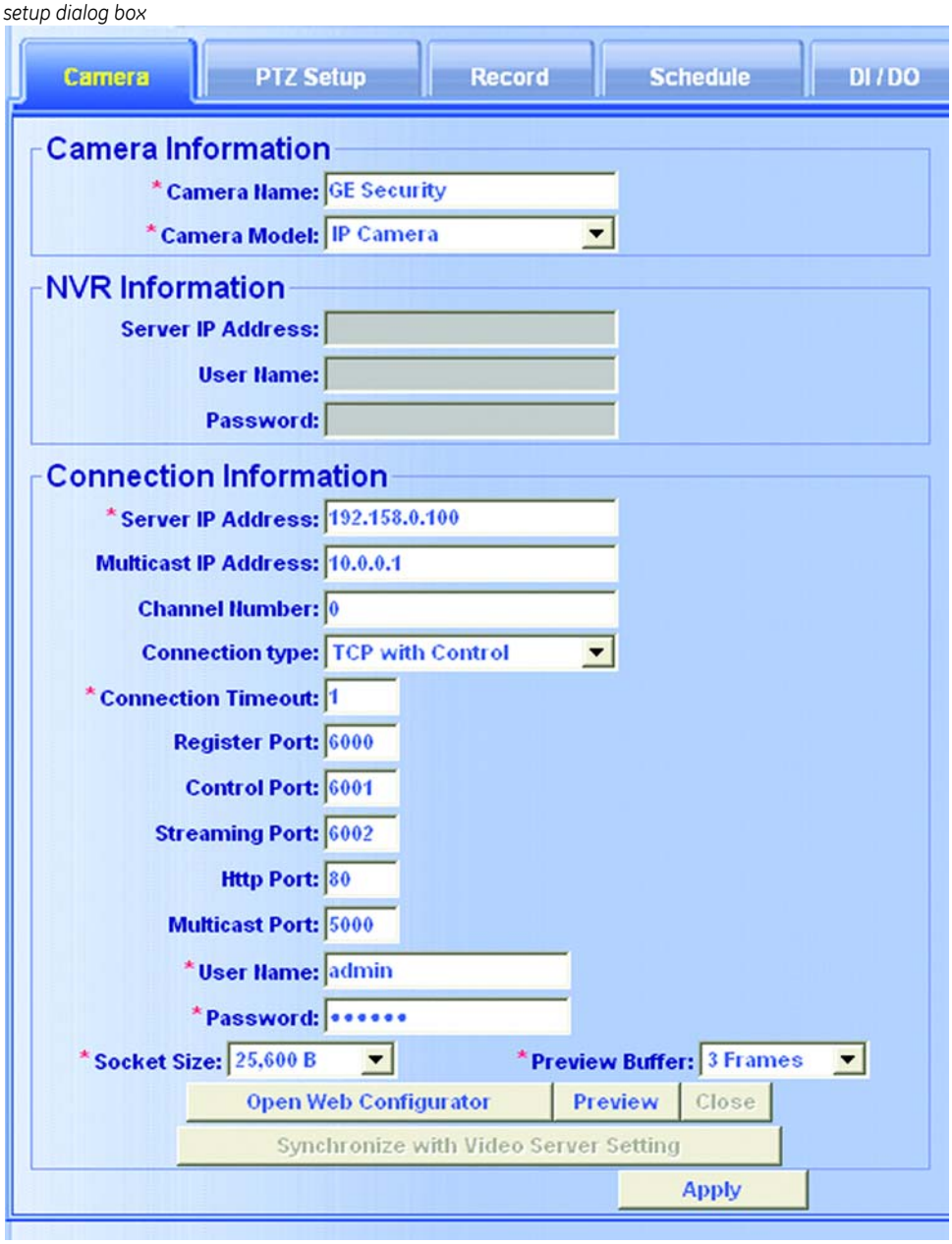
Table 4. Setup screen functions

Name	Function
Camera setup	Sets up all camera information.
PTZ setup	Sets up all connected PTZ devices.
Recording setup	Sets up all recording parameters.
Schedule setup	Sets up digital recording parameters.
DI/DO setup	Sets up digital input and digital output devices.
Motion detection	Sets up motion detection information.
Notification	Sets up event notification mechanism.
User account	Sets up user account permission.
System setup	Sets up overall system parameters.

Camera setup

This section explains how to use the camera setup dialog box (*Figure 4*).

Figure 4. Camera setup dialog box



Camera setup

The content of the camera appears on top of the preview media window, located to the right of your control center interface. Enter the appropriate information that pertains to your camera and system (*Figure 4* on page 7). This is important to ensure the camera operates correctly.

1. At the *camera name* text box, enter your camera name or description. The software accepts any name.
2. At the *camera model* text box, select your camera model from the provided dropdown menu, which features:
   - video server
   - video server (2-way audio)
   - IP camera
   - IP camera (2-way audio)
   - IP speed dome
   - IP speed dome (2-way audio)
   - IP quad
   - streaming engine
3. At the *NVR information* section, enter your streaming engine server's *IP* address, your user name (default is *admin*) and password (default is *123456*).
4. Enter your server IP address to connect to the video server with unicast (TCP) connection. Enter your host name address in this field as well. You may verify this operation by using the ping command: `C:\>ping hostname.domain.com.`
5. Enter your multicast IP address. To do this you must subscribe to a multicast network to retrieve video packets. If you enter the multicast IP address without entering the server IP address (see step 4), then the preview window can only perform in the preview mode. If you enter both addresses, you may perform preview and digital I/O and PTZ operations. The system limits you to 15 concurrent users.
6. Enter the channel number. This determines which video channel your server uses.
7. Enter your connection type. You have two choices: TCP with control and multicast with control.
8. Set the connection timeout value to connect to the IP device. For example, if you set it to three seconds, the maximum timeout value is three seconds. During the timeout period, the application hangs. We recommend a one second timeout.
9. You may set the ports used for the network functions of your IP camera in the next five fields. The default values work with your CamPlus IP camera.
10. Enter the *user name* and *password* of the camera you are connecting to.
11. Select the appropriate network transport socket size from the dropdown menu. If you have a busy network you can use the default size of 25,600 bytes. If the network bandwith is not stable, lower your socket size. If you lower your socket size, the packet transmits faster and doesn't resend by the TCP protocol layer.
12. Select which preview buffer size you prefer.
13. Click the web configurator button. This opens the video server's web configurator, which allows you to configure the camera's settings, including network settings, resolution and frame rate, date/time and

picture adjustments. Refer to the *Streaming Explorer* user manual for information on camera configuration.

14. Click the preview button to see the preview window and adjust the frame rate and video quality.

Frame/video adjustment

Your camera setup screen allows you to set and verify frame information as well as make video adjustments.

Synchronize with video server setting retrieves related frame rate and video adjustment settings from your IP camera.

The *frame rate mode* fields shows *constant* or *variable* frame rates. These are settings from the IP camera. *Constant* frame rate indicates that all connections accept the same frame the video server specifies. *Variable* frame rate indicates that each connection may have different frame rates.

Table 5 shows fps settings and values depending on the type of frame rate your video server uses.

Table 5. FPS settings

Video server setting		Default value	Specific value
Constant frame rate	NTSC	**Record:** fps same with video setting **Display in 4CH:** Maximum available fps **Display in 9CH and above:** 1 CH with max. available fps; others are 1 fps	**Record:** fps same with video setting **Display in 4CH:** fps same with video setting. **Display in 9CH and above:** fps same with video setting
	PAL	**Record:** fps same with video setting **Display in 4CH:** Maximum available fps **Display in 9CH and above:** 1 CH with max. available fps; others are 1 fps	**Record:** fps same with video setting **Display in 4CH:** fps same with video setting. **Display in 9CH and above:** fps same with video setting
Variable frame rate	NTSC	**Record:** fps same with video setting **Display in 4CH:** Maximum available fps **Display in 9CH and above:** 1 CH with max. available fps; others are 1 fps	**Record:** fps as you set (30, 6, 3, 1) **Display in 4CH:** Maximum available fps **Display in 9CH & above:** Maximum available fps
	PAL	**Record:** fps same with video setting **Display in 4CH:** Maximum available fps **Display in 9CH & above:** 1 CH with max. available fps; others are 1 fps	**Record:** fps as you set (30, 6, 3, 1) **Display in 4CH:** Maximum available fps **Display in 9CH & above:** Maximum available fps. **Display in 1CH:** Maximum available fps. Others are 25, 5, 3, 1.

PTZ setup

This section describes how to configure your PTZ (pan, tilt and zoom). IP video control center supports two types of PTZ control:

- IP video control center PTZ setup.
- control panel setup.

Note: This section is not applicable to the CamPlus IP line of cameras.

Use the instructions below to complete your configurations.

IP video control center PTZ setup

To configure your IP video control center PTZ, do the following:

1. Click the *enable PTZ* box to enable the PTZ control function on your camera.
2. Select the appropriate protocol. Supporting protocols are Pelco-P (type1), Pelco-P (type2), Pelco-D, Videotrex, Samsung, Eyeview, VCL, GE Security, and Dynacolor.
3. Select the *parity* type of your PTZ device command. Refer to your PTZ device manual. The default is Nonparity.
4. Select your pan operation settings. Select maximum, minimum, and default pan speed. The speed varies from 1 (minimum) to 5 (maximum).
5. Select your tilt operation settings. Select maximum, minimum, and default tilt speed. The speed varies from 1 (minimum) to 5 (maximum).
6. Enter 1 at the *address ID* text box.
7. Add or delete your defined PTZ protocol.
8. Select the baud rate of your PTZ device command. Refer to your PTZ device manual.
9. Select the stop bit of your PTZ device command. The default is 1.
10. Select the byte length of your PTZ device command. The default is 8.

Control panel setup

To configure your control panel, do the following:

1. Click to enable the control panel remote control function.
2. Select the com port that connects to the control panel.
3. Select the parity type of your control panel command. Please refer to your PTZ device manual.We recommend you select nonparity.
4. Select the baud rate of your control panel command. Please refer to your PTZ device manual.
5. Select the stop bit of your control panel command. We recommend 1.
6. Select the byte length of your control panel command. We recommend 8.

Recording setup

This section describes how to setup your recording dialog box (*Figure 5*). To setup your recording dialog box, do the following:

1. In the *Save recordings to* text box, enter the location on your directory where you want to save your recordings. The directory may be a local hard disk, RAID storage, NAS storage, or mounted storage linked with Netball.
2. In the *File type* text box, select the type of file to save. The default is raw.
3. In the *Save recordings for days* text box, enter the duration you want the software to store your recordings. You may save the recordings for up to 365 days (one year). Next, enter the *File type*. Select bitmap (BMP) or jpeg (JPG). If you leave the box blank, the files stay indefinitely.
4. In the *Save screen capture for days* text box, enter the duration you want the software to store your screen captures. If you leave the box blank, the files stay indefinitely.

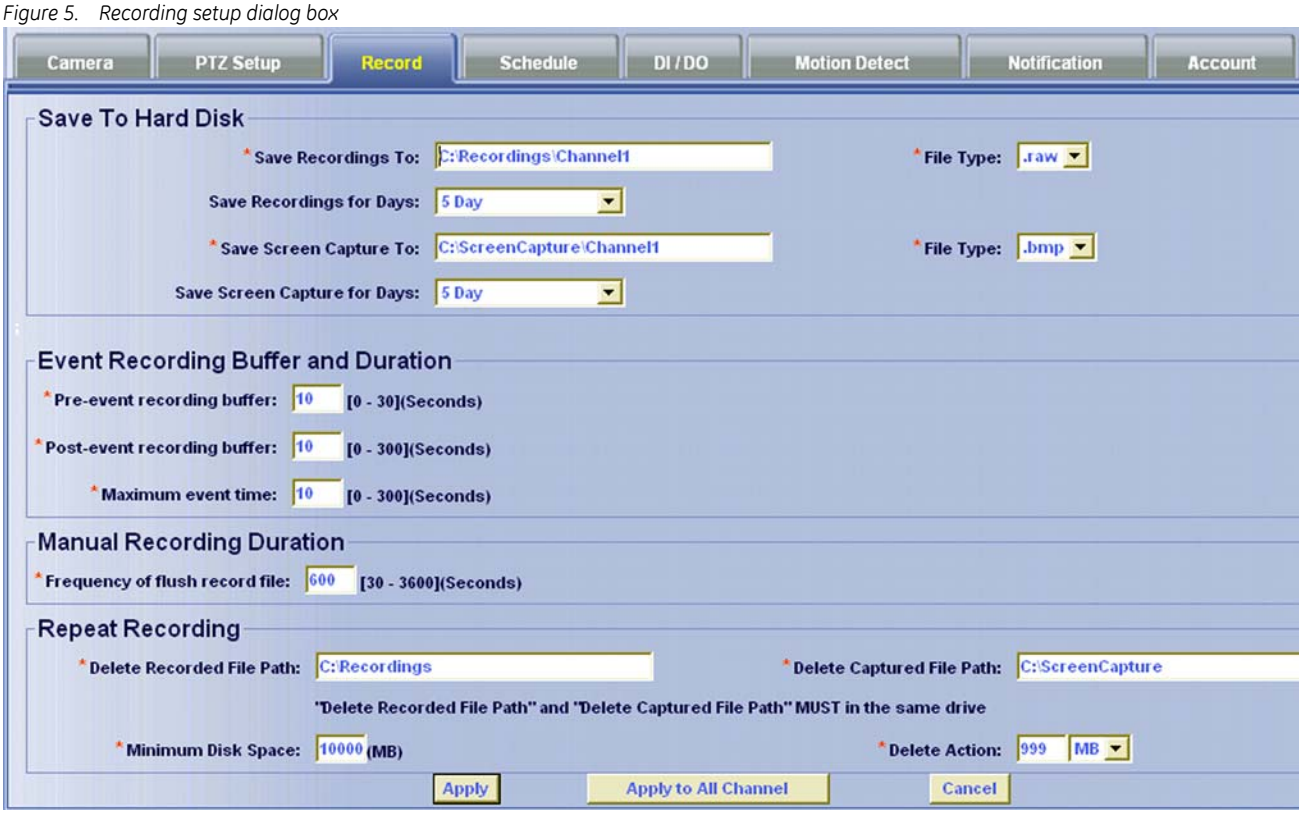
The event recording buffer and duration text boxes allow you to set recording buffer times for the following:

- *Pre-event recording:* specifies a buffer time (in seconds) to retain before a particular event occurs.
- *Post-event recording*: specifies a buffer time (in seconds) to retain after a particular event occurs.
- *Maximum event time*: specifies the maximum length of a particular event.

To setup event recording buffer and duration, do the following:

1. Enter the values in the corresponding text boxes.

Figure 5. Recording setup dialog box



Note: The recording buffer settings prevent the system from recording a new event file every second. These settings are made prior to using your video control center.

2. At the *Frequency of flush record file* text box, enter a value (in seconds) that sets a time frequency of when the system generates new files, after your system deletes files.

Repeat recording allows you to set directory path destinations and file deletion parameters. To set your repeat recording parameters, do the following:

1. At the *Delete recorded file path* text box, enter the file path that IP control center uses to begin file deletions. The system enlists all subdirectories under this directory and deletes older files.
2. At the *Delete captured file path* text box, enter the file path that IP control center uses to delete files.
3. Enter the minimum disk space that your system maintains in your hard drive for recording in the *Minimum disk space* text box.
4. The *Delete action* text box sets deletion parameters for your recordings. When the system reaches the minimum disk space, it deletes an amount of files equal to this setting in the *Delete action* text box. All repeat recording files work with *Manual record* mode, *Background record* mode, and *Schedule* mode.

Schedule recording

This section describes how to set up schedule recording (*Figure 6*). To schedule recording, do the following:

1. Enter a *Schedule name*.
2. At the *Enable* text box, select either true (enable) or false (disable).
3. At the *Period* text box, enter the start date and end date of your recording schedule.
4. At the *Daily schedule* text box, enter your start and end time.
5. Save your settings. When this is done, a *Schedule ID* appears and a *Schedule list* displays at the bottom of your screen. To refresh your settings or to begin a new schedule, click *New schedule*.

Figure 6. Schedule recording

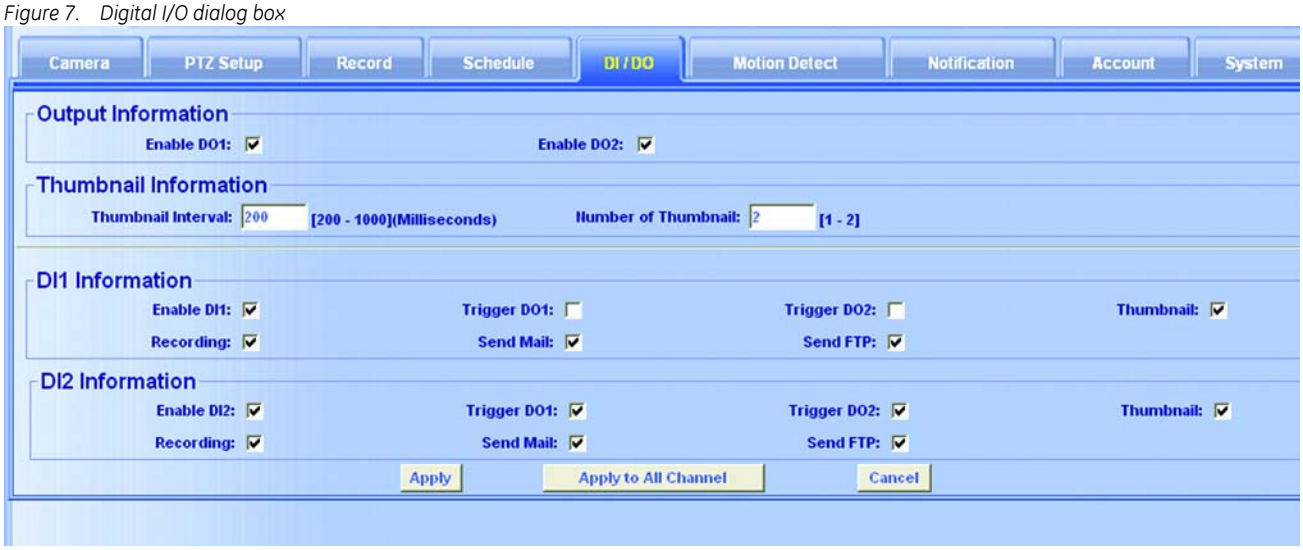
Digital I/O

This section describes how to setup digital I/O and other related notification mechanisms. The functions available on the screen vary depending on particular device connections.

To configure your digital I/O, do the following:

1. At the *Output information* text box, decide whether to enable or disable DO1 and DO2. Click the boxes to enable.
2. Enter the *thumbnail interval time* for your thumbnails. Enter the number of thumbnails.
3. Click the necessary *DI1* and *DI2* checkboxes. These boxes specify digital IN 1 information with the following options:
   - *Trigger DO1*: Triggers DO1 relay when a digital input event occurs.
   - *Trigger DO2:* Triggers DO2 relay when a digital input event occurs.
   - *Create thumbnail:* Captures image to a thumbnail. The size of the thumbnail is the same as the resolution of the streaming.
   - *Create recordings:* Record video clips.
   - *Send mail:* Send mail with thumbnail images attached.

Figure 7. Digital I/O dialog box



Motion detect dialog box

This section describes how to setup your motion detection and other notification mechanisms. The motion detection dialog box has three regions: I, II, and III (*Figure 8*). Within these regions, you may set motion detection parameters. When your system senses motion within these regions, it automatically records data. You may configure motion detection in the following areas:

Start (x,y). These coordinates on your screen are preset. You do not have to set them.

End (x,y). These coordinates on your screen are preset. You do not have to set them.

Sensitivity. Set the level of motion sensitivity using the pulldown menu options.

- *Indoor* (TCP connection): sensitivity set to 50 or higher.
- *Indoor* (multicast connection): sensitivity set to 70 or higher.
- *Outdoor* (TCP connection): sensitivity set to 60 or higher.
- *Outdoor* (multicast connection): sensitivity set to 70 or higher.

Trigger DO1 or Trigger DO2. Check which digital output you wish to use when a motion detection event occurs.

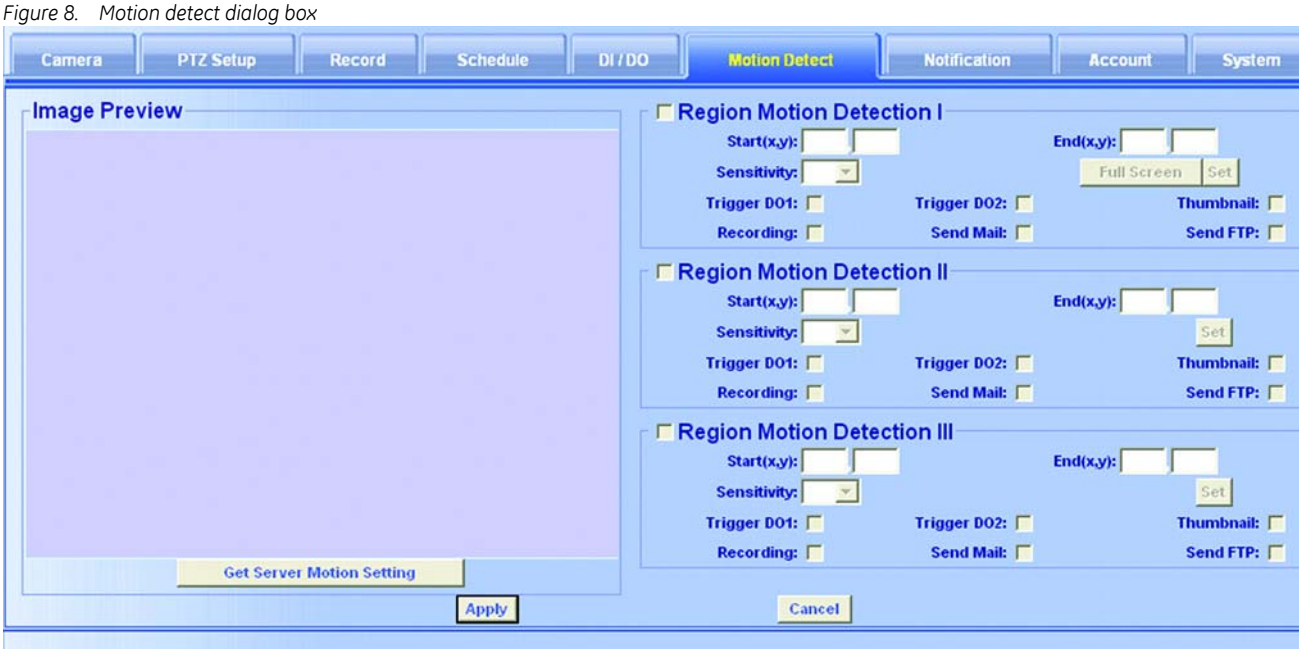
Thumbnail. Check this box if you wish to create thumbnails of your motion detection images. The size of the thumbnail is set in the *Output information* section.

Recording. Check this box to record video clips of motion detections. The preevent and postevent recording buffer is set in the *Recording* tab on your *Setup* menu. We recommend you check this setting.

Send mail. Check this box if you want to send e-mail notifications of motion detection. This function automatically attaches thumbnails to the e-mail. The SMTP setup is found in the *Notification* tab on your *Setup* menu.

Send FTP. Check this box if you want to send motion detection notification via FTP to an FTP server. The FTP setup is found in the *Notification* tab on your *Setup* menu.

Figure 8. Motion detect dialog box



Notification dialog box

The section describes how to setup notifications that are based on your motion detection settings in the *Motion detection dialog box*. This page has four main sections (see *Figure 9* on page 16) that need completion: *Mail server information*, *FTP server information, DI1 and DI2 notification,* and *Regional motion detection notification*.

Mail server information

This section of your *Notification dialog box* specifies the SMTP server information. To setup mail server information, do the following:

1. Enter your *SMTP server information*. The SMTP server sets the outgoing mail server address.
2. Enter your *user name*. This is the account login to your SMTP server.
3. Enter your *password.* This is the password login to your SMTP server.
4. Enter the *e-mail address* of the sender.
5. Enter the *full name* of the server.

FTP server information

This section specifies the FTP server information. To setup your FTP server information, do the following:

1. Enter your *FTP server name*. This sets the FTP server address.
2. Enter your *user name*. This is the account login to your FTP server.
3. Enter your *password*. This is the password login to your SMTP server.
4. Enter your *upload path information*. This sets the upload path of the FTP server.

DI1, DI2 notification

This section specifies information that relates digital output triggers from your motion detection settings. To set up the DI1 and DI2 notifications, do the following:

1. In the *To:* section, enter the receiver's e-mail address.
2. In the *cc:* section, enter the cc: recipient's e-mail address.
3. In the *subject:* section, enter the subject of the e-mail you're sending.

Regional motion detection notification

This section corresponds directly with the *Motion detection setup* page. It specifies information when a motion detection event occurs, and where to send that information when an event occurs.

1. In the *To:* section, enter the receiver's e-mail address.
2. In the *cc:* section, enter the cc: recipient's e-mail address.
3. In the *subject:* section, enter the subject of the e-mail you're sending.

You may also click *Test* to ensure the account/password information correctly authorizes.

Figure 9. Notification dialog box

User account dialog box

This section describes how to setup your user account and various permissions. To setup your user account, do the following:

1. Enter your new *User ID*. When you log on, you need to use this ID.
2. Enter your new *User name*. This name is shown on the preview window.
3. Enter your *Password*.
4. At the *Description* text box, enter a simple description of your new account.
5. At the *Active date* text box, enter the active date in yyyy/mm/dd format.
6. At the *Expire date* text box, enter the expire date in yyyy/mm/dd format.
7. At the *User role* text box, you may change an account group from the dropdown menu. You may select from the following choices:
   - *Administrator*, which gives you permission to use the *Preview, Playback*, and *Setup* menus.
   - *Standard user*, which gives you permission to use the *Preview* and *Playback* menus.
   - *Guest user*, which gives you permission to user the *Preview* menu only.

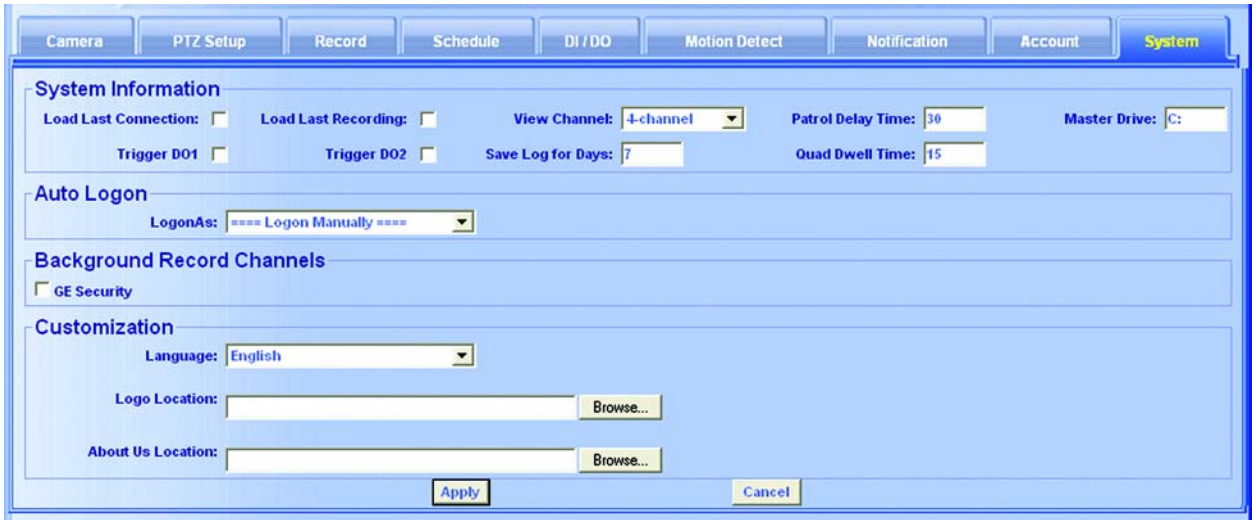
Figure 10. User account dialog box

System dialog box

This section describes the steps necessary to customize your IP video control center interface. In this section, you may configure and specify the following:

1. Check the *Load last connection* check box to load the last connection status upon startup. This does not include recording status.
2. Check the *Load last recording* check box to load the last recording status upon startup.
3. Select the *View channel* drop down menu to specify the number of channels that appear on your interface upon startup. There are multiple options from which to choose.
4. Enter a delay time in the *Patrol delay time* check box (in number of minutes). This parameter affects the patrol delay time of a specific channel in the patrol display function. For example, when you choose the patrol display on the main IP video control center menu, it shows the specific delay time of each channel. If you're using an IP Quad device, the parameter affects the patrol delay time of each channel.
5. Check the *DOI* box to enable the auto trigger DOI function.
6. Check the *DOII* box to enable the auto trigger DOII function.
7. At the *Autologin* dropdown menu, select your default login procedure. The options are:
    - *Log on manually,* which forces you to manually enter your user name and password each time you use IP video control center.
    - *Admin*, which automatically logs you on as administrator, with the accompanying permissions.
    - *Guest,* which automatically logs you on as a guest user, with the accompanying permissions.
8. Click the *background record channel* to enable camera recordings.
9. To change the language that IP video control center uses, select a language from the *Language* dropdown menu.
10. To change the logo file, at the *Logo location* text box enter a file path to upload into your IP video control center interface. This changes the logo that appears in the top left portion of your interface.
11. To change the information in your *About us* box, enter a file path to upload that information into your IP video control center interface.

Figure 11. System dialog box



Using IP video control center

This section explains how to use your IP video control center's *Preview* and *Playback* functions. When using preview mode for the first time, note the following:

- When you activate a channel, the preview window displays with a blue title bar above the frame.
- The camera ID light displays in green.
- By clicking on the icons at the bottom of your interface, you may change the screen size to reflect your channel settings. For example if you have one channel, click on the second icon from the left. This automatically enlarges your frame.

Before using your preview mode, you need to activate the media window. Within your media window, you may apply the following functions:

- Volume adjustment
- Media setup
- Create snapshot
- Zoom media window
- Send DOI
- One-channel recording
- Multichannel recording
- Mute
- Enable microphone and audio broadcast

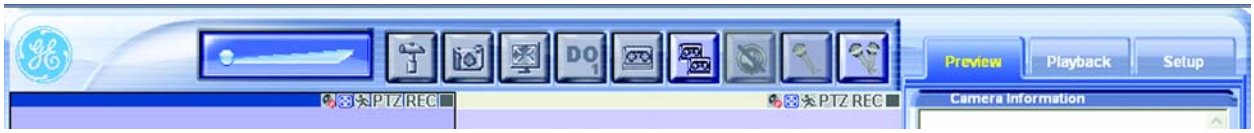
To activate the media window, you may choose from one of the following options:

1. Click on the media window in the video panel. A display with a blue title bar appears. This shows current camera configuration, including camera ID, camera name, video resolution, fps, etc.
2. Click on the channel number that lights up in green in the Media quick launch at the bottom of your screen.This also brings up the video stream from your camera.

Preview mode

Preview mode has 10 functions on its *Active media panel,* which is found at the top of your screen. Explanations of these functions are in this section in the order they appear on your screen (from left to right). See *Figure 12*.

Figure 12. Preview mode's active media panel



Volume adjustment bar. Select this icon to adjust volume if your chosen channel has audio capability.

Camera setup. Choose this icon to setup your camera information.

This automatically takes you to the *Camera setup* menu in the *Setup* tab. See *Figure 4* on page 7 for details.

Create snapshot. The IP video control center creates a snapshot image on demand.

This function also creates a "manual thumbnail" event in your system.The *create snapshot* function supports BMP file format.To configure BMP files, use your *Recording* setup function (see *Figure 5* on page 11).

Toggle full-screen mode. This feature stretches your active media window to full size. When you click this icon a second time, it reverts back to its original size. Your channel ID (the number of channels you configure in your IP video control center) determines the original size of your active media window. The larger window may have some distortions and doesn't comply with the correct proportions of your original video setting.

Send DOI. Use this icon to trigger DOI manually.

Toggle one-channel recording. Use this icon to manually start or stop recording.

Toggle multi channel recording. Use this icon to manually start or stop recording on more than one channel. When using this icon, it only uses the channels you set in your *Recording* setup (see *Figure 5* on page 11). For example, if your configurations are for three channels, the recordings perform for three channels.

Mute. Use this icon to turn off audio.

Speak. Use this icon to transmit audio to the remote device. This feature is only valid on two-way devices.

Broadcast. Use this icon to transmit audio to all remote devices that connect to IP video control center. This feature is only valid on two-way devices and operates when your channel is in *Preview* mode.

Media indicator

Active media window provides a live video stream from your IP camera or media playback device. When active, the top of each active media window provides information about its video stream. The information in this section corresponds with the data and icons shown on your active media window (from left to right).

Camera ID. Indicates current camera ID.

Digital time code. Displays the timestamp from your IP camera. This format is the digital time code that embeds in the video stream. You may apply the digital time code as a watermark of the video stream.

Camera name. Indicates current camera name. You may configure this value in the camera setup function.

Audio indicator. Indicates the current audio status, which is either audio mute or audio enabled status.

Enlarge screen. Click this icon to stretch and enlarge your current window. Click again to restore to its original size. You may also doubleclick to enlarge your preview window. Another doubleclick restores the window to its original size. When you stretch and enlarge the preview window, the CPU loading increases to decode the MPEG-4 video stream.

Motion detection indicator. This blue icon indicates your camera is setup with motion detection. A gray icon indicates this camera is not setup with motion detection. See *Figure 8* on page 14 for motion detection setup information.

PTZ indicator. The PTZ icon appears blue when the camera is setup with PTZ control. When the PTZ icon is gray, this indicates your camera is not setup with PTZ control. See *PTZ setup* on page 10 for specific information.

Recording indicator. The REC icon appears red when the camera is recording.

Connection status. This icon appears green when your connection is properly made. Clicking this icon ends the connection to your camera.

Figure 13. Media indicator

Advanced preview

To view more than three-channel DI images simultaneously, you need to configure your IP video control center for auto frame, and do the following:

1. Click your *Camera Setting* icon on your active media panel.
2. At the *Camera Setup* screen, enter camera name, camera model, server IP address, user name, and password. Click *Preview.*
3. On the FPS column, select *Auto Frame*. Select *constant* or *variable* frame rate mode.
4. Click *Apply.* To set other cameras with Auto Frame, repeat the steps above.

Assign camera to specific preview window

If you have more than one camera in your IP video control center configuration, and would like to assign your camera specific preview windows, do the following:

1. Click on a preview window.
2. Select a camera to assign to that preview window by clicking one of the numbered buttons at the bottom of your screen.

Manager panel

Preview mode has a manager panel at the bottom of your screen. This panel has several functions to assist you.

Figure 14. Manager panel

Patrol preview toggle. This icon, located at the far left of your manager panel, enables or disables patrol preview. Click once to enable patrol preview. Click again to disable.

One-window preview mode. Use this icon, second from the left on your manager panel, to set your viewing window to a single frame.

Four-window preview mode. Use this icon, third from the left on your manager panel, to view four frames (representing four camera views).

Twelve-window preview mode. Use this icon, fourth from the left on your manager panel, to view 12 frames (representing 12 camera views).

Sixteen-window preview mode. Use this icon, fifth from the left on your manager panel, to view 16 frames (representing 16 camera views).

Six-window preview mode. Use this icon, third from the right on your manager panel, to view six frames (representing six camera views).

Eight-window preview mode. Use this icon, second from the right on your manager panel, to view eight frames (representing eight camera views).

10-channel preview mode. Use this icon, on the right of your manager panel, to view 10 frames (representing 10 camera views).

Record

This section explains how to use the four recording modes: *manual, background, schedule,* and *repeat*.

Manual recording. In this mode, you may start and stop recording manually. To manually record, do the following:

1. Click the *Recording* toggle icon at the top of your screen. When the REC indicator displays in red, it indicates a specific preview window is manually recording. A dim REC indicates the manual-recording is not on. The corresponding digits at the bottom of your screen light up in red, as well.
2. Verify the system accepts the command. Look at the event list, (see *Figure 15*) which shows a new record for this manual recording event.

Figure 15. Event list message

Background recording. This mode allows you to record channels without preview. The advantage to using background recording is that it saves CPU space in comparison with manual recording. To use background recording, do the following:

1. Click the *Record All* toggle icon to start or stop background recording. The system initializes the request (this takes at least five seconds), and then all channels begin recording. The REC indicator displays in red, which shows that background recording is on.
2. Verify the system accepts the command. Look at the event list. (See *Figure 15*, which shows a new records for this background recording event).

Schedule recording. This mode allows you to set up several independent recording schedules. Background recording starts and stops according to your schedule setups.

To use schedule recording, do the following:

1. At the top of your screen, select a camera number. The schedule menu appears (*Figure 6* on page 12).
2. Enter a *Schedule name*.
3. At the *Enable* text box, select either true (enable) or false (disable).
4. At the *Period* text box, enter the start date and end date of your recording schedule.
5. At the *Daily schedule* text box, enter your start and end time.
6. Save your settings. When this is done, a *Schedule ID* appears and a *Schedule list* displays at the bottom of your screen. To refresh your settings or to begin a new schedule, click *New schedule*.

Repeat recording. Repeat recording allows you to set directory path destinations and file deletion parameters. To set your repeat recording parameters, do the following:

1. At the *Delete recorded file path* text box, enter the file path that IP control center uses to begin file deletions. The system enlists all subdirectories under this directory and deletes older files.
2. At the *Delete captured file path* text box, enter the file path that IP control center uses to delete files.
3. Enter the minimum disk space that your system maintains in your hard drive for recording in the *Minimum disk space* text box.
4. The *Delete action* text box sets deletion parameters for your recordings. When the system reaches the minimum disk space, it deletes an amount of files equal to this setting in the *Delete action* text box. All repeat recording files work with manual record mode, background record mode, and schedule mode.

Playback mode

This section provides instruction on how to use your IP video control center's Playback mode. Playback mode has several useful features. Click on the *Playback* tab to start Playback mode.

Open file. Click on *Open file* to open a dialog box that opens a recorded file. Browse to the folder containing your recorded files.

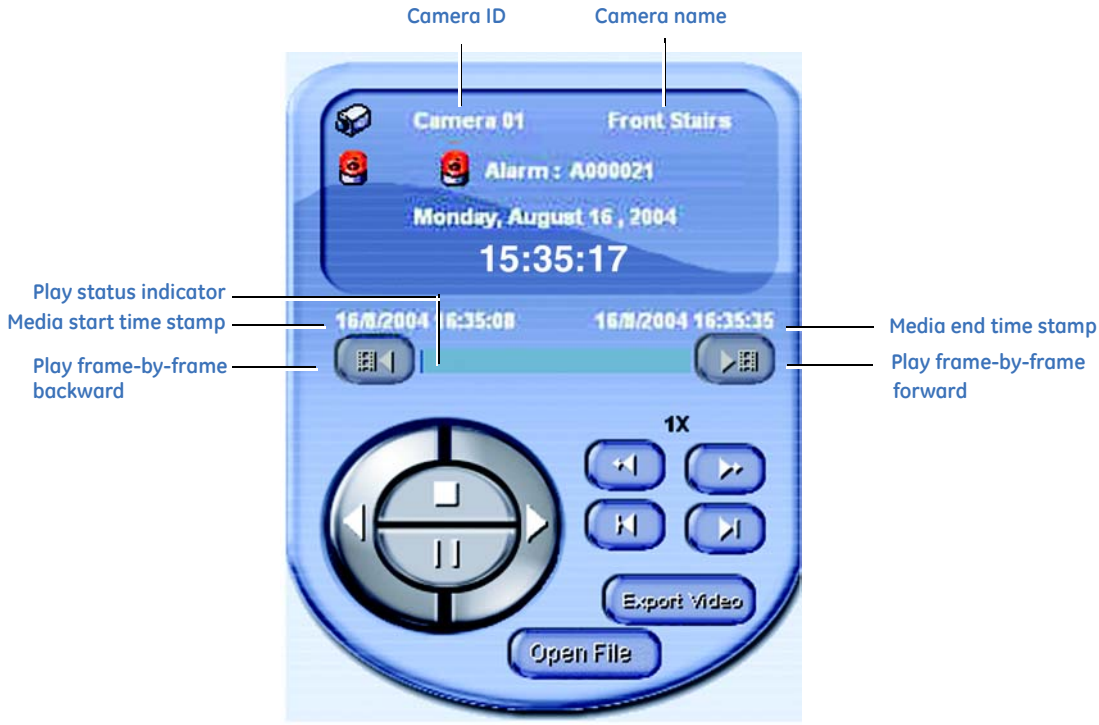
Thumbnail. Click on *Remote Search* or *Search* to display event search windows.

Bookmark. Click on *Remote Search* or *Search* to display event search windows.

Active playback. This window displays playback video files.

Media playback panel. Shows playback mode activities, such as camera ID, timestamps, and play status indicator (see *Figure 16*).

Figure 16. Media control panel



Camera ID. Displays the camera ID.

Camera name. Displays the camera name.

Play status indicator. Shows current play indicator. If you click on the play status bar, play cycle resets.

Media start time stamp. Displays the starting time stamp of the media.

Media end time stamp. Displays the ending time stamp of the media.

Play frame-by-frame backward. Plays previous frame.

Play frame-by-frame forward. Plays next frame. If you want to play frame by frame you must first pause the media file.

Event search list

The event search list allows you to find a listing of all recorded events in your IP video control center. To use event search list, click on the *Search* tab in your *Thumbnails* box. Event search list provides data for the following: camera, event, time period, search, event search list, and event detail.

Camera. Lists the cameras that connect to IP video control center. Click on the camera check box to select or deselect all cameras.

Event. Lists the types of events that you may search. Available events are DI, manual record, motion detection, and background record. Click on event check box to select or deselect all events.

Time period. Select a start and end time period.

Search. Click this button to start search events.

Event search list. This list displays the recorded files that match your criteria.

Event detail. Click on the event detail to start playing video.

Remote event search list

The remote event search list allows you to search for events across a network. To use remote event search list, click on the on *Remote Search* tab in your bookmark box. Remote event search list provides data on the following: NVR information, camera list, events, time period, etc.

NVR (network video recorder) information. Enter the IP address that you want to search on your NVR.

Get camera list. Provides a listing of all cameras on your network.

Camera. Lists the network of cameras. Click on camera check box to select or de-select all cameras.

Event. Lists the types of events that you may search. Available events are DI, manual record, motion detection, and background record. Click on *event* check box to select or de-select all events.

Time period. Select a start and end time.

Search. Click this button to start searching.

Event search list. This list displays the recorded files that match the criteria.

PTZ control panel

This section describes how to use your PTZ control panel. The PTZ panel follows the Pelco-P protocol. See *Figure 17*.

Note: If you are using a fixed camera, the information in this section does not apply.

IRIS function. Click **ON** to open IRIS. Click **OFF** to close IRIS. IRIS is part of your camera's lens that controls the amount of light it receives.

PAN speed function. Click the plus (+) sign to increase the speed of your pan operation. Click the minus (-) sign to decrease the speed of your pan operation.

TILT speed function. Click the plus (+) sign to increase the speed of your tilt operation. Click the minus (-) sign to decrease the speed of your tilt operation.

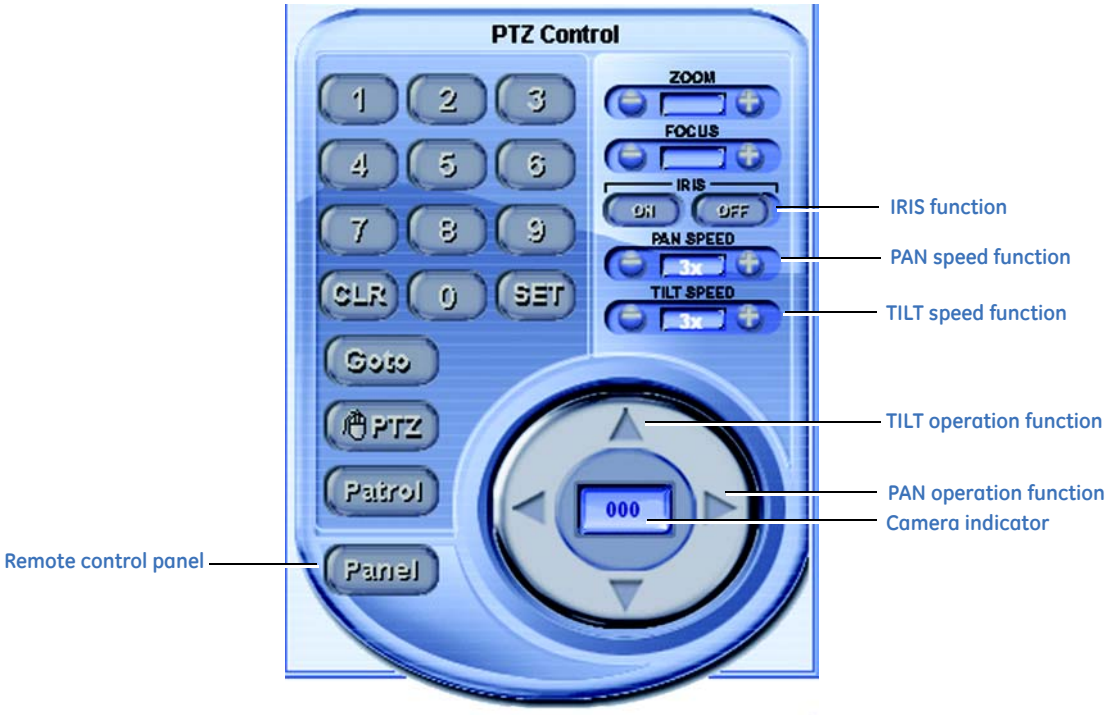
TILT operation function. Click the up arrow to tilt up. Click the down arrow to tilt down.

PAN operation function. Click the right arrow to pan right. Click the left arrow to pan left.

Camera indicator. When lit this indicates current active camera ID.

Remote control panel function. Click this button to enable the remote control panel function. Remote control panel function transmits the control data from a control panel (that connects to your PC) to the remote PTZ device.

Figure 17. PTZ control



Chapter 2 Contact technical support

This chapter provides information to help you troubleshoot problems, perform simple maintenance procedures, and contact technical support in case you need assistance with your GE equipment.

In this chapter:

Contacting technical support

For assistance installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, you may contact technical support during normal business hours (Monday through Friday, excluding holidays, between 5 a.m. and 5 p.m. Pacific Time).

Table 6. Service and support contact information

	Customer service	Technical support
Phone	**Toll-free:** 888.GESECURity (888.437.3287) in the US, including Alaska and Hawaii; Puerto Rico; Canada. Outside the toll-free area: 503.885.5700.	
E-mail	*gesecurity.customerservice@ge.com*	*nstechsrv@ge.com*
Fax	888.329.0331	888.329.0332

Note: Be ready at the equipment before calling for technical support.

Online publication library

Another great resource for assistance with your GE product is our online publication library. To access the library, go to our website at the following location:

tap://www.gesecurity.com

In the **Customer Support** menu, select the *Resource Library* link. After you register and log on, you may search through our online library for the documentation you need.[1]

1. Many GE documents are provided as Potfuls (portable document format). To read these documents, you will need Adobe Reader, which can be downloaded free from Adobe's website at *www.adobe.com*.