


Site Server

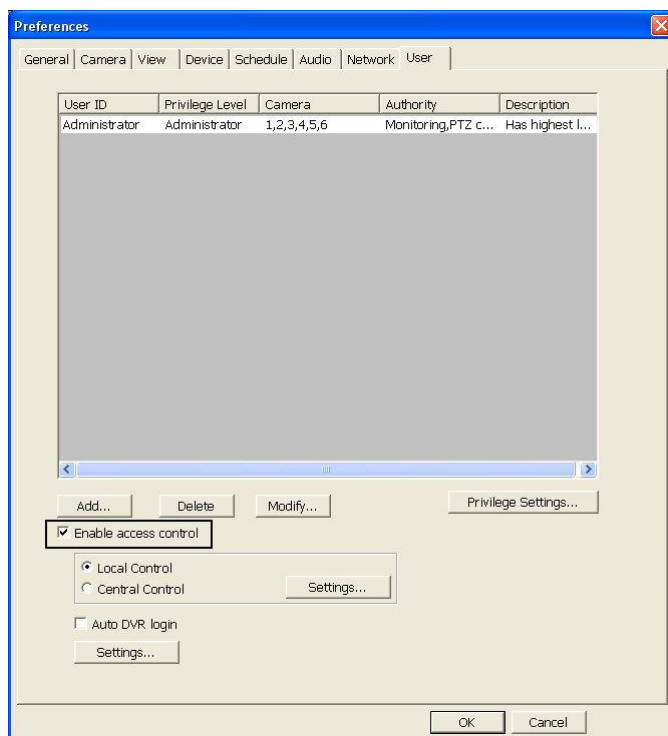
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- [Site Server Interface](#)
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- [Monitoring a Site in Map Mode](#)
- [Configuring the Site Server](#) *Updated*
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Site Server

Site Server is a digital video and audio surveillance and recording program. It allows up to 16 video cameras, 16 audio input devices, and 16 sensors to be monitored simultaneously on the program screen. For each camera, the motion detection feature and other methods of detection can be activated for tracking and recording suspicious events. For the utmost security, round-the-clock, non-stop video recording can also be enabled. As the administrator of your huperVision Surveillance System, you can also create accounts for other users and give them access rights to Site Server and the other programs of your huperVision system.

Launching the Site Server

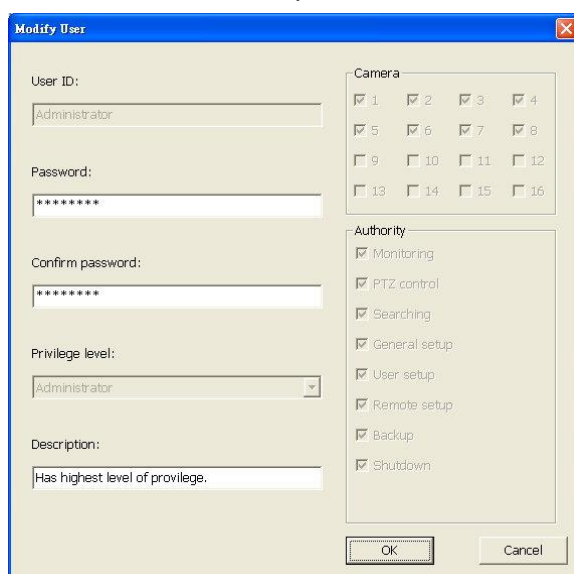
Everytime you start your computer, Site Server automatically runs by itself. By default, Site Server will allow any user to have access to the program. To restrict the program's access rights only to the local Administrator account, click  in silver scheme or  in black scheme to open the Preferences dialog box, then click the User tab and select the "Enable access control" option.





A message box then appears, informing you that there is no password yet for the local Administrator account. Click OK.



The Modify User dialog box then opens. Enter the desired password twice in the Password and Confirm password text boxes, then click OK.



When access control is enabled, Site Server will, by default, run in logoff mode when the program is launched. When Site Server is in logoff mode, the split screens on the program window will not show any surveillance video and will appear as gray frames.

To logon to Site Server and have access to all of its functions, click  in silver scheme or  in black scheme. A pop-up menu then opens. Click Log In on the pop-up menu. The Site Server Login dialog box then opens. Type "Administrator" and the password in the "User ID" and "Password" text boxes.



Notes:

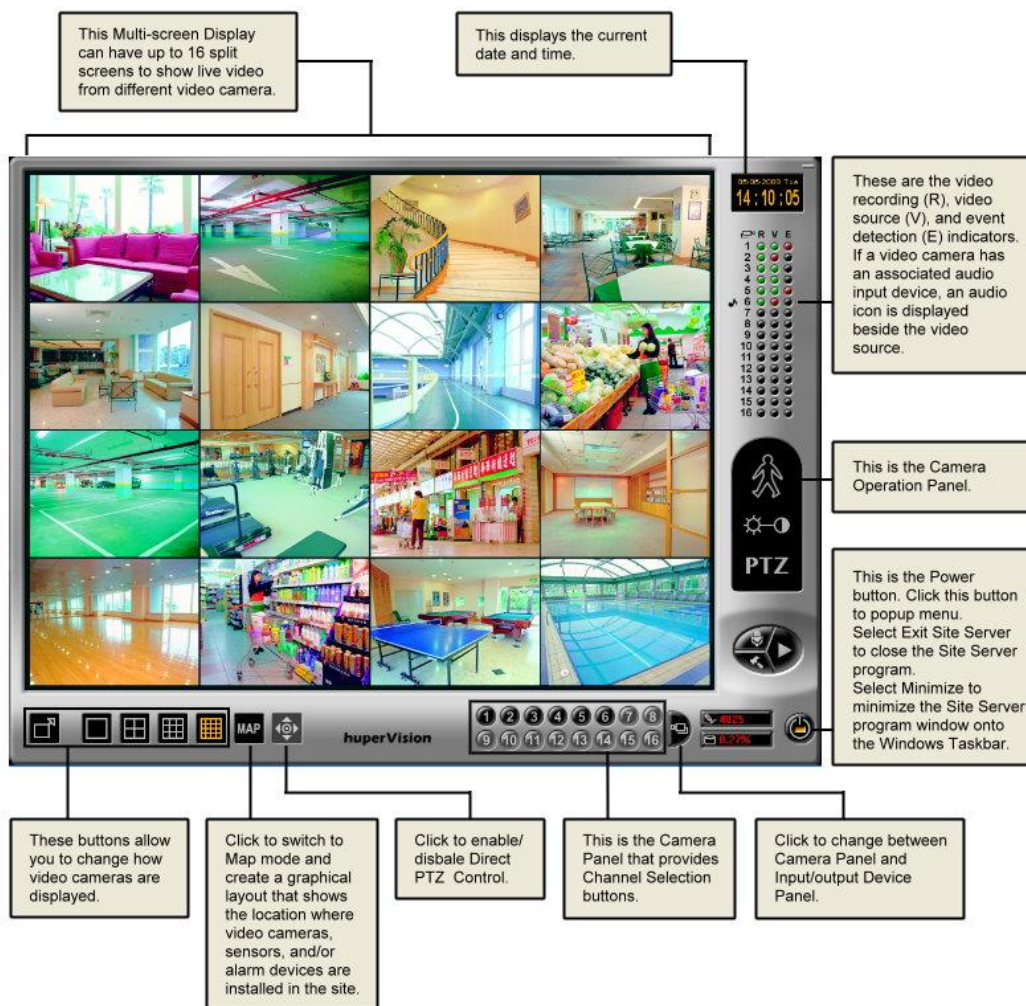
- You can add more user accounts to Site Server. (See "Creating and maintaining user accounts".)
- If there are several computers installed with Site Server and connected via LAN, use the List Server program to manage and monitor the different Site Server systems. (See Chapter 9 for more information on the List Server.)

Site Server Interface

When you have entered or logged into the Site Server program, the program goes into Live mode. In this mode, you will be able to see live video from up to 16 cameras and monitor input/output devices (such as sensors and alarms).

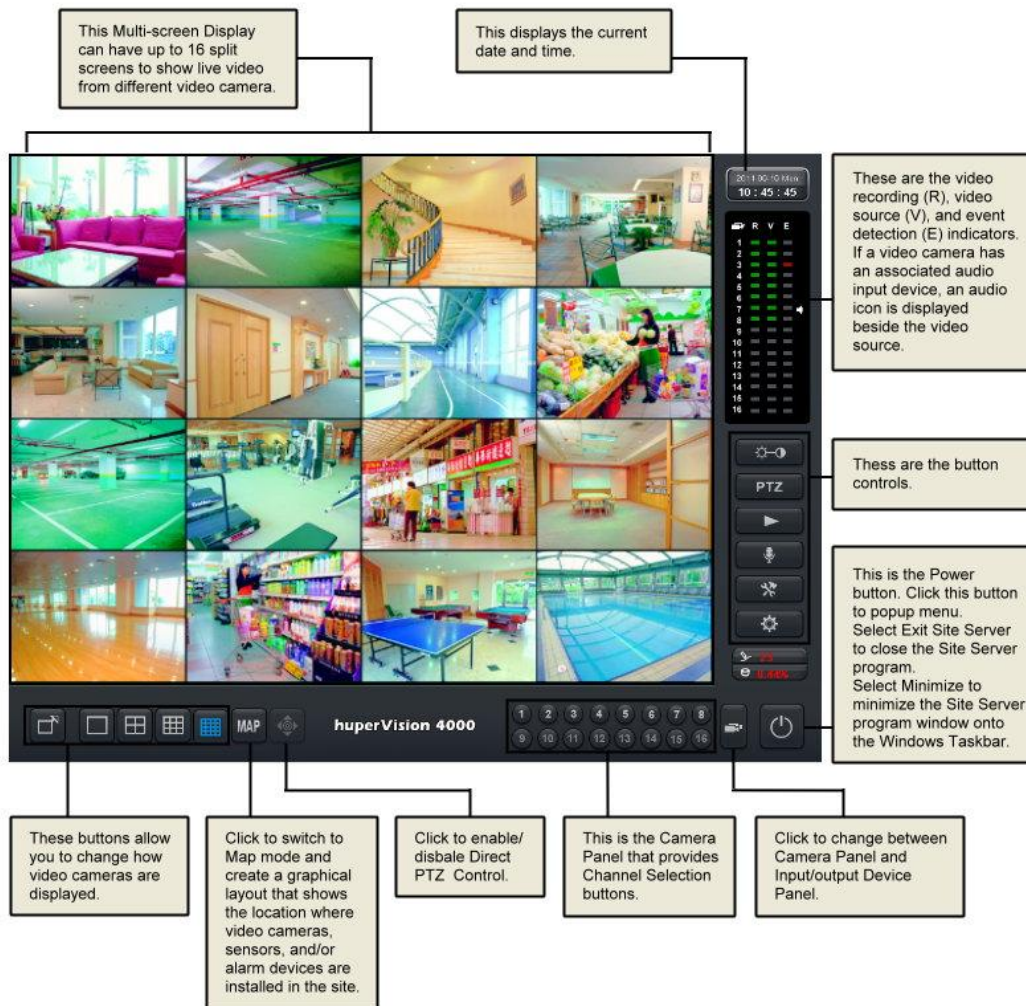
Site Server Interface

Silver scheme version



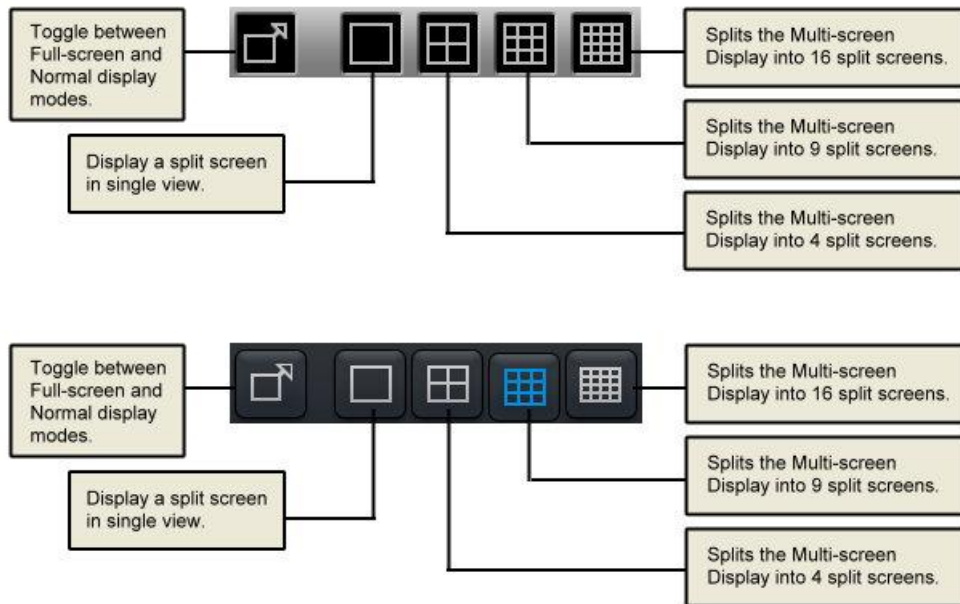
huperVision


Black scheme version



Split Screen buttons

These buttons set how many split screens are displayed on the program screen.



When you click the Full Screen button  to change Site Server into Full Screen mode, only video windows will be shown and the user interface controls will be hidden. To make the user interface controls appear, press [ESC] or move the mouse near the lower side or the right side of the screen.

If Full Screen mode will be used, it is recommended to hide the Windows taskbar to prevent it from covering the user interface controls.

Split Screens

Split screens show live video from the video cameras that are installed in the monitored site. On the split screens, the video camera number, current date and time, etc. can be displayed. If video recording is currently in progress, a "REC" indicator will also appear at the bottom right corner of the corresponding screen.



Note: Per split screen, the "REC" indicator will be displayed if and only if the caption display is enabled in the Preferences dialog box: Camera tab and when the respective cameras are in video recording mode. (See "Configuring caption display settings".)

Maximizing split screen size

If there are multiple split screens displayed, double-click a split screen if you want to maximize its size and temporarily cover its three neighboring screens. How a split screen is maximized depends on the total number of split screens that are currently displayed on the Site Server program window. For instance, if there are 9 split screens displayed, double-clicking Camera 1 will enlarge it to occupy half of the program window; double-clicking Camera 1 again will further enlarge it to occupy the entire program screen.

To restore a split screen back to its previous size, double-click on it again.

To restore enlarged split screens back to their normal size, right-click any of the split screens, then select Reset Layout from the pop-up menu.

Changing split screen position

Drag a split screen and drop it to another split screen to exchange their positions.

Map button

Click the Map button to switch Site Server to Map mode. This mode shows a graphical layout of the site being monitored, with clear indications on where the video cameras, sensors, and/or alarms are installed. (See "Monitoring a Site in Map Mode" for details.)

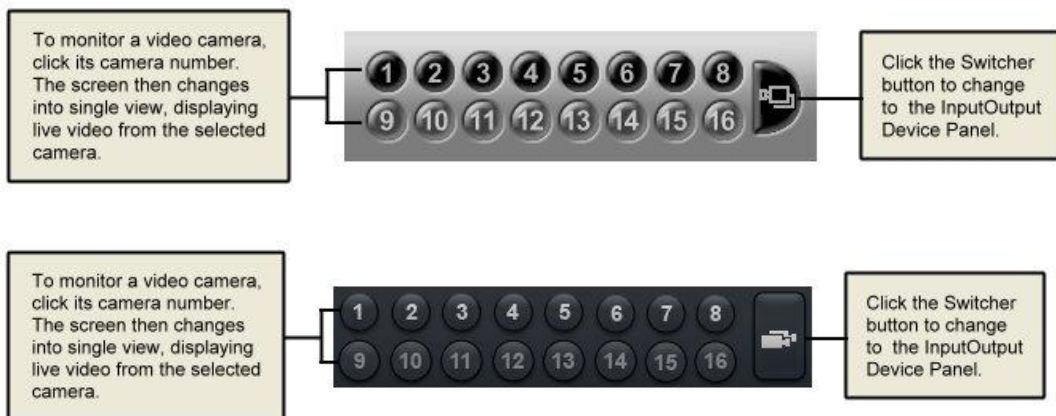
Channel Selection Panel

By default, Video Camera buttons are displayed at the bottom of the Site Server program window. These buttons allow you to display a split screen in single view.

If there are input/output devices such as sensors and alarms also connected, you can easily switch between viewing video cameras and monitoring the input/output devices.

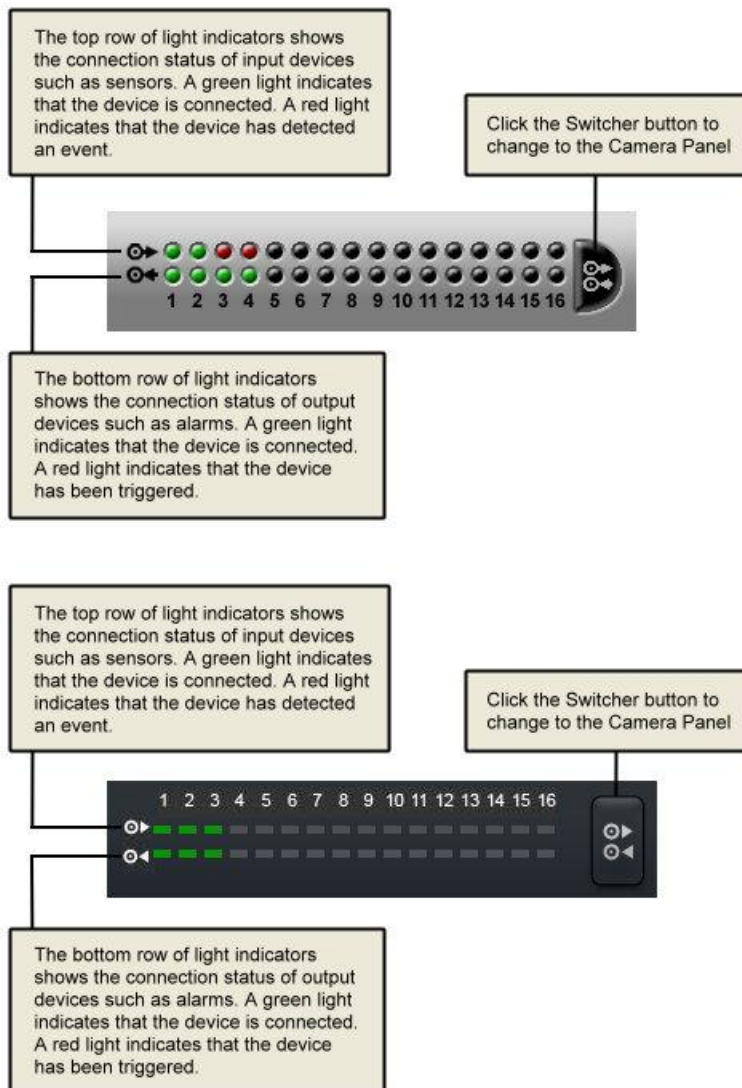
Camera Panel

This panel provides camera buttons that are numbered in sequence and a Switcher button.



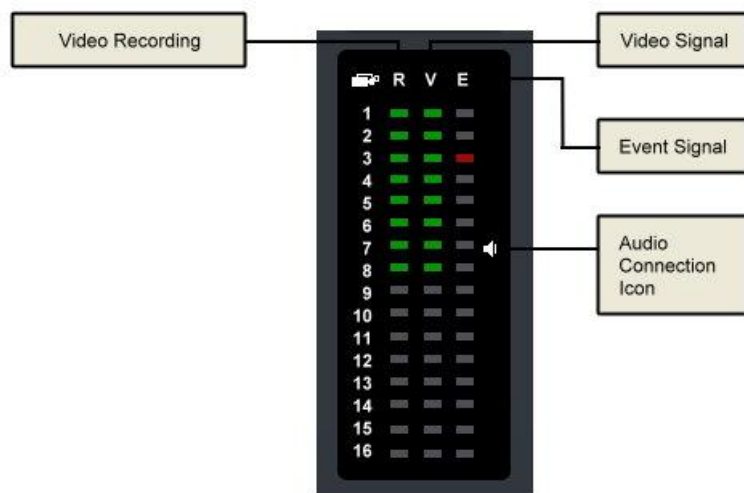
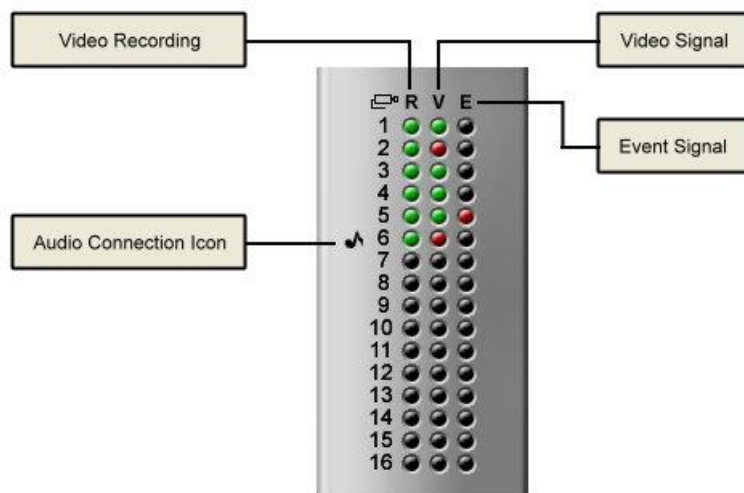
Input/Output Device Panel

Input/Output Device Panel displays the status of connected sensors, alarms and other traditional security devices.



Status Panel

The Status Panel displays four types of status information: Video Recording, Video Signal, Audio Connection Icon, and Event Signal.



Video Recording

"R" stands for video recording. When a light indicator appears green in color, it means that the video recording function is enabled for the video camera.

Video Signal

"V" stands for video signal from cameras. When a light indicator appears green in color, it means that the video camera is connected and turned on. When a light indicator appears red in color, it means that connection to the video camera is lost.

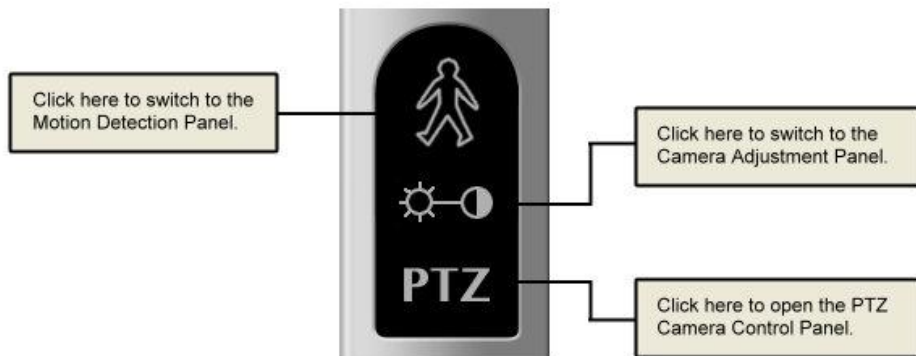
Event Signal

"E" stands for event signal, which could have been activated by motion detection or by an input device such as the sensor. The light indicator appears red in color when an event has been detected.

Note: Video/Audio recording features, video camera connections, audio channel connections, and input device connections can all be enabled or disabled in the Preferences dialog box. (Refer to the section "Configuring the Site Server" for details.)

Camera Operation Panel

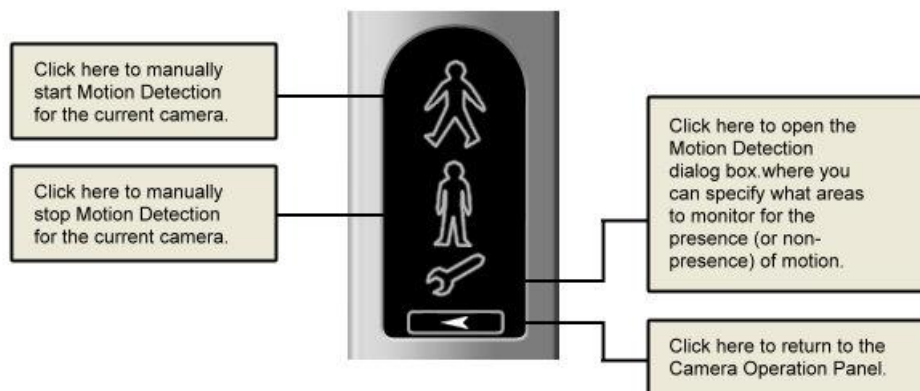
The Camera Operation Panel allows you to switch between three different control panels: Motion Detection Panel, Camera Adjustment Panel, and PTZ Camera Control Panel.



Note: The camera operation panel is only available in silver scheme version.

Motion Detection Panel

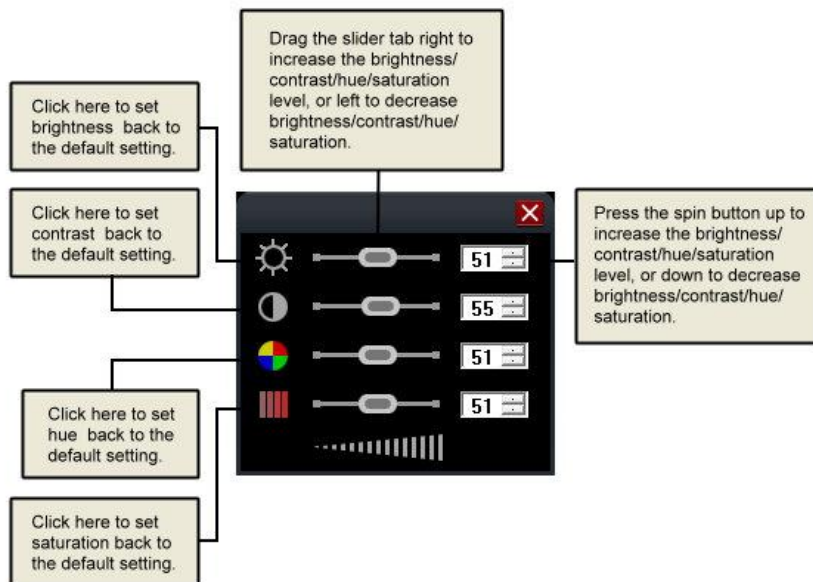
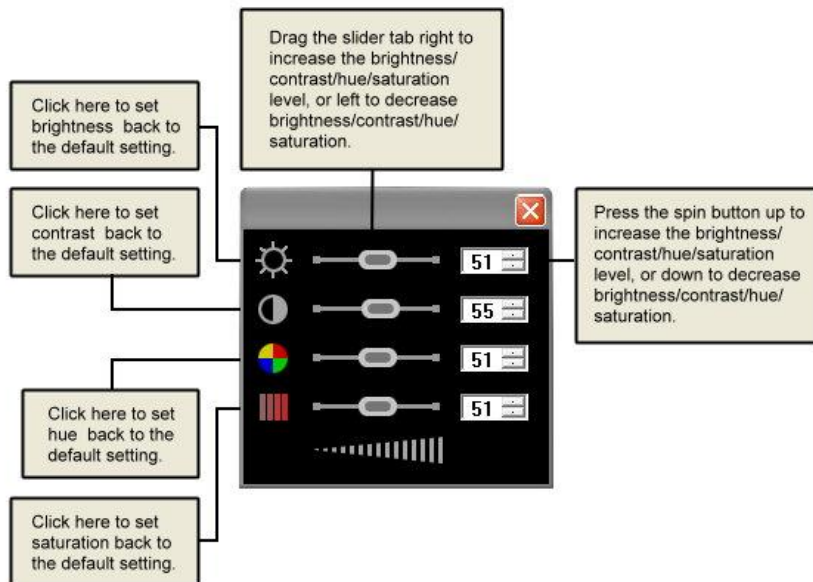
The Motion Detection Panel allows you to manually start or stop motion detection. The Start and Stop buttons are available only when the current camera's motion detection function has not been configured to be performed on a scheduled basis. This panel is only available in silver scheme version.



Note: Motion detection cannot be stopped if the recording method is set to Non-stop smart recording.

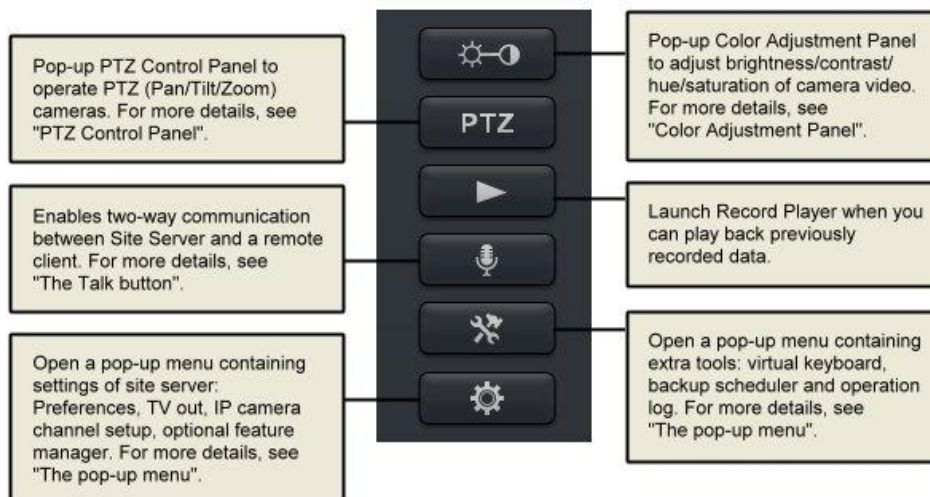
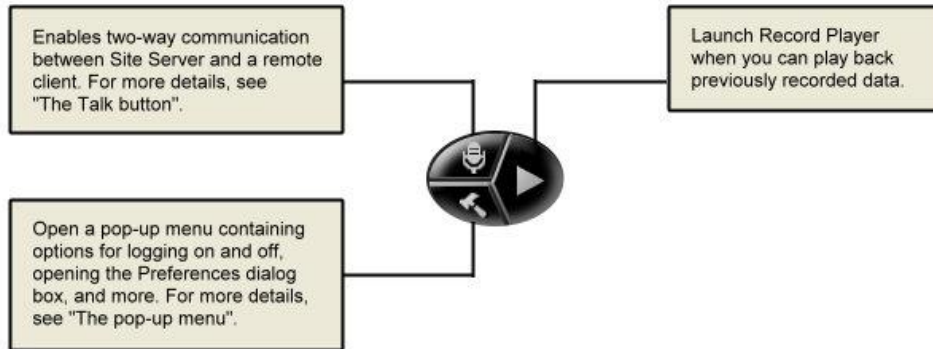
Camera Adjustment Panel

The Camera Adjustment Panel provides controls for adjusting the hue color, saturation, brightness, and contrast of the camera video.




Note: Hue adjustment is not available on PAL video cameras.


Other button controls



The pop-up menu

Clicking the  button in the silver scheme version opens the following pop-up menu:



Clicking the  and  button in the black scheme version opens the following pop-up menus:

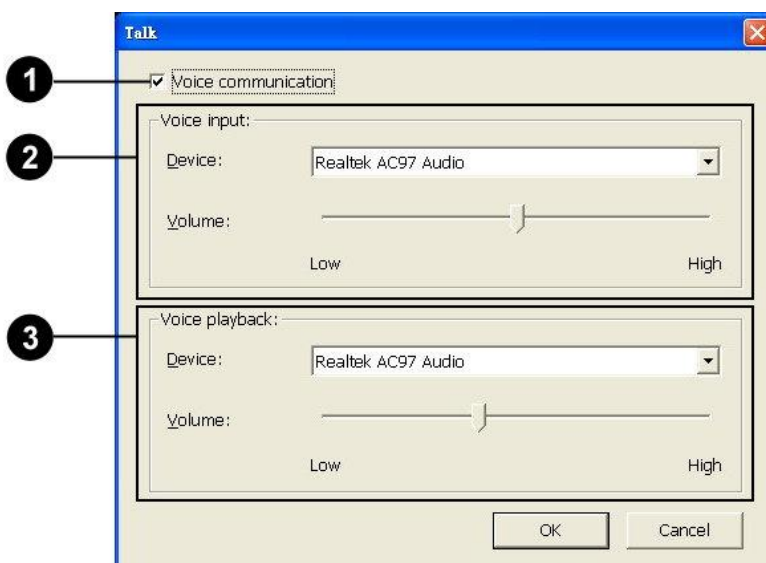


Log In / Out	Allows you to log on or off the Site Server.
TV out	Opens the TV out setup dialog box where you can customize spot monitor output of your analog cameras. This feature is only available for 4700 series capture card, Gaia series and Vento series.
Optional Feature Manager	Opens the Optional Feature Manager dialog box where you can enable/disable and assign channel location of optional feature. This menu item is only available when you have an optional feature license USB key installed.

IP camera Channel Setup	Opens the IP camera channel setup dialog box where you can customize how many IP camera channels you want to enable in whole system.
Virtual Keyboard	Launches Windows virtual keyboard accessory.
Backup Scheduler	Launches Backup Scheduler where you can manually do a backup of video records or schedule a daily backup. For more information, see Chapter 4.
Operation Log	Opens a dialog box where you can see a list of operations that are logged by the Site Server. For more details, see "Viewing logs and disk usage information" in this chapter.
Preferences	Opens the Preferences dialog box where you can customize surveillance video recording, smart detection, and more.
About	Opens the About dialog box where you can see copyright and version information about huperVision.

The Talk Button

Site Server can be enabled to accept two-way communication request from a remote client site also running the Remote Viewer program. Click the Talk button to open the Talk dialog box where you can configure settings to enable two-way voice communication.




- 1** Voice communication
Select this option to activate the Talk feature of Site Server.
- 2** Voice input
Displays the audio device used by your input device (e.g. microphone) to capture your voice. You can also adjust the input device's volume here. If you have more than one audio device installed, select the device you want to use from the drop-down menu.
- 3** Voice playback
Displays the audio device used by your playback device (e.g. speakers) to play back the voice from your counterpart. You can also adjust the playback device's volume here. If you have more than one audio device installed, select the device you want to use from the drop-down menu.

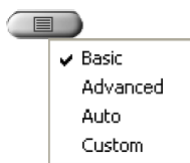
The Voice input and Voice playback audio devices that you select must not be occupied by another device when using the Talk feature. Please check the Audio tab in Preferences to see if the audio device is being used or not. See "Audio capturing device settings (Audio tab)" for details.

Operating PTZ Cameras

Use the PTZ Camera Control Panel to operate PTZ (Pan/Tilt/Zoom) cameras.

PTZ Control Panel

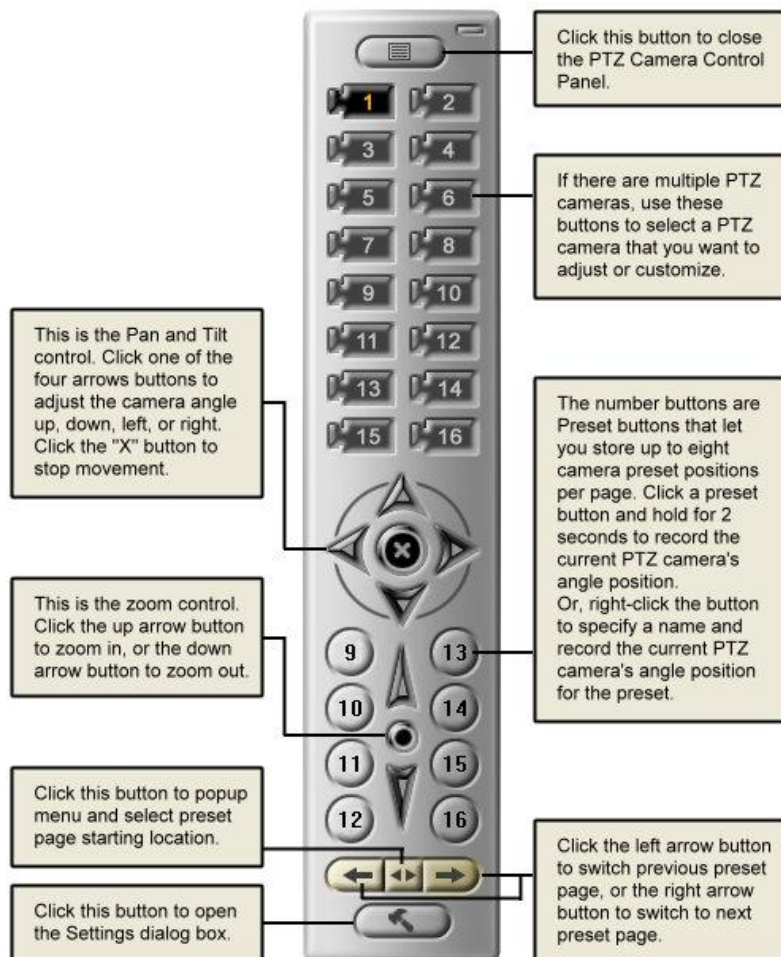
The PTZ Camera Control Panel provides four types of adjustment panels that allow you to customize and operate PTZ cameras. Click  to open a pop-up menu where you can switch between these four panels.



Basic	Switch to the Basic panel if you want to manually control camera panning, tilt movements, and zooming.
Advanced	The Advanced panel allows you to set the iris level and focus of a selected PTZ camera as well as the camera's pan and tilt speed.
Auto	Switch to the Auto panel if you want to enable/disable the auto-panning or auto-loop function. In this panel, you can define settings for these functions.
Custom	The Custom panel lists commands for operating the PTZ camera that you have custom-defined in the Settings dialog

Basic

Silver scheme version

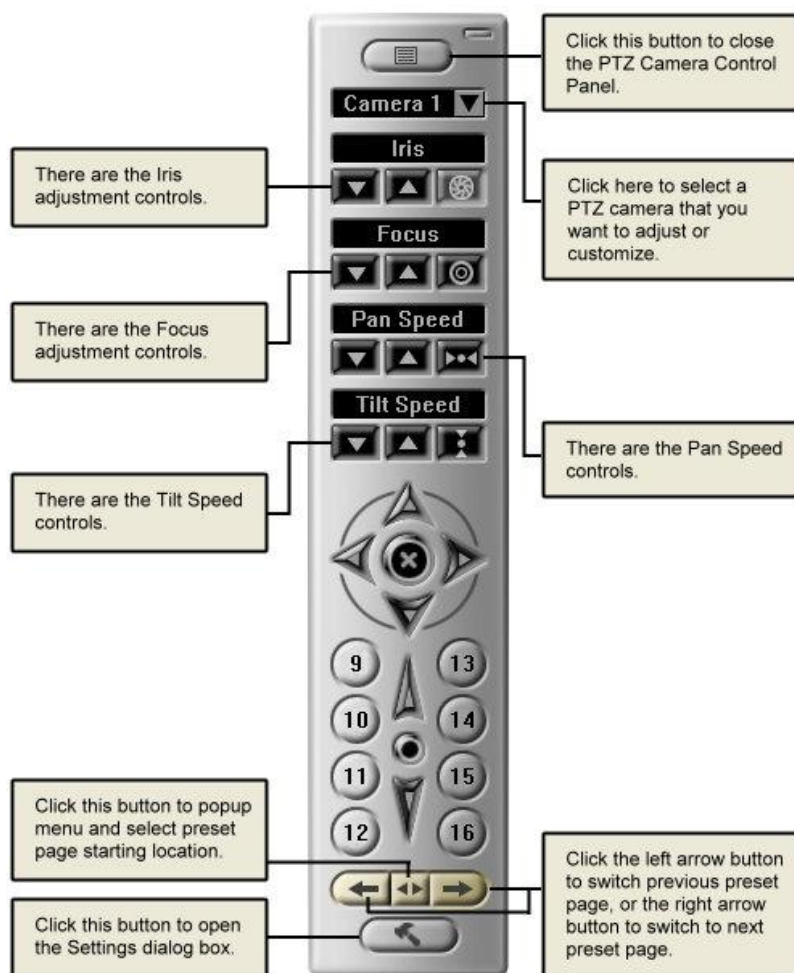


Black scheme version

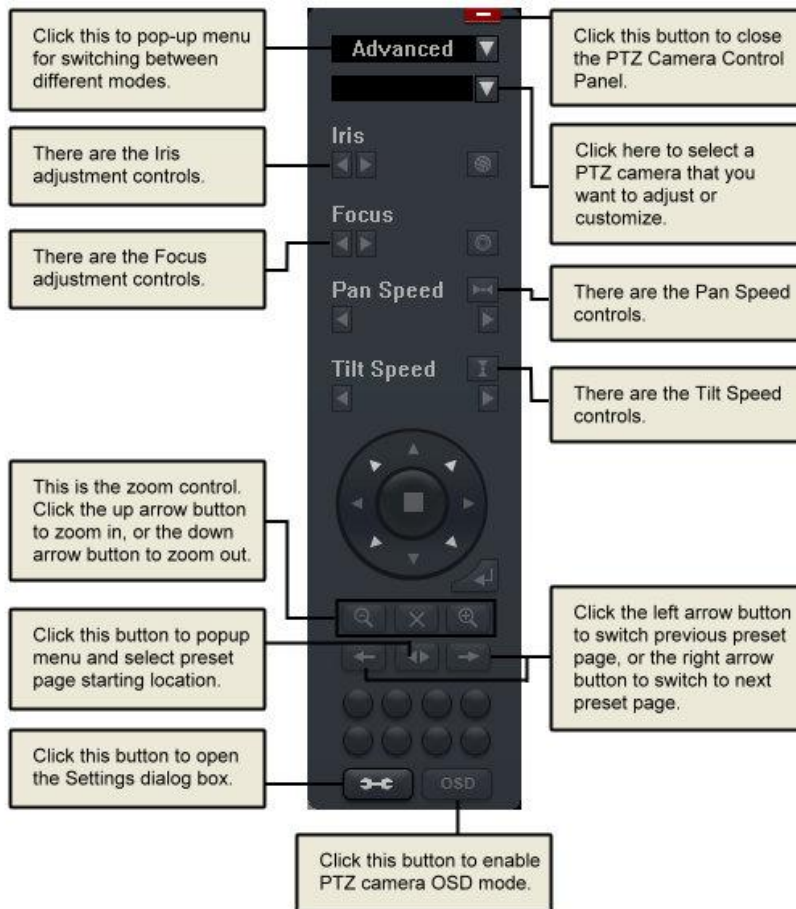


Advanced

Silver scheme version



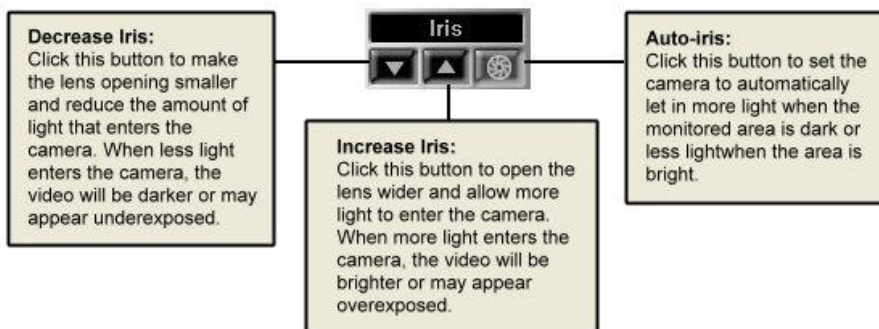
Black scheme version



Iris controls

The iris lens of a PTZ camera controls the amount of light that enters the camera.

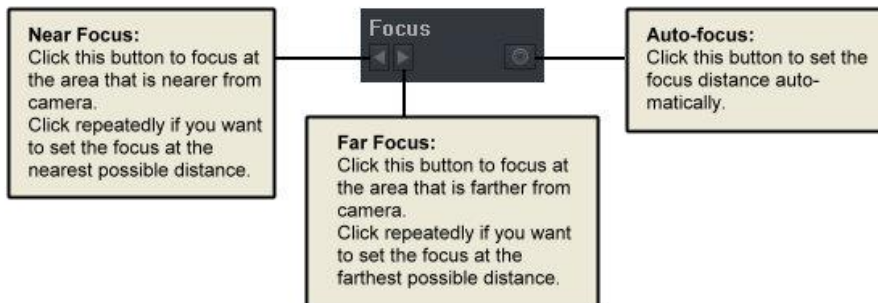
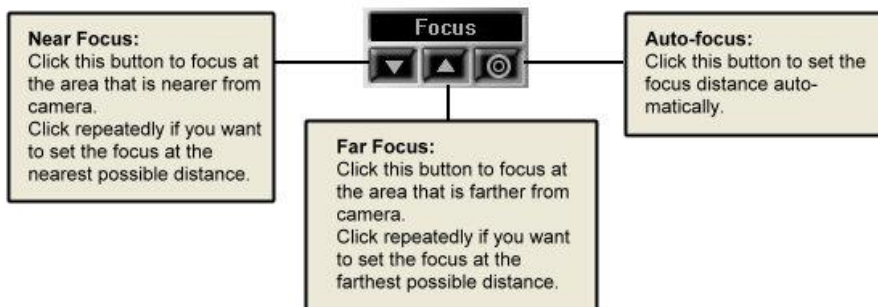
These are the Iris adjustment controls:





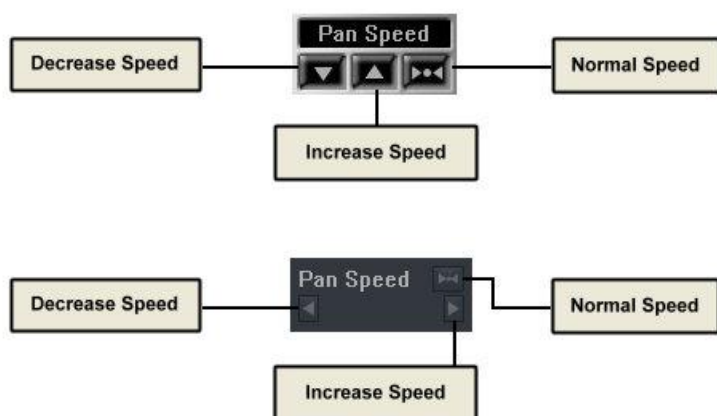
Focus controls

Use the Focus controls to set the focus distance.



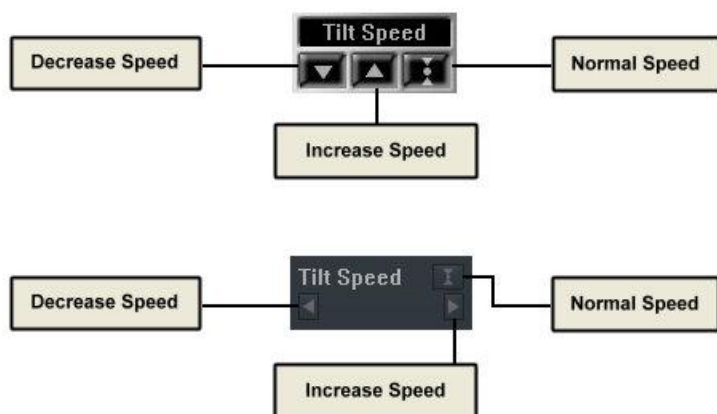
Pan Speed controls

Use the Pan Speed controls to set the speed for turning the PTZ camera.



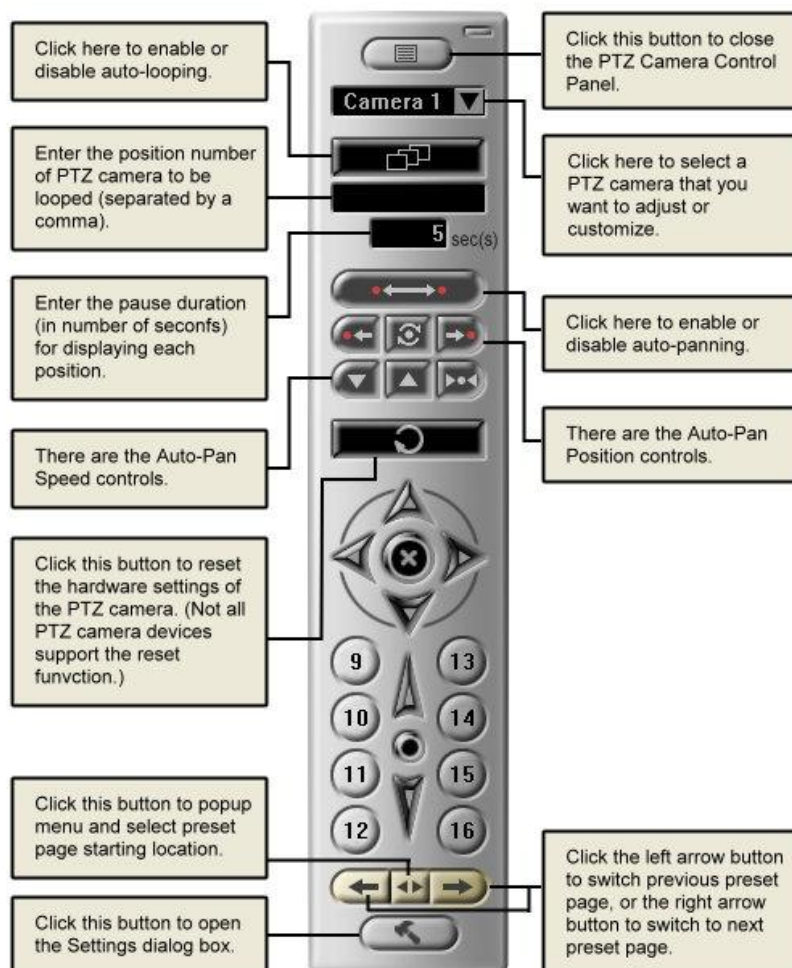
Tilt Speed controls

Use the Tilt Speed controls to set the speed for adjusting the angle of the PTZ camera.

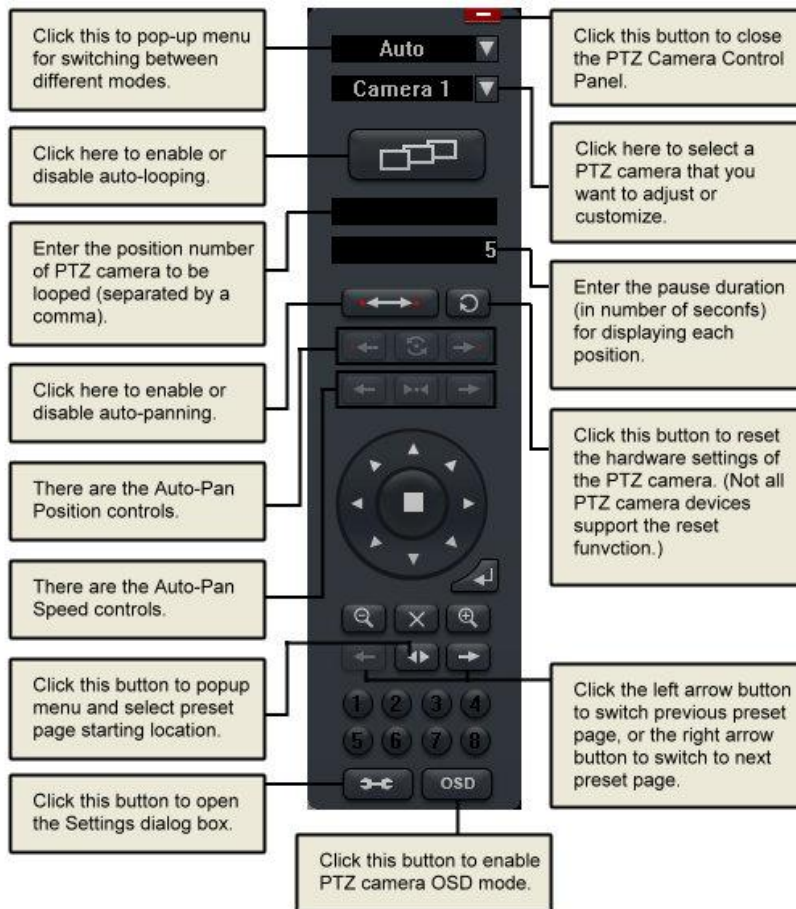


Auto

Silver scheme version

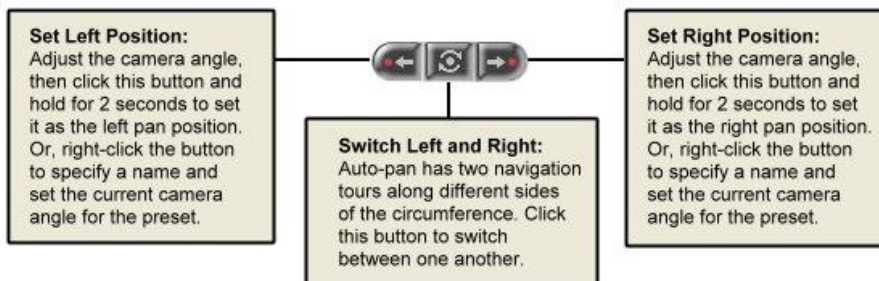


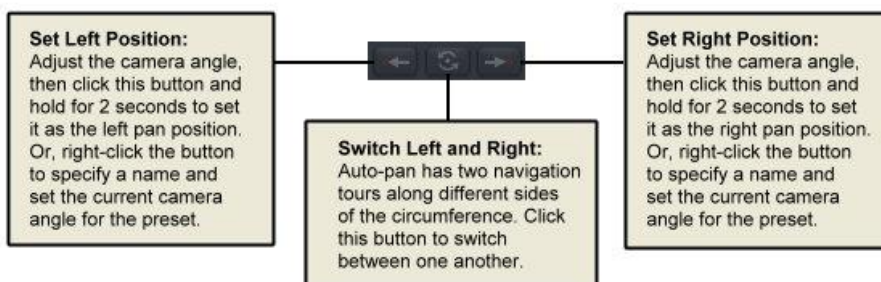
Black scheme version



Auto-Pan Position controls

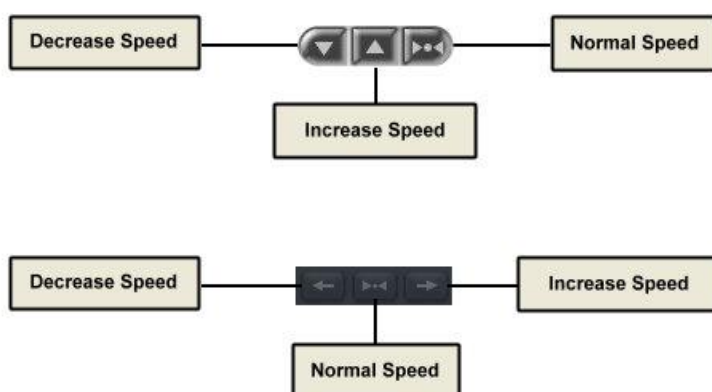
Use these buttons to set the two camera positions for auto-panning.





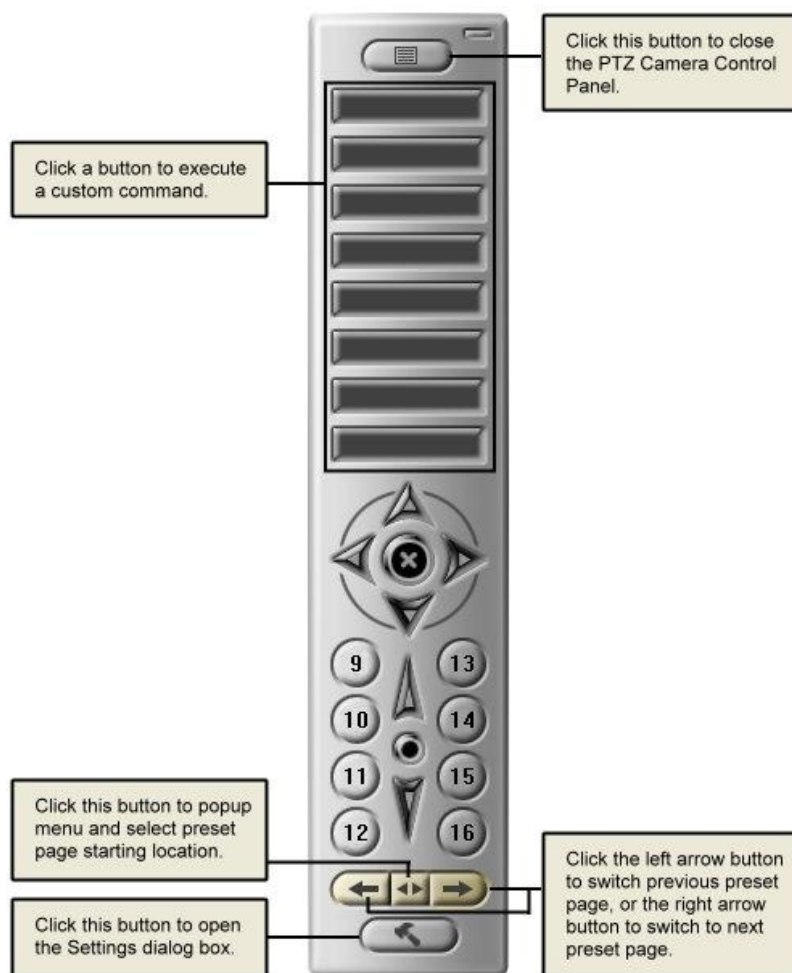
Auto-Pan Speed controls

Use these buttons to set the speed for auto-panning the PTZ camera.



Custom

Silver scheme version



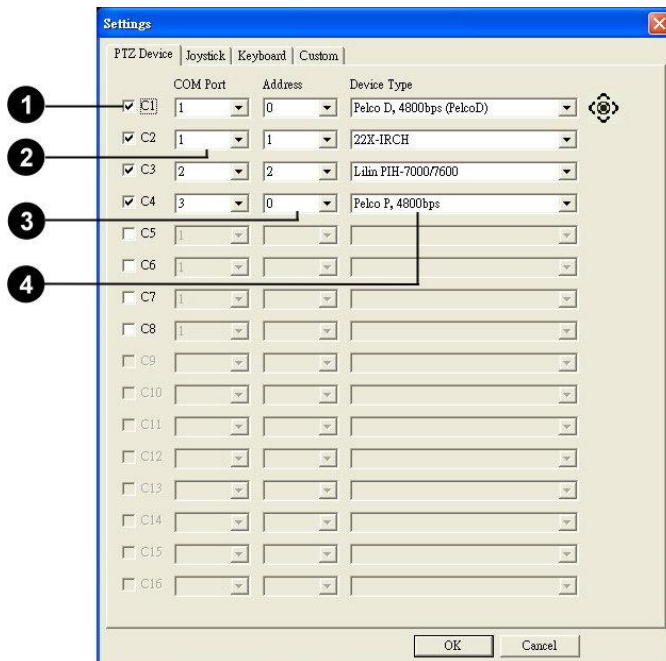
Black scheme version



Settings dialog box

The Settings dialog box allows you to activate/deactivate PTZ cameras and define advanced settings for these cameras.

PTZ Device



- 1** Video Input Ports (C1 - C16)

These indicate the total number of video input ports that are available in your capture card. For instance, if C1 to C4 are enabled and the remaining numbers are grayed out, this means that your capture card is only equipped with 4 video input ports.

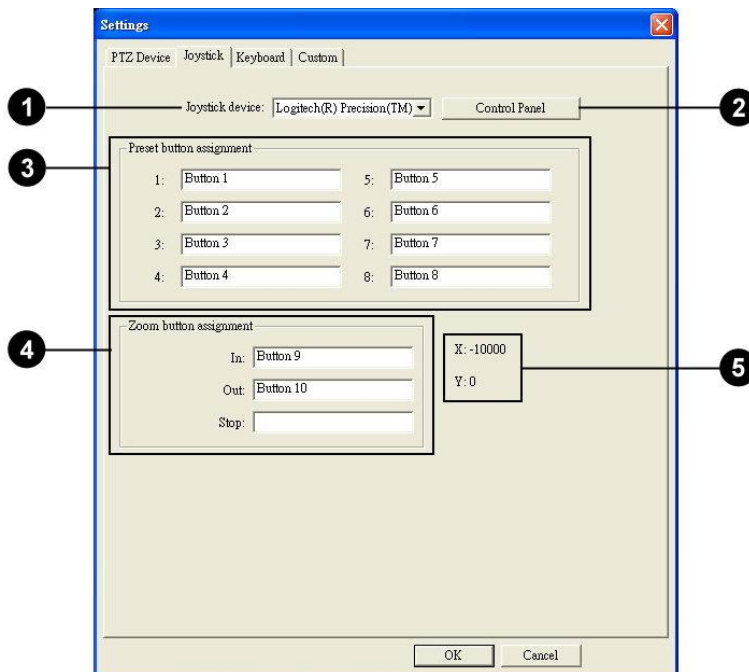
If you have PTZ cameras, you need to select which video input ports of the capture card the cameras' video cables are plugged into. If you select the incorrect check boxes, you will not have access to the PTZ cameras.
- 2** COM Port

Select the proper COM port on the Site Server computer where a PTZ camera's control cable is connected to.
- 3** Address

If there are multiple interconnected PTZ cameras that share the same COM port, specify each PTZ camera's address ID. Note: The address ID is set on the PTZ camera device, and must be unique for each device.
- 4** Device Type

Select the brand/model name of the PTZ camera.

Joystick Device



- 1** Joystick device

If the computer is installed with a joystick device, you can use the joystick to control a PTZ camera. Select the joystick device from this drop-down list to customize it
- 2** Control Panel

Click this button to open a Control Panel where you can test the selected joystick device.
- 3** Preset button assignment

The numbers in this group box represent the eight preset camera angle positions. You can assign different joystick buttons to each of these preset positions.
- 4** Zoom button assignment

Here, you can assign different joystick buttons for zooming in, zooming out, and pausing camera zoom.
- 5** X: Y:

Displays the current coordinate position of the joystick movement.

Keyboard

The screenshot shows the 'Settings' dialog box with the 'Keyboard' tab selected. The dialog has four main sections, each indicated by a numbered circle (1-4) on the left:

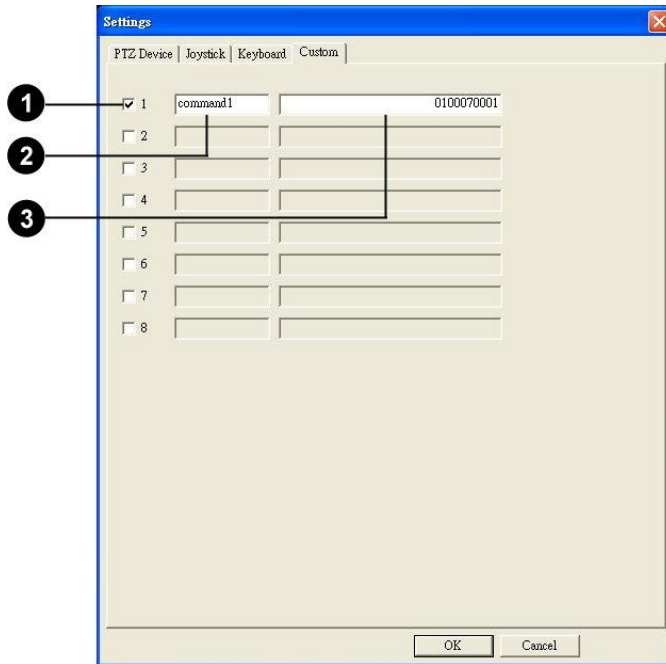
- 1** ☒ Enable keyboard control
- 2** **Movement**
 - Pan left: Left
 - Pan right: Right
 - Tilt up: Up
 - Tilt down: Down
 - Stop: End
- 3** **Zoom**
 - In: +
 - Out: -
 - Stop: Home
- 4** **Preset positions**
 - Preset 1: Num 1
 - Preset 2: Num 2
 - Preset 3: Num 3
 - Preset 4: Num 4
 - Preset 5: Num 5
 - Preset 6: Num 6
 - Preset 7: Num 7
 - Preset 8: F11

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

- 1** **Enable keyboard operation** Select this option if you want to operate the PTZ camera through a keyboard.
- 2** **Movement** Assign the desired keys to use for controlling camera movement such as pan, tilt, and pause. To assign, first click your mouse inside the text box, then press the desired key. For instance, if you want Pan Left to be assigned with the Left Arrow key, simply press this key in the provided text box.
- 3** **Zoom** Assign the desired keys to use for zooming in, zooming out, and pausing camera zoom. Simply press the key you want to assign in the provided text box.
- 4** **Preset positions** The preset numbers in this group box represent the eight preset camera angle positions. You can assign a different key to each of these preset positions by simply pressing the desired key in the provided text box.

Custom


This is where you can customize the buttons in the Custom panel and assign PTZ commands to each button. You can define up to eight buttons.



- 1** Button number Select a number to customize a button.
- 2** Button name Specify a descriptive name for each button, which will appear on the Custom panel.
- 3** Command Enter the custom command in the provided text box. PTZ control commands are hexadecimal strings, and different PTZ camera manufacturers provide different sets of control commands. You can get the control command list from the PTZ camera manufacturer or download from the manufacturer's Web site.

Direct PTZ Control



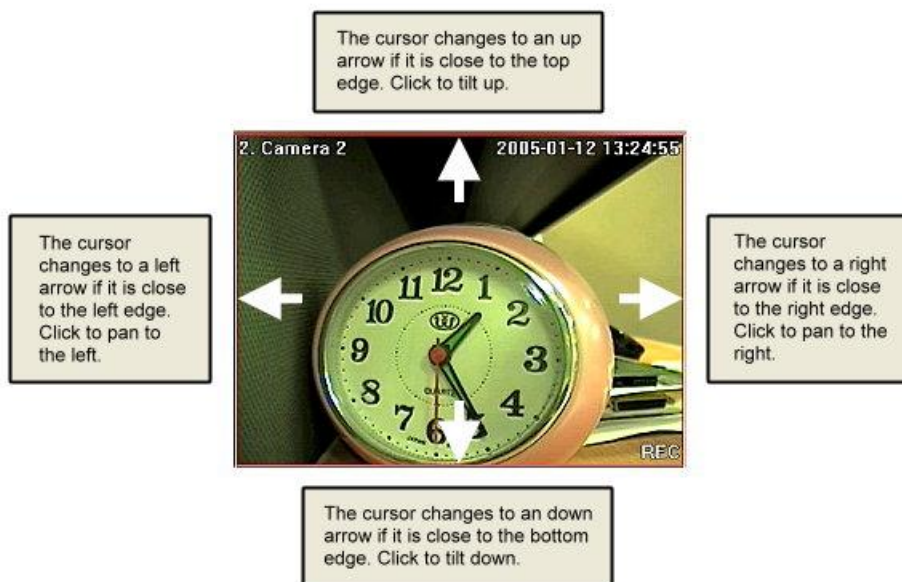
The Direct PTZ Control allows you to adjust camera angle position and zoom ratio on the video screen directly. Click the  button to enable/disable the On-screen PTZ Control mode. Before operating a PTZ camera, click a PTZ camera split screen to select it first.



Basic Operation

Basic operation is available to all PTZ cameras.

Pan/tilt Movement



Wheel Zoom

Scroll the mouse wheel forward/backward to zoom in/out the PTZ camera.

Advanced Operation

Advanced operation is available to some advanced PTZ cameras.

Click to Move


When you click a position on the PTZ camera video screen, the PTZ camera adjusts its angle position automatically and moves the clicked position to the center of the camera video screen.

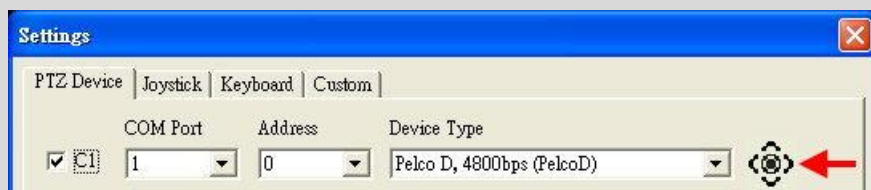
Note: Because of the mechanical limitation of pan and tilt angle range, the clicked position might not be right at the center of the camera video screen.

Drag to Move and Zoom

When you click and drag your mouse over an area on the PTZ camera video screen, the PTZ camera adjusts its angle position automatically and moves that area to the center of camera video screen, and then zooms in the area.

Note:

- Advanced operation is available to the following dome cameras:
 - Dynacolor dome camera
www.dynacolor.com.tw/english
Model: 7725
 - Pelco dome camera Spectra III.
www.pelco.com
Model: Spectra III SE and Spectra III series
- If the dome camera supports advanced operation, an icon  will be displayed right beside its settings in the Preferences dialog box - PTZ Device tab.





Auto-tracking

Auto-tracking is an innovative functionality that enables PTZ cameras to track moving objects on live video. Right-click on a split screen, then on the pop-up menu that opens, click PTZ Auto Tracking. This opens the Auto-tracking dialog box where you can set up how to track moving objects.

For more information about how to set up auto-tracking, see Appendix later in this chapter.

Monitoring a Site in Map Mode




To create a graphical layout of the site being monitored, switch to Map mode. Map mode allows you to load a picture of the entire site being monitored and insert device icons on the picture to indicate the locations where video cameras, sensors, and/or alarm devices are installed in the site. This can help you to instantly identify the location where detected events occurred and take immediate actions when necessary.

To switch to Map mode, click . Then, click  to switch to Map Edit mode and start creating a map layout of the monitored site.


Creating a site map

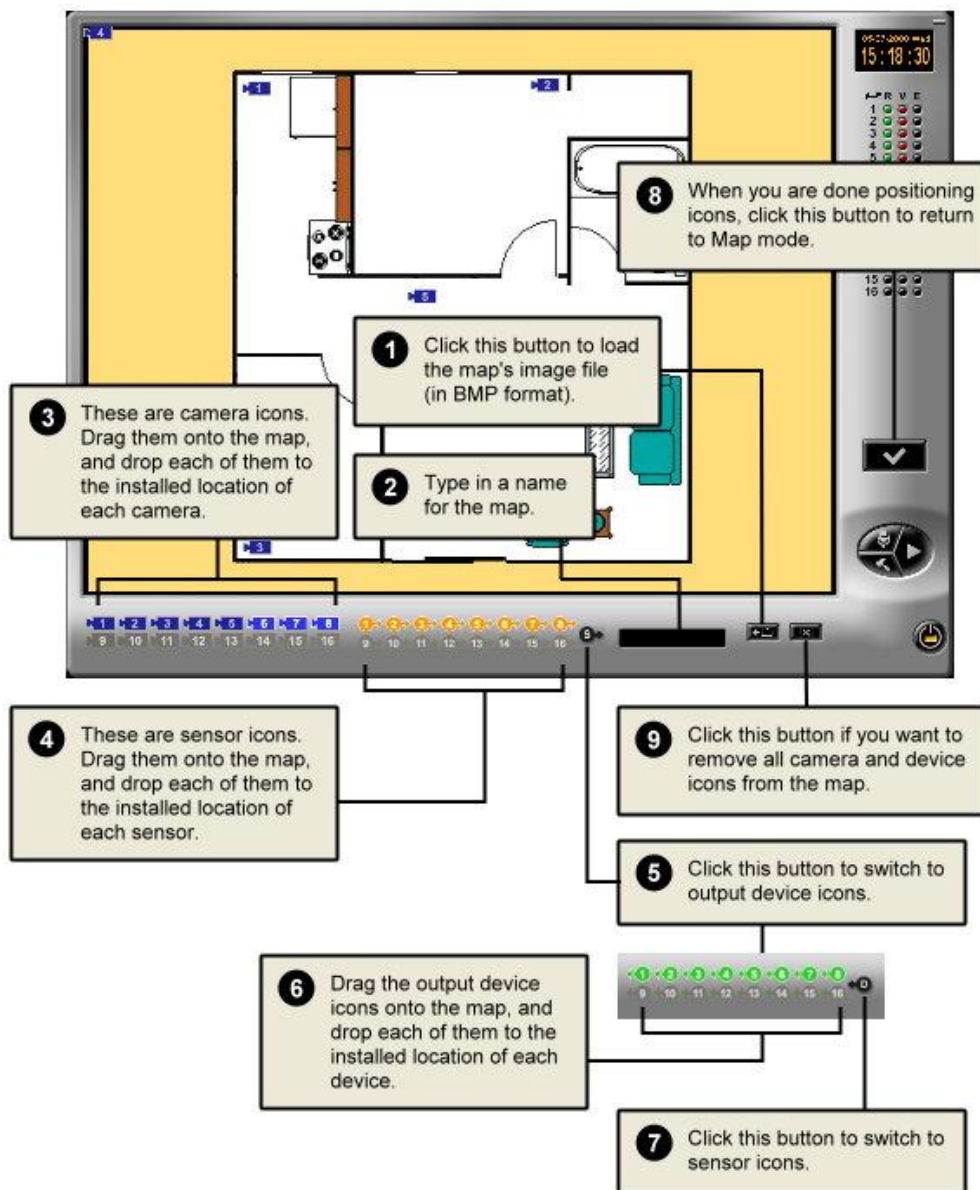
To create a map layout in Map Edit mode, place the camera, sensor, and output device icons on the site map according to their actual installed locations. See the figure next page for step- by-step instructions.

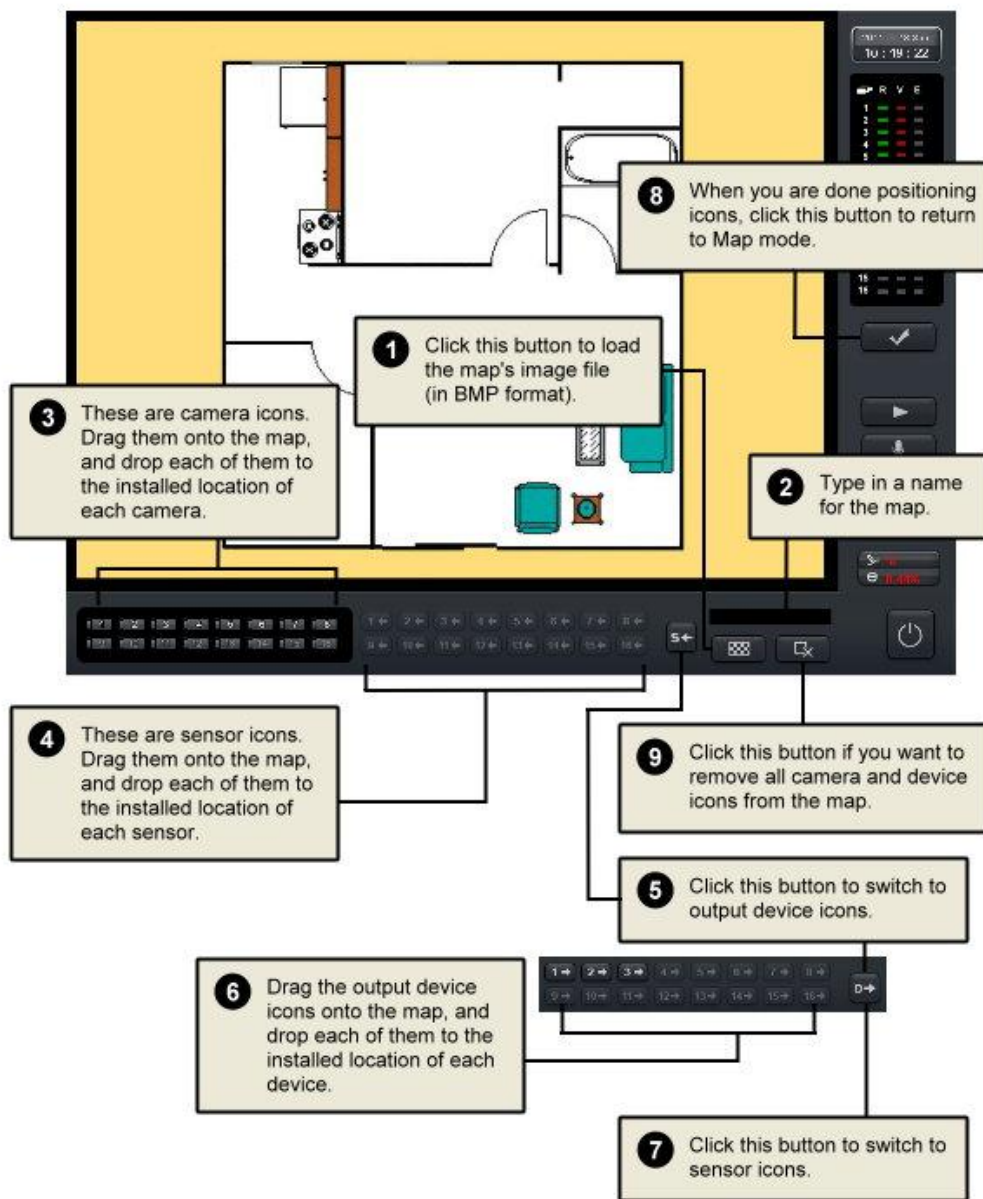
While you are adding camera icons onto the map, you may notice that their colors vary. Camera icons may appear in one of these three colors:

-  In gray color, indicates that there is no video camera connected.
-  In light blue color, indicates that there is a video camera connected but the corresponding camera icon has not yet been plotted on the site map.
-  In dark blue color, indicates that there is a video camera connected and the corresponding camera icon has already been plotted on the site map.

While positioning an icon, you can remove an icon from the map by dragging that icon out of the map.

If you want to start all over and add icons to the map, click . This clears all icons from the map.

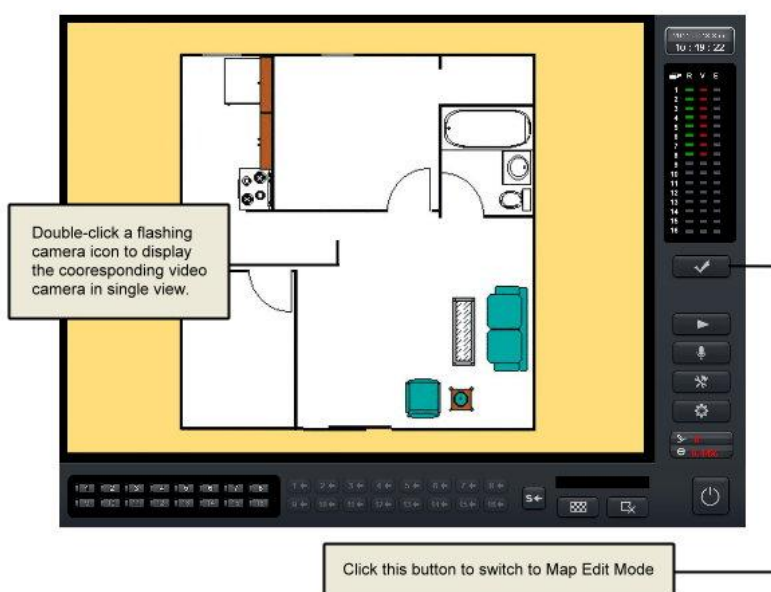
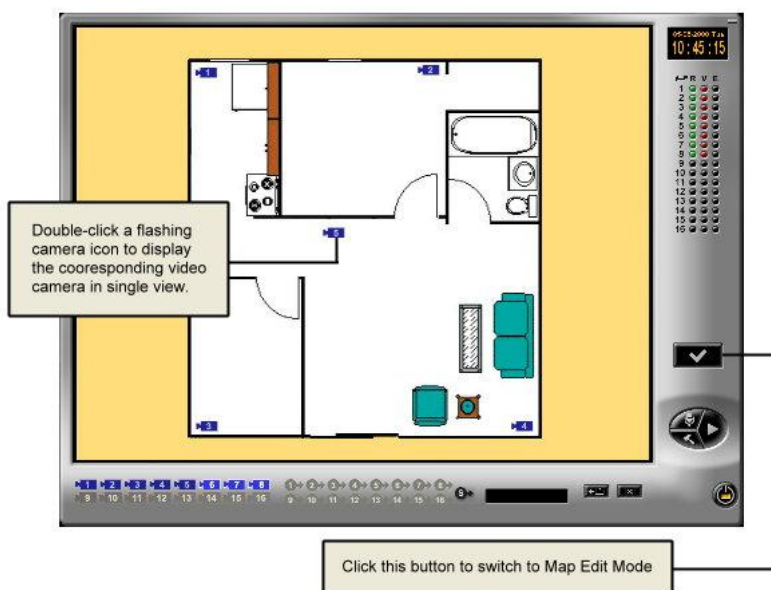






Viewing the site map

Once the site map is complete, you will be able to easily pinpoint locations where detected events occurred by watching out for flashing icons on the site map.

Whether it is a video camera, sensor or output device that has been triggered by an event, its corresponding icon on the map flashes. You can double-click on the camera icon to switch to single view and see what is happening live at the site.



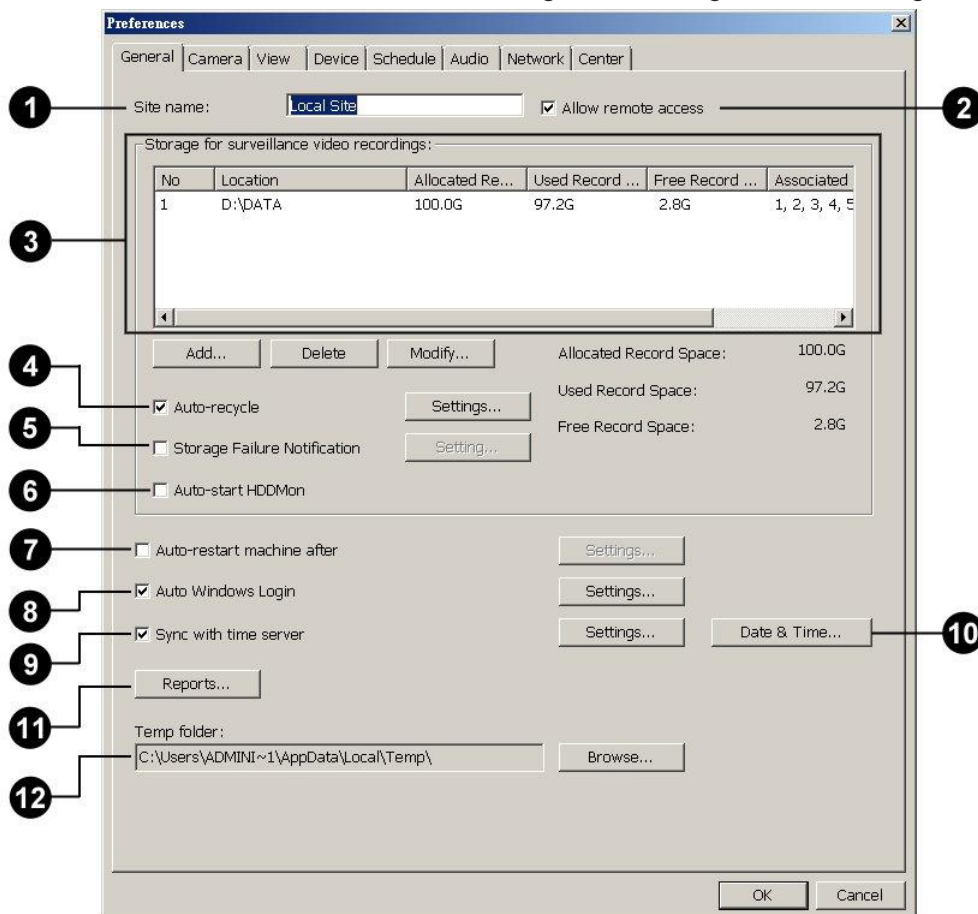
Configuring the Site Server

Click  in silver scheme or  in black scheme on the Site Server program to open the Preferences dialog box and choose which video cameras and sensors to monitor, enable/disable output devices (such as alarms), and set up Site Server to perform motion detection, digital video recording, scheduled surveillance, and other tasks.

The succeeding sections explain how to configure settings in the Preferences dialog box.

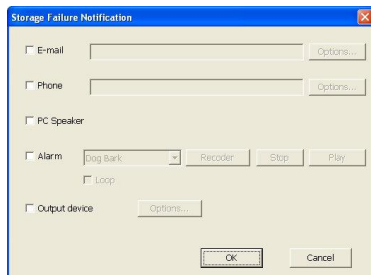
General settings (General tab)

Click the General tab in the Preferences dialog box to configure the following settings:



- 1 Site name
Type in a name for identifying the monitored site (for instance, the location name).
- 2 Allow remote access
Select this option if you want to enable other users to remotely monitor the site from Internet, Intranet or direct modem connection.
- 3 Storage for surveillance video recordings
Allocate disk drives and folders for saving digitally recorded videos.
- 4 Auto-recycle
Select this option to automatically delete old recordings or counting database to free up disk space. See "Auto recycling disk storage space" for details.

5 Storage Failure Notification



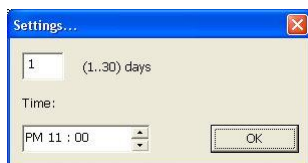
When this function is enabled, it will have notification while video recordings fail to write into storage.

This notification provides E-mail, Phone call, PC Speaker, Alarm sound and Output device alarms.

6 Auto-start HDDMon

Select this option to run HDDMon program automatically after Site server is started.

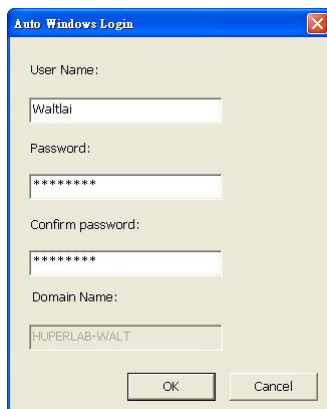
7 Auto-restart machine after



Select this option to enable the Site Server computer to be restarted after a specified length of time.

Click Settings to specify the number of days to elapse as well as the startup time.

8 Auto Windows Login



Select this option to log into Windows automatically when the DVR server is booted or restarted. To be able to do so, you need to click Settings and specify the valid user name and password as well as the domain name for login.

9 Sync with time server



Specify the time server related settings.

- | | | |
|-----------|-------------|---|
| 10 | Date & Time | Specify the current date and time. |
| 11 | Reports | Generate and e-mail reports about detected events periodically - in a daily, weekly, or monthly basis. (See "Scheduling reports" for more details.) |
| 12 | Temp folder | This folder stores temporary files generated by the Windows system and the Site Server program. You can use the default folder, or click Browse to choose another folder. |

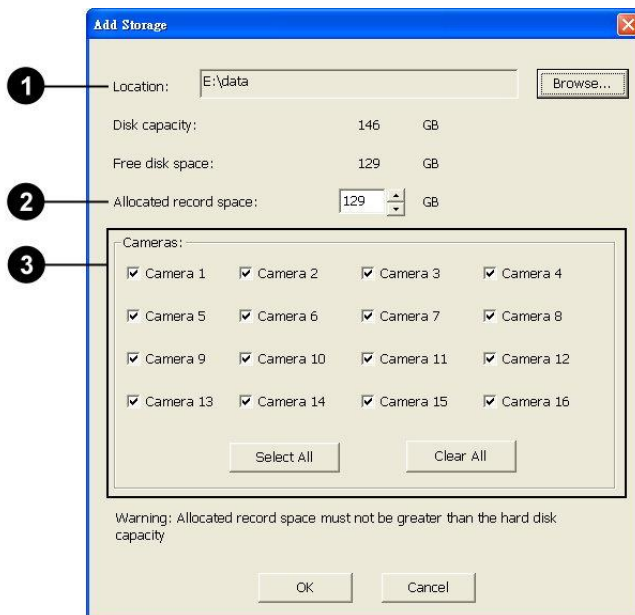
Assigning disk storage

To digitally record live video, disk storage needs to be allocated for saving the recordings.

To assign disk storage for storing video recordings:

1. Create a "Data" folder at each hard drive where your video recordings will be stored.
2. Click  in silver scheme or  in black scheme to open the "Preferences" dialog box.
3. Click the General tab.
4. Click the Add button to open the Add Storage dialog box. (See "Add Storage dialog box" on the next page.)
5. Click the Browse button to select the "Data" folder of a hard drive.
6. Click the OK button to close the Add Storage dialog box.
7. The assigned hard drive and its data folder will then be displayed under the Storage for surveillance video recordings list.
8. Repeat steps 4 to 6 to add more data folders to be used for storing video recordings.
9. Click the OK button in the Preferences dialog box to confirm and use the modified settings.

Add Storage dialog box



- 1** Location

Specify the folder location to use for saving recordings. To choose a folder, click Browse.

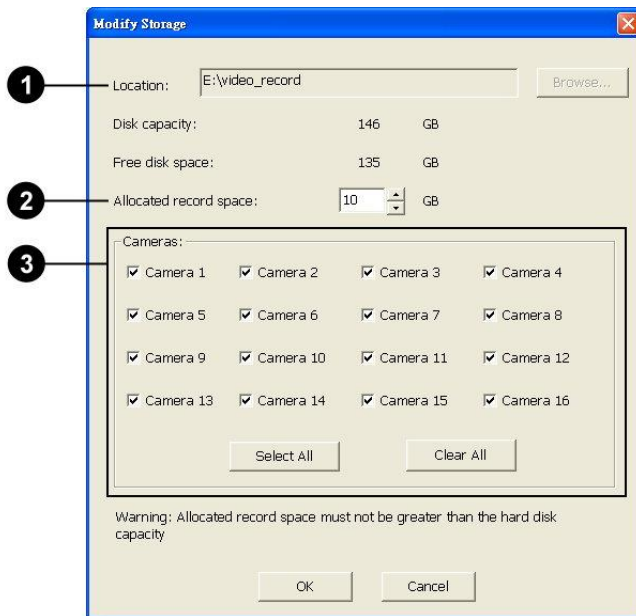
Note: A root folder cannot be used to save recordings. Please create a subfolder inside the root folder.
- 2** Allocated record space

Specify the amount of disk space to allocate to the selected folder. If you add a folder that is not in the storage list and it contains previous video recordings, the default maximum record space is the total file size of the video recordings inside the selected folder.
- 3** Cameras

Select the checkboxes of the cameras whose recordings you want to save to the selected folder. Click the Select All button to select all checkboxes. Click the Clear All button to deselect all checkboxes first before selecting the desired checkboxes.

Modify Storage dialog box

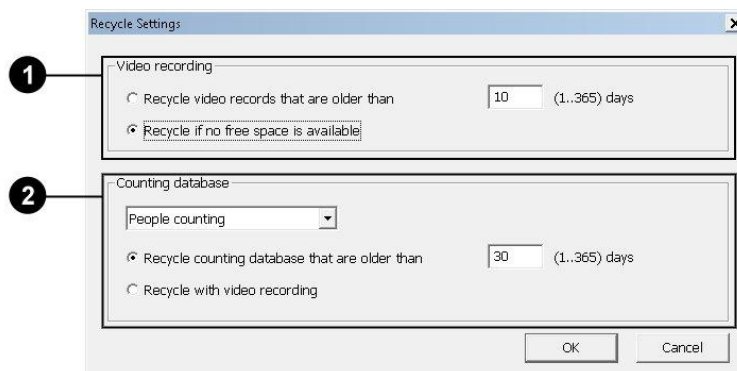
To change the assignments of a folder, click on its item number, then click Modify and make your changes in the Modify Storage dialog box.



- 1 Location The folder location cannot be changed. (The only way to change the folder is to delete it and add a new folder.)
- 2 Allocated record space The allocated disk space can be increased or decreased.
- 3 Cameras Camera assignments can be changed by selecting/deselecting checkboxes.

Auto recycling disk storage space

Allocate as much disk space as necessary for saving digital recordings, but take note that video files are large in size and may eat up disk space fast. When the "Auto-recycle" option is selected, Site Server deletes old recordings and frees up disk space for reuse. Click the Settings button to open the Recycle Settings dialog box and specify how to recycle used disk space.



1 Video Recording

Recycle video records
that are older than

Select this option to automatically delete video records that are older than the specified number of days and use the freed storage for saving new recordings. Enter the number of days to retain before deleting old video records. It can be from 1 to 365 days.

Recycle if no free
space are available

Select this option to automatically recycle disk storage when there is no more free space in the assigned storages for saving new recordings.

A single recycling instance can free up 100MB for your record storage.

2 Counting database

Counting type menu

Select counting database to recycle from this menu.

Recycle video records
that are older than

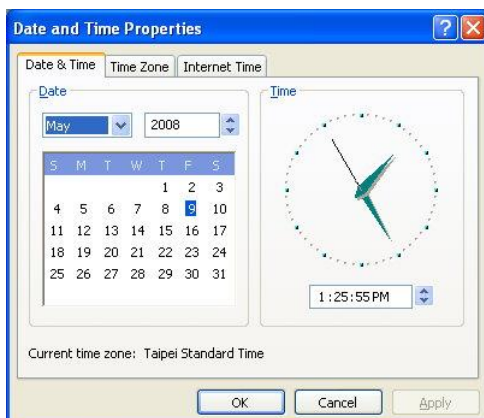
Select this option to automatically delete counting database that are older than the specified number of days and use the freed storage for saving new recordings. Enter the number of days to retain before deleting old video records. It can be from 1 to 365 days.

Recycle with video
recording

Select this option to automatically delete counting database according to the video recording recycle settings.

Setting the date and time

If the system's date and time are not configured correctly, click the Date & Time button to make proper adjustments. This is crucial for Site Server to accurately record the date and time.



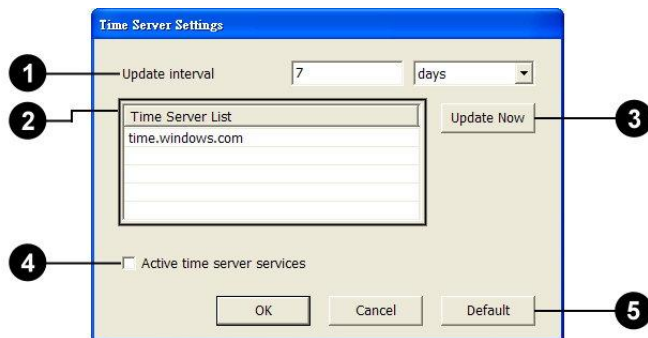
Scheduling reports

Site Server can send by e-mail periodic reports that show information about detected events. Click the Reports button to specify what types of events to include in the reports and to whom the reports will be sent.

- | | |
|--------------------------------------|---|
| 1 Daily/Weekly/Monthly report | Choose whether to send reports on a daily, weekly, or monthly basis. |
| 2 Events detected by | Select which events to include in the reports (that is, events which have been detected by the different methods of event detection such as Motion detection, Missing & left object detection, Sensor detection, Manual trigger, etc.). |
| 3 E-mail from | Specify the sender's e-mail address. |
| 4 E-mail to | Specify the recipient's e-mail address. If there are multiple recipients, separate each of their e-mail addresses with a semicolon. |
| 5 Report Time | Choose the time of day when to send the report. |

Synchronizing with time server

Site Server can send by e-mail periodic reports that show information about detected events. Check the Sync with time server option and click the Settings button to specify which time server to be synchronized or enable Windows time server services to be connected with other DVR sites.



- | | | |
|----------|-----------------------------|---|
| 1 | Update interval | Specify the update interval with the connected time server. |
| 2 | Time server list | List of time server to be synchronized. To edit this list, just double-click the column and modify the contents. |
| 3 | Update now | Click this button to update system time immediately. |
| 4 | Active time server services | Check this option to enable Windows time server services that make this DVR site as a time server to be connected and synchronize system time with other DVR sites. |
| 5 | Default | Click this button to set all options in this dialog to default values. |

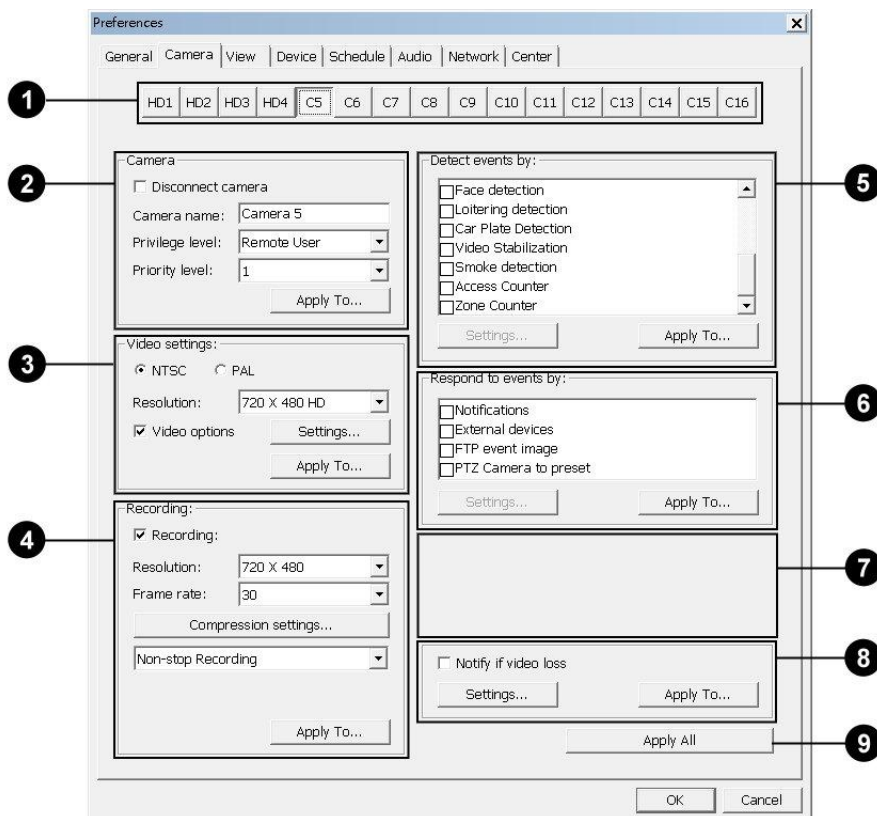
Video camera settings (Camera tab)

Click the Camera tab in the Preferences dialog box to configure settings for up to 16 video cameras. Each camera is identified by a camera number (C1 to C16). Click each camera button to set up options for a video camera.



In each group box under the Camera tab, there is an Apply To button. Click this button if you want the same settings in a group box to be applied to other video cameras as well. The Camera Selection dialog box will open where you can choose the video cameras to which the group box settings will be applied.

Note: The settings and masks you specified in smart detection methods cannot be applied to multiple selected cameras since each camera has a different video scene.



- 1** Camera buttons

Each button corresponds to a video camera. Click a button to configure settings for a video camera.
- 2** Camera

This group box provides general camera settings.

Disconnect camera

Select this option to disable the connection to a camera and stop all tasks. Clear this option to re-establish camera connection.

Camera name

Type in a name for identifying a video camera (for instance, the location where the camera is installed).

Privilege level

Assign each camera with a privilege level to restrict unauthorized users from viewing the camera. (Refer to the section " Account Manager" for details on the different privilege levels.)

Priority level

The priority level determines which video camera will be given the highest priority and displayed in single view when multiple simultaneous events have been detected from several cameras. The range for priority level is from 1 to 16, level 1 being the highest priority.
- 3** Video settings

This group box provides video display settings.

Resolution

Choose the desired video resolution and video standard (NTSC or PAL) to display live video.

Video options

Define live video display settings.
- 4** Recording

Specify the method of recording to use. It is possible to set the recording resolution (smaller resolution) different from the value in the Video settings group.
- 5** Detect events by

Select the methods to use for detecting events. See "Methods of detecting events" for details.
- 6** Respond to events by

Set up how Site Server will react to detected or manually triggered events.

- 7** Wide dynamic vision

Select this option if you want to enhance the on-screen display of live camera video. There are three types of enhancements that can be adjusted: Visibility enhancement, Sharpness, and Noise reduction.
- 8** Notify if video loss

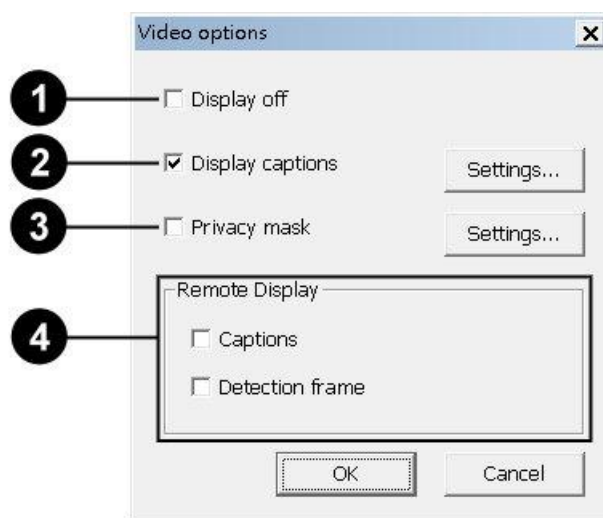
Select this option if you want to be notified when there is a video loss problem with the cameras.
- 9** Apply All

Click this button to use the same camera settings (except for the camera name) for all video cameras.

Note: Basic de-interlace processing is applied to 640x480, 720x480 and 720x576 resolutions, whereas advanced de-interlace processing is applied to the following high-definition resolutions: 640x480 HD, 720x480 HD and 720x576 HD. Advanced de-interlacing improves the video quality in scenes that contain fine details, however, it consumes more CPU power.

Configuring video options

To set video options (such as captions, privacy mask, etc.) on the split screens, select the "Video options" option and click Settings.



- 1** Disable local video display to save CPU usage

Disable video live display to save system resource. Used for the system that is no need to display.
- 2** Display captions

Select the checkbox and click Settings button to add captions on split screens.

3 Privacy mask

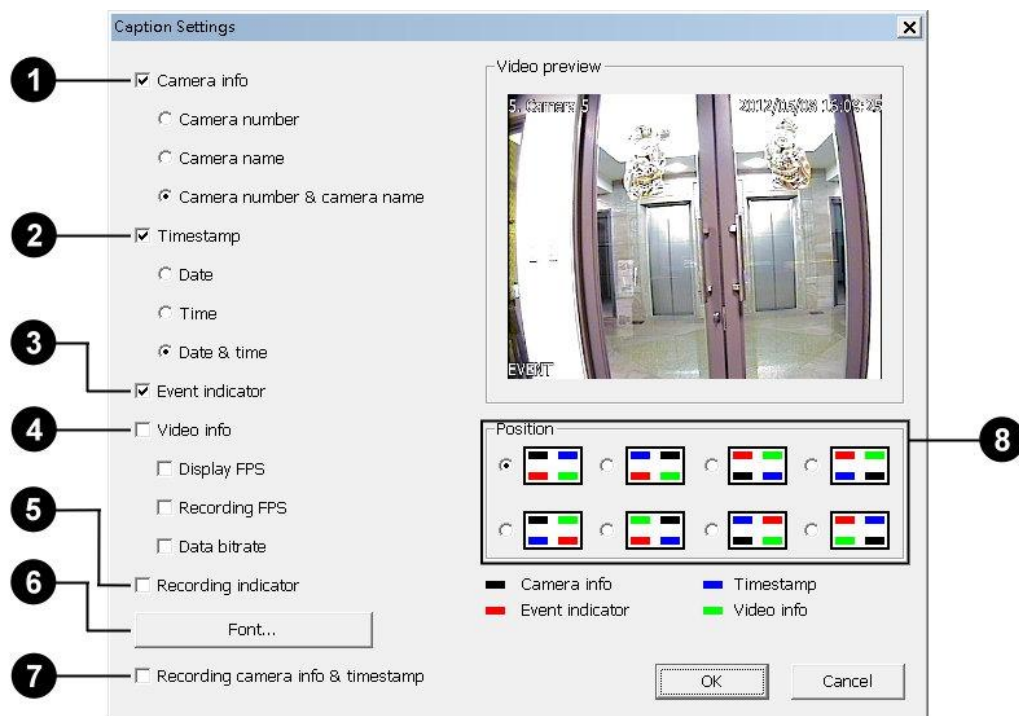
Select the checkbox and click Settings button to add privacy mask on split screens.

4 Remote display

Check display options for huperLab's remote applications like Web Remote, huperRemote...etc.
 Captions: Display captions according to settings of captions settings. Only camera info + timestamp are displayed for remote applications.
 Detection frame: Display detection frames from video analytic

Configuring caption settings

To set caption options (such as camera name, number, etc.) on the split screens, select the "Display captions" option and click Settings.



1 Camera info

Display camera information by:
 camera number / camera name / camera number & camera name

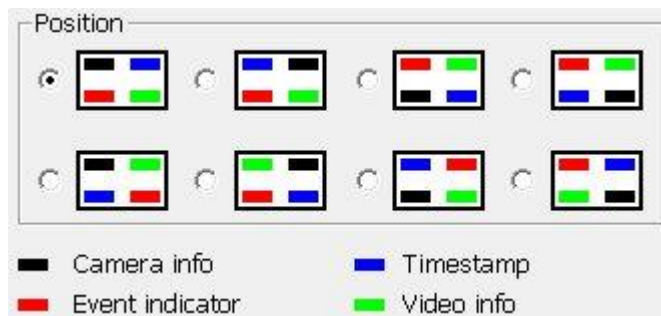
2 Timestamp

Display timestamp by:
 date / time / date & time

- 3 Event indicator Pop up indicator when there is an event.
- 4 Video info Display video data information:
Display FPS: live video frame rate
Recording FPS: recording frame rate
Data bitrate: recording data rate
- 5 Recording indicator Display recording indicator
☒ : recording is on
☐ : recording is off
- 6 Font Click this button to select a font face, font size, and font style to use for captions.

Note: The selected font will be displayed in the actual font size only when the video dimension is set at 640x480. If, for instance, 32-point is the selected font size and the video dimension is set at 320x240, font will be scaled down to 16-point size.

- 7 Recording camera info & timestamp Check this option to record camera info & timestamp into recording file.
- 8 Position Select caption layout from 8 pre-defined positions.






Customizing privacy mask

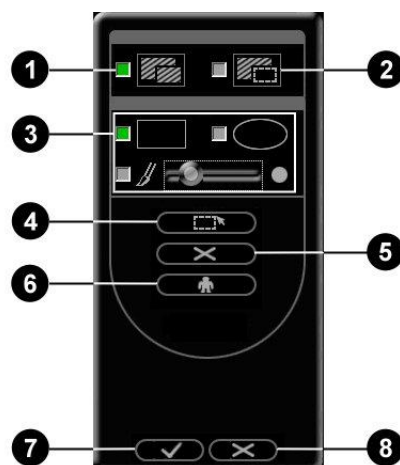
Privacy mask allows user to mask certain areas in the surveillance video for privacy protection.

Follow the steps below to setup Privacy Mask and create exclusive area:


1. Open the Preferences dialog box and click the Camera tab.
2. Select a camera for which you want to set up privacy mask by clicking its camera number.
3. In the Video settings group box, select the Video options checkbox, then click the Settings button. The Video options dialog box appears.
4. In the Video settings dialog box, select the Privacy mask checkbox, then click the Settings button. The Privacy mask dialog box appears.

5. Click  to expand the drawing panel and reveal the complete button controls for setting up detection area.
6. Click  to temporarily freeze the live video and make it easier for you to draw your detection area.
7. Click a starting point on the video, then drag your mouse to draw an exclusive area.
8. Click the Apply button  to apply mask areas to the chosen camera.


The Privacy Mask dialog



- 1** Add mask




Select this option to add a mask. Use the drawing tools to draw the mask.
- 2** Subtract mask




To add back parts from a masked-out area and include them during detection, select this option. Use the drawing tools to erase the mask.
- 3** Drawing tools

Use one of the following drawing tools to draw masks:


 - Rectangular mask




Select this tool to draw a rectangular-shaped mask. Drag your mouse over an area on the video to draw the mask.
 - Elliptical mask




Select this tool to draw an elliptical -shaped mask. Drag your mouse over an area on the video to draw the mask.
 - Draw by Brush




Select this tool to draw a freeform-shaped mask. Drag the slider to the right to have larger-size brush strokes, or drag to the left to have smaller- size strokes. To draw the mask, drag your mouse over an area on the video.
- 4** Mask All




Click this button to mask out the whole video and then switch to the Subtract-mask mode automatically.
- 5** Clear Masks




Click this button to erase all the masks and then switch to the Add-mask mode automatically.
- 6** Freeze Video



Click this button to freeze the live video.
- 7** Apply



Click to apply the modified settings.
- 8** Cancel



Click this button if you change your mind and do not want to apply the modified settings. The Privacy mask dialog box then closes and reuses the previous settings.

Digital recording

Select the "Enable recording" option to enable digital video recording. Choose the desired recording method from the drop-down list.

Recording:
☒ Recording:
 Resolution: 320 X 240
 Frame rate: 30
 Compression settings...
 Non-stop Recording
 Non-stop Smart Recording
 Event Recording
 Time-lapse Recording

There are 4 recording methods:

Non-stop Recording

Allows round-the-clock digital recording.

Event Recording

Records only detected events. (See "Specifying the methods for detecting events for details" on the different methods of detecting events.)

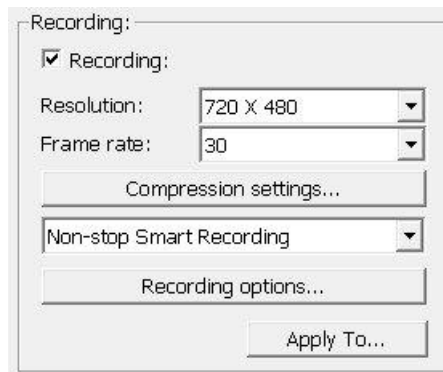
Recording:
☒ Recording:
 Resolution: 320 X 240
 Frame rate: 30
 Compression settings...
 Event Recording
☒ Pre-event recording
 5 (1..10) sec. Apply To...

If you select the Pre-event recording option, video recording can be started before the detected event has actually occurred. You can capture from 1 up to 10 seconds of video prior to the event.

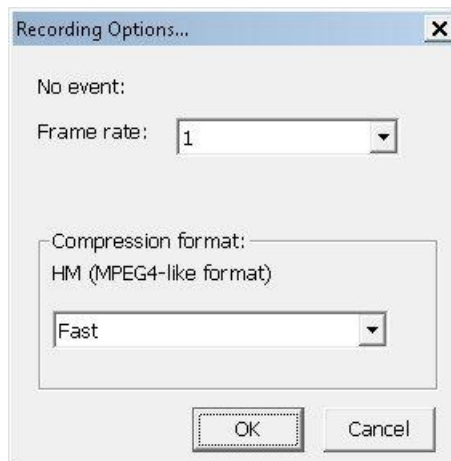
Note: Enabling pre-event recording may increase the video recording size.

Non-stop Smart Recording

Records live events in full recording speed. If no event has been detected, by default, the recording frame rate will be 1 frame per second. If there is an event detected, details of the event will be captured in full recording speed.

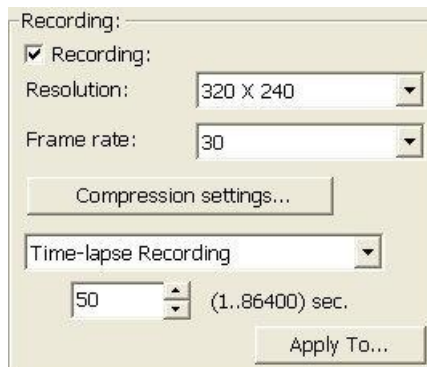


You can also change the no event frame rate & compression by pressing Recording options button.



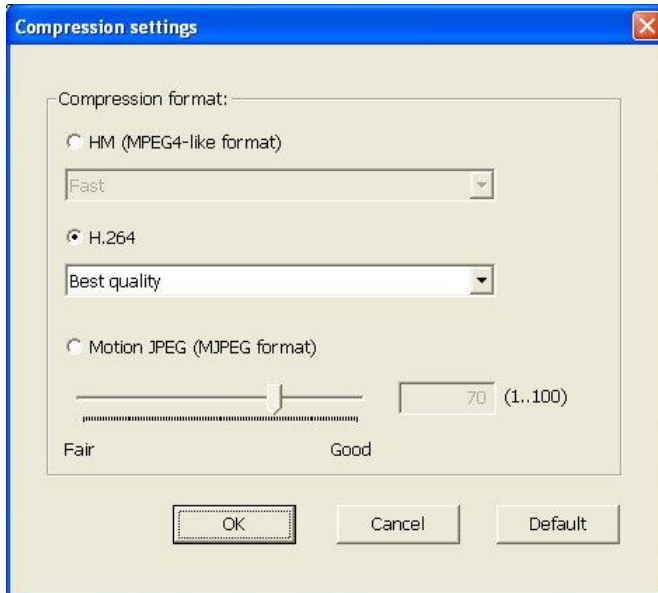
Time-lapse Recording

Records video with specified frame rate below 1 fps. The range can be from 1 frame per second to 1 frame per day (86,400 seconds).



Specifying compression settings

In the Recording group box, click the Compression settings button to define compression settings.



There are 3 compression methods:

HM This is HuperLab's proprietary format for compressing video data. It has three levels of video quality you can choose from:



- Fast quality is the default. It offers the quickest recording speed and moderate file sizes. However, it provides the least video quality.
- Good quality gives you moderate video quality and the smallest file sizes. It offers moderate recording speed.
- Best quality offers the highest video quality. However, recording speed is slow and recordings have extremely large file sizes.

H.264

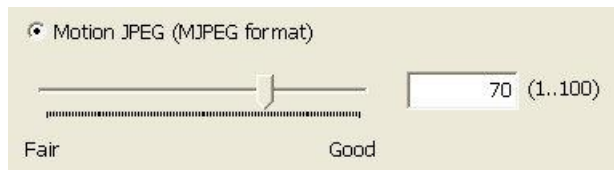
This is H.264 format for compressing video data. It has five levels of video quality you can choose from:



- Fast quality is the default. It offers the quickest recording speed and moderate file sizes. However, it provides the least video quality.
- Compact quality offers the same recording speed and file size as Fast quality. It consumes more CPU power to increase compression ratio.
- Good quality gives you moderate video quality and the smallest file sizes. It offers moderate recording speed.
- Better quality offers higher video quality. However, recording speed is slower and recordings have larger file sizes.
- Best quality offers the highest video quality. However, recording speed is slow and recordings have extremely large file sizes.

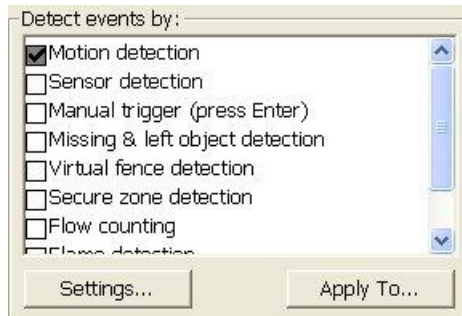
Motion JPEG

This records video in Motion JPEG format. The video quality is adjustable, ranging from value 1 to 100. The higher the value, the better is the video quality.



Methods of detecting events

Under the Detect events by group box, select the checkboxes of the methods to use for detecting events.



There are several methods for detecting events:

Motion detection	This allows video cameras to detect the presence of movement from a sequence of consecutive video frames. Click Settings to open a dialog box where you can adjust the sensitivity level, noise tolerance, and more. For more details, see "Motion detection" in Video Analytics chapter.
Sensor detection	This allows sensors in the site to monitor and detect suspicious activities. Click the Setting button to choose which sensors in the site will be used for detection. Note: The sensor names here cannot be modified.
Manual trigger	This allows you to manually monitor activities in the site. You can press "Enter" to log and/or digitally record ongoing activities. Note: Manual event duration is predefined in seconds.
Missing/left object detection	This method detects for objects that have been taken out of the scene, or detects for suspicious objects that have been left on the scene. For more details, see "Missing/left object detection" in Video Analytics chapter.

Virtual fence detection	This method detects for possible intrusions along a borderline. You can specify one or more borderlines on a site where you want to detect for suspicious people who trespass, or detect moving objects that passed by in the wrong way (for example, vehicles that went in the opposite direction in a one-way street). For more details, see "Virtual fence detection" in Video Analytics chapter.
Secure zone detection	This method detects for intrusions in forbidden areas. You can specify one or more areas where people or objects are not allowed to enter. For more details, see "Secure zone detection" in Video Analytics chapter.
Flow counting	This method counts the number of moving objects that pass by a predefined borderline. For more details, see "Flow counting" in Video Analytics chapter.
Scene change detection	This method detect abnormal scene in camera video. For more details, see "Scene Change Detection" in Video Analytics chapter.
Flame detection (Optional)	This method detects for flames. For more details, see "Flame detection" in Video Analytics chapter.
Flame detection pro (Optional)	This is the Professional version for Flame Detection. For more details, see "Flame Detection Pro" in Video Analytics chapter.
People counting (Optional)	This method counts the number of moving people that pass by a predefined detection area. For more details, see "People counting & people counting pro" in Video Analytics chapter.
People counting pro (Optional)	This pro version adds enhancement feature in crowded people saturation and slightly improve the result with light shadow. For more details, see "People counting & people counting pro" in Video Analytics chapter.
Face detection (Optional)	This method detects face object in video and record in event database. For more details, see "Face Detection" in Video Analytics chapter.
Loitering detection (Optional)	This method detects object moving around in video and record in event database. For more details, see "Loitering Detection" in Video Analytics chapter.

Car plate detection
(Optional)

This method detects car plate object in video and record in event database. For more details, see "Car Plate Detection" in Video Analytics chapter.

Video stabilization
(Optional)

This method analyzes and stabilizes surveillance video when the camera installed outdoors is shaking. For more details, see "Video stabilization" in Video Analytics chapter.

Smoke detection
(Optional)

This method detects for smokes. For more details, see "Smoke detection" in Video Analytics chapter.

Access counter
(Optional) **NEW**

This method counts how many times the specific area/object has been accessed. For more details, see "Access counter" in Video Analytics chapter.

Occupancy counter
(Optional) **NEW**

This method estimates the number of people occupying in the camera FOV. The system will alarm if any crowd is detected. For more details, see "Occupancy counter" in Video Analytics chapter.

3D counter
(Optional) **NEW**

This method counts the number of moving people that pass by a predefined detection area. Combine self-developed 3D algorithms and stereo camera to construct and analyze 3D video contents with greater precision. For more details, see "3D counter" in Video Analytics chapter.

Note: This option is only available with 3D stereo camera.

Responding to events

Site Server can be configured to automatically respond to detected or manually triggered events. There are four options:



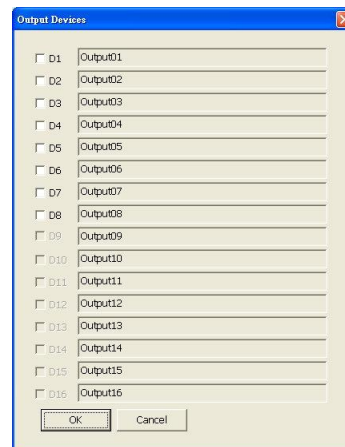
1 Notifications

Select this option to enable Site Server to send out notifications when events have been auto-detected or manually triggered. Click the Settings button to select the types of notifications to send. (See the next section, “Types of notifications” for more details.)

2 External devices

Select this option to enable Site Server to send out signals to external devices when events have been auto-detected or manually triggered. Click the Settings button to choose which external devices to send signals to.

Note: The external device names here cannot be modified.



3 FTP event image

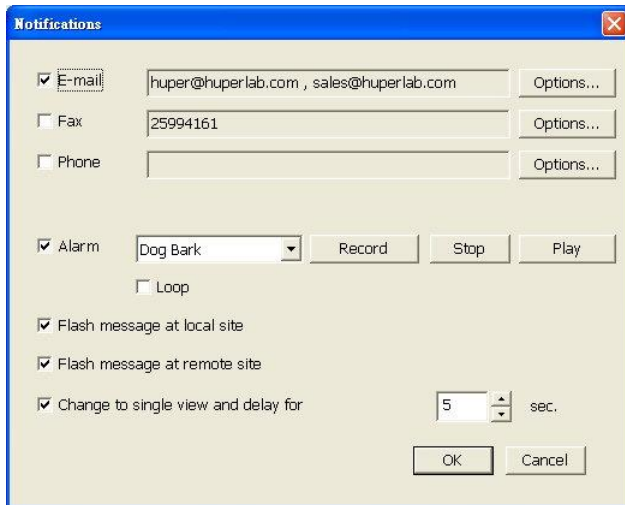
Select this option to allow uploading of sequences of snapshots to an FTP server when an event has been detected.

4 PTZ camera to preset

Select this option to allow any fixed surveillance camera to move one or more PTZ cameras to preset positions when there are motion detected, sensor detected, or manually triggered events.

Types of notifications

In the Notification dialog box, choose from the different types of notifications by selecting some or all of the checkboxes. For each selected type of notification, click its corresponding Options button to configure settings.



Notifications

☒ E-mail: Options...

☐ Fax: Options...

☐ Phone: Options...

☒ Alarm: Record Stop Play

☐ Loop

☒ Flash message at local site

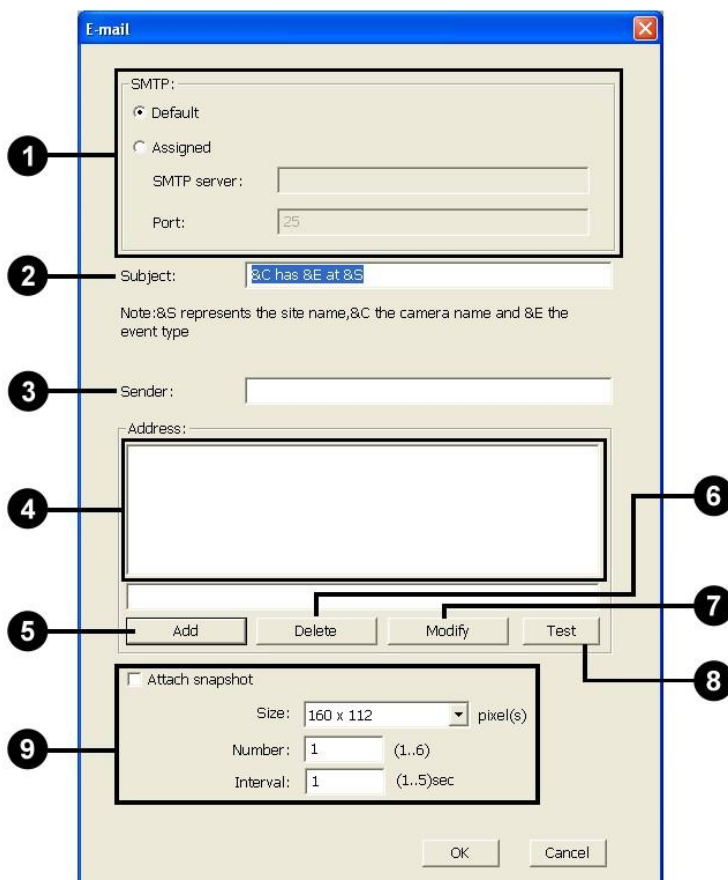
☒ Flash message at remote site

☒ Change to single view and delay for sec.

OK Cancel

■ Email

Send out an e-mail message. Configure the following settings to enable notification e-mails to be sent:



E-mail

1 SMTP:

- ☒ Default
- ☐ Assigned

SMTP server:

Port:

2 Subject:

Note: 8S represents the site name, 3C the camera name and 8E the event type

3 Sender:

4 Address:

5 Add Delete Modify Test

6 7 8

9 ☐ Attach snapshot

Size: pixel(s)

Number: (1..6)

Interval: (1..5)sec

OK Cancel

- 1** SMTP assignment Select Default to use huperVision built-in SMTP server emulation.
Select Assigned to specify SMTP Server address and port number to use.
- 2** Subject By default, the e-mail subject contains variables that will automatically be replaced with the site name, camera name and event type. If you want to specify your own e-mail subject, type your text in the provided text box.
- 3** Sender Specify the sender's e-mail address.
- 4** Address list Shows the e-mail addresses that will receive the event notification. Click on an e-mail address to select it for deletion or modification.
- 5** Add Enter the e-mail address of a recipient in the blank field above this button, then click this button to add the e-mail address to the Address list.
- 6** Delete Click this button to remove the selected e-mail address from the address list.
- 7** Modify To modify an e-mail address, first select that e-mail address in the address list, then make the changes in the edit box at the bottom. Click the Modify button to update the e-mail address.
- 8** Test Click this button to test sending an email.
- 9** Attach snapshot Select this option to include one or more snapshots of a detected event as email attachment.

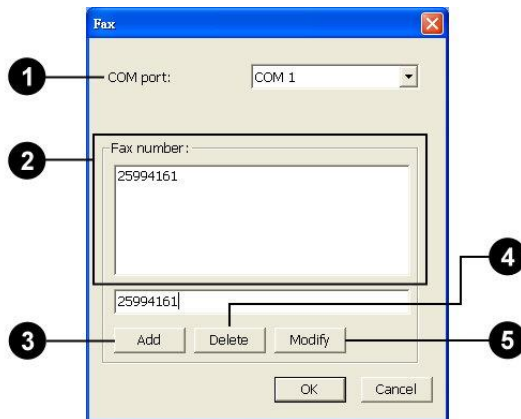
Size Set the image dimensions. Choose a larger size if the attachment is to be sent to another computer. If the image is to be sent to a mobile device such as a mobile phone, choose the appropriate size for the target device.

Number Set the number of snapshots to be attached. Maximum attachment can be up to 6 images.

Interval Set the time interval between snapshots. The interval can be from 1 up to 5 seconds.

■ Fax

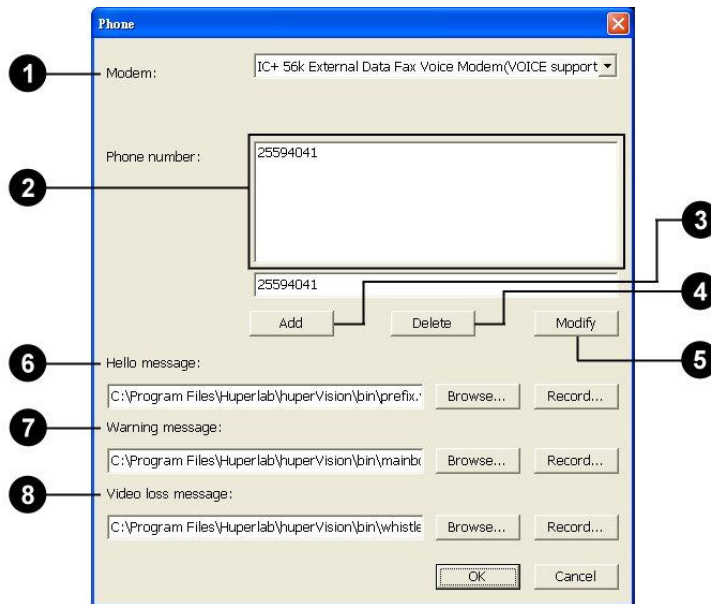
Send out a fax message. Configure the following settings to send fax:



- | | | |
|----------|----------|---|
| 1 | Com port | Select one available Com port that connects to a modem device. |
| 2 | Fax list | Lists the fax numbers that will receive the event notification. Click on a fax number to select it for deletion or modification. |
| 3 | Add | Enter the fax number in the blank field then click this button to add the fax number to the Fax number list. |
| 4 | Delete | Click this button to remove the selected fax number from the fax number list. |
| 5 | Modify | To modify a fax number, first select that number in the fax number list, then make the changes in the edit box at the bottom. Click the Modify button to update the fax number. |

■ Phone

Notifies by phone and sends out a voice message. Configure the following settings to be able to dial out and send voice messages.



- 1** Modem

Select an available modem driver that has the voice support.
- 2** Phone list

Lists the phone numbers that will receive the event notification. Click on a phone number to select it for deletion or modification.
- 3** Add

Enter the phone number in the blank field then click this button to add the number to the Phone number list.
- 4** Delete

Click this button to remove the selected telephone number from the telephone number list.
- 5** Modify

To modify a telephone number, first select that number in the telephone number list, then make the changes in the edit box at the bottom. Click the Modify button to update the telephone number.
- 6** Hello message

Select a wave file or click the Record button to record a hello message.

Note: The voice message should be recorded with at least PCM 8kHz, 16-bit mono audio format.

- 7** Warning message Select a wave file or click the Record button to record a warning message. The hello message will be dispatched first, followed by the warning message.
- If the recipient of the message wants to skip the hello message and directly listen to the warning message, he/she can press any key on the phone.
- 8** Video loss message Select a wave file or click the Record button to record a voice message that will be sent in the event when there is a video loss problem. The hello message will be dispatched first, followed by the video loss message.
- If the recipient of the message wants to skip the hello message and directly listen to the video loss message, he/she can press any key on the phone.
- Alarm
Play an alarm sound. From the drop-down list, select from the available sounds, or select "Custom" and then click Record to record your own alarm sound. To listen to a preview of your recorded sound, click Play. You can also select the "Loop" option to sound the alarm until the event terminates.
 - Flash message at local site
An "Event" indicator will be displayed if and only if the "Flash message at local site" checkbox is selected in the Notification dialog box. A blinking "Event" indicator will be displayed on the bottom left corner of a split screen on Site Server when an event is detected.
 - Flash message at remote site
Display an "Event" indicator on the Remote Viewer interface of users who are remotely viewing your video cameras from a Web browser. A blinking "Event" indicator will be displayed on the top, central portion of a split screen on the Remote Viewer when an event is detected.
 - Change to single view and delay for ___ seconds
Switches the Site Server screen to single view to display live the camera from which an event has been detected. Specify the duration (in number of seconds) for retaining the display in single view (after the event occurs) before changing Site Server back to split-screen view.

Uploading event snapshots to an FTP server

Select the FTP event image option under the Respond to events by group box in the Camera tab if you want the Site Server to take snapshots when there is a motion detected, missing object or suspicious object left on scene that is detected, sensor detected, or manually triggered event and then upload the images to an FTP server. After selecting this option, click the Settings button to open the FTP event image dialog box where you can specify the FTP server details and customize how snapshots should be taken.

The screenshot shows the 'FTP event images' dialog box. It contains the following fields and controls:

- 1** FTP server IP address: A text box containing '127.0.0.1'.
- 2** FTP server TCP port: A text box containing '21'.
- 3** Location: A text box containing '\upload'.
- 4** User: A text box containing 'huper'.
- 5** Password: A text box containing '*****'.
- 6** Event: A section containing:
 - Size: A dropdown menu showing '96 x 80' and a 'Pixels' label.
 - Number: A text box containing '1' with '(1..6)' next to it.
 - Interval: A text box containing '1' with '(1..5) sec' next to it.

At the top right of the dialog box are 'OK' and 'Cancel' buttons.

- | | |
|--------------------------------|--|
| 1 FTP server IP address | Specify the IP address (or URL) of the FTP server. |
| 2 FTP server TCP port | Specify the TCP port at which the FTP server is located. (By default, this is port 21.) |
| 3 Location | Specify the directory path on the FTP server where event snapshots will be uploaded to. |
| 4 User | Specify a valid user name that has write access rights and that will be used to logon to the FTP server. |
| 5 Password | Enter a valid password for the specified user name. |
| 6 Event image | Specify how event snapshots are to be taken. |

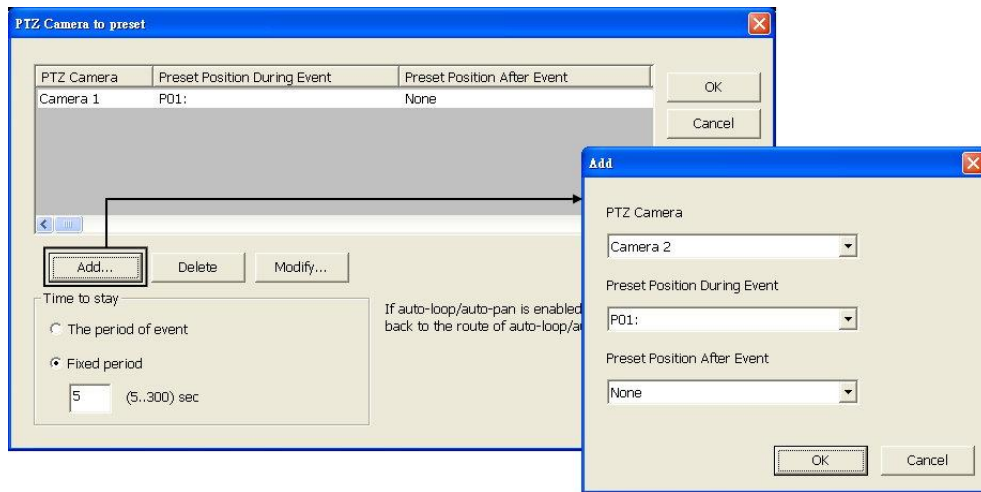
Size	Set the image size. Available sizes include: 96 x 80, 112 x 112, 128 x 96, 144 x 144, 160 x 112, 176 x 144, 208 x 192, 320 x 240, 352 x 240, 640 x 480, and 720 x 480.
Number	Set the number of snapshots to be taken for each detected or manually triggered event. Maximum number of snapshots can be up to 6 images.
Interval	Set the time interval between snapshots. The interval can be from 1 up to 5 seconds.

Notes:

- Event snapshots are saved in the temp folder that is specified in the General tab of the Preferences dialog box before they are uploaded to the FTP server (or e-mailed).
- Event snapshots will be deleted from the temp folder after they have been uploaded to the FTP server (or e-mailed).
- When FTP upload (or e-mail) fails, Site Server will try transmission again after five minutes. At most, 48 tries will be attempted (i.e., about 4 hours in total). If, after exceeding this maximum number of attempts, FTP upload (or e-mail) is still unsuccessful, the images will be removed from the temp folder and the transmission error will be recorded into the operation log. The About button will also appear in red as an indicator that an error has occurred.
- The maximum number of event snapshots that can be stored in the temp folder is determined by the DVR system at runtime. If the maximum allowable limit has been exceeded, older images will be removed automatically to free up disk space for storing new event snapshots.

Moving PTZ cameras during an event

Select the PTZ camera to preset option under the Respond to events by group box in the Camera tab if you want any fixed surveillance camera to move PTZ cameras to preset positions when there are auto detected events or manually triggered events. Click the Settings button to open the PTZ camera to preset dialog box where you can choose one or more PTZ cameras to move as well as specify the preset positions where to move them during an event and after the event has ended.



Follow these steps to choose one or more PTZ cameras and select preset positions:

1. Click Add.
2. In the Add dialog box, first select the desired PTZ camera number from the PTZ camera drop-down list. Then from the PTZ camera preset during event drop-down list, choose a preset position where you want to move the PTZ camera during an event.
3. If you want to move the PTZ camera to another position after the event has ended, select the desired preset position from the PTZ camera preset after event drop-down list. If you select None, the PTZ camera will stay at its current position when auto-loop or auto-pan mode is disabled. When auto-loop or auto-pan mode is enabled, selecting None will resume the PTZ camera to either of these two modes depending on which one of them is enabled.
4. Click OK to return to the PTZ camera to preset dialog box.
5. To add more PTZ cameras, repeat steps 1 to 4. To change position settings of a PTZ camera, select its camera number from the list then click Edit.
6. In the Time to stay group box, you have two choices for setting the time length for letting the PTZ camera stay at a preset position:

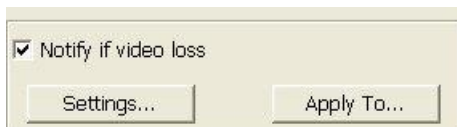
- **The period of event** Select this option to keep the PTZ camera at the preset position during the whole event. Sometimes, an event period might be as short as 0 or 1 second (such as a motion event or video loss event). Moving a PTZ camera to a preset position and staying there for only 0 or 1 second is not relevant. Also, some PTZ cameras may not be able to process multiple commands in such a short period of time. In these cases, a minimum dwelling period of 2 seconds will be set.
- **Fixed period** Select this option if you want to specify fixed time duration. Enter the desired duration in the provided text

Note: A fixed surveillance camera can drive one or more PTZ cameras at the same time. While a PTZ camera stays at a designated preset position, it will reset the duration of this position and accept another request only at the following conditions:

- The request is from the same fixed camera.
- The request is from another fixed camera that has higher priority.

Video loss notification

Select the Notify if video loss option in the Camera tab if you want the Site Server to issue notifications when there is camera video loss.



After selecting this option, click the Apply To button and select which cameras that you want to monitor for video loss problems.

Click the Settings button to open the Video Loss Notification dialog box where you can choose the desired types of notifications: E-mail, Phone, and Alarm.



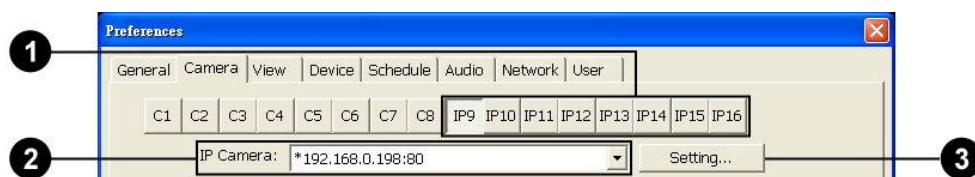
For each type of notification that you selected, click the corresponding Options button to customize notification settings. For details on how to customize, see "Types of notifications" earlier in this chapter.

In the Video Loss Notification dialog box, you can also select the PTZ camera to preset checkbox if you want the cameras that lost their video signal to move PTZ cameras to preset positions so that you can still see live video. Underneath this checkbox, click the Options button to open the PTZ camera to preset dialog box where you can choose the PTZ cameras that you want to move and specify preset positions for these PTZ cameras. For details on how to do this, refer to the procedure in the section "Moving PTZ cameras during an event".

IP camera settings (Camera tab)

Click the Camera tab in the Preferences dialog box to configure settings for IP cameras if you have IP license. Each IP camera is identified by a camera number (IPx). Click each camera button to set up options for an IP camera.

Note: The starting channel number of IP camera depends on the total channel number of video cameras.

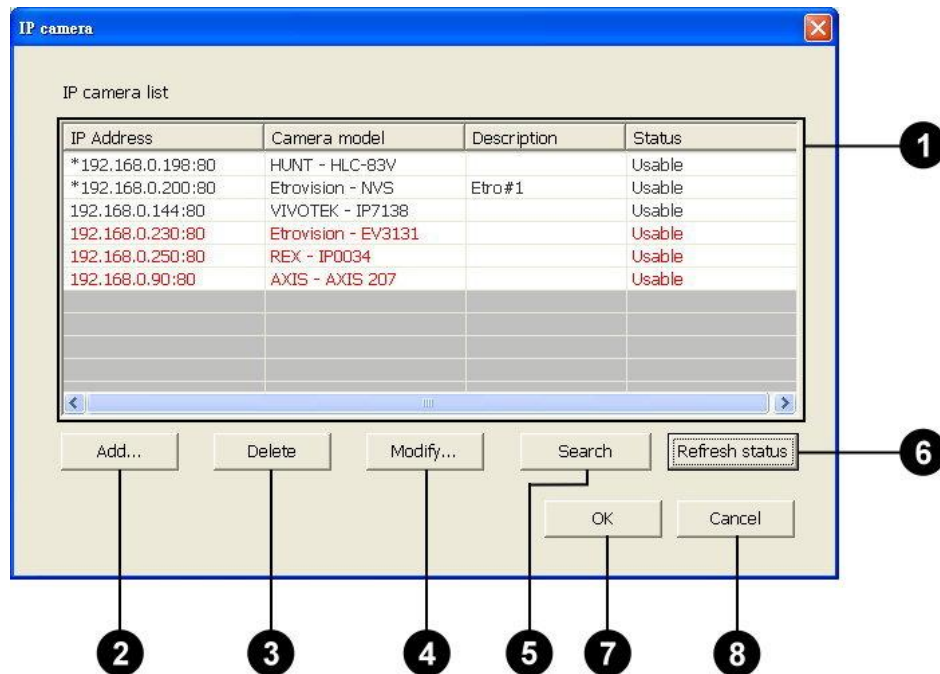


- 1** Camera buttons Each button corresponds to an IP camera. Click a button to configure settings for an IP camera.
- 2** IP camera list Lists the IP cameras that can be assigned. Select a camera from list to assign for this channel.
- 3** Setting Click this button to configure the contents of IP camera list including adding, deleting or modifying IP cameras.

Note: The * mark in front of IP address in the IP camera list means this IP camera has been assigned.

Configuring IP camera settings

Click Setting button in the Preferences Camera page to pop-up IP camera dialog box.



- | | |
|-------------------------|--|
| 1 IP camera list | List of available IP cameras displayed in the Preferences Camera page. |
| IP address | Used IP address for the camera. |
| Camera model | IP camera model |
| Description | Description text of IP camera for display only. |
| Status | Display camera connection status after refreshing status. |
| 2 Add | Pop-up dialog to add IP camera to the list manually. |
| 3 Delete | Remove the selected IP camera from list. |
| 4 Modify | Pop-up dialog to modify camera settings. |
| 5 Search | Search currently available IP cameras in the network. |
| 6 Refresh status | Checking connection status of IP cameras in the list. |
| 7 OK | Update IP camera list and back to the Preferences Camera page. |
| 8 Cancel | Restore IP camera list and back to the Preferences Camera page. |

Add to IP camera list

In the IP camera dialog box, click the Add button to add IP camera manually into the list.

- | | |
|---|--|
| <p>1 Network setting</p> <p>IP address</p> <p>HTTP port</p> | <p>Network related settings for connecting IP camera</p> <p>IP address of added camera</p> <p>HTTP port for connecting IP camera. Default value is 80.</p> |
| <p>2 Camera information</p> <p>Camera model</p> <p>Description</p> | <p>Camera</p> <p>Select camera model from the porting list. Default value is Auto detect.</p> <p>Description text of IP camera for display information only</p> |
| <p>3 Account setting</p> <p>Account</p> <p>Password</p> <p>Anonymous</p> | <p>Settings to login IP camera</p> <p>User account to login IP camera</p> <p>Account password to login IP camera</p> <p>Check this option to login IP camera without account & password.</p> |
| <p>4 Advance setting</p> <p>Connect</p> | <p>Advance features to adjust camera settings</p> <p>Pop-up web page to setup camera in details.</p> |

Note: The connection may fail if choosing wrong camera model.

Note: Not every IP camera model supports this feature.

Modify IP camera configuration

In the IP camera dialog box, select an item from list and click the Modify button to modify the camera configuration.

The 'Modify' dialog box contains the following sections:

- Network setting:**
 - IP address: 192.168.0.230
 - HTTP Port: 80
- Account setting:**
 - Account: admin
 - Password: *****
 - ☐ Anonymous
- Camera information:**
 - Camera model: Etrovision - EV3000 Series
 - Description: EtroVision IP Cam
- Advance setting:**
 - Connect...

Buttons: OK, Cancel

All the operations are the same as Adding IP camera. Please refer to " Add to IP camera list " for details.

Search IP camera

In the IP camera dialog box, click the Search button to search currently available IP cameras..

The 'Search IP Camera' dialog box shows a progress bar from 0% to 100%. The progress bar is currently at approximately 25%, indicated by 10 blue segments out of 40.

After searching process, additional available IP cameras will be added in the IP camera list in **RED** text. Click OK will add these available cameras to the list and can be selected in Preferences Camera page. Click Cancel will restore IP camera list without change.

IP Address	Camera model	Description	Status
*192.168.0.198:80	HUNT - HLC-83V		
*192.168.0.200:80	Etrovision - NVS	Etro#1	
192.168.0.144:80	VIVOTEK - IP7138		
192.168.0.250:80	REX - IP0034		
192.168.0.230:80	Etrovision - EV3131		
192.168.0.90:80	AXIS - AXIS 207		

Update status of IP camera list

In the IP camera dialog box, click the Refresh status button to update IP camera status in the list.



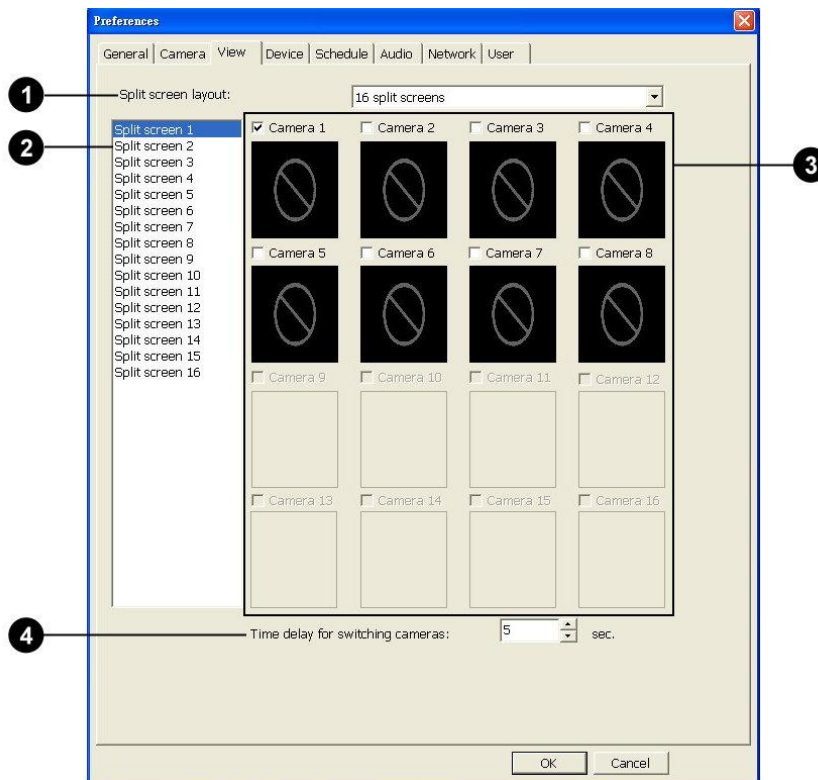
After updating status of IP camera, it will display current IP camera status as below::

IP Address	Camera model	Description	Status
192.168.0.198:80	HUNT - HLC-83V		Usable
192.168.0.144:80	VIVOTEK - IP7138		Usable
192.168.0.200:80	Etrovision - NVS		Usable
192.168.0.250:80	REX - IP0034		Usable
192.168.0.230:80	Etrovision - EV3131		Usable
192.168.0.90:80	AXIS - AXIS 207		Usable
192.068.0.66:80	Etrovision - NVS		Usable

- IP Camera with black text Indicates that usable online IP cameras
- IP Camera with gray text Indicates that unavailable offline IP cameras
- IP Camera with red text Indicates that usable online IP camera (after searching IP cameras)

Split screen settings (View tab)

Click the View tab in the Preferences dialog box to assign several video cameras per split screen. The assigned video cameras will take turns, and each camera will be displayed for a specified amount of time.



- 1** Split screen

Choose a split screen layout on which to assign video cameras for display. Select any of Site Server's preset layouts: Single View, 4 Split Screens, 9 Split Screens, or 16 Split Screens.
- 2** Split screens list

This lists the split screens that are displayed on a given screen layout.
- 3** Camera assignments

When you highlight a split screen number on the list at the left, the right side of the dialog box shows the video cameras that are currently assigned to that split screen. Assigned video cameras are indicated by the selected checkboxes.

Select/clear checkboxes to change the assignment video cameras.

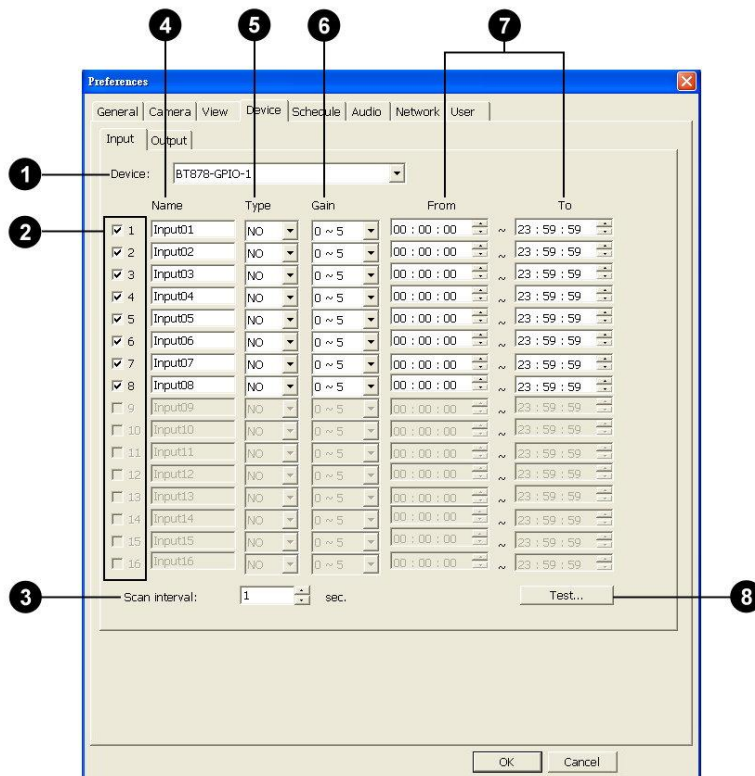
- 4 Time delay for switching cameras
- Per split screen, specify the time duration for displaying each of the assigned video cameras. The duration can be set from 1 second up to 360 seconds.

Input/Output device settings (Device tab)

Click the Device tab in the Preferences dialog box to select an I/O card and set up the connections to security devices such as sensors and alarms. Under the Device tab, click the "Input" tab to configure sensor devices, and click the "Output" tab to enable devices to receive signals from Site Server.

Configuring input devices (Input tab)

In the "Input" tab, at most 16 sensor devices can be enabled and customized. The following describes the settings that can be customized.

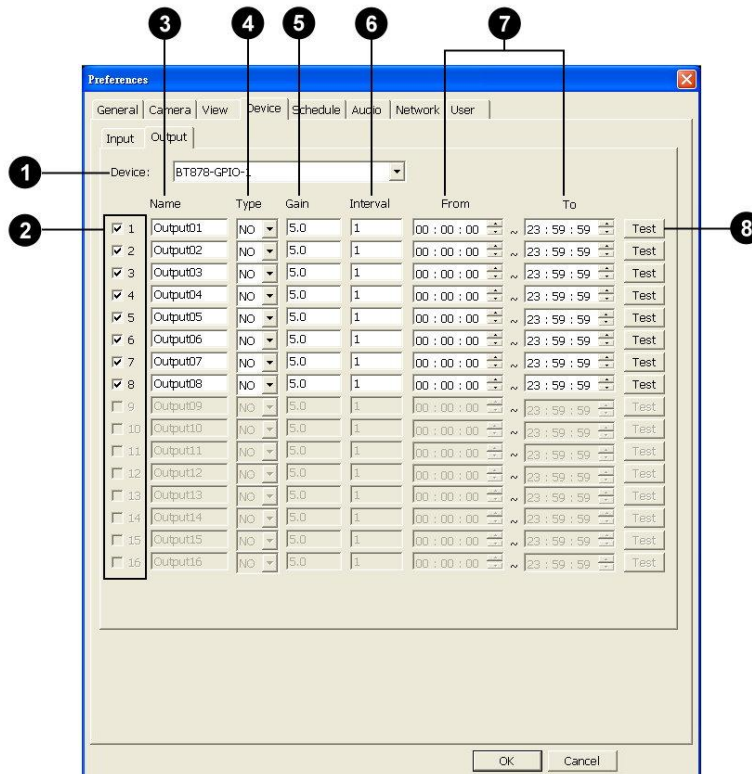


- | | |
|--|---|
| <p>1 Device</p> <p>2 Enable/Disable checkboxes</p> <p>3 Scan interval</p> | <p>Select an I/O card from the drop-down list. Different I/O cards have different number of analog input ports.</p> <p>Select the checkboxes of sensors whose analog input will be monitored. Or, clear the checkboxes to disable connections to the sensors.</p> <p>Specify the interval (in seconds) for scanning input ports periodically.</p> |
|--|---|

- 4** Name Specify the sensor name (for instance, the location where the sensor is installed).
- 5** Type Select an input type: NC (Normal Close) or NO (Normal Open).
- 6** Gain Specify the sensor's input voltage range.
- 7** From/To Specify the time period for monitoring the sensor's analog input.
- 8** Test Click this button to open the "Sensor test" dialog box to view the actual analog input voltage value.
The Sensor test dialog box allows you to check the connection status of input devices. The sensor input type and the current voltage value are displayed. You can try each input devices and inspect the voltage to check if the connections between input devices and Site Server are well connected.

Configuring output devices (Output tab)

In the "Output" tab, at most 16 output devices can be enabled and customized. The following describes the settings that can be customized.



- | | |
|------------------------------------|--|
| 1 Device | Select an I/O card or I/O box from the drop-down list. Different I/O cards or I/O boxes have different number of analog output ports. |
| 2 Enable/Disable checkboxes | Select the checkboxes of devices to connect to, or clear the checkboxes to disable connections to the devices. |
| 3 Name | Specify the output device name (for instance, the location where the output device is installed). |
| 4 Type | Select an output type: NC (Normal Close) or NO (Normal Open). |
| 5 Gain | Specify the output voltage. |
| 6 Interval | Specify the interval for sending the specified output voltage to the device. |
| 7 From/To | Specify the valid time period for activating the output device. |
| 8 Test | Click this button to output the specified voltage to NO- type devices and output 0 voltage to NC-type devices during the specified interval. |

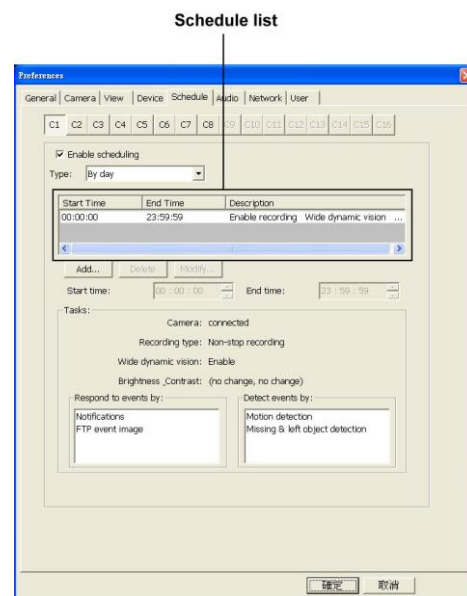
Timed surveillance settings (Schedule tab)

Click the Schedule tab in the Preferences dialog box to set up a surveillance schedule for each video camera. Timed surveillance can be scheduled in a daily, weekly, or monthly basis.

By Day

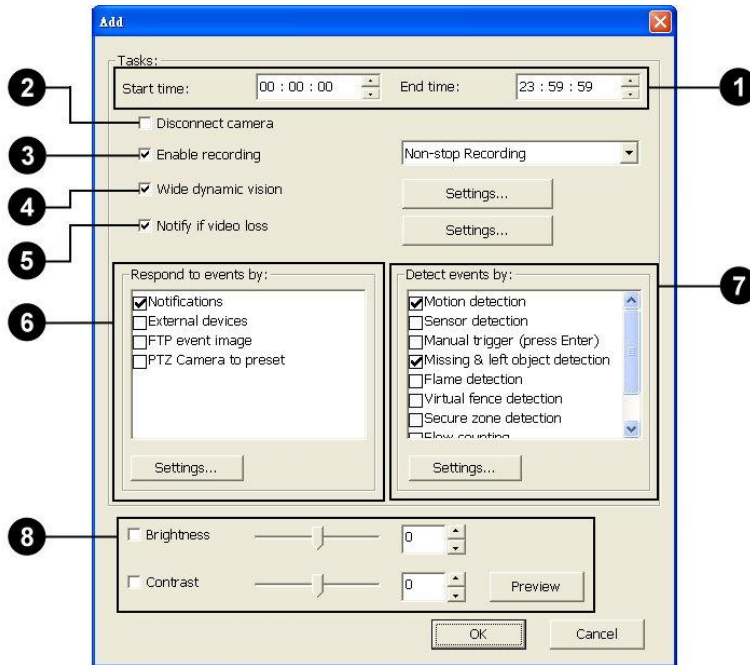
To set up a daily surveillance schedule for each video camera:

1. Choose a video camera by clicking the number button that corresponds to that camera.
2. Select the "Enable scheduling" option.
3. From the "Type" drop-down list, select "By day".
4. To add a new schedule, click "Add".
5. In the dialog box that opens, set a time schedule for monitoring the camera and select the checkboxes of tasks to be performed within the scheduled time. (See next page for more details.)
6. Repeat steps 1 to 5 to add more schedules.
7. All created time schedules will be added to the schedule list in the Schedule tab.
To select a schedule and view details, click its "Start Time" entry.
To delete a schedule, select it and click the Delete button.
To modify a schedule, select it and then click the Modify button.
8. Repeat steps 1 to 7 to create daily schedules for other video



Note: Time segments that are not listed in the Schedule list will use the options set in the Preferences - Camera tab.

Daily surveillance settings



- | | | |
|----------|----------------------|---|
| 1 | Start / End time | Specify what time to monitor and detect events. |
| 2 | Disconnect camera | Select this option to disconnect the camera during the time period specified by the "Start / End" time settings. |
| 3 | Enable recording | Select this option to enable digital recording during the scheduled time period. Choose a recording method from the drop-down list. |
| 4 | Wide dynamic vision | Select this option to enhance camera video quality. Click the Settings button to make adjustments. |
| 5 | Notify if video loss | Select this option to be informed when certain cameras lose their video signal. Click Settings to set up the type of notification (by e-mail, phone, etc.). |
| 6 | Respond to events by | Choose the methods for responding to detected or manually triggered events. |

- 7 Detect events by Select one or more detection methods, then click the Settings button to customize settings for each selected method.
- 8 Brightness / Contrast Adjust the camera brightness and contrast if necessary. After adjustment, you can click Preview to see how the camera video appears. If the camera is currently in the process of recording events, the preview result will appear on the recording.

Note: If you tweak brightness and contrast settings on the Camera Adjustment Panel of the Site Server interface while a scheduled task is enabled, your modified settings will be updated to the brightness and contrast settings of the scheduled task. However, if the scheduled task is not configured with any brightness and contrast settings, then your adjustments on the Camera Adjustment Panel will just affect the live camera display.

By Week

To make a weekly surveillance schedule for each video camera:

1. Choose a video camera by clicking the number button that corresponds to that camera.
2. Select the "Enable scheduling" option.
3. From the "Type" drop-down list, select "By week".



4. By default, the weekday list shows Saturday and Sunday as the days off and the other days as workdays. You may change the type of day for the days listed. For instance, to change Sunday to be a special day, click "Sunday" and then select the "Special day" option.

☒ Enable scheduling

Type: By week

Week	State
Sunday	Day off
Monday	Work day
Tuesday	Work day
Wednesday	Work day
Thursday	Work day
Friday	Work day
Saturday	Day off

☐ Work day Settings...
☐ Day off Settings...
☐ Special day Settings...

- You can create different surveillance schedules for work days, off days, and special days. Click the "Settings" button beside each of the three options to set the surveillance schedule for each.

The procedure for setting the weekly surveillance schedule is just the same as that for setting the daily surveillance.

- Repeat steps 1 to 5 to create weekly schedules for other video cameras.

By Month

To make a monthly surveillance schedule for each video camera:

- Choose a video camera by clicking the number button that corresponds to that camera.
- Select the "Enable scheduling" option.
- From the "Type" drop-down list, select "By Month".
- The calendar shows the current month, with the current day highlighted. Also, by default, Saturday and Sunday are defined as the days off and the other days as workdays.

☐ Enable scheduling

Type: By month

May, 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

☒ Work day Settings...

☐ Day off Settings...

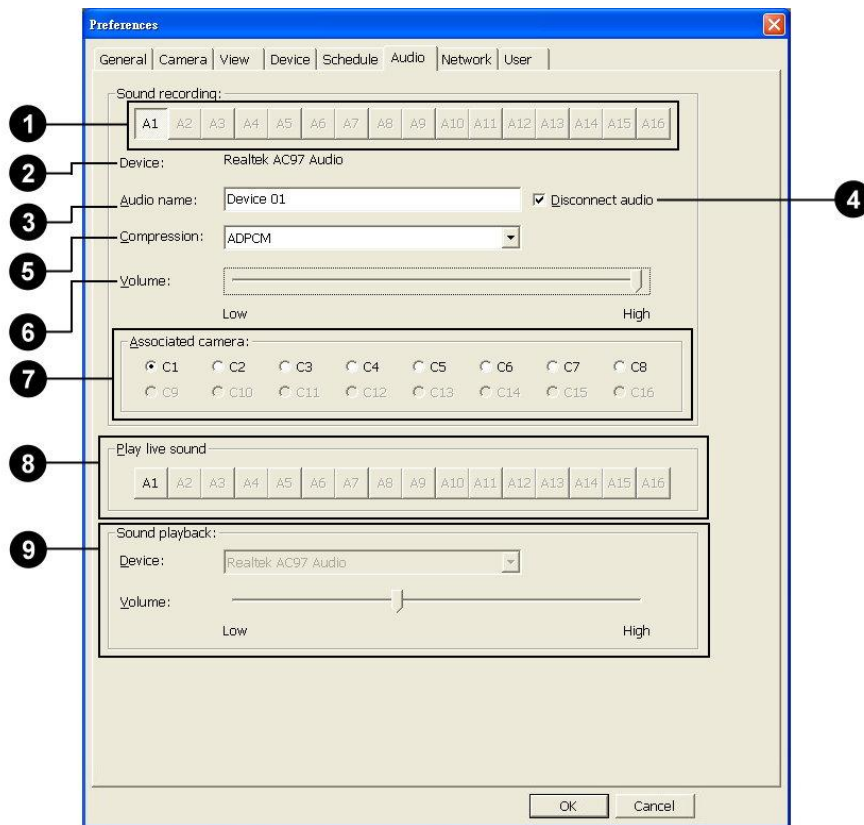
☐ Special day Settings...

You may change the type of day for any day of the month. Just click on a day in the month calendar, then click the type of day ("Work day", "Day off", or "Special day") at the right.

5. To change the type of day in other months, move to the other months by clicking the arrow buttons on top of the calendar. Do the process mentioned in step 4 to change the type of day for any day of the month.
6. The procedure for setting the surveillance schedule for days of a given month is just the same as that for setting the daily surveillance.

Audio capturing device settings (Audio tab)

Click the Audio tab in the Preferences dialog box to configure the settings for up to 16 audio devices. Please be sure to associate video cameras and audio input devices according to their correct practical deployment.



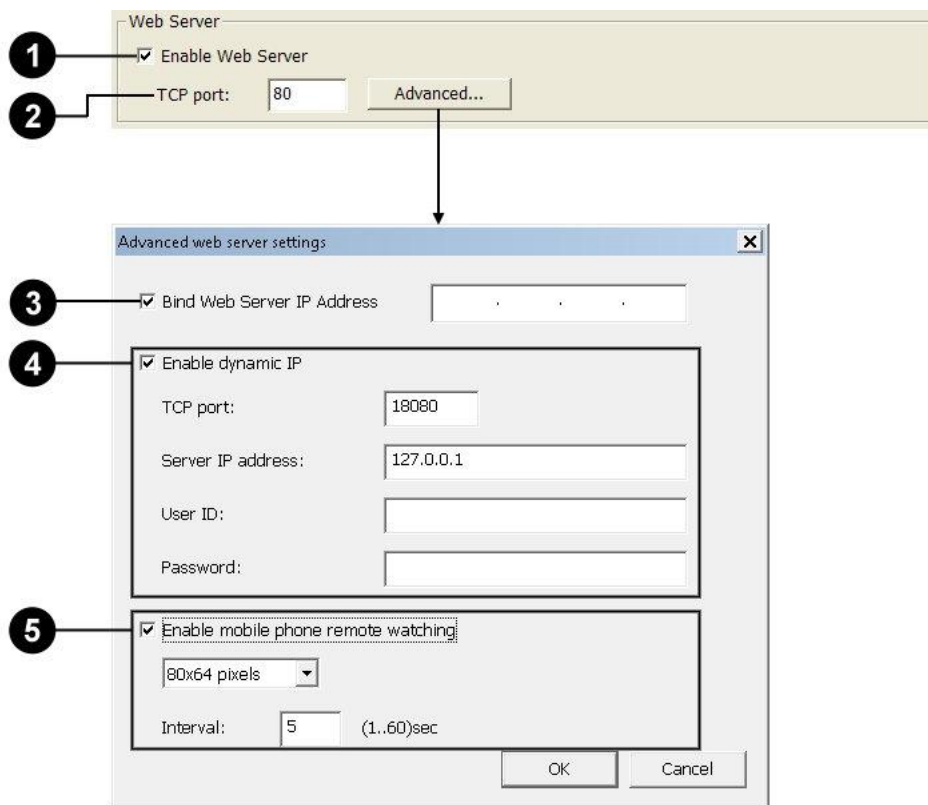
- | | | |
|----------|------------------|--|
| 1 | Audio buttons | Each button corresponds to an audio input device. Click a button to configure settings for an audio recording device. |
| 2 | Device | Displays the audio input device name. |
| 3 | Audio name | Type in a name for identifying the audio recording from the audio input device (for instance, the location where the audio recording device is installed). |
| 4 | Disconnect audio | Select to stop recording audio from this particular audio input device. Clear to reconnect to the audio input device. |
| 5 | Compression | This determines the recorded audio quality and the resulting file size. Currently, only the Microsoft® ADPCM compression scheme is available. |

- 6** Volume Determines the record volume level of the audio input device. Use the slider to adjust the volume level.
- 7** Associated camera Each radio button corresponds to a video camera. Select a video camera you want to associate with the audio input device (A1 to A16). You can only associate one camera per audio recording device.
- 8** Play live sound Each button corresponds to an audio input device. Click a button to hear the audio when viewing the camera associated with the audio recording device.
- 9** Sound playback Displays the audio device used by your computer to play back audio from the audio recording device. You can also adjust the playback device's volume here. If you have more than one audio device installed, select the device you want to use from the drop-down menu.

Web Server and Video Server settings (Network tab)

In the Network tab of the Preferences dialog box, you can set up the Site Server computer as a Web Server and a Video Server. When configured as a Web server, the system will allow remote users to view video cameras remotely via a Web browser on a computer or mobile phone. Whereas, when configured as a Video server, the system will allow video streaming across the Internet when remote users view the on-site cameras.

Web Server



- 1 **Enable Web Server** Select this option to configure Site Server as a Web server. When acting as a Web server, Site Server will allow remote access to its live video cameras. Remote users can launch Microsoft Internet Explorer and type in the IP address of the Site Server computer to download a four split-screen Web page and remotely monitor the cameras via the Internet.

- 2** TCP port

Specify a TCP port number to be used by the Web server. The chosen TCP port must not be unique and unused by other applications.
- 3** Bind web server IP address

If your computer is installed with two network cards and owns two IP addresses, select this option and enter the IP address that you would like to assign to the Web.
- 4** Enable dynamic IP

Select this option if the Site Server uses a dynamic IP address (i.e., an IP address that varies each time the computer connects to the Internet). The Site Server computer will report the current IP address to the Dynamic IP Server. Remote users can use a Web browser to log into the Dynamic IP Server and then connect to the Site Server computer and remotely monitor the on-site video cameras.

Set the dynamic IP options as below:

TCP Port Specify the port of the dynamic Web server.

Server IP address Specify the IP address of the dynamic Web server.

User ID Specify a user ID for the person you will give authorization to have access to your computer.

Password Specify a password for the user ID.
- 5** Enable mobile phone remote watching

Select this option to allow remote users to monitor the on-site cameras via a Web browser on their mobile phone. Set the appropriate Video dimension for the target mobile phones and specify the Interval between surveillances.

Note: Currently, only the following mobile phones are supported: Docomo iMode phone, J-phone, and AU-phone.

Video Server

The screenshot shows the 'Video Server' configuration window. It is divided into two main sections: 'High Speed Port Settings' and 'Low Speed Port Settings'. Each section contains fields for 'TCP port', 'Dimension', 'Compression', and 'Frame rate'. The 'High Speed Port Settings' section has a 'Modify' button at the bottom right. The 'Low Speed Port Settings' section also has a 'Modify' button at the bottom right.

Setting	High Speed Port Settings	Low Speed Port Settings
TCP port:	18082	18083
Dimension:	320x240	320x240
Compression:	HM (MPEG4-like), Fast	HM (MPEG4-like), Fast
Frame rate:	12	10
Compression:		H.264, 900 kbps
Frame rate:		2 - 15

High speed port High speed port is used to transfer data with high quality streaming. This port is used by remote applications like huperRemote, Web Remote, ...etc.

Low speed port Low speed port is used to transfer data with low quality streaming. This port is used by remote applications like huperCenter, mobile App (iOS, Android,...),...etc.

To edit high speed port settings, click Modify button and change the settings:

The screenshot shows the 'High Speed Port Settings' dialog box. It has a title bar with a close button. The dialog contains fields for 'TCP port', 'Dimension', 'Quality', and 'Frame rate'. There are three numbered callouts: 1 points to the 'TCP port' field, 2 points to the 'Dimension' dropdown, and 3 points to the 'Quality' dropdown. The 'Frame rate' field is also visible. At the bottom, there are 'OK' and 'Cancel' buttons.

1 TCP port Assign the desired TCP port number. Default TCP port numbers are 18082 for high speed port.

2 Dimension

Specify a fixed video dimension for streaming video to remote clients. Set this to the "Original video dimension" or "320 x 240".

When you set the dimension to "320 x 240" and the source video is in "640 x 480" for instance, the video will be re-sampled to 320 x 240 first before it is streamed over the Internet.

3 HM Settings t

Specify HM compression method settings for streaming video to remote clients.

Quality

Compressing video makes the video file size smaller and allows faster video streaming. For HM compression, choose one of the following compression qualities: "Fast quality", "Best quality", or "Good quality".

Note: Each compression method has its own GOP and QP settings that are stored in the LiveTag.ini file under the program folder. After you have chosen a compression method, its corresponding settings will be updated to the Server.ini file.

Frame rate

Specify the maximum frame rate that the TCP port will use for video streaming. 1 up to 30 fps can be set.

To edit low speed port settings, click Modify button and change the settings:

Low Speed Port Settings

1 TCP port: 18083

2 Dimension: 320x240

3 HM (MPEG4-like)

Quality: Fast

Frame rate: 10

4 H.264

Bit rate (kbps): 900

Frame rate (Max): 15

Frame rate (Min): 2

OK Cancel

- 1 TCP port Assign the desired TCP port number. Default TCP port numbers are 18083 for low speed port.
- 2 Dimension Specify a fixed video dimension for streaming video to remote clients
 Note: Low speed port can only use 320x240.
- 3 HM Settings Specify HM compression method settings for streaming video to remote clients.
 Quality Compressing video makes the video file size smaller and allows faster video streaming. For HM compression, choose one of the following compression qualities: "Fast quality", "Best quality", or "Good quality".
 Note: Each compression method has its own GOP and QP settings that are stored in the LiveTag.ini file under the program folder. After you have chosen a compression method, its corresponding settings will be updated to the Server.ini file.
- Frame rate Specify the maximum frame rate that the TCP port will use for video streaming. 1 up to 30 fps can be set.
- 4 H.264 Settings Specify H.264 compression method settings for streaming video to remote clients.
 Bit rate Specify the maximum data rate for streaming.
 Frame rate (Max) Specify the maximum frame rate under constant bit rate setting.
 Frame rate (Min) Specify the minimum frame rate under constant bit rate setting.

Configuring external dynamic DNS settings

If the Site Server computer connects to the Internet using a dynamic IP address with external DDNS services and you want remote users to be able to locate it over the Internet, you need to configure the dynamic IP settings in the DDNS Server group box.

DDNS Server

1 ☒ Enable DDNS Server

2 Service Provider: No-IP

3 Domain name:

4 Username:

5 Password:

- | | | |
|----------|--------------------|---|
| 1 | Enable DDNS server | Select this option if the Site Server uses a dynamic IP address with external DDNS services. |
| 2 | Service provider | Select service provider of external DDNS services. |
| 3 | Domain name | Specify the domain name of the dynamic Web server. |
| 4 | Username | Specify a user ID for the person you will give authorization to have access to your computer. |
| 5 | Password | Specify a password for the user ID. |

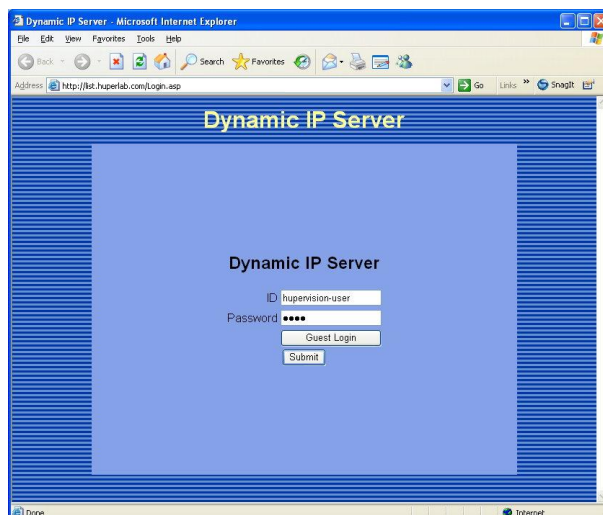
It is strongly recommended that a username and password be defined when the Enable Dynamic IP option is selected. By specifying a username and password, the Site Server computer will be more secure and only personnel you have given authorization to will be able to access the computer.

Accessing hyperLab's dynamic IP server site

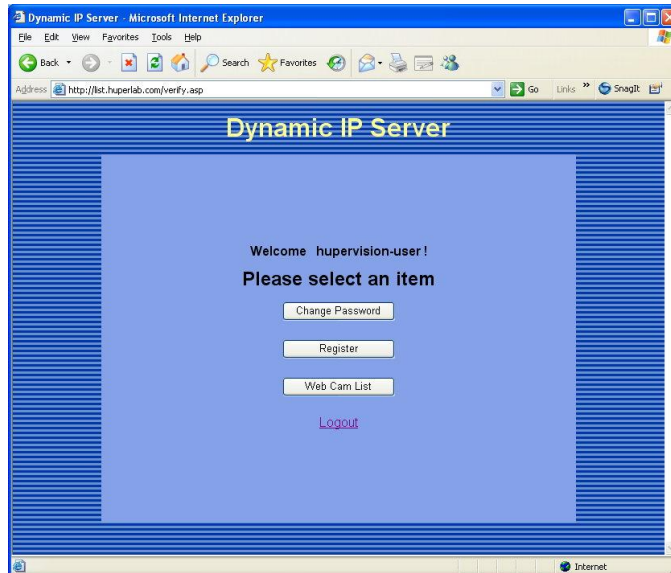
After enabling the dynamic IP options in the web server advanced settings, the Site Server automatically registers the IP address, user ID and password on the dynamic IP server. Remote users who want to monitor video cameras remotely on a dynamic IP server must perform the following steps.

For remote users to view video cameras on the dynamic IP server:

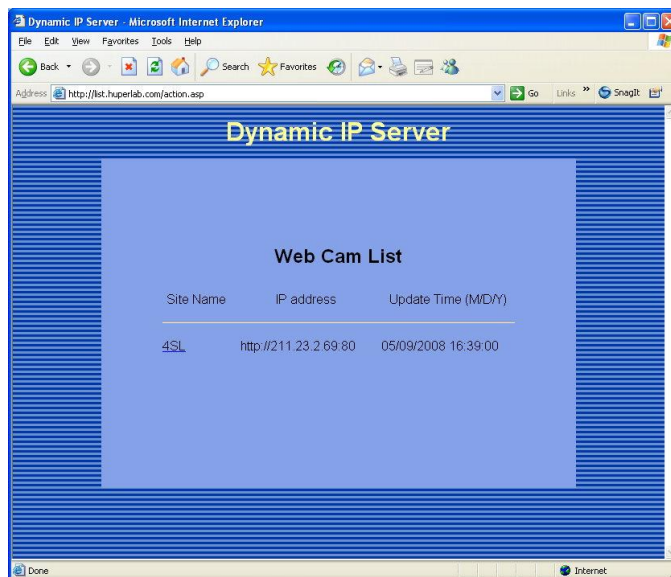
1. Launch a Web browser such as Internet Explorer, then enter the dynamic IP server's URL in the Address box.
2. Enter the user ID and password. If no user ID and password have been assigned, click the "Submit" button.



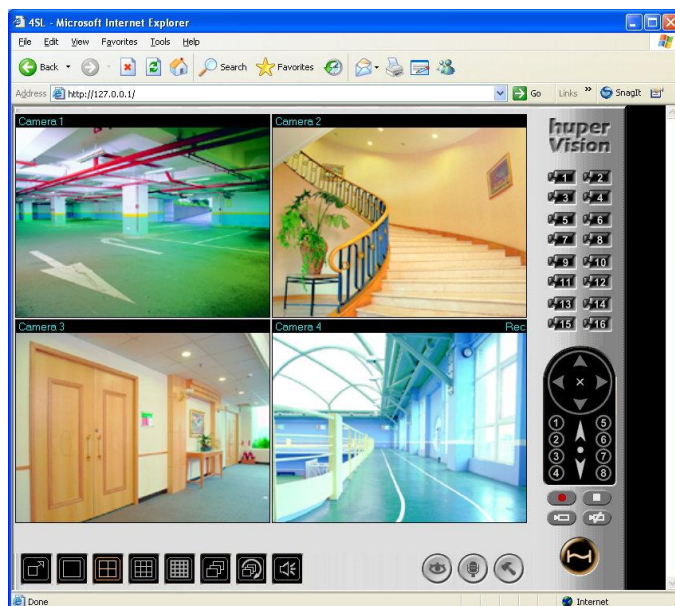
- Click the button that opens the page where the available Web cameras that can be viewed are listed. For example, click the “Web Cam List” button.



- Click a site name from the list to open the Web page of the corresponding server site.



5. Use the navigation controls on the Web page to monitor the on-site cameras.



Notes:

- There is a free list server, www.dvr24h.com, that is available to the public.
- If the DVR system is in a LAN environment, you must set the router to forward port number 80 to the DVR system. Otherwise, clicking the DVR link in the Dynamic IP Server will not allow users to reach the DVR system.

Center Linkage (Center tab)

Preferences Center tab is used to replace the tool huperLinkage that can provide connection and event notification settings of huperCenter.

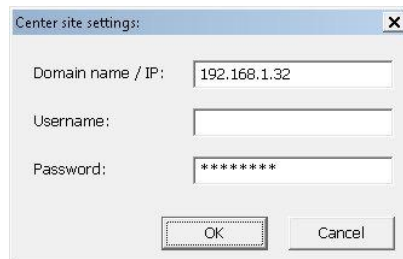
- | | | |
|----------|-----------------------|---|
| 1 | Enable center linkage | Enable connection to huperCenter |
| 2 | Center management | Settings for DVR connection to huperCenter |
| | Local DVR identifier | ID for connected huperCenter site. Need to input non-repeated ID. |
| | Username / Password | Username & password combination to login DVR. Only this account can connect to huperCenter. |

Center site list

huperCenter connection site list.

DVR can connect to 5 center site at the same time. The columns of each row have different connection priority: Primary > Secondary > Tertiary. DVR will connect to the primary site first. If not available, it will connect to secondary site, then tertiary site.

Double click the cell in the list will pop-up Center site settings dialog. Input the domain name (or IP) / Username / Password and press OK to save settings to the center site list.



The image shows a 'Center site settings' dialog box with the following fields and buttons:

- Domain name / IP: 192.168.1.32
- Username: (empty field)
- Password: (empty field with asterisks)
- OK button
- Cancel button

3 Notification

Send mail to Center

Notification settings for DVR events

Enable this option to send mail to huperCenter. Only selected cameras will send mail when there is an event.

SMTP server address

SMTP server address to send the event mails.

Email address

Email address to receive the event mails from huperCenter.

Camera selection

Press camera button to select camera

TV-Out

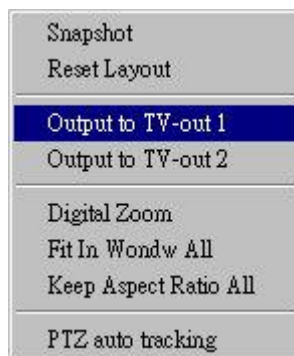
TV out feature is can only support analog video input with fixed or loop output mode.

There are two ways to output video to TV-out: using on-screen TV-out or TV-out manager. Using on-screen TV-out can output video easily in a few clicks, or using TV-out Manager for more detail output adjustment.

On-screen TV-Out

On-screen TV-out is the easy way to output video to TV-out. Follow the simple steps below to quickly output video by using on-screen TV-out:

1. Click on the spilt screen you want to output to TV-out
2. Right-click to pop up menu and select “Output to TV-out 1” or “Output to TV-out 2” command.



Note: It will auto switch and enable the correct output target.

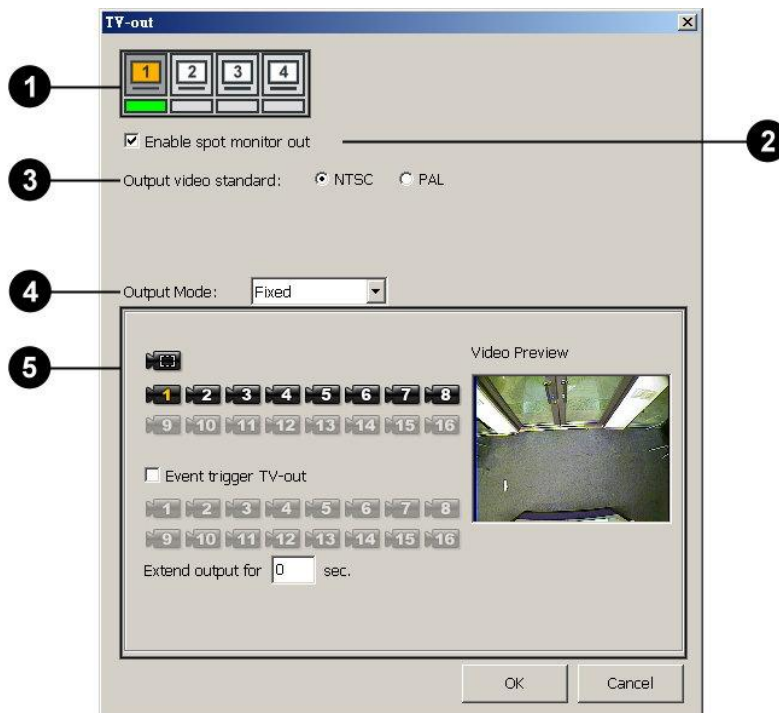
3. The video is now sent to selected TV-out output.

Note: It is necessary to connect TV-out cable to see the output result.

The TV-Out Manager dialog box

huperVision 4000 TV-out manager acts as spot monitor which can forward single video to TV monitor, and supports up to 8 cameras loop through display. When the camera detects motion or event, the surveillance video will be popped up in TV monitor.

To setup TV-Out properties, click on the hammer button and select TV-Out Manager from the pop up menu. The detail features of TV-out Manager dialog box are described as below:



- ❶ TV-out output selection and status



Select target TV-out output and display status of available output. Only available TV-out output sources are listed.



: Selected target



: Available target



: TV-out is enabled



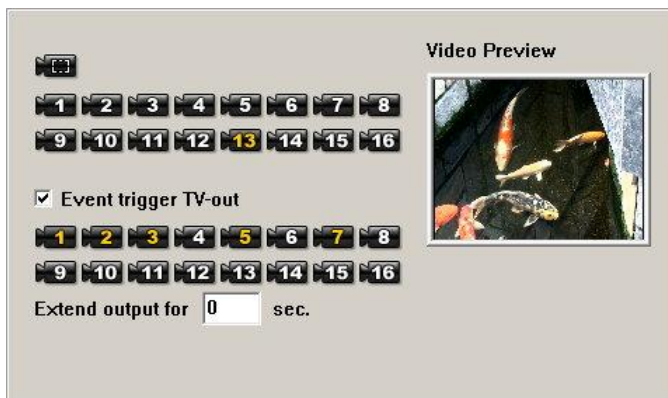
: TV-out is not enabled






- ❷ Enable spot monitor out

Enable/disable for selected TV-out target

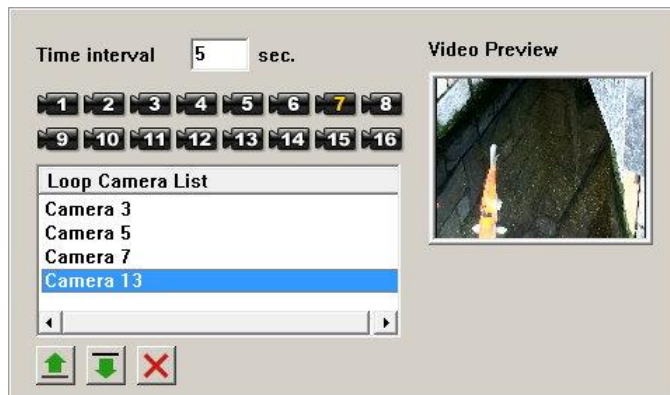
- | | |
|--------------------------------|--|
| 3 Output video standard | Select output video standard (NTSC or PAL) |
| 4 Output mode | Select output mode
Fixed: Fixed channel video output + selected channels event pop-up
Loop: Single channel looping video |
| 5 Output settings | Output settings according to selected output mode |

Fixed settings



- | | | |
|------------------|---|---|
| Null monitor |  | Select this item for empty video output (commonly used with event trigger mode) |
| Camera selection |  | Select output camera
 : Selected camera
 : Available camera
 : Unavailable camera |
| Video preview | | Preview the selected camera video |

Loop settings



Time interval

Specify the interval between events.

Loop camera
list

Press camera icon above the list to add camera to the list. The list can contain up to 8 repeatable cameras.

 : Available camera

 : Unavailable camera

 : Move selected item up in the list

 : Move selected item down in the list

 : Remove selected camera from the list

Video preview

Preview the selected camera video

Bonus IP License and Channel Setup

Huperlab's new release capture card / server boards have bonus IP license feature which allows true hybrid functionality between both connected analog and IP cameras. You can adjust channel combination for all analog cameras or up to all IP cameras without extra cost.

Note:

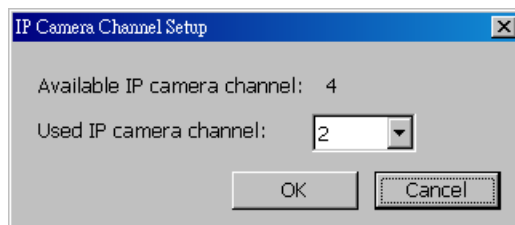
1. The number of bonus IP license depends on product model. Please refer to the data "Max. IP CH Support" on our product brochure specifications.
2. To use bonus IP license, you need to install IP Camera Plugin accompany with the installation CD.

Follow the steps below to adjust camera combination with IP Camera Channel Setup:

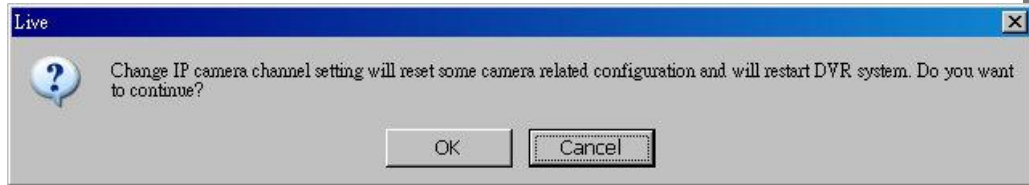
1. Click on the hammer button and select "IP Camera Channel Setup" from pop-up menu



2. In IP Camera Channel Setup dialog, the "Available IP camera channel" is the number bonus IP license for current DVR system. Adjust the number of "Used IP camera channel" and then press OK.



3. DVR system will pop up a message to ask for reboot DVR. Press Yes to continue and No to cancel.



4. After reboot DVR, check the channel layout by opening the preferences camera tab.

Before
change



After
change



Note: The channel location of bonus IP license is put from the last channel of all available channels.

Viewing logs and disk usage information

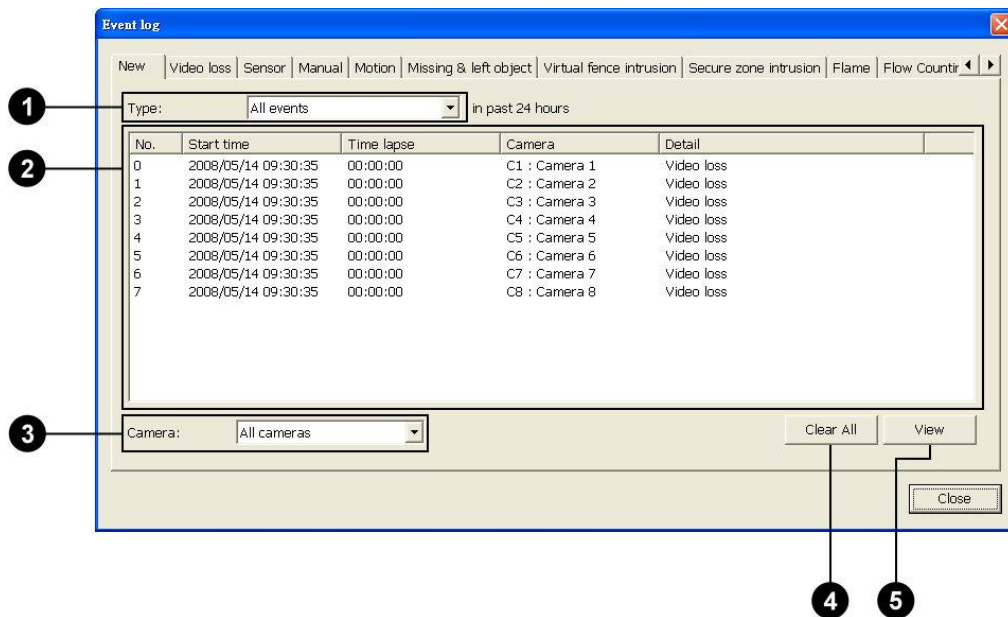
Use the following button controls to check recorded logs of events and inspect the hard disk storage space in the server computer that runs Site Server.

New Event Information



Clicking this button opens the Event Log dialog box which keeps a detailed log of events that have been detected.

The New tab, by default, shows a list of all events that were detected in the last 24 hours.



- 1** Type

If you want to view only the logs of one type of event such as Motion event, select it from the Type list.
- 2** Log list

The Log list shows details about each event, such as the start and end times of the event, camera number (indicated by C1 - C16) or sensor number (indicated by S1 - S16) that detected the event, type of event, etc.
- 3** Camera

If you want to view only the logged events of one camera, select the camera number from the Camera list.

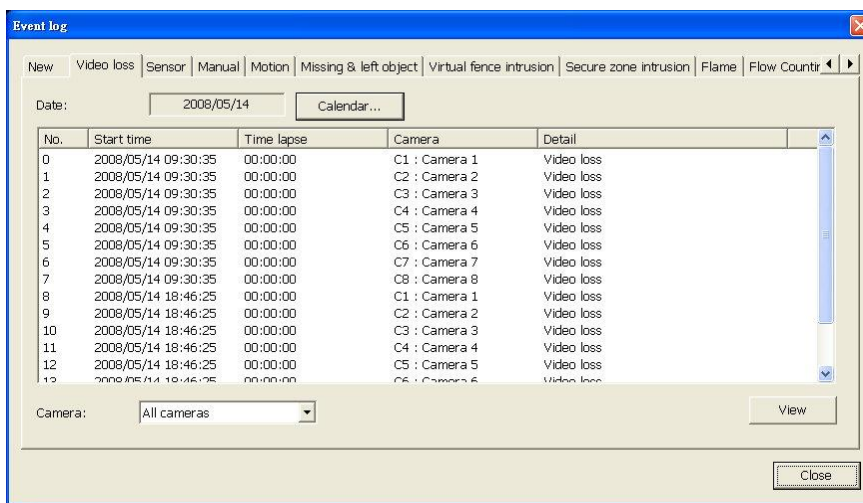
4 Clear All

Click this button to delete all event logs from the list. These events are not deleted from the record database.

5 View

Click this button to launch the Event Viewer program and play back a selected event. Not all events contain video recordings.

Click any of the other tabs in the Event Log dialog box to view only logged events of a particular type of event. For instance, click the Video Loss tab if you want to see only the list of cameras that were logged due to loss of video signal.

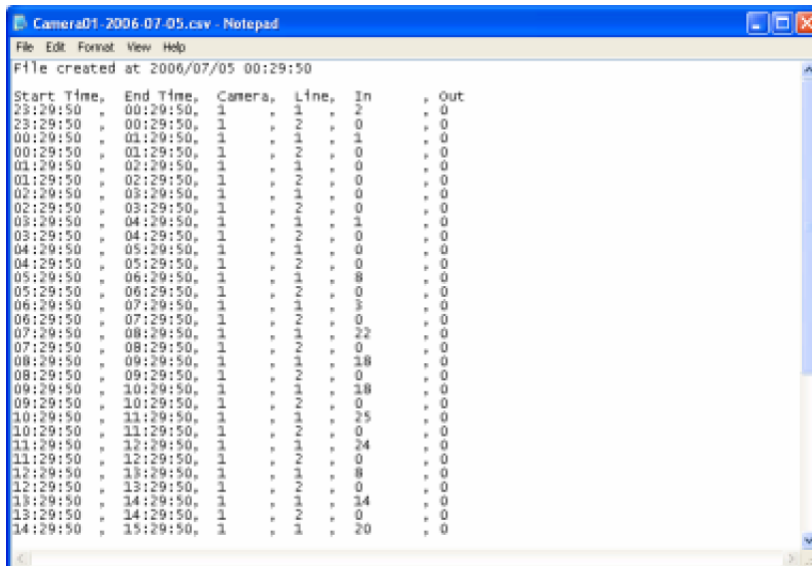


If you want to view logged events of another date, you can click the Calendar button to select the desired date.

Flow counting events of each camera are logged separately in different subfolders. Under C:\Program Files\huperlab\huperVision\FlowCountData, a subfolder for each camera is named using the convention, CameraNN, where NN represents the camera number. (This is assuming that the huperVision suite is installed in C:\Program Files\huperlab\huperVision).

Flow counting event logs are saved in .CSV (Comma Separated Value File) format, which is a popular database format. You can open the file and view the logs using software such as Microsoft Excel.

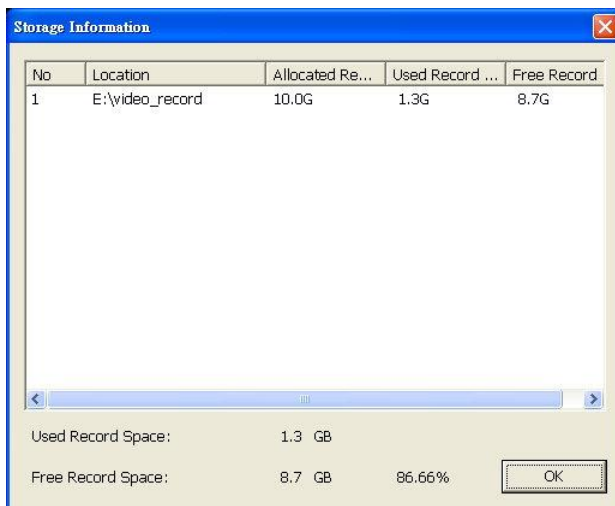
A new CSV file is created per day for each camera that records Flow counting events. The following is a sample CSV file.



Start Time	End Time	Camera	Line	In	Out
23:29:50	00:29:50	1	1	2	0
23:29:50	00:29:50	1	1	0	0
00:29:50	01:29:50	1	1	1	0
00:29:50	01:29:50	1	1	0	0
01:29:50	02:29:50	1	1	0	0
01:29:50	02:29:50	1	1	0	0
02:29:50	03:29:50	1	1	0	0
02:29:50	03:29:50	1	1	0	0
03:29:50	04:29:50	1	1	1	0
03:29:50	04:29:50	1	1	0	0
04:29:50	05:29:50	1	1	0	0
04:29:50	05:29:50	1	1	0	0
05:29:50	06:29:50	1	1	8	0
05:29:50	06:29:50	1	1	0	0
06:29:50	07:29:50	1	1	3	0
06:29:50	07:29:50	1	1	0	0
07:29:50	08:29:50	1	1	22	0
07:29:50	08:29:50	1	1	0	0
08:29:50	09:29:50	1	1	18	0
08:29:50	09:29:50	1	1	0	0
09:29:50	10:29:50	1	1	18	0
09:29:50	10:29:50	1	1	0	0
10:29:50	11:29:50	1	1	25	0
10:29:50	11:29:50	1	1	0	0
11:29:50	12:29:50	1	1	24	0
11:29:50	12:29:50	1	1	0	0
12:29:50	13:29:50	1	1	0	0
12:29:50	13:29:50	1	1	0	0
13:29:50	14:29:50	1	1	14	0
13:29:50	14:29:50	1	1	0	0
14:29:50	15:29:50	1	1	20	0

Storage Information

This button displays the amount of remaining disk space. Click this button to open the Storage Information dialog box and view details on disk usage.




No	Location	Allocated Re...	Used Record ...	Free Record
1	E:\video_record	10.0G	1.3G	8.7G

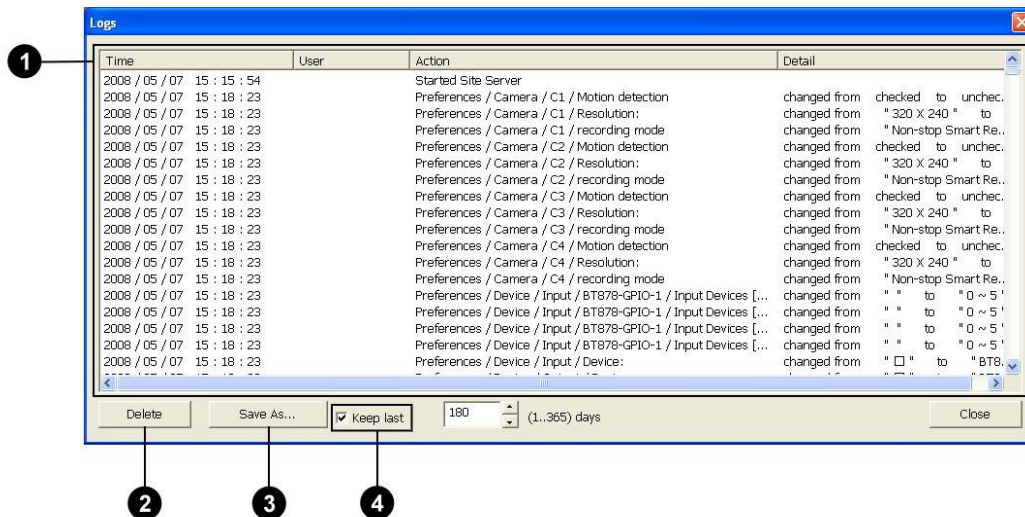
Used Record Space: 1.3 GB

Free Record Space: 8.7 GB 86.66%

OK

Operation Logs

Site Server records login/logout sessions, preferences modification date and time, as well as date and time logs of connections from remote sites. To view these operation logs, first click  on the Site Server program screen. Then, in the pop-up menu, click Operation Log to open the Logs dialog box.

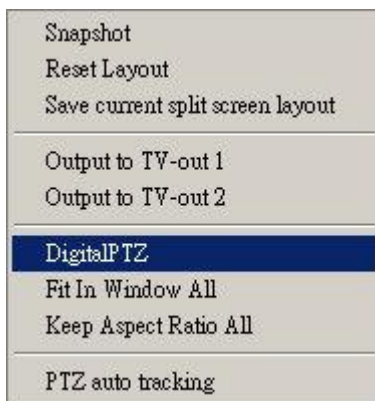


- 1** Log list The Log list shows the date and time, user account name, and the action performed.
- 2** Delete Click this button to delete all recorded logs. Only users with "administrator" privileges have rights to delete operation logs.
- 3** Save As Click this button to save operation logs as a text file.
- 4** Keep as Select this option and specify how many days of operation logs to maintain. This enables Site Server to purge old logs after the specified number of days and free up disk space.

ePTZ

ePTZ is ideal for capturing raw data video from megapixel cameras since video image will be no longer limited to the divide picture. You can easily capture video shot you want and zoom in to the proper ratio. This feature enables to remain original size of raw data by proportional zoom-in for better image performance.

Using features of ePTZ, just select target video window and press right button to pop up menu. The ePTZ related menu items are listed below:



ePTZ

Fit In Window All

Keep Aspect Ratio All

Pop up the ePTZ floating panel.

Set all split screens display as “fit in window”

Set all split screens display as “keep aspect ratio”

ePTZ Interface










Switch to  mode
PIP on floating panel



Switch to  mode
PIP embedded in video display



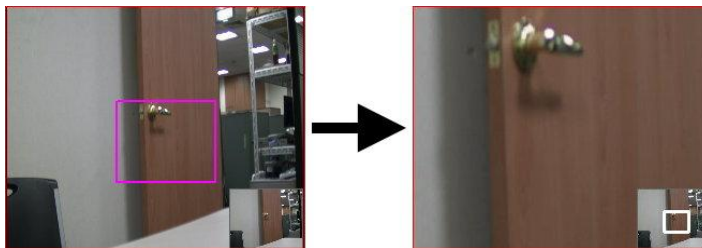
The detail features of ePTZ floating panel are listed below:

Close panel		Press this button to close ePTZ floating panel.
		Press this button to switch to panel display off mode.
		Press this button to switch to panel display on mode.
Zoom in		Press this button to zoom in video.
Zoom out		Press this button to zoom out video.
Fit in window		Press this button to display video as "fit in window".
Keep aspect ratio		Press this button to display video as "keep aspect ratio".
Original size		Press this button to display video in original dimension. This command is available only in single view or single split screen mode.
Zooming frame adjustment		Press any of the 8-directional arrow buttons on the wheel to adjust zooming frame position within PIP by small amount.
PIP video		Display the full view
Display area		The display area is located below the function buttons described above. This area displays the current selected camera name.

On-screen Operation

You can perform some on-screen operation when ePTZ feature is enabled as below:

- Drag frame to zoom in



Dragging frame on video

Zoom in video

- Zoom in / out with mouse center wheel
- Point or drag zooming frame on PIP

SMTP Settings

SMTP related settings allow you to send email through SMTP server if the generated event is needed to be notified. The new SMTP options can use huperVision built-in SMTP server or external servers from other ISP vendors.

You can find the new SMTP settings in the following functions:

- Storage Failure Notification
- Event Notification
- Video Loss Notification

Follow the steps below to find SMTP settings.

- For Storage Failure Notification
 1. Open the Preferences dialog box and click the General tab.
 2. Check the "Storage Failure Notification" in the "Storage for surveillance video recording" group box and then click Options button.
 3. Check "E-mail" and click Options button.
 4. Click the SMTP tab.
- For Event Notification
 1. Open the Preferences dialog box and click the Camera tab.
 2. Check the "Notifications" option in the "Respond to events by" group box and then click Settings... button.
 3. Check the "E-mail" and then click Options button.
 4. Click the SMTP tab.
- For Video Loss Notification
 1. Open the Preferences dialog box and click the Camera tab.
 2. Check the "Notify if video loss" option and then click Settings... button.
 3. Check the "E-mail" and then click Options button.
 4. Click the SMTP tab.

The SMTP Settings

The screenshot shows the 'E-mail' dialog box with the 'SMTP' tab selected. Five numbered callouts point to specific settings:

- 1** points to the 'Default' radio button.
- 2** points to the 'Assigned' radio button.
- 3** points to the 'Use the following type of encrypted connection:' checkbox and the 'SSL' dropdown menu.
- 4** points to the 'My outgoing server(SMTP) require authentication' checkbox and the 'User name:' and 'password:' input fields.
- 5** points to the 'POP3 before SMTP' checkbox and the 'POP3 mail server:', 'Port:', 'User name:', and 'password:' input fields.

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

- | | |
|---|---|
| 1 Default | Select this option to use huperVision built-in SMTP server. |
| 2 Assigned | Select this option to assign external SMTP server.
To setup external SMTP server, you need to assign server name and used port. |
| 3 Use the following type of encrypted connection | This option is an extra feature when Assigned option is enabled.
Some SMTP server requires encryption when sending email. Select TSL or SSL to fit your SMTP server requirement. |

- 4** My outgoing server (SMTP) require authentication

This option is an extra feature when Assigned option is enabled.

Some SMTP server requires authentication when sending email. Input correct username & password if your server need to authentication.
- 5** POP3 before SMTP

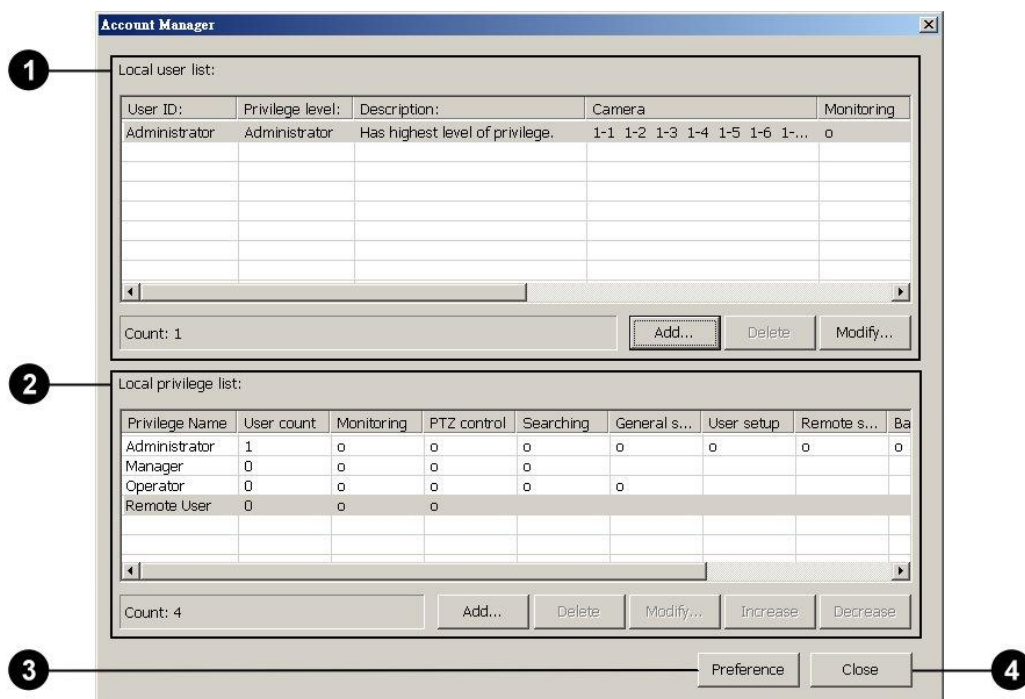
This option is enabled when My outgoing server(SMTP) require authentication option is checked.

Some SMTP server will use POP3 to receive email. Input POP3 related information (server name, used port, username & password) for this feature.

Account Manager

Account Manager is re-integrated and becomes an independent module that can manage accounts & privileges for both multi-instance Site Server & MatrixView. It can create and manage user accounts, add new privilege levels, enable local or centralized control over Site Server & MatrixView, and enable automatic login access to the DVR server.

Account Manager Interface



- 1** Local user list List of user account. Can add/delete/modify user account.
 For more details, please check Managing Accounts section.
- 2** Local privilege list List of user group privilege. Can add/delete/modify user
 group privilege contents and priority. For more details,
 please check Managing Privileges section.
- 3** Preferences Pop up Preferences setting interface. For more details,
 please check Setting Preferences section
- 4** Close Close Account Manager interface

Managing Accounts

Local user list:

User ID:	Privilege level:	Description:	Camera	Monitoring
Administrator	Administrator	Has highest level of privilege.	1-1 1-2 1-3 1-4 1-5 1-6 1-...	o

Count: 1

Creating and maintaining user accounts

To create a new user account:

1. Click "Add". The Add User dialog box then appears.

Add User

User ID:

Password:

Confirm password:

Privilege level:

Description:

Authority

☒ Monitoring ☒ Remote setup

☒ PTZ control ☒ Backup

☒ Searching ☒ Shutdown

☒ General setup ☒ Privacy Mask

☒ User setup

Camera

☒ Site 1

☒ Camera 1

☒ Camera 2

☒ Camera 3

☒ Camera 4

☒ Camera 5

☒ Camera 6

☒ Camera 7

☒ Camera 8

☒ Camera 9

☒ Camera 10

☒ Camera 11

☒ Camera 12

☒ Camera 13

☒ Camera 14

☒ Camera 15

☒ Camera 16

2. Enter a "User ID", and enter the "Password" twice in the provided text boxes.
3. Select a "Privilege level" to assign to the user account. (See the table below)

User	Privilege
Administrator	Highest level of privilege. A user who is assigned with an "Administrator" privilege will be able to view all cameras, customize preference options, and add/delete/modify user accounts.

Manager	A user who is assigned with a "Manager" privilege can view cameras assigned with "Manager", "Operator" or "Remote user" privilege, but does not have rights to customize preference options.
Operator	A user who is assigned an operator privilege: <ul style="list-style-type: none"> ▪ Can view cameras that were assigned with "Operator" or "Remote user" privilege. ▪ Does not have access rights to the Account Manager. ▪ Does not have rights to modify preference settings of camera that were assigned with "Administrator" or "Manager" privilege.
Remote user	A user who is assigned with a "Remote user" privilege can only view cameras that were assigned with the same level of privilege remotely through a Web browser or remote viewer tool.

4. Enter a textual "Description" about the user account.
5. In the Camera list, check the surveillance cameras that this user account will be permitted to have access. If the privilege level assigned to this user account does not permit access to all cameras, the restricted cameras will be grayed out and cannot be selected in the Camera list.

Note: For multi-instance DVR system, all cameras will be displayed in the camera list. You can access cameras across local sites with one single account.

6. In the Authority group box, the permitted rights for performing certain actions will be selected by default for the chosen privilege level. (For instance, if you assigned the Administrator level in step 3, all rights will be selected. Whereas if you assigned the Remote User level, only Monitoring and PTZ control will be selected and the others will be grayed out.) If you want to exclude some rights, deselect their checkboxes.

To make changes to a user accounts

1. Select the user ID of the account that you want to modify.
2. Click "Modify" and then make adjustments in the Modify User dialog box.

To delete a user accounts

1. Select the user ID of the account that you want to remove.
2. Click "Delete".

Note: Default user Administrator cannot be deleted or modified.

Managing Privileges

Local privilege list:

Privilege Name	User count	Monitoring	PTZ control	Searching	General s...	User setup	Remote s...	Ba
Administrator	1	o	o	o	o	o	o	o
Manager	0	o	o	o				
Operator	0	o	o	o	o			
Remote User	0	o	o					

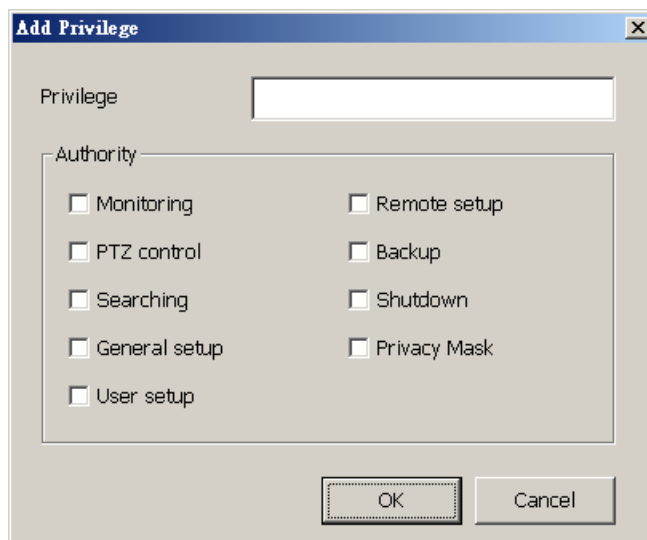
Count: 4 Add... Delete Modify... Increase Decrease

There are four default privilege levels: Administrator, Manager, Operator, and Remote User. If you want to add more privilege levels and assign them with different sets of actions, click the Add button under Local privilege list. This will open the Privilege Level dialog box where you add, modify, delete, increase, or decrease privilege levels.

Note: Default privilege levels cannot delete, modify or change privilege priority.

To create a new privilege level:

1. Click "Add" to open the Add Privilege dialog box.



The 'Add Privilege' dialog box contains a text field for 'Privilege' and a section for 'Authority' with the following options:

- ☐ Monitoring
- ☐ PTZ control
- ☐ Searching
- ☐ General setup
- ☐ User setup
- ☐ Remote setup
- ☐ Backup
- ☐ Shutdown
- ☐ Privacy Mask

Buttons: OK, Cancel

2. Enter a name for the new privilege level.

3. In the Authority group box, select the checkboxes of those actions that you want to assign to this privilege level. (See the table below for details on each type of action.)
4. Click "OK".

Authority	Actions
Monitoring	View live camera video either on the local site or remote site.
PTZ Control	Control PTZ cameras. (Does not include rights to customize settings)
Searching	Perform any action on video recordings except for backup. It allows access to the Record Player, Remote Record Player, and huperRemote to play back video recordings.
General Setup	<ul style="list-style-type: none"> ▪ Modify settings on the Preferences dialog box of Site Server. In the Camera tab, only cameras that have lower or equal privilege levels to the login user are allowed to do modifications. ▪ Enable or disable detection on the Site Server. ▪ Modify settings on the detection dialog boxes of Site Server. ▪ Modify settings on the PTZ Control Panel. ▪ Adjust the brightness, contrast, hue, and saturation settings for cameras on the Site Server.
User Setup	Add, delete, or modify user accounts in Preferences - User tab.
Remote Setup	Use remote desktop control.
Backup	Run the Backup Scheduler program to modify settings and back up recordings.
Shutdown	Close the DVR Site Server program

Setting Preferences

1 ☐ Enable access control

2 ☐ Local Control

☐ Authenticate with Active Directory Server

Active Directory Domain:

☐ Central Control

Server IP address:

TCP port:

3 ☐ Auto DVR login

Login name:

Password:

OK Cancel

- | | |
|--|---|
| 1 Enable access control | Select this option if you want to restrict the Site Server / MatrixView program's access rights only to users having the Administrator privilege. When access control is enabled, you need to login to access the programs. |
| 2 Local control / Central control | Select Local Control to maintain user accounts to be added and managed locally on the Site Server. Otherwise, select Central Control if you want all user accounts to be registered to the List Server, which acts as a central server for maintaining user data for all networked DVR systems. |
| 3 Auto DVR login | Select this option if you want to allow only certain user accounts to login to the Site Server / MatrixView. |

Auto DVR login

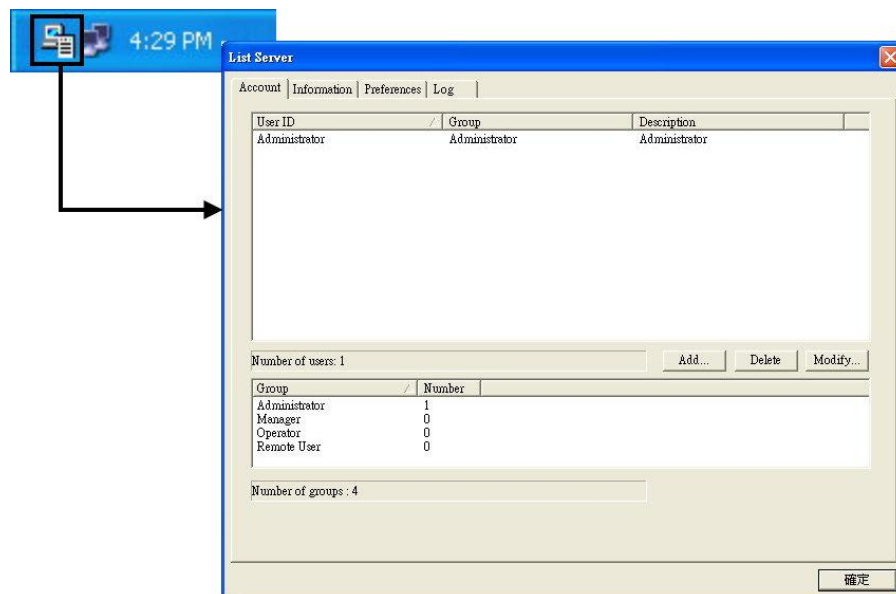
The Auto DVR login option, when selected, allows only certain user accounts to log into and access the Site Server.

To allow a certain user account to have login access to Site Server:

1. First, create a user account. See the section "Creating and maintaining user accounts" for details on how to create a new user account.
2. Select the Auto DVR login checkbox and enter the Login name and correct password to specify the user account that will be allowed to log into the Site Server.

Central Control and Local Control

By default, the "Central Control" option is selected which allows user account information to be registered in the centralized database of the List Server. With this option selected, new user accounts that you create will be added to the List Server.



List Server can be installed and ran on a separate computer on your local network. If you have this type of set up, specify the correct TCP port and Server IP address of the List Server computer in order for the Account Manager to connect to the List Server computer and to register user account information on that computer.

☒ Central Control

Server IP address:

TCP port:

On the contrary, if you prefer the user account information to be added and maintained locally. Select the “Local Control” option.

Note: The default user account for List Server is: User name: administrator, Password: system

Appendix **Profile Settings of LiveTag.ini**

What is the profile settings for?

Some settings of huperVision are related to the product models and hardware environments. These settings are put on the “LiveTag.ini” file with default values. Installers and users can modify the settings for customization or performance/quality tuning.

Where is the file for the setting?

The file “LiveTag.ini” is located at the bin subfolder of product installed folder.

How to Modify the Settings?

Prior to the modification, you need to know each setting standing for. Below explain the settings one by one.

[SYSTEM] Section

Key Name	Default	Description
Smart_Saving_interval	1	Specify the recording frame rate while no motion video in No-stop Smart recording mode. 1 for 1fps, 2 for 0.5 fps, etc.
NORESPONSETIME	130	Specify the time out (in seconds) for hardware watchdog to reboot the system if the system has not been responding for a while. The maximum value is 255.
H8008DB	1	Force H8008DB capture card use bracket mode for video sources input.
IVS_FPS	15	The frame rate for intelligent video analysis. Increasing this value gets smoother video for analysis modules and probably better results for some analysis.
LIVEMON	1	Enable software watchdog LiveMon.exe, which monitors the program status of site server.

Time_shift_threshold	3	The maximum allowable time shift (in seconds) for site server to keep using the same file for recording. Site server switches to another file for recording If the system time is significantly changed.
Start_Minimized	0	Start site server in background mode.

[NONCHANGEDISPLAY] Section

Key Name	Default	Description
NOCHANGE	1	Specify if site server should change desktop resolution to 1024x768 16-bit mode before it starts.

[GDI_BG_COLOR] Section

Key Name	Default	Description
MaskGridR	250	Specify the color (R value) of mask patterns for motion detections.
MaskGridG	250	Specify the color (G value) of mask patterns for motion detections.
MaskGridB	250	Specify the color (B value) of mask patterns for motion detections.
Bg_colorR	0	Specify the background color (R value) of mask patterns for motion detections.
Bg_colorG	0	Specify the background color (G value) of mask patterns for motion detections.
Bg_colorB	0	Specify the background color (B value) of mask patterns for motion detections.

[COMPRESSOR_FAST] / [COMPRESSOR_GOOD] /

[COMPRESSOR_BEST] Section

Key Name	Description
GOP	Specify the frame rate of I-frame. Larger value gains smaller data size but may reduce the image quality.
QP	Specify the QP value. Smaller value gains better image quality but has larger data size.
Search_level	Specify the motion searching method. Value 1 has best performance with largest data size. Value 2 has good performance with smaller data size. Value 3 is slowest with smallest data size.

PS: Settings for HM compression

Key Default	FAST	GOOD	BEST
GOP	30	30	30
QP	7	7	5
Search_level	1	2	2

PS: Please DO NOT change these key default values of compression settings or it may increase the CPU consumption.

[H264_FAST] / [H264_COMPACT] / [H264_GOOD] / [H264_BETTER] /

[H264_BEST] Section

Key Name	Description
QP	Specify the QP value. Smaller value gains better image quality but has larger data size.
Deblocking	Specify if a deblocking filter should be applied to blocks in decoded video to improve visual quality and reduce data size by smoothing the block edges. Turning on deblocking will increase the CPU usage.

CABAC	Choose between context-adaptive binary arithmetic coding (CABAC) and context-adaptive variable-length coding (CAVLC). CABAC=1 will reduce data size but increase the CPU usage considerably.
Partition_16x16	Specify if H.264 encoder should predict block with size of 16x16 , 16x8 and 8x16. Turning on this option might reduce data size with some additional CPU usage.
Partition_8x8	Specify if H.264 encoder should predict block with size of 8x8 , 8x4, 4x8 and 4x4. Turning on this option might reduce data size with some additional CPU usage.
GOP_MIN	Specify the minimum frame interval of I-frame. Larger value gains smaller data size but may reduce the image quality.
GOP_MAX	Specify the maximum frame interval of I-frame. Larger value gains smaller data size but may reduce the image quality.
Search_level	Specify the motion searching method. Larger value might reduce data size with larger CPU cost.
Search_range	Specify the motion searching range. Larger value might reduce data size with larger CPU cost.
Subpel_level	Specify the subpel motion searching level. Larger value might reduce data size with larger CPU cost.
Chroma_ME	Turning on Chroma_ME to perform motion searching for chroma components of video, which might reduce data size with larger CPU cost.

PS: Settings for H264 compression

Key Default	FAST	COMPACT	GOOD	BETTER	BEST
QP	30	29	26	23	20
Deblocking	0	1	0	0	0
CABAC	0	1	0	0	0
Partition_16x16	0	1	0	0	0
Partition_8x8	0	1	0	0	0
GOP_MIN	30	30	30	30	30
GOP_MAX	30	60	30	30	30
Search_level	0	1	1	1	1
Search_range	0	16	16	16	16

Subpel_level	0	1	1	1	1
Chroma_ME	0	1	1	1	1

PS: Please DO NOT change these key default values of compression settings or it may increase the CPU consumption.

[AUDIO_FORMAT] Section

Key Name	Default	Description
SAMPLE	8000	Specify the audio sampling rate. 8KHz by default.
BIT	8	Specify the sample resolution, 8 bits by default. It could be 8 bits or 16 bits.

[DRAW_FRAME] Section

Key Name	Default	Description
SmartGenerateJPEG	1	If mobile phone remote watching (JPEG) is enabled, JPEG files will be generated periodically (specified in the preference settings). Turning on SmartGenerateJPEG will stop JPEG generation if there is no web connection after 1 minute (to reduce system resource and CPU usage).

[PTZ_CAMERA_TO_PRESET] Section

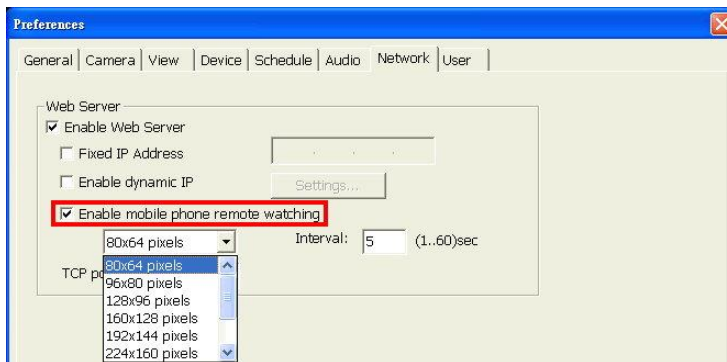
Key Name	Default	Description
MinEventDwellTime	2	If "PTZ camera to preset" event notification is used, this option specify the minimum time interval for PTZ camera to dwell in preset position. Note that some events have very short duration.

[CAP_RECOVER] Section

Key Name	Default	Description
ShowMsg	0	Show a count-down message if the capture chips stop responding.
CountDownSec	30	The time-out (in seconds) for the message.
Reboot	1	Reboot the system if the capture chip stop responding.

[DRAW_FRAME_SIZE] Section

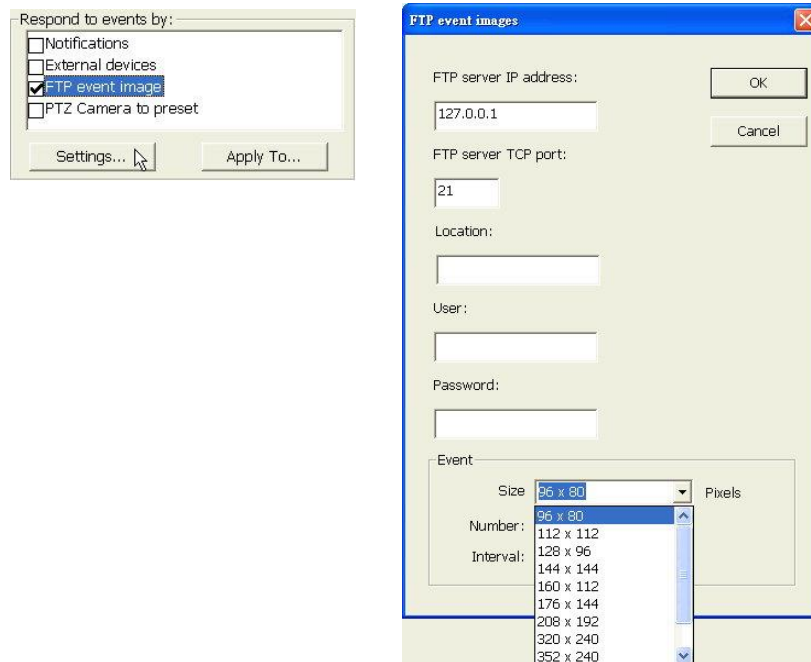
The contents in this section are the list of image size for mobile phone remote watching. This setting is located in the Network tab of Preferences dialog.



Key Name	Description
XImageSize_(n-1)	The nth menu item of available image width of JPEG for mobile phone remote watching.
YImageSize_(n-1)	The nth menu item of available image height of JPEG for mobile phone remote watching.

[FTP_FRAME_SIZE_NTSC] / [FTP_FRAME_SIZE_PAL] Section

The contents in this section are the list of image size for mobile phone remote watching. This setting is located in the Network tab of Preferences dialog.

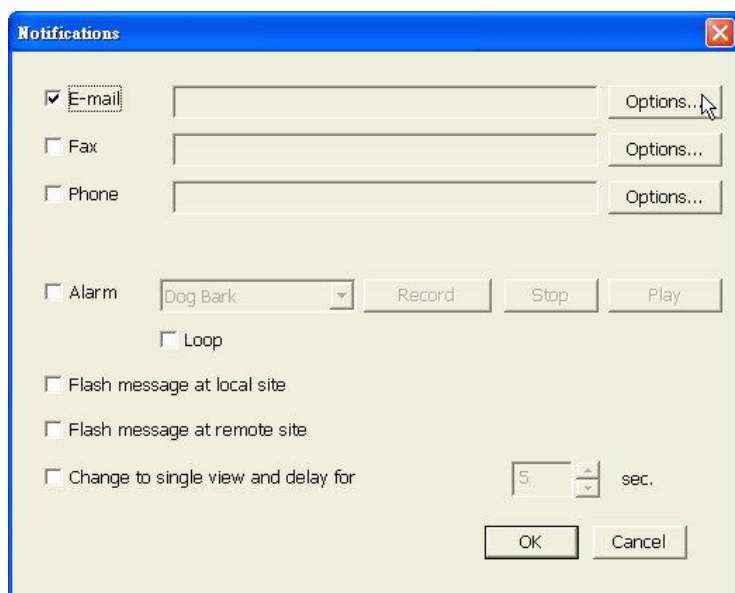


Key Name	Description
XImageSize_(n-1)	The nth menu item of available image width of JPEG for FTP of event notification.
YImageSize_(n-1)	The nth menu item of available image height of JPEG for FTP of event notification.

[EMAIL_FRAME_SIZE_NTSC] / [EMAIL_FRAME_SIZE_PAL] Section

The contents in this section are the list of image size for email notification. This setting is located in the Respond to events by section within Camera tab of Preferences dialog.





Notifications

☒ E-mail Options...

☐ Fax Options...

☐ Phone Options...

☐ Alarm Record Stop Play

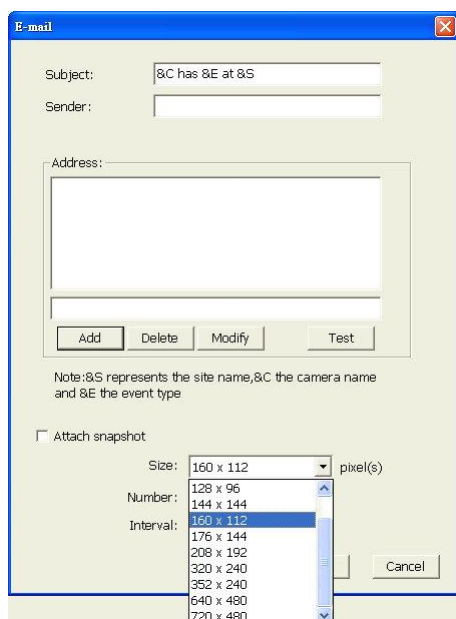
☐ Loop

☐ Flash message at local site

☐ Flash message at remote site

☐ Change to single view and delay for sec.

OK Cancel



E-mail

Subject:

Sender:

Address:

Add Delete Modify Test

Note: 8S represents the site name, 8C the camera name and 8E the event type

☐ Attach snapshot

Size: pixel(s)

Number:

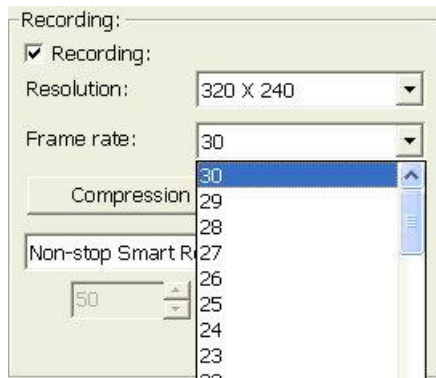
Interval:

Cancel

Key Name	Description
XImageSize_(n-1)	The nth menu item of available image width of JPEG for email notification.
YImageSize_(n-1)	The nth menu item of available image height of JPEG for email notification.

[REC_FRAME_RATE_NTSC] / [REC_FRAME_RATE _PAL] Section

The contents in this section are the list of frame rate for recording. This setting is located in the Recording section within Camera tab of Preferences dialog.



Key Name	Description
U_SERIES_0	Recording frame rate for U-series card (currently unavailable).
RATE_(N-1)	The nth menu item for available recording rate.

[IP_CAMERA] Section

Key Name	Default	Description
TransCode	0	TransCode=0 keeps the original incoming video format of IP camera. TransCode = 1 will transcode the incoming video, which requires more CPU usage
BONUS_IP_CAMERA	0	If the system does not have IP camera license, turning on this option will switch the last camera into IP camera mode.

[AUTO_WINDOWS_LOGIN] Section

Key Name	Default	Description
Enable	1	<p>Enable=1 keeps the option Auto Windows Login in the Preferences General page available and adjustable.</p> <p>Enable=0 will hide the option Auto Windows Login from the dialog and disable auto login feature.</p>

[FlexChannelManager] Section

Key Name	Default	Description
AutoDetectChannel	0	<p>Automatically detect channel number for FlexChannel cards from the number of connectors of video cable.</p> <p>0: Disable, 1: Enable</p>
DefaultChannel	0	<p>Default channel number of FlexChannel card when AutoDetectChannel is disabled.</p> <p>0: Max (16 currently), 4: 4 channels, 8: 8 channels, 16: 16 channels</p>

Appendix PTZ Camera Auto-tracking Guide

System Requirements

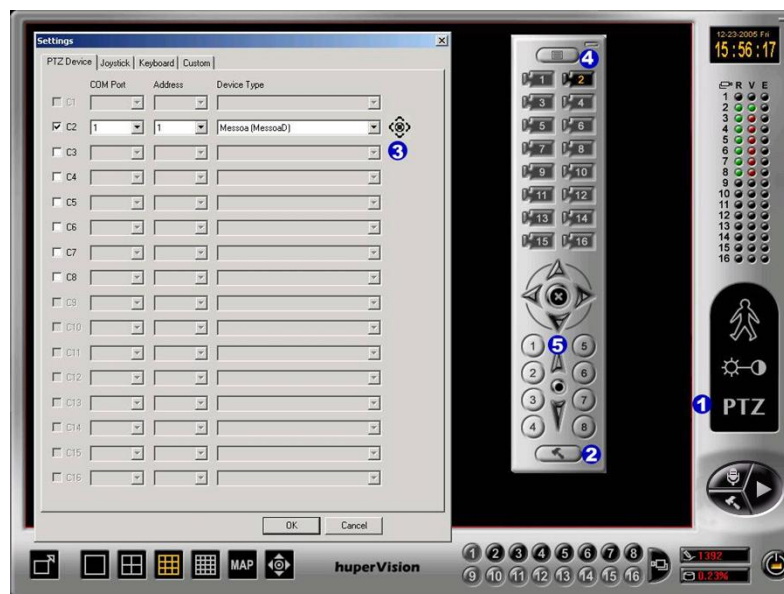
1. A DVR machine with huperVision 4000 v1.2 or above installed.
2. A Pelco PTZ camera or a Messoa PTZ camera that supports the Pelco-D control protocol (plus an RS232/RS485 converter if the DVR machine doesn't provide an RS485 port.)

Installation

- Step 1: Make sure the PTZ camera device uses the Pelco-D control protocol. If not, please adjust its switcher or jumper to use Pelco-D protocol.
- Step 2: Connect the video cable of the PTZ camera to a BNC port of the capture card on the huperVision machine.
- Step 3: Connect the control cable of the PTZ camera to one COM port on the huperVision machine. If the huperVision machine doesn't support the RS485 port, an RS232/S485 convert is required.

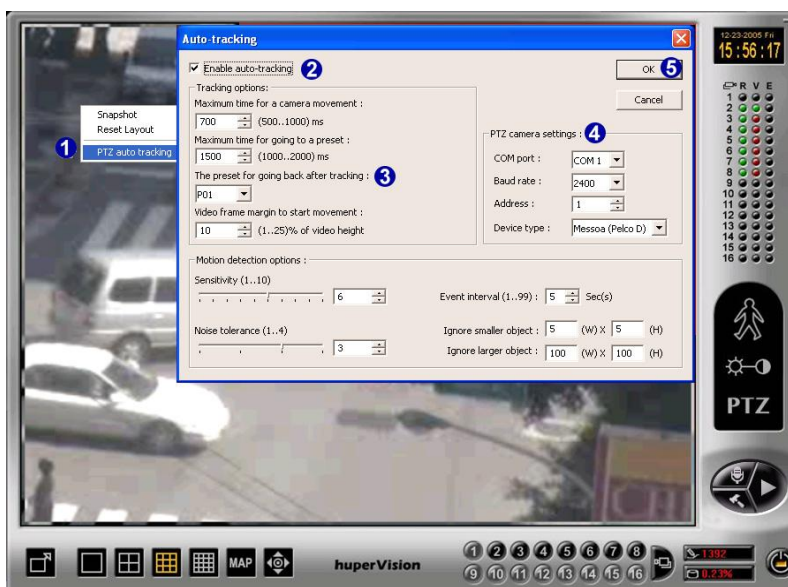
Customize Settings

1. Connect the PTZ camera to the DVR system and define a preset position



- Step 1: Click the “PTZ” icon on the panel at the right side of the huperVision system to display the PTZ Control Panel.
- Step 2: Click the hammer button at the bottom of PTZ Control Panel to open the “Settings” dialog box.
- Step 3: In the “Settings” dialog box, enter the PTZ camera information onto the “PTZ Device” setting page.
 - Select the “Cx” check box where “x” indicates the channel number that the PTZ camera’s video cable connects to.
 - Select the COM port from the “COM port” list that the PTZ camera’s control cable connects to.
 - Select the address ID of the PTZ camera from the “Address” list (check the PTZ camera switcher to find the address ID or inquire from the dealer.)
 - From the “Device type” list, select “Messoa (MessoaD)” for the Messoa PTZ camera, or select “Pelco D, 2400 bps (Pelco-D)” for the Pelco PTZ camera.
 - Then click the “OK” button to close the “Settings” dialog box.
- Step 4: Click the camera button to select the PTZ camera.
- Step 5: Define a preset position where the PTZ camera will move to after tracking. First, adjust the camera viewing angle to an appropriate position. Then save the position to a preset button by pressing a preset button and holding it for about 3 seconds.

2. Enable the auto-tracking function and customize its settings.



- Step 1: Right-click on the PTZ camera video to display a pop-up menu. Then click “PTZ Auto-tracking”.
- Step 2: In the “Auto-tracking” dialog box, select the “Enable auto-tracking” checkbox to activate the auto-tracking function.
- Step 3: From “The preset for going back after tracking” list, select the preset position where the PTZ camera will move back to after tracking. Selecting “None” will make the PTZ camera stay at the last position after tracking.
- Step 4: Specify the PTZ camera information, including COM port, baud rate, address ID and device type. The suggested baud rate is 2400 for the Messoa PTZ camera and Pelco PTZ camera.
- Step 5: Click “OK” to confirm the settings and start the auto-tracking function.

Auto-tracking Settings

The following are the settings you can adjust in the Auto-tracking dialog box to optimize the accuracy of auto-tracking:

- 1 Enable auto-tracking Select this checkbox to activate the auto-tracking function.

Note: While auto-tracking is enabled, you cannot manually control the PTZ camera on the PTZ Control Panel.

- 2** Maximum time for a camera movement

Specify the maximum time for the PTZ camera to complete a movement. While PTZ camera is in movement, motion detection will be disabled. After it completes the movement, motion detection will be enabled automatically. The time duration can be set anywhere between 1000 to 2000 ms.
- 3** Maximum time for going to a preset

Specify the maximum time for the PTZ camera to move to a preset position. An appropriate time is the period for the PTZ camera to complete a movement along a circumference. The time duration can be set anywhere between 1000 to 2000 ms.

Note: If the specified time for moving to a preset is too short to complete a movement, the auto- tracking function may not work accurately.

- 4** The preset for going back after tracking

Select the preset position where the PTZ camera will move back after tracking. Select None if you want the PTZ camera to stay at the last viewing angle and position.
- 5** Video frame margin to start movement

Define the frame margin in the PTZ camera video. The PTZ camera will not move until moving objects touch the frame. The frame width can be set between 1% to 25% of the video height.
- 6** PTZ camera settings

 - COM port

Select the COM port number that the control cable of the PTZ camera connects to.
 - Baud rate

Select the appropriate baud rate to define the communication speed between the huperVision system and the PTZ camera.

■ Address

The address of the PTZ camera is defined by the PTZ camera device's ID switcher and jumper. If you find no address ID or have no idea about it, try selecting a value of 1. If it doesn't work, please contact your dealer to get a correct address ID.

■ Device type

There are some available device types. For example: Messoa (Pelco D) for the Messoa PTZ camera, and Pelco (Pelco D) for the Pelco PTZ camera.

Note: Please be sure to set the correct COM port, baud rate and address ID. Otherwise, the auto-tracking function will not work.

7 Sensitivity

Specify the sensitivity level of motion detection. The sensitivity level can range from 1 to 10.

8 Noise tolerance

Specify the tolerance level to camera video noise. This can range from 1 to 4.

9 Event interval

Specify the minimum interval between tracking events. If the specified interval has elapsed and there are still no objects tracked, the PTZ camera will return to the selected preset position (or it will stay at the last position if None has been selected under The preset for going back after tracking option).

10 Ignore smaller / larger objects

Specify the size of moving objects that will be ignored during tracking.

Appendix **Guide to Connect PTZ Camera**

I. Something you should know first

1. There are two types of RS-232 ports on a computer: serial ports and parallel ports. The serial port, so-called COM port, is the one for plugging in the control cable from the PTZ camera.
2. PTZ cameras have a RS-422/485 port to connect the control cable. In order to connect a control cable from a PTZ camera to a computer, a converter device from RS-422/485 to RS-232 is usually adopted.

Note: The connection length of RS232 cable is limited in 15 meters. The connection length of RS-422/485 cable can be up to 1,200 meters.

3. A serial port on a computer can control multiple PTZ cameras. These PTZ cameras connected to the same computer serial port are each identified by a unique hardware ID. You can assign an ID to a PTZ camera by adjusting the ID switch of PTZ camera device. For details, please refers to the PTZ camera manual.
4. RS-232 pin definition

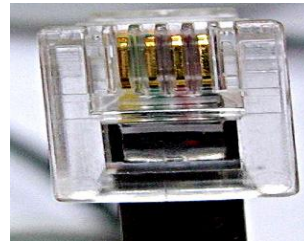
When we look in front of the female D connector of COM port, the pin on the top right is pin 1. There are numbers beside the pins at the D female connector. The computer communicates with PTZ cameras via pin 2 and pin 3. The lines of pin 2 (RXD) and pin 3 (TXD) each connect to the "Data-" pin and "Data+" pin of the PTZ camera device.

Pin	Function	
1	CD	
2	RXD	Receive data
3	TXD	Transport data
4	DTR	DTE ready
5	GND	DTE ready
6	DSR	DCE ready
7	RTS	Request to send
8	CTS	Clear to send
9	RI	Ring indicator

Please refer to the PTZ camera manual for the actual pin name.

5. RJ11 cable

RJ11 cable is a general telephone cable. Telephone cable has three types: telephone cable that has 2 lines, 4 lines or 6 lines inside. Be sure to use a telephone cable that has 4 lines or 6 lines inside to connect from PTZ camera to the converter device. When we look in front of the RJ11 connector, the left line is line 1 and the right line is line 6. In the cable, line 4 and line 5 are used for RX+ and RX- lines.



RJ11 connector
(four lines inside)

II. Connect the PTZ camera: Use DynaColor dome camera as an example

Step 1: Adjust jumpers at the PTZ camera base.

Jumper	
Dome ID	001
Duplex / Simplex	
S1 & S2	DynaColor protocol

Notes:

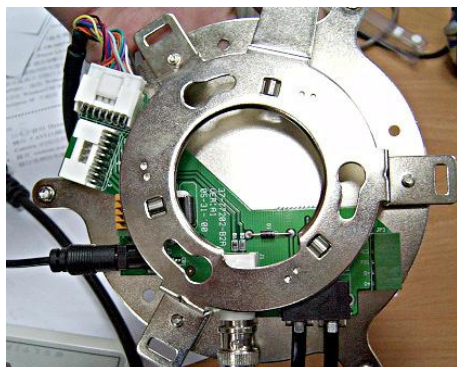
1. After the PTZ camera has been set up and the pan, tilt and zoom controls seem not very well. You can switch from duplex mode to simplex mode and try again.
2. If there are two more PTZ cameras connect to a serial port at the computer, you must assign each PTZ camera a unique ID.



Jumpers at the bottom side of PZT camera base

Step 2: Connect cable from PTZ camera base to PTZ dome camera.

Connect a cable (comes in the camera pack) from the white connector (at the upper-left corner in Picture) of PTZ camera base to PTZ dome camera.

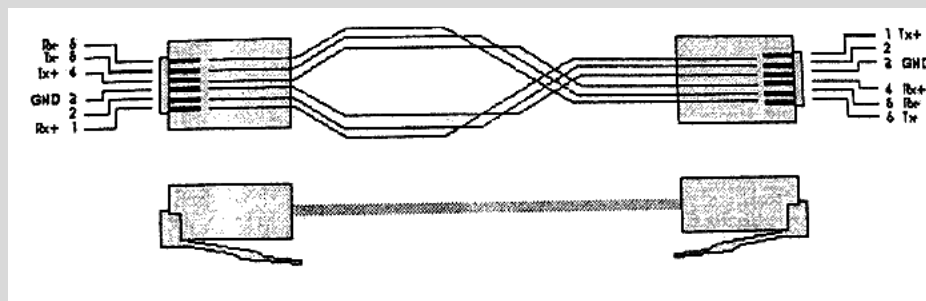


Connectors at the front side of PTZ camera

Step 3: Connect RJ11 cable from PTZ camera base to the RS-422/485 port of converter device. There are two RJ11 connectors at the camera base (at the right-bottom corner in Picture 3). Connect an RJ11 cable from one RJ11 connector at the PTZ camera base to the RS-422/485 port of converter device. Be sure that the RX+ and RX- lines of RJ11 cable each connects to the DATA+ and DATA- pins of converter device.

Notes:

1. Another RJ11 connector is optional for connecting to control panel device. These two RJ11 connectors are forks from the same cable.
2. The converter device needs a power supply to perform action. Please refer to the device manual for the voltage level.

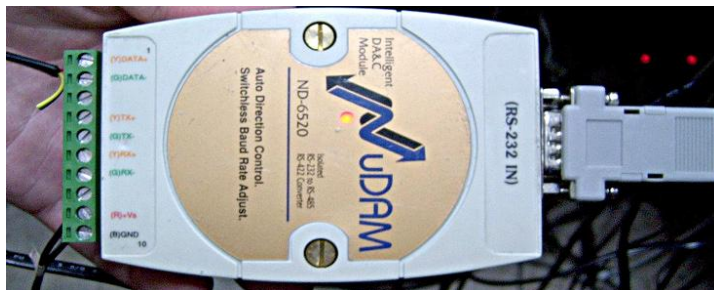


For D751X Control Keyboard



For Speed Dome

Step 4: Connect RS232 cable from the RS-232 port of converter device to the computer.

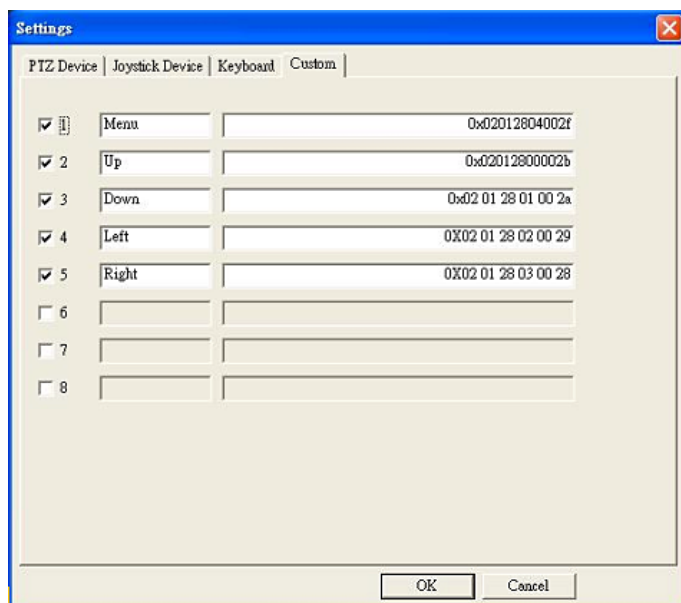


Appendix **An Example of PTZ Custom Command Usage**

Enable OSD (On Screen Display) of DynaColor Dome Camera

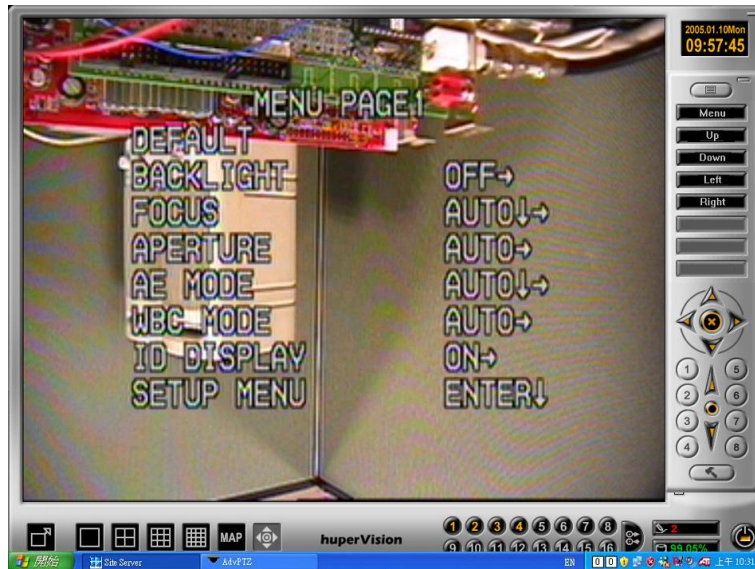
DynaColor dome camera supports the OSD (On Screen Display) commands for device setting. Below is an example to use the Custom Command page of the Advance PTZ Control Panel to operate the OSD commands of DynaColor dome camera.

- Step 1: Click the PTZ icon on the Camera Control Panel of the DVR server to display the Advance PTZ Control Panel.
- Step 2: Click the settings button on the Advance PTZ Control Panel to display the “Settings” dialog box. Click the “Custom” tab to go to the “Custom” setting page.
- Step 3: Select check boxes, enter command names and command codes as what shows in the below picture.



- Step 4: Click the mode button on the Advance PTZ Control Panel and select the “Custom” mode. The Advance PTZ Control Panel switches to the “Custom” panel.

Step 5: Click the “Menu” button to display the OSD commands. Click “Up” and “Down” button to navigate menu commands. Click “Left” and “Right” buttons to change the setting.



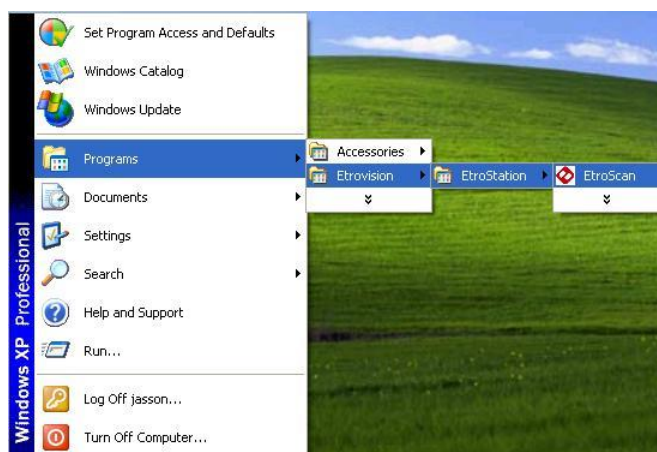
Appendix

An Example of IP Camera (Video Server) Network Settings

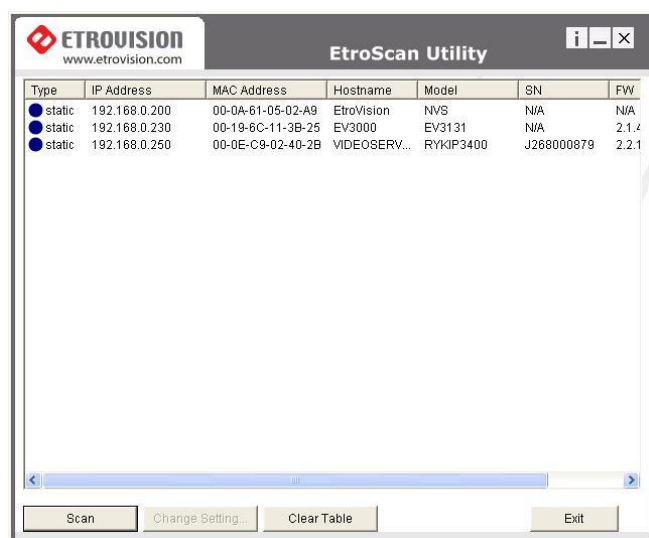
Here we take EtroVision IP camera (video server) as an example.

Modify IP address of IP camera (video server)

1. Run EtroScan Utility that comes with EtroVision IP camera (video server).

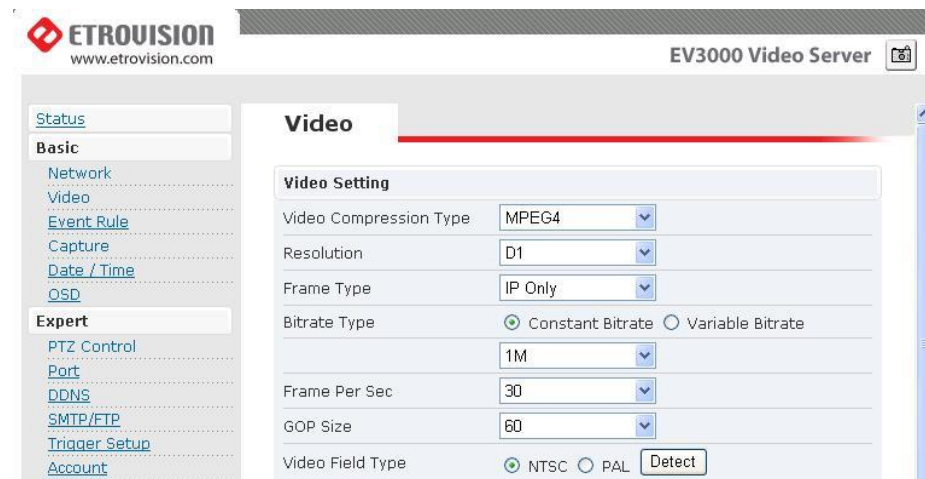


2. Scan the available IP cameras in the network. Modify the IP address to be located within the same sub network of your DVR site.



Edit IP Camera settings

Run web browser and enter IP address of IP camera to enter camera setting page.
The default username/password combination for EtroVision IP camera is
“root/pass”.



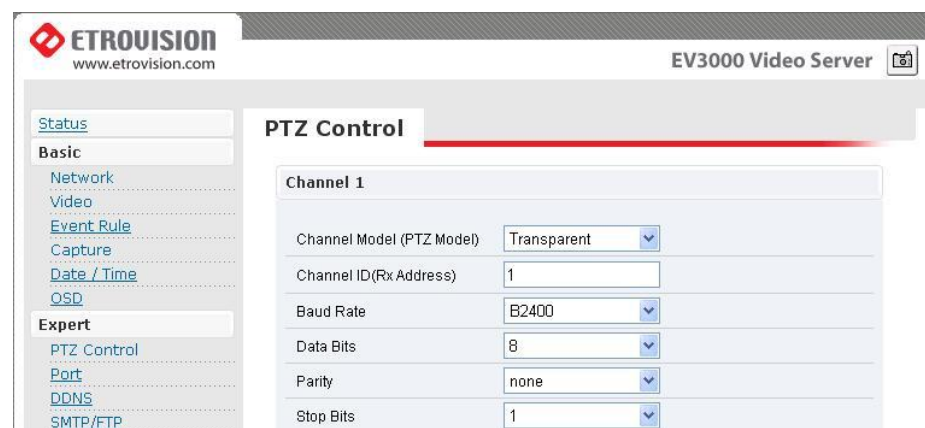
The screenshot shows the EtroVision EV3000 Video Server web interface. The left sidebar contains a navigation menu with sections: Status, Basic (Network, Video, Event Rule, Capture, Date / Time, OSD), and Expert (PTZ Control, Port, DDNS, SMTP/FTP, Trigger Setup, Account). The main content area is titled 'Video' and contains a 'Video Setting' section with the following fields:

Video Compression Type	MPEG4
Resolution	D1
Frame Type	IP Only
Bitrate Type	<input checked="" type="radio"/> Constant Bitrate <input type="radio"/> Variable Bitrate
	1M
Frame Per Sec	30
GOP Size	60
Video Field Type	<input checked="" type="radio"/> NTSC <input type="radio"/> PAL <input type="button" value="Detect"/>

PTZ Control settings

Control PTZ camera through video sever, follow the steps below:

1. Switch to PTZ Control page.
2. Select Transparent from Channel Model (PTZ Model).
3. Reboot the video server.



The screenshot shows the EtroVision EV3000 Video Server web interface with the 'PTZ Control' section selected. The left sidebar is the same as in the previous screenshot. The main content area is titled 'PTZ Control' and contains a 'Channel 1' section with the following fields:

Channel Model (PTZ Model)	Transparent
Channel ID(Rx Address)	1
Baud Rate	B2400
Data Bits	8
Parity	none
Stop Bits	1

Note: You must use set ID/PW to connect the Video Server in huperVision site server.

Connect Multiple IP Cameras under NAT

Follow the steps below to connect IP cameras under NAT (firewall):

1. Change the A/V Port of video server from default 1852 to other actually available port number under this NAT (ex: 11852).

ETROVISION
www.etrovision.com

EV3000 Video Server

Port

Web

Web Port: 80

Video + Audio

AV Port: 1852 → 11852

OK

2. Choose an available port of NAT (e.g. 5180) and forward it to the default port (HTTP Port) of video server (here we use EtroVision 151 as an example).

NAT >> Configure Port Redirection Table

#	Mode	Service Name	Protocol	Public Port	Private IP	Private Port	Active
1	Single	IP Camera	TCP	4242	192.168.0.115	80	<input checked="" type="checkbox"/>
2	Single	IP Camera 2	TCP	4243	192.168.0.106	80	<input checked="" type="checkbox"/>
3	Single	Hunt	---	18089	192.168.0.105	80	<input type="checkbox"/>
4	Single	Jacky ACTi	---	6002	192.168.0.130	6002	<input type="checkbox"/>
5	Single	Jacky1	TCP	18088	192.168.0.135	18088	<input checked="" type="checkbox"/>
6	Single	Jacky2	TCP	18090	192.168.0.108	18088	<input checked="" type="checkbox"/>
7	Single	Jacky ACTi	TCP	1830	192.168.0.130	80	<input checked="" type="checkbox"/>
8	Single	EtroVSCmdPort	TCP	5280	192.168.0.152	80	<input checked="" type="checkbox"/>
9	Single	EtroVSCmdPort	---	39109	192.168.0.151	39109	<input type="checkbox"/>
10	Single	EtroVSCmdhtPo	TCP	5180	192.168.0.151	80	<input checked="" type="checkbox"/>

3. Then, assign the NAT open port with the new A/V Port (e.g. 11852).

Index No. 20

☒ Enable Open Ports

Comment: EV3000 -2

WAN Interface: WAN2

Local Computer: 192.168.0.151

	Protocol	Start Port	End Port		Protocol	Start Port	End Port
1.	TCP	11852	11852	6.	---	0	0

4. In the huperVision Site Server, add new IP camera with the IP Address of NAT and the corresponding port (5180) which has been forward to HTTP port of video server. Leave the Camera Model to [Auto detect].

5. After making the settings, you can find the correct model of Video Server in the IP camera list.

IP Address	Camera model	Description	Status
192.168.0.103:80	HUNT - HLC-81I		
192.168.0.104:80	HUNT - HLT-86F		
192.168.0.130:80	ACTi - ACD2100		
192.168.0.118:80	ACTi - ACD2100		
*192.168.0.146:80	ACTi - ACD2100		
192.168.0.132:80	ACTi - ACD2100		
192.168.0.106:5106	VIVOTEK - PT31x4		
192.168.0.138:5118	VIVOTEK - VS2101		
*192.168.0.07:90	AXIS - AXIS 211		
huperlab.com:5180	Etovision - EV3000		

You can use the same steps to connect multiple IP cameras under this NAT.