
NVR CLIENT

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INTERNET ENABLED VIDEO-MONITORING SYSTEM

Thank you for purchasing **DETEXI**, the digital video monitoring system. **DETEXI** is the premier system for digital video monitoring and recording. **DETEXI** has the ability to scale from small business use to enterprise level security operations.

Please take the time to read this manual so you may make the most effective use of your powerful new **DETEXI** system.



1. Installation Procedure

Installation

Start the **Setup.exe** program. Follow the on-screen setup instructions. If you receive a message indicating that a newer version of a given file already exists on your system, keep your existing file.

Restart your computer when setup is complete.

2. Program Mode: Stand Alone/Client-Server

DETEXI program can work in either [Stand-Alone](#) or [Client-Server](#) mode. The difference is how and where the information about users' ID, passwords, rights to access cameras, cameras' settings and recorded video are stored and processed.

A newly installed program must be setup to work properly. By default the [Client-Server](#) mode is expected and program requires you to enter a [User ID](#) and [Password](#) that has been assigned by the server administrator.

Start the program from the Windows Start menu, as a result Fig. 2.1. will appear. To gain access to program settings and camera setup, click **CANCEL**. This will introduce the Main screen (Fig. 2.2.).



The image shows a dialog box titled "PLEASE AUTHENTICATE". It contains three input fields: "User ID", "Password", and "Programmer". The "Programmer" field is a dropdown menu with "Programmer" selected. To the right of the "User ID" and "Password" fields are two buttons: "OK" and "Cancel".

Fig. 2.1. If user has no user ID and password, Click CANCEL to alter program settings and/or cameras setup.

From main screen, you can activate several setup functions:

- **SETUP** key (for Registered client only) | Takes the user to cameras setup
- **SETTINGS** key | Takes the user to program settings

- **Map Setup (Stand-alone/Registered Client):** is done in “Client module”. In order to do the setup, the following steps are taken:

- Click on Map button located at the main page of the stand-alone client (Fig. 2.3). This will open the map window (Fig. 2.2.b.) that contains the following buttons:

- ✓ Map File
- ✓ Save
- ✓ Clear
- ✓ Cameras
- ✓ Group

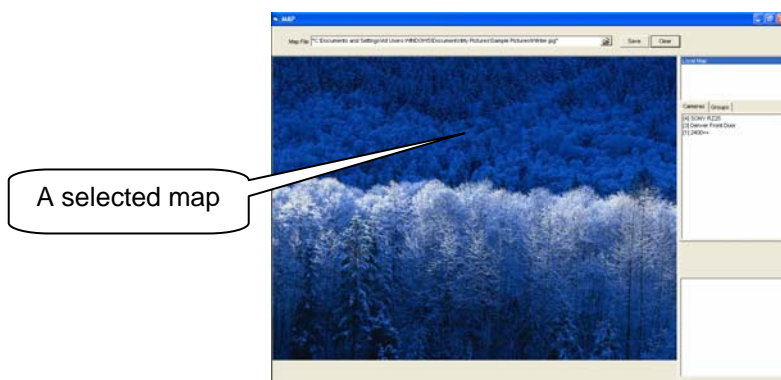


Fig. 2.2.b. Map Window containing a selected map

- Select a map from the map file
- Select cameras from the list of the existing cameras. As a result, it will be possible to put the cameras in their respective locations on the existing map (Fig. 2.2.c.).

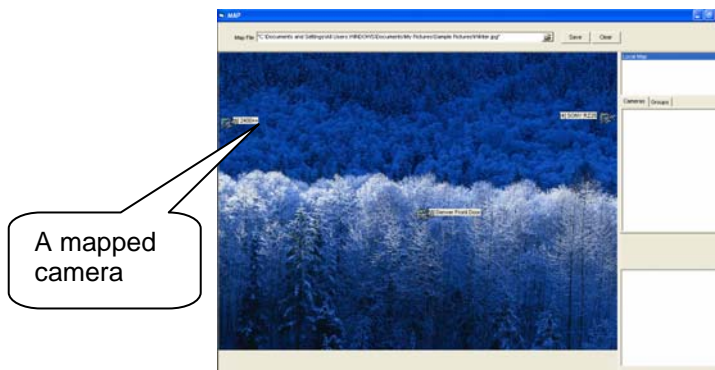


Fig. 2.2.c. Map Window containing a selected Map and mapped cameras

- Save
- You can also **clear** the map (removes the cameras from the map).

- A camera that is mapped will have an "M" button located at the top right corner of the enlarged camera view (Fig. 2.2.a). Click on the M button in order to be directed to the designated map of this specific camera. The main purpose of M button is to provide the location of a specific camera when popup view of that camera is enforced as a result of an **alarm event**.
- Fig. 2.2.d. illustrates a mapped camera and its enlarged view.

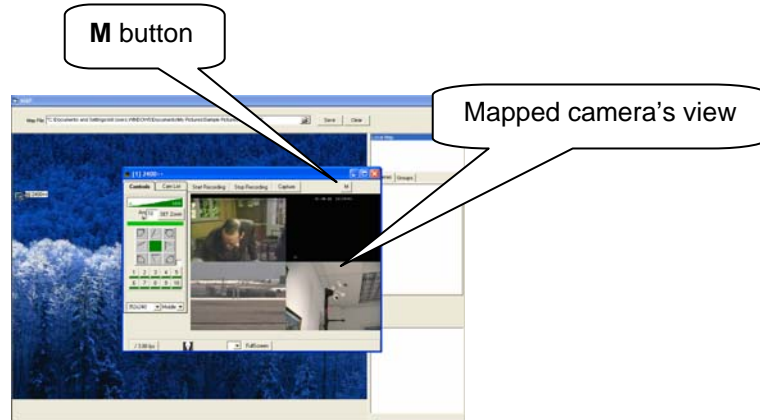


Fig. 2.2.d. Map Window containing the selected Map, mapped cameras, and an enlarged camera view

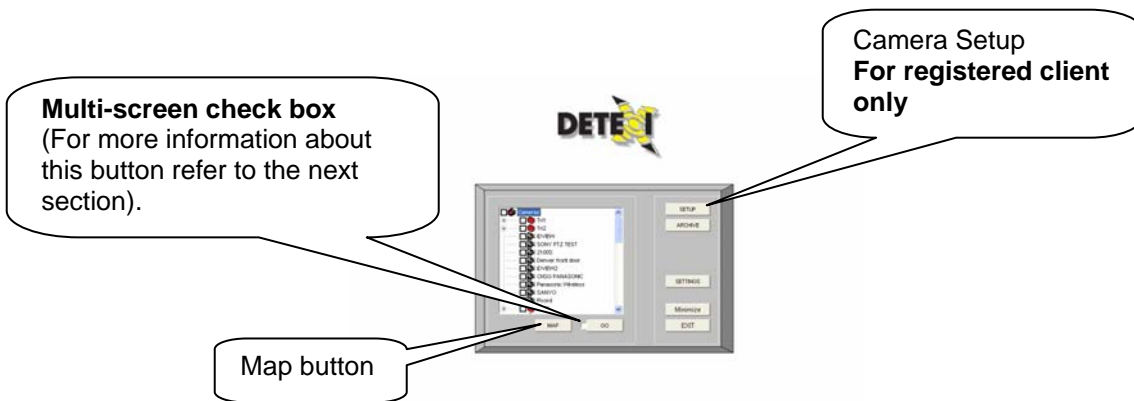


Fig. 2.3.
Main screen (For registered/stand alone client)
And Multi-screen check box

Multi screen check box

- If **checked**, it provides multi-screen view (Fig. 2.4.a.). Right click on each view in order to access each view separately (it contains the “camera control keyboard” Fig. 2.4.b.).

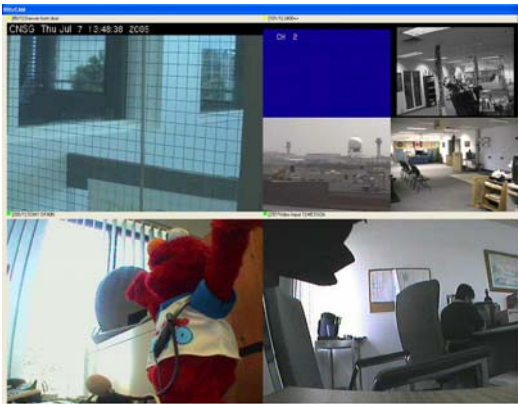


Fig. 2.4.a.

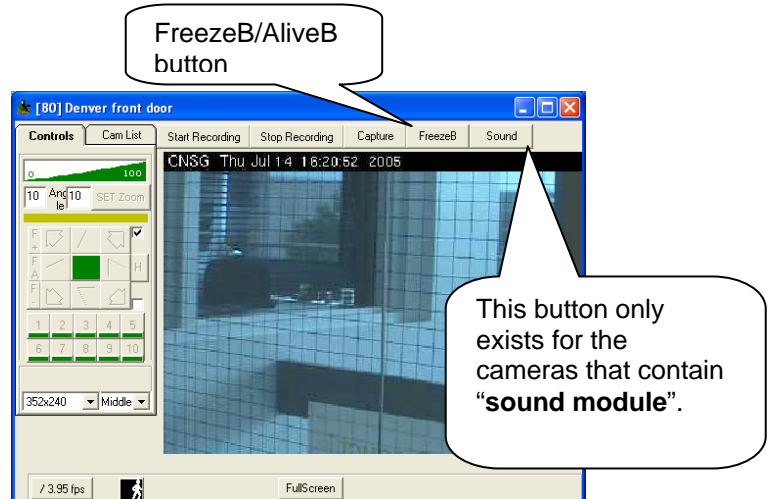


Fig. 2.4.b.

- If **not checked**, it provides the view as shown in Fig. 2.5. As it is illustrated in the figure, it contains the “camera control keyboard”.

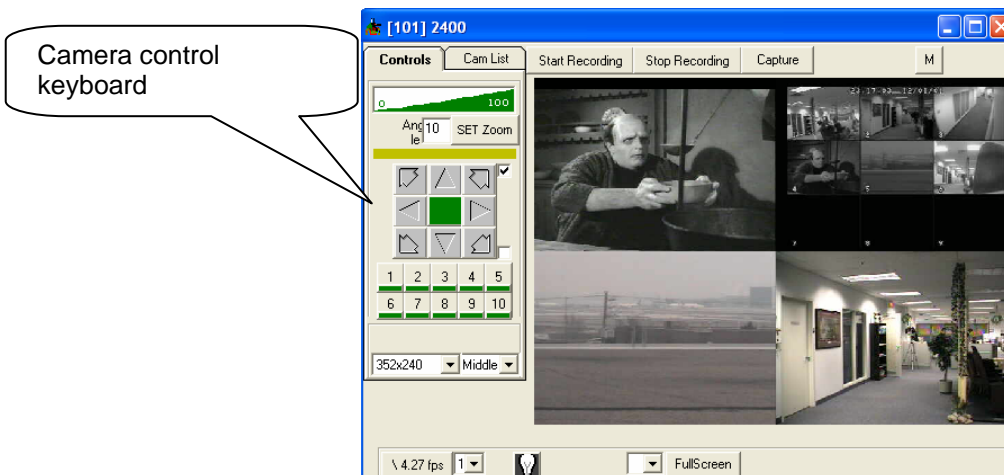


Fig. 2.5.

3. Program Settings

DETEXI program has general mode settings. To change general settings – click on **Settings** key located on the main screen. As a result, **Settings** dialogue box will be opened (Fig. 3.1.).

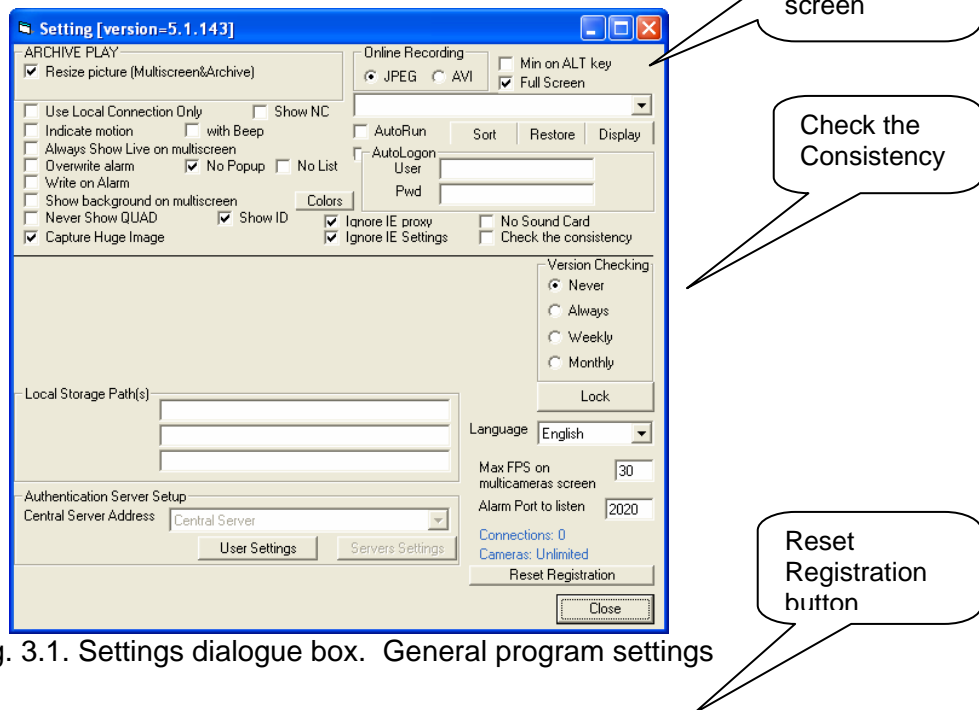


Fig. 3.1. Settings dialogue box. General program settings

❖ **Archive Play**

Resize picture (Multiscreen & Archive) - Allows the user to resize an image.

- If **checked**, shows stretched view (larger view).
- If **not checked**, shows the actual camera size view (smaller view).

❖ **Online Recording**

Online Recording defines the format in which recorded live video files are saved:

- **JPEG** | Recorded video files are saved in *jpx* format – a stream of *jpeg* frames.
- **AVI** | Recorded video files are saved in raw *avi* format that can be played on any video player (larger file size).

❖ **Minimize on Alt-key** – If **checked**, program goes to System Tray when ALT key is pressed.

❖ **Full screen** – If **checked**, the program will run on full monitor screen (Fig. 3.2.), If **not checked**, the program will run in a smaller size screen (Fig. 3.3.).



Fig. 3.2. 'Main' page view, when
"Full screen" on the settings page
is checked

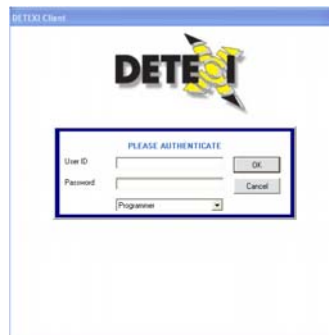


Fig. 3.3. 'Main' page view, when
"Full screen" on the settings page
is not checked

Full screen provides an additional option to the user that is to have the ability to view cameras in multi-screen in different ways. They are as follows:

- Standard view (Fig. a.).
- 5+1 cameras view (Fig. b.).
- 12+1 cameras view (Fig. c.).

Move the cursor to the upper right corner of the multi-screen view to observe the latter options (Fig. a.)

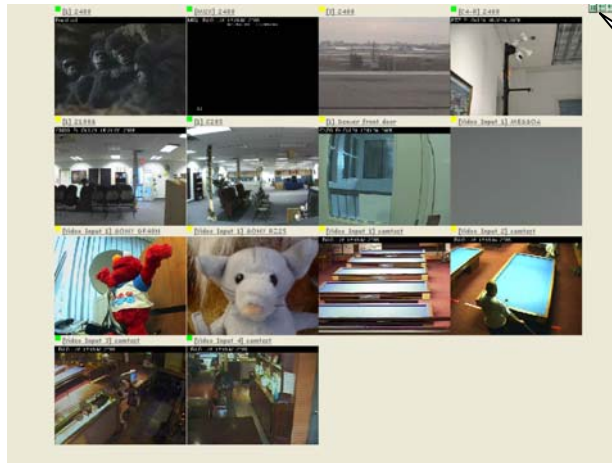


Fig. a. Standard multi-screen view (Full screen is checked)

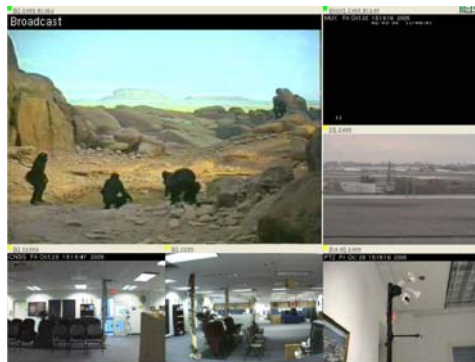


Fig. b. 5+1 cameras multi-screen view

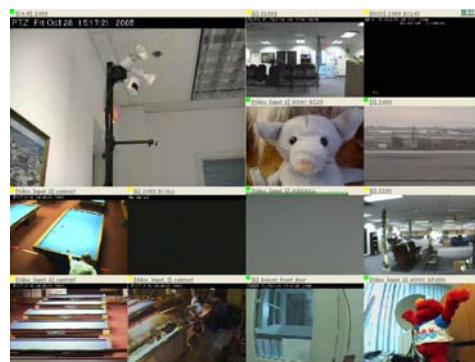


Fig. c. 12+1 cameras multi-screen view

Note: In order to move cameras on the multi-screen:

- Press **shift** and
- Drag and drop any camera to any other camera's space.
- And their place (camera view) will be exchanged on the multi-screen.

- ❖ **Use Local Connection only** – program connects to camera, using local address only (ignores external address and port).

Note: This is checked and unchecked according to *“This Client is inside the Local Network”* in the **servers settings** (Fig. 3.7.). It implies that,

- If *“This client is inside the Local Network”* is checked, so is the *“Use local connection only”*.
- If *“This client is inside the Local Network”* is not checked, *“Use local connection only”* is not checked either.

- ❖ **Show NC** – show background picture if no connection to the camera or connection has not been established yet. If **“Show NC”** is unchecked system shows dark blue background.

-
- ❖ **Indicate motion – If checked,**
 - In multi-screen view, highlights the camera that motion is detected in it, in **red (With Beep** – In addition to highlighting the picture, it beeps).
 - In Archive, It highlights any significant motions in green (please refer to part 7.2 of this document for more information.).

 - ❖ **Always Show Live on multi-screen** – keeps all cameras connected on multi-screen live, at all time.

 - ❖ **Can overwrite previous alarm** – always brings up new alarm windows (even if the previous alarm window is still on the screen)

 - ❖ **No popup- If checked,** popup view of the camera will not be available on the screen in case of an alarm event (alarm on motion and/or alarm on input). User will only have the popup “Alarm list” and is able to select any of the alarm events from the list to view (double click on “Get Site” button to access the camera view and double click on “Get Alarm” button to view the alarm instance).

 - ❖ **No List (No Alarm List window)** – If **checked,** popup view of “Alarm List” (Alarm List Window) will not be available on the screen in case of an alarm event (Fig. 3.6 and Fig. 8.2).

 - ❖ **Write on Alarm** –
 - If **checked,** client will start recording locally immediately for any defined number of seconds (Number of seconds can be defined and written into the provided box). If ‘0’ is selected for number of seconds, it will continue recording until “stop recording” is clicked.
 - If **not checked,** no immediate recording, only instant real-time view (There will not be a box to write the number of seconds in) (Fig. 3.6.).

 - ❖ **Show Background on multi screen** – If **checked,** adds background to multi screen view.

 - ❖ **Colors** – User can select a color for “Site name” that is used in multi screen view (Fig. 5.3).

 - ❖ **Show ID** – If **checked,** the camera ID will be shown on the multi screen view.
If **not checked,** camera ID will not be shown on the multi screen view

 - ❖ **Never show QUAD on multi screen** –
 - If **checked,** uses one stream for every single video input in case if a device has more than one video input (e.g. Fig. 3.4. contains 6 streams)
 - If **not checked,** uses one stream for the device that supports quad view (e.g. Fig. 3.5. contains 3 streams)

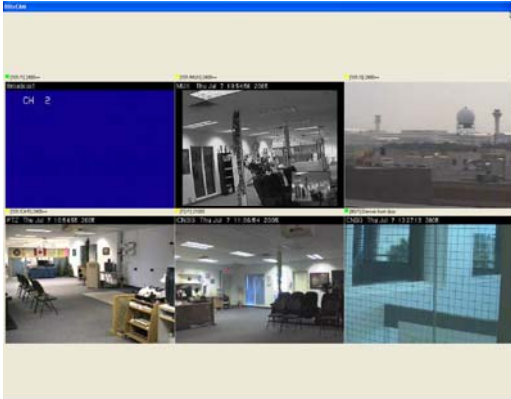


Fig. 3.4. Six streams

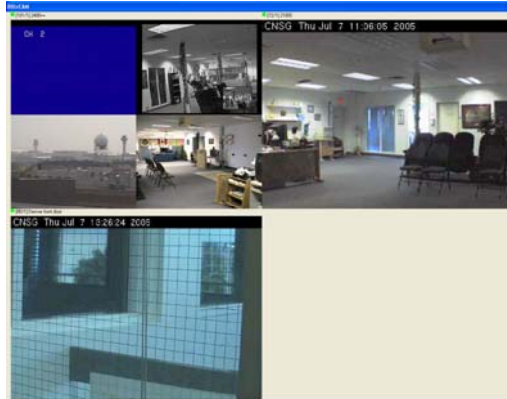


Fig. 3.5. Three streams

- ❖ **Capture HUGE image** – if checked client will always request 640x480 size image from the camera if “Capture” button is pressed (For AXIS and IDVIEW cameras only).
- ❖ **Ignore IE proxy** – If **checked**, client will ignore the Internet Explorer LAN settings, and will place its own proxy address into the proxy address space of the selected camera.
- ❖ **Ignore IE Settings** – If **checked**, client will completely ignore the Internet Explorer proxy server settings in LAN settings.
- ❖ **Version checking** – checks to see if the current version needs to be updated. Also sets the checking interval.
- ❖ **Central Storage Setup** - defines parameters for archive in **Client-Server** mode (on the server):
 - **Storage Directory** | Full path.
 - **Package size (in minutes)** | Value – time interval. Has to be equal “1”.

Write on Alarm for a defined number of seconds (e.g. 30 sec.)

No Alarm List

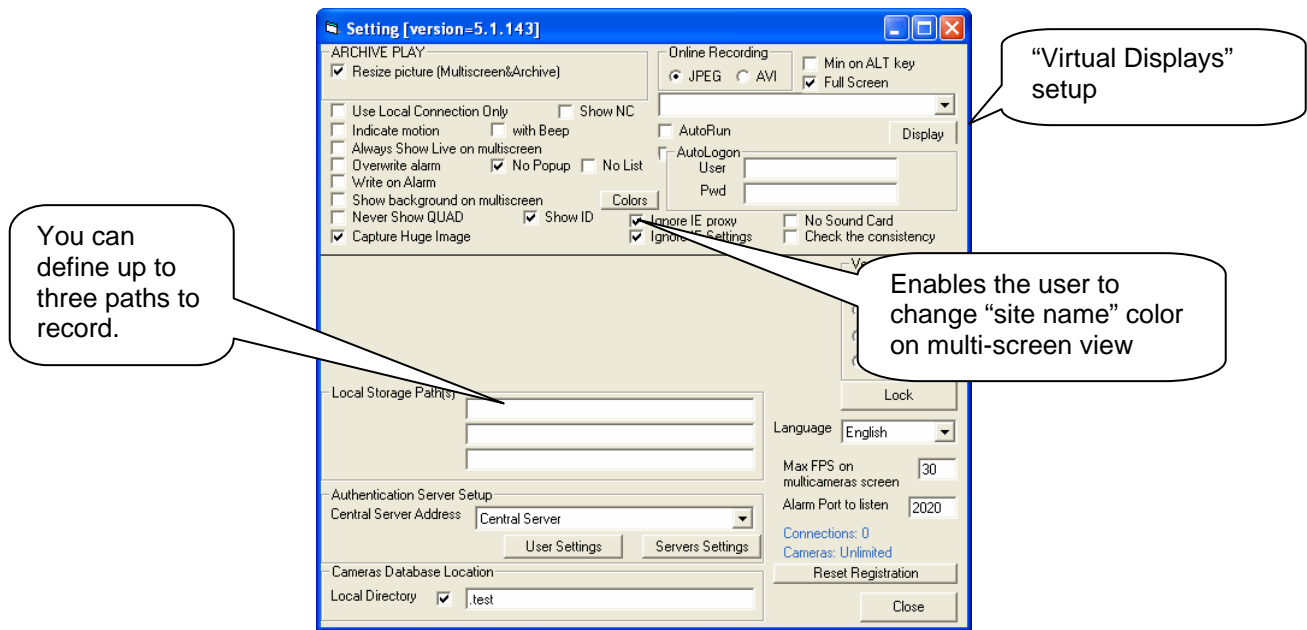


Fig. 3.6. Setting dialogue box

- ❖ **Central Server** - defines server parameters for **Client-Server** mode. Client can access several NVR's or authentication servers. These settings can only be accessed by hitting cancel before you log in. Click on the settings tab to access the setting dialogue box (Fig. 3.6.).
- ❖ **Authentication Server Setup**
 - ✓ Central Server address
 - ✓ User setting – settings for proxy. The following information has to be provided: Domain, Computer, User, Password, and Confirmation.
 - ✓ Servers setting – to set additional server

Note: If you are currently connected to any server, this button will be grayed out.

Central Servers List dialogue box appears when **Servers settings** button on the settings window is pressed (Fig 3.7.).

Central Server settings define server parameters for **Client-Server** mode:

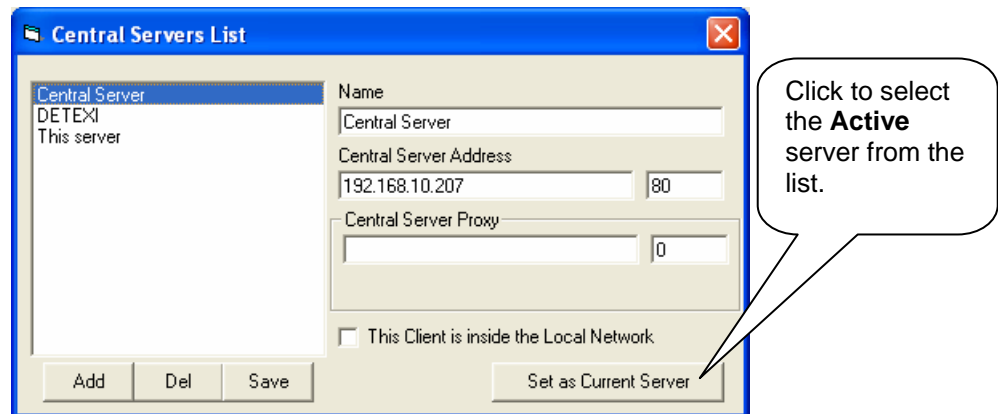


Fig. 3.7. Central Servers List dialogue box

Central Server list contains the following information:

- | | |
|--|---|
| <ul style="list-style-type: none">▪ Name▪ Address▪ Port▪ Proxy▪ Proxy Port▪ This Client is inside the Local Network | <p>Central server's name</p> <p>IP address.</p> <p>0 (default) – Standard HTTP</p> <p>If access through proxy.</p> <p>0 (default) – Standard HTTP.</p> <p>Checked – Client uses only local addresses to connect to the cameras.</p> <p>Note: This affects the “Use local connection only” option on the settings window. It implies that</p> <ul style="list-style-type: none">- If “This client is inside the Local Network” is checked, so is the “Use local connection only”.- If “This client is inside the Local Network” is not checked, “Use local connection only” is not checked either. |
|--|---|

- ❖ **AutoRun** – If **checked**, runs the client in minimized mode.
- ❖ **Sort** – can be used to sort the cameras.
- ❖ **Restore** – restores the initial order of the cameras (clears the sorting).
- ❖ **AutoLogon** – If **checked**, client will try to logon automatically (when user name, password, and server address are provided).
- ❖ **No Sound Card** – if **checked**, suppresses the sound, even from cameras with an attached sound module (Fig. 3.6.).
- ❖ **Check the Consistency** – If **checked**, checks the consistency of the video stream that is being loaded as a result of a manual/archive search (please refer to section 7 for more information). It issues the following message regarding consistency verification (Fig. 3.8.):

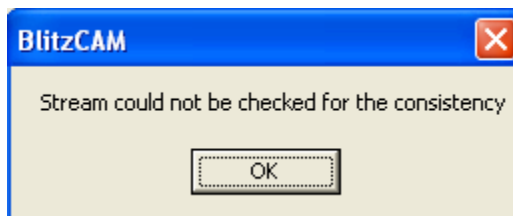


Fig. 3.8. This window appears when “**Check the Consistency**” on the settings window is **checked**, and the user is trying to load a picture during “Search Archive” process.

- ❖ **Maximum FPS on multi-cameras screen** - defines how many frames **will be shown** on the multi-screen (Useful in case if, the incoming traffic from all cameras is too high)

❖ **Alarm Port to Listen** – the port that client will listen to in order to issue an alarm. If “0”, client will not listen to the port at all.

❖ **Lock** - lock/unlock **setup** forms with password.

❖ **Cameras Database Location (for registered client) -**

- **Local Directory** | **Checked** – client software will search for camera data in the directory defined next to the checkbox.

Note: Uncheck this option in order to enable the user to sign in as a remote client.

❖ **Reset Registration** – when you press this button located at “Setting” dialogue box (Fig. 3.1.), registration dialogue box appears (Fig 3.9.).

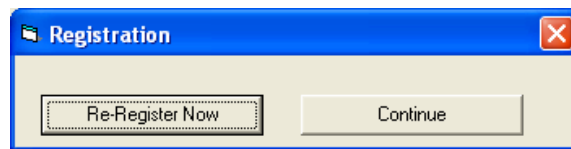


Fig. 3.9. Registration dialogue box

- If you press on “continue” button - you can continue working with the program.
- If you press on “Re-Register Now” button - Program generates the **registration number** and asks the user to enter the matching **product ID** (Fig. 3.10.).

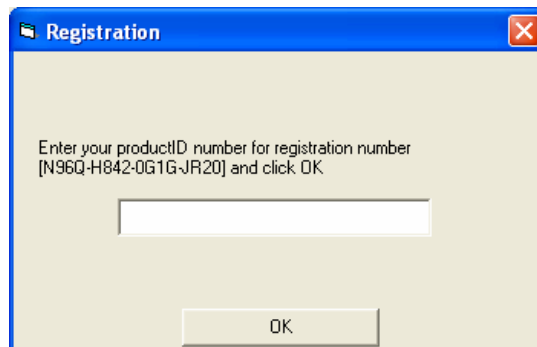


Fig. 3.10. Request for product ID (for program with Registration number [N96Q-H842-0G1G-JR20])

To Re-register the **product ID**, user should contact [Canadian Network Systems Group Inc.](#)

**6895 Columbus Road
Mississauga, ON L5T 2G9**

**Phone (905) 565-3096
Fax (905) 565-3097
E-mail jpaterson@on.aibn.com**

Canadian Network Systems Group Inc. will provide you with the **product ID** that matches your **registration number**. Next time you activate the program, you will have to enter your **product ID**, and this results in **Re-registration** process completion.

4. How to Setup a Camera (for registered clients only)

DETEXI program does not setup the camera by itself; it sets up **access** to the camera. Complete setup capabilities exist, when full version of the program in **Stand-Alone** mode is available.

DETEXI program can work in either **Stand-Alone** or in **Client-Server** mode. The difference is how and where the information about users' ID, passwords, rights to access cameras, cameras' settings and recorded video are stored and processed.

- ❑ In **Client-Server** mode, the end user has no access to the **Setup** functions. Server administrator maintains all camera settings and security procedures.
- ❑ In **Stand-Alone** mode, the end user has access to all **Setup** functions, and s/he acts as an administrator.

In either case, all setup activities are accomplished through the same menu screens. To add, delete, or change camera settings, click on **Setup** key on the main screen; this will bring up the **Setup** dialogue box (Fig. 4.1.).

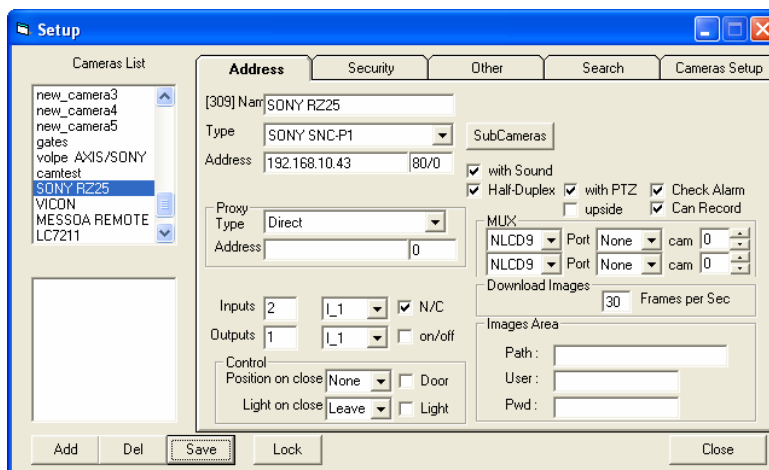


Fig. 4.1. Setup dialogue box: **Address** tab (default)

Setup dialogue box contains the following tabs:

- **Address**
- **Security**
- **Other**
- **Search**
- **Cameras Setup**

Note: The administrator must go through all the **tabs** to add or view all camera information.

4.1. Setup: Address

When **Setup** dialogue box appears, default page is the **Address** page (Fig. 4.1.). Major camera information such as name, type, and IP address are entered here.

- To **add** a new camera - place the cursor anywhere in the camera list and click on the **ADD** button.
- To **change** the camera settings - click on the appropriate name in the camera list. The camera setting becomes available.
- To **delete** a camera - click on the appropriate name in the camera list. Then click on **DEL** key.
- When finished click on the **Save** button to accept the changes.
- If the **Groups List** is activated (cursor is anywhere on the groups list), **ADD**, **DEL** and **Save** keys **will** work with the group function.
- After changes are made, **close** and **restart** the program to lock in the new settings.

The following data should be entered:

Camera

- **Name** | Name you wish to assign to the camera.
- **Type** | Sets the camera type and version.
- **Address** | IP address of the camera.
- **Port** | 0 (default) – Standard HTTP, if the camera is mapped.
- **Size** | For AXIS cameras only. Choose: full size (default), huge size, and half size.
- **W/fps** | Write frames per second – 30 (default).

Proxy Server – if access through Proxy

- **Type** | Choose: direct (default), UseDefault, Named Proxy.
- **Address** | IP address of the Proxy Server.
- **Port** | 0 (default) – Standard HTTP.

Control

- **Inputs** | Number of inputs (pull down menu contains camera's input list).
- **N/C** | If **checked**, input status is "Normally closed".
If **not checked**, input status is "Normally Open".
- **Outputs** | Number of outputs (pull down menu contains camera's output list).
- **On/Off** | If **checked**, output status is "Normally On".
If **not checked**, output status is "Normally Off".
- **Door (output behavior)** | If **checked**, the output acts in a momentary manner (Fig. 6.10).
- **Light (output behavior)** | If **checked**, the output acts in a toggled manner (Fig. 6.8).
- **Position on close** | Choose: none (default) or 1-10 Preset Position.
- **Light on close** | If camera has a light control. Choose: OFF (default), ON, or Leave to determine the action of the lights when you stop viewing the camera.

- **Limits** | For AXIS cameras only. Sets the camera maximum angles of movement, according to the technical specification.

MUX Controls (to control multiplexer)

- **MUX Type** | Choose: None or type of an attached multiplexer
- **Port** | Choose: None (default), Com1, Com2, Com3, Com4.
- **Cam** | Choose: 1-4 camera port that has control.

Download Images

- **Frames per second** | Defines requested FPS from the camera

Download Subdirectory (not used in this application)

- **Subdirectory**
- **User**
- **Pwd**

Sub-Cameras Button

Sub-camera button on the address option of the cameras setup, introduces the following dialogue box (Fig. 4.2.)

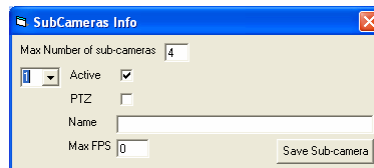


Fig. 4.2. Sub-cameras Info dialogue box

The following parameters are set in sub-cameras info box:

- **Max number of sub-cameras** | Number of sub-cameras for this device
- **Active** | **Checked** – sub-camera will be shown to user
- **PTZ** | **Checked** – user can control the sub-camera
- **Name** | Name of the sub-camera
- **Max FPS** | Requested FPS from the -camera

Some cameras also have the following attributes located in the **Address** option of the **SETUP**:

- **Restart** (restarts the camera)
- **D** (set Date/Time)
- **Upside** - if **checked**, it shows the camera view upside down
- **With PTZ** - if **checked**, camera has Pan/Tilt/Zoom capability
- **Check Alarm** - if **checked**, remote listener checks the status of the inputs on the camera
- **With Sound** - if **checked**, the camera has an attached sound module
- **Half-Duplex, for SONY cameras only (in “stand alone” mode)** - if **checked**, enables a button on the camera view called “Listen/Talk”:
 - Press and hold the button, and its state changes to **Talk**; thus, user can talk and be heard by the person at the door.
 - Release the button, and its state changes to **Listen**; thus, user can listen to what the person at the door has to say.

- **Can Record** (if **checked**, enables the “Recorder” for the cameras that contain this feature) buttons.

4.2. Setup: Security

DETEXI program has three levels of access, protected by a user name and password:

- User level
- Operator level
- Administrator level

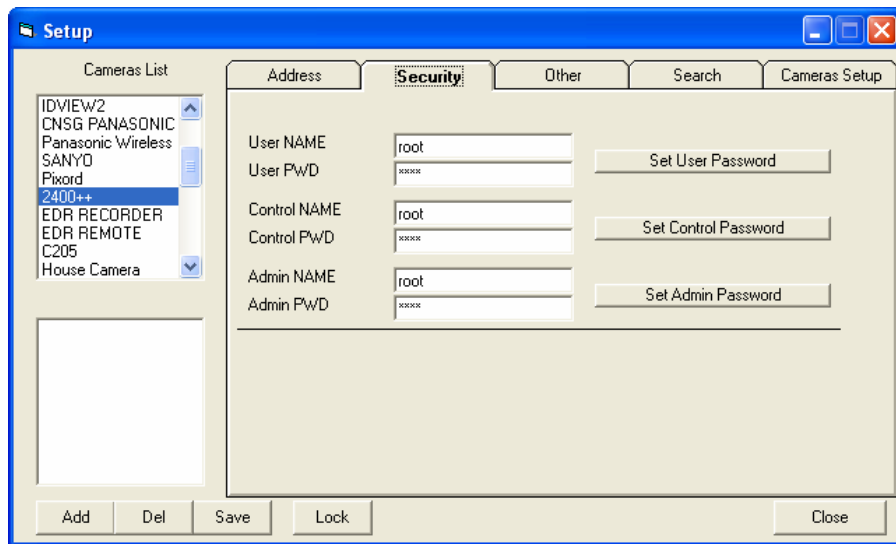


Fig. 4.3. Setup dialogue box: “Security” tab.

All the names and passwords are set on the Security option page of the cameras setup (Fig. 4.3.). This information can be changed as required.

User level

- User Name
- User PWD

Operator level

- Control Name
- Control PWD

Administrator level

- Admin Name
- Admin PWD

- Note:** Each web camera has three-level password protection in its own built-in operating system that can be changed from:
- *DETEXI* program or
 - By pressing on the *Set User Password*, *Set Control Password*, and *Set Admin Password* keys.

4.3. Setup: Other

The following information is required in “**other**” option of the cameras setup:

- Camera Location
- Customer Name
- Site Address
- Site Sector
- Contact Number
- Special Instructions

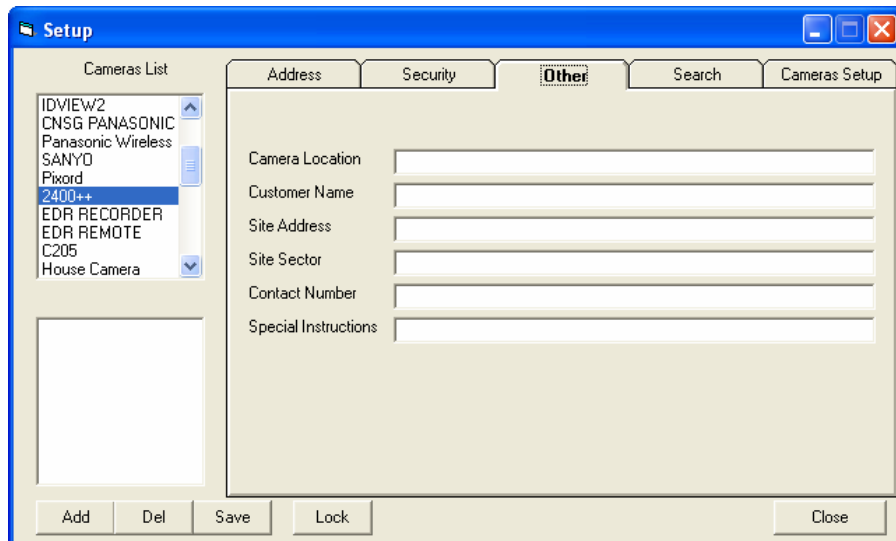


Fig. 4.4. Setup dialogue box. “**Other**” tab

4.4. Setup: Search

Region of Interest (ROI) for the motion detection function is set within the Search tab (Fig. 4.5.).

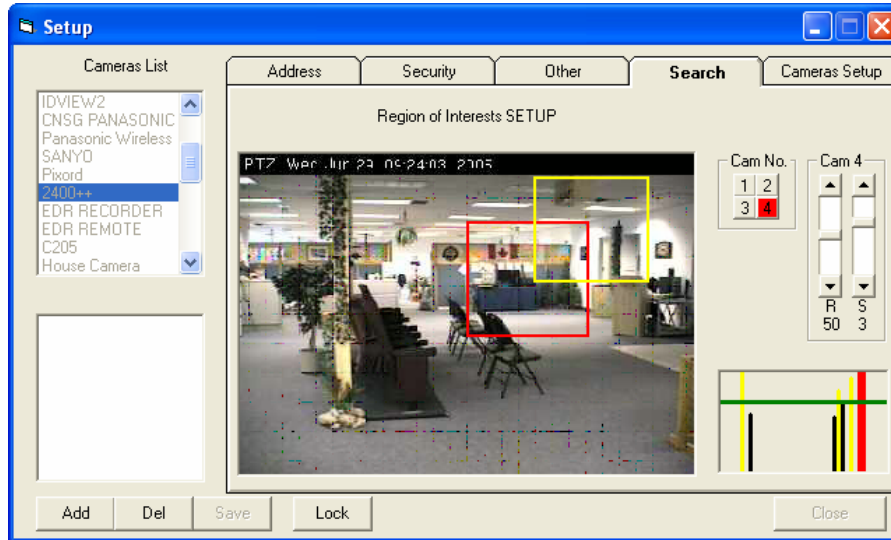


Fig. 4.5. Setup dialog box. “Search” tab.

If a **Region of Interest** is specified, the program is informed when there is movement within the specified area. This creates an easy to search video archive, based on detected movement only.

Setting up region of interest (ROI) for the motion detection function

- **Region of Interest** Draw rectangle around the area: press left-mouse-button, drag, & release.
- **Cam No.** If more than one video connection. Choose: 1, 2, 3, and 4 to set each camera’s region of interest.
- **R** Position on the scroll bar. Shows the **Roughness** level chosen (0-100).
Tunes the roughness of the movement that will be detected.
- **S** Position on the scroll bar. Shows the **Sensitivity** level chosen (0-10).
Tunes the sensitivity of the movement that will be detected.

Control of **Roughness** and **Sensitivity** level gives the opportunity to exclude small image changes. For instance blowing leaves or shadow movements are excluded by controlling the roughness and sensitivity level.

It is possible to set 2 ROI (red and yellow) for each sub-camera.

To clear ROI,

- Yellow ROI: Left Click outside the yellow box.
- Red ROI: Double Left click outside the red box.

4.5. Setup: Cameras Setup

“Cameras Setup” table - obsolete

4.6. Setup: Lock Button

Lock button provided on all cameras setup windows (Fig. 4.1, 4.3, 4.4, 4.5.) allows the user to lock/unlock cameras setup.

After clicking on the lock button the Password dialogue box appears (Fig. 4.7.)

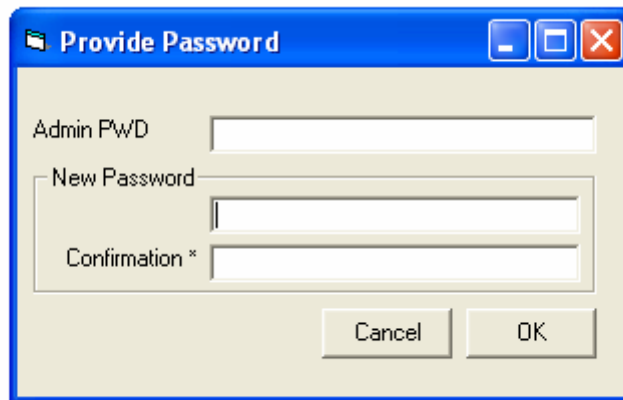
A screenshot of a Windows-style dialog box titled "Provide Password". The dialog has a blue title bar with standard minimize, maximize, and close buttons. The main area is light beige and contains three text input fields: "Admin PWD", "New Password", and "Confirmation *". At the bottom right, there are two buttons: "Cancel" and "OK".

Fig. 4.6.

You have to provide password for locking the cameras setup button (Fig. 2.3.). If the password is already set, you must know it in order to lock the cameras.

You can change this password by entering the old one, and providing a new password.

Note:

1. *If you forget the password, restore is not possible.*
2. *If **Cameras Setup** is locked, you will be asked to provide password every time you click on “Setup” button (Fig. 2.3.).*
3. *To unlock the **Cameras Setup** click on the lock/unlock button again.*

5. Starting the program



Detexi.Lnk

To start the program, click on the following ICON on the DESKTOP
 In Client-Server mode, program authenticates the user to the Central Server – enter User ID, Password and click OK (Fig. 5.1a).



a)



b)

Fig. 5.1 a) User should provide user ID and password.
 b) Incorrect user ID or/and password warning.

Program receives the camera database from the server, and connects to the site(s) that user **is authorized** to view (Fig. 5.2).

From the **main screen** you can activate the following functions:

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ SETUP (for Registered Client only) ▪ ARCHIVE ▪ SETTINGS ▪ Minimize ▪ EXIT | <p>Go to the cameras setup.</p> <p>Go to the archive.</p> <p>Go to the program settings.</p> <p>Minimize the program window.</p> <p>Exit from the program.</p> |
|--|--|

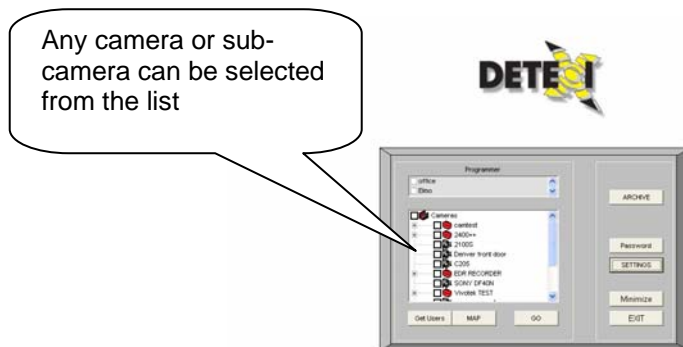


Fig. 5.2 Main screen

5.1. How to choose camera(s)

Choose one of the following options:

- **ALL CAMERAS** | Program displays all connected cameras.
- **GROUP** | Program displays a predefined group of cameras.
- **LOCATION** | Program displays one selected camera.

When you press on the **Go** button,

- Program sends a connection request to each highlighted site
- Waits for a response
- Retrieves live video (Fig. 5.4.).

User can view a number of cameras at the same time; it is reasonable to limit groups to 16 locations at a time.

Users can add/delete cameras to/from a group, or add/delete group(s) using the **Setup** function.

If Groups are created for a user, s/he can interchange between different groups by right clicking on the multi-screen view and selecting from the list of available groups.

If the user has started by viewing all cameras and changed to view any available group, s/he can select **All Cameras** from the group list and go back to view all available cameras again (Fig. 5.3).

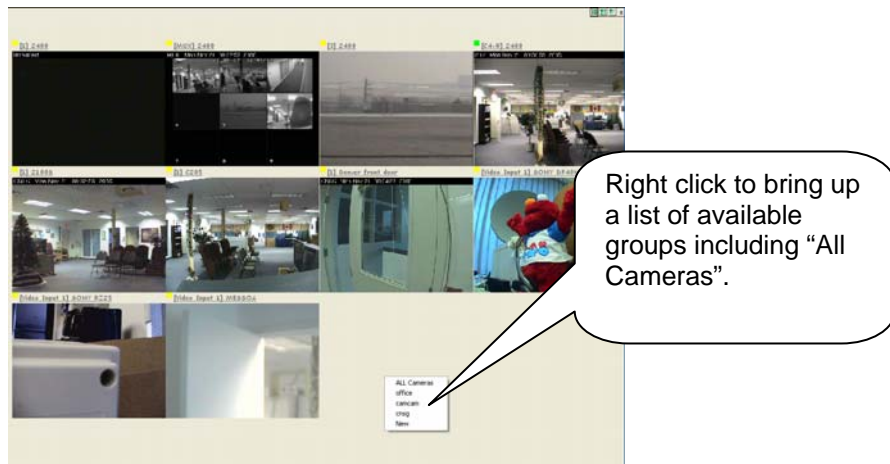


Fig. 5.3. Multi-screen view

Each site contains:

- Status Indicator
- Site Name
- Video from the site

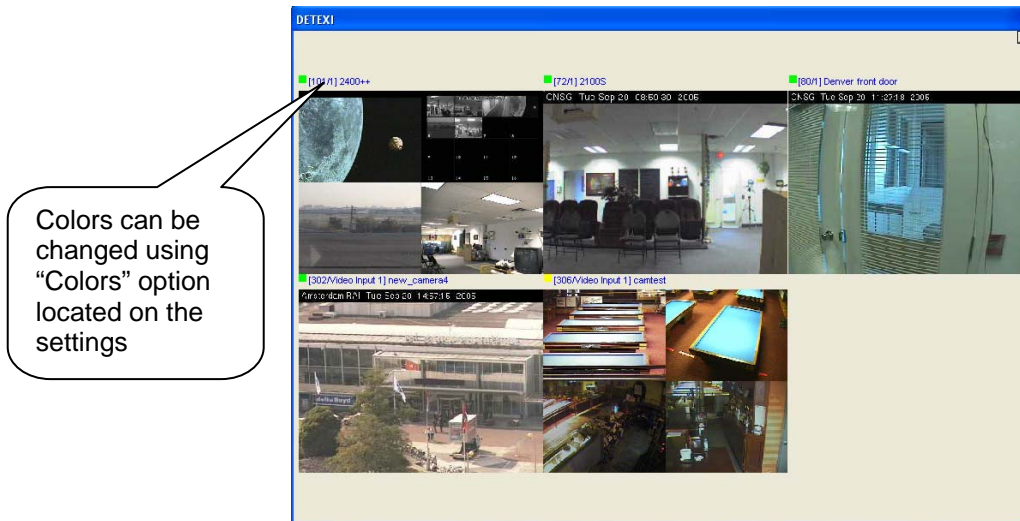


Fig. 5.4. DETEXI displaying live video from five locations

Status Indicator shows the status of each camera site using different colors:

- | | |
|----------|---|
| ■ Red | Program cannot connect to the site (no connection or wrong password). |
| ■ Green | Connection active. |
| ■ Yellow | Program is waiting for an answer from a request to connect. |

5.2. Quick Camera Control (Right Click Popup Menu)

A popup menu appears by right clicking on any site video display, (Fig. 5.5.). The right click popup menu allows the user to take quick control of the camera.

- | | |
|---|--|
| <ul style="list-style-type: none"> ▪ Go to <Site Name> ▪ Enlarge <Site Name> ▪ Go to Archive ▪ Lighter/Darker/Auto ▪ Disconnect <Site Name> ▪ Reconnect <Site Name> ▪ Reconnect All ▪ Exit (or press Alt key) | <p>Site video will pup up, and user gets the control keyboard.</p> <p>Site video will be enlarged, and user gets the control keyboard.</p> <p>Searching/Playing archive.</p> <p>Control the camera brightness (for JVC camera only).</p> <p>Disconnects camera, Site Indicator turns ■ Red.</p> <p>Reconnects camera, Site Indicator turns ■ Green.</p> <p>Reconnects all disconnected cameras.</p> <p>Close popup menu.</p> |
|---|--|

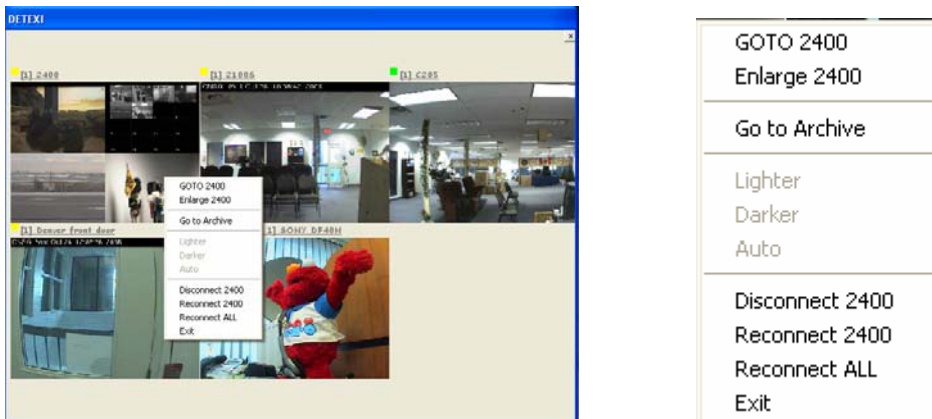


Fig. 5.5 Right click popup menu on the camera video (enlarged to the right). Camera name is 2400, camera indicator is Yellow – program is waiting for an answer.

Note: When you select “GO to <site name>, all other camera views will stop presenting live picture (only the selected camera’s picture is live). In order to keep other camera views live, **check** “Always show live on multi-screen” in setting dialogue box. Also “Freeze B/Alive B” button is provided so that the user can control the Freeze/Alive status of the picture (Fig .2.4.b.).

You can control the camera from the multi-screen view. To select a camera to control, click on the camera name. A green line will appear under the selected camera.

1. Use Left-mouse click on image to move the selected camera
2. Press the home key on your keyboard to move to the home position
3. F1-F10 - move to preset positions from 1 to 10
4. Page Up - Zoom in
5. Page Down – Zoom out
6. “End” – stop zooming (for Sony only)

6. How to Control the Camera

6.1. Activating the Site

After selecting a camera from the [main screen](#), click on the “Go” button. This will activate the selected camera.

[Control keys](#) become accessible if you have right to PTZ this camera.

If you have chosen a [Group](#) or [All cameras](#), several site videos are displayed on the screen simultaneously.

To activate a specific site:

- Right click on the site video.
- Choose [Go To <Site Name>](#) line.

The selected site video will be enlarged, and user gets the camera control keyboard. Program can display one camera site (Fig. 6.1.a.) or several camera sites ([quad video view](#)) connected to a video server or multiplexer (Fig. 6.1.b.).

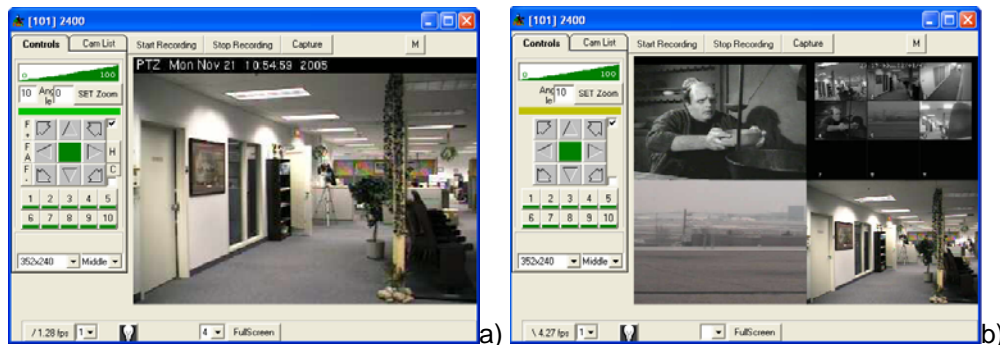


Fig. 6.1 a) User activated the camera,
b) User activated four cameras
Connected to the multiplexer

If there is more than one camera, user must choose one of the videos by left clicking on it; as a result, the camera control keyboard becomes available for that specific video. To return to [quad video view](#), click on the [Reset](#) key (Fig. 6.2.).

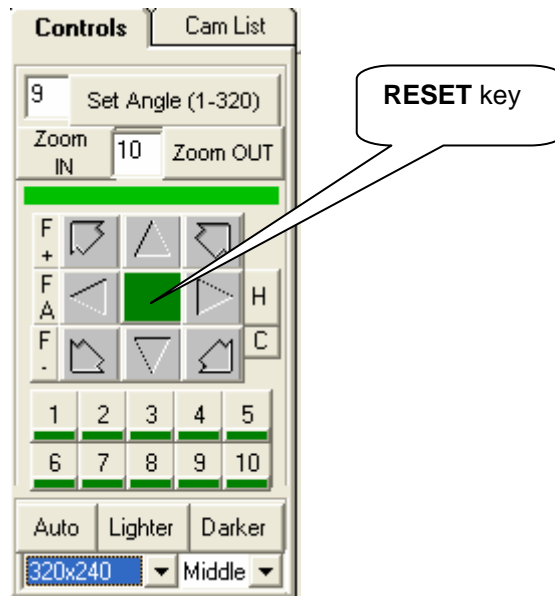


Fig. 6.2. Camera control keyboard: **Reset** key

6.2. Camera Control Functions

Camera Control Keyboard becomes available when user activates different cameras (Fig. 6.1.). Some keys may be disabled or disappear if the camera does not support the corresponding function.

If a camera is associated with a multiplexer, user gets additional controls that are provided by the multiplexer. Additional control keys appear on the camera control keyboard (Fig. 6.12.).

If camera is connected to the network through proxy, a LAN/WAN checkbox appears on the control panel (Fig. 6.8.).

You can uncheck this box to get to the camera locally (without proxy). This is done only when your computer is located on the same LAN as the camera.

6.2.1. Set Camera Preset Position (For certain cameras only)

Preset Position keys from 1 to 10 move the camera to **administrator's predefined positions** (Fig. 6.3.). If camera is in a preset position, the corresponding Preset Position key is highlighted yellow.

To check and see if the preset position key is already set, roll the mouse pointer over the key, and the name of preset position will appear.

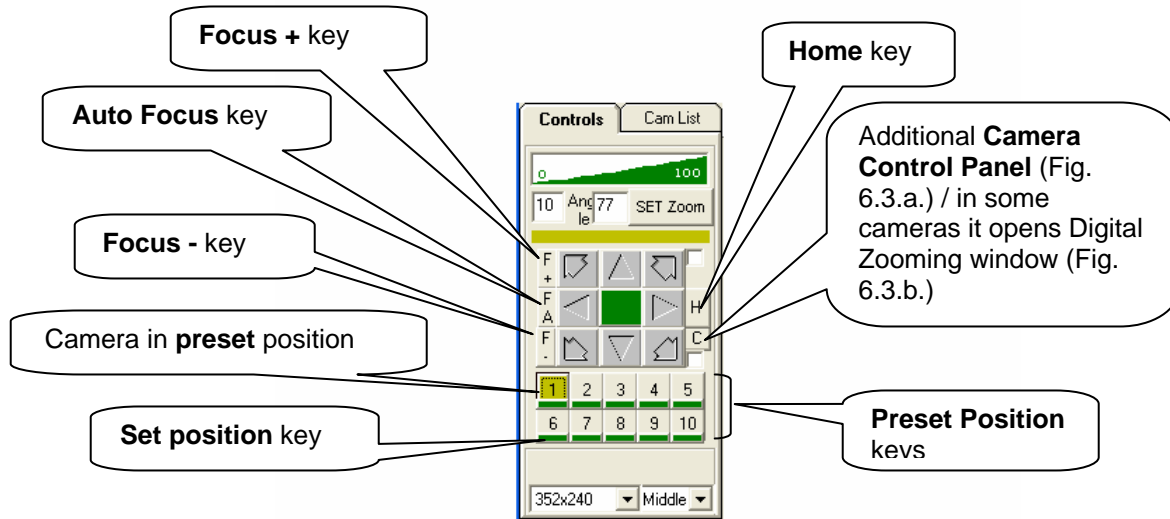


Fig. 6.3. Camera control keyboard: Preset Position keys, Home key, Focus keys.

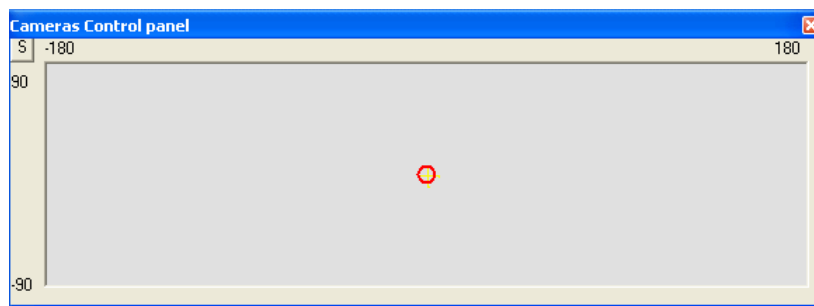


Fig. 6.3.a. Cameras control panel

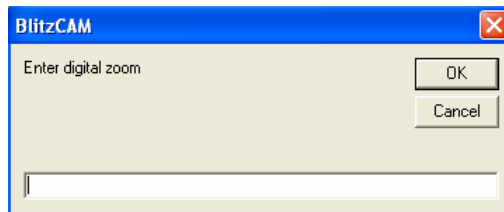


Fig. 6.3.b. Digital zooming window

The process of setting a preset position is password protected (Fig. 6.4.).

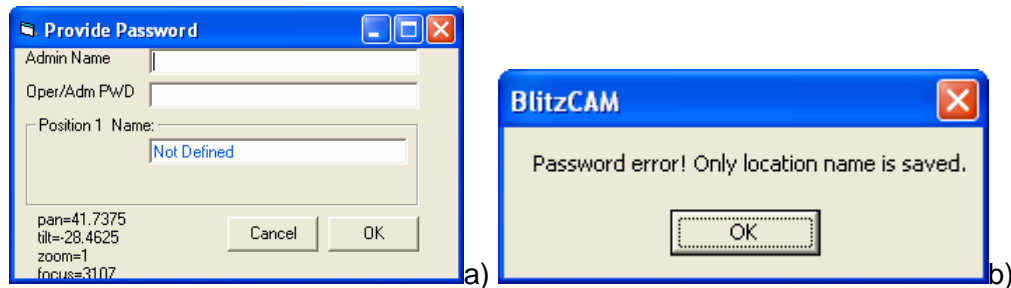


Fig. 6.4. a) User should provide an administrator password and assign a name to Preset Position 1.
b) Incorrect password.

To set/reset a preset position key (for Axis cameras only):

- Use the **Fine Control** keys to change a camera position, and select a position on the screen that you like to set as a preset position.
- Click on the **Set Position** key (green stripe), below the **Preset Position** key you like to set.
- Enter administrator password and **Position Name**.
- Click Ok.
- Restart the camera.

Note **Position Name** should be an alphanumeric string only.

6.2.2. Move Camera to Preset Position

To move the camera to a **Preset Position**:

- Roll the mouse pointer over the **Preset Position** keys to view the position name.
- Click on the key that you desire. The camera moves to the predefined position.

6.2.3. Focus / Auto Focus camera

If necessary the user can manually change the camera focus using **F+** and **F-** keys. To return back to auto focus – click on the **FA** key (Fig. 6.3.).

6.2.4. Return the Camera to Home Position

Each PTZ camera has a **Home Position**. The program calculates the **Home Position** automatically as the center of its field of view, based upon the camera settings. To return the camera to the **Home Position** - click on the **Home (H)** key (Fig. 6.3.).

6.2.5 Camera's Control Panel/Digital zooming

The **“C”** key provided on the camera control keyboard is an additional type of camera control (Fig. 6. 3.). When you click on the 'c' key, an additional window will appear which contains a **red** dot in the middle (Fig. 6.3.a.).

To move the camera,

- Left click on this new window
- Drag and release according to the desired direction
- Stops when mouse is released
- Further from the center, the faster camera's movement

In some Sony cameras, the **“C”** key opens a window for digital zooming (Fig. 6.3.b.). In order to zoom digitally,

- Enter the desired zooming percentage
- Click ok
- Camera will zoom in according to the selected zooming percentage

6.2.6. Controlling the Camera

Define the degree of movement for the camera (angle from 1 to 320) in the set angle field.

Use the appropriate **Fine Control** key to move the camera (Fig. 6.5.):

- UP (Left Up, Right Up)
- LEFT
- RIGHT
- DOWN (Left Down, Right Down)

- OR -

Left click on the video screen in the direction you desire to move to. For instance, if you left click on the lower right hand corner of the picture, camera moves to the RIGHT and DOWN.

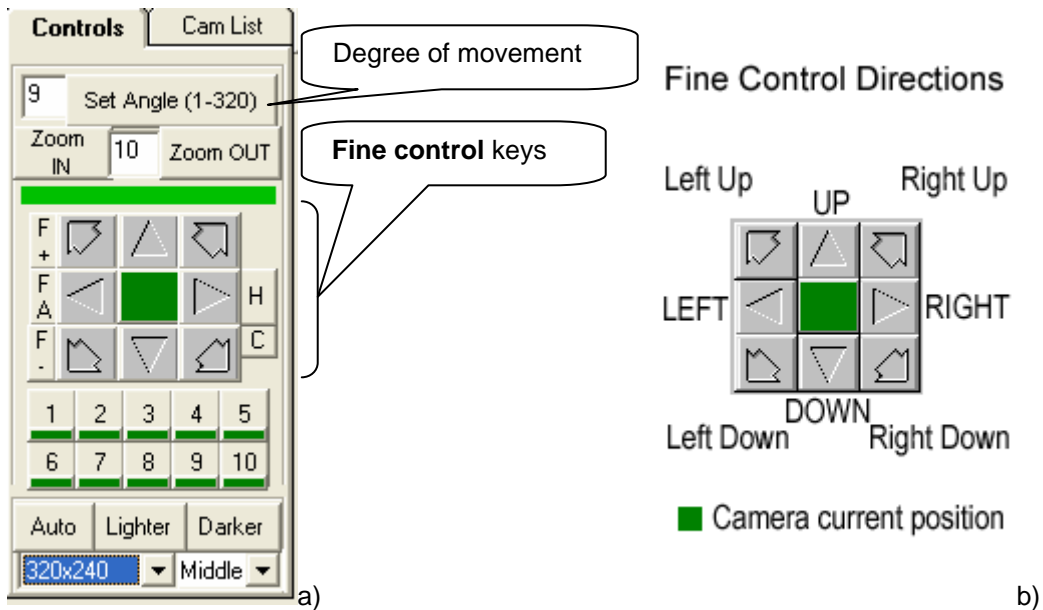


Fig. 6.5. a) Fine Control keys. b) Fine Control directions.

6.2.7. Zooming In/Out (PTZ cameras only)

❖ Cameras with **Zoom IN/Zoom OUT** control keys:

Define the percentage of zooming for the camera (from 1 to 100), and click on [Zoom In](#) or [Zoom Out](#) control keys (Fig. 6.6.a.).

- OR -

Click on the center of the picture:

- [Zoom IN](#) key or left-mouse-button | Zoom in to the video
- [Zoom OUT](#) key or right-mouse-button | Zoom out of the video

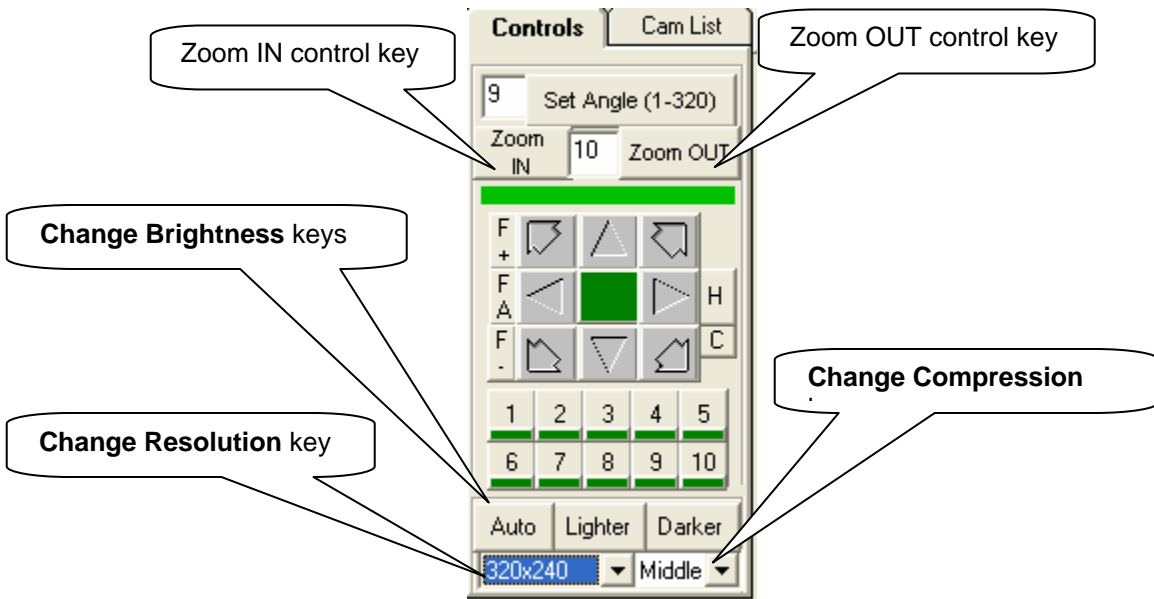


Fig. 6.6.a. Zoom IN/Zoom OUT control keys

Some of the cameras that have this feature are:
PANASONIC, TOSHIBA, JVC, VIVOTEK, and SANYO.

❖ Cameras with **Set Zoom** control key:

Define the percentage of zooming for the camera (from 1 to 100), and click on Set Zoom control key (Fig. 6.6.b.).

- OR -

Click anywhere in the designated zooming percentage area.

- To zoom IN, click on the **green** area close to '100'.
- To zoom OUT, click on the **white** area close to '0'.

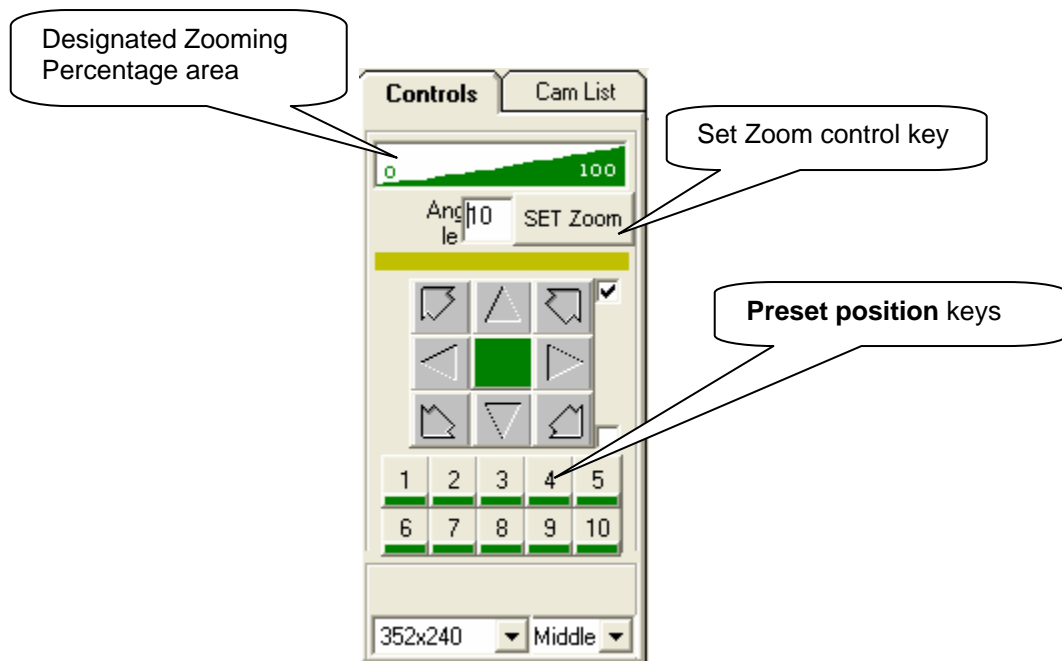


Fig. 6.6.b. **Set Zoom** control key

Some of the cameras that have this feature are:
PIXARD, SONY, AXIS, MOBOTEX, DETEXI, and IDVIEW.

Note

For Axis cameras:

- Degree of zooming is an absolute value that characterizes min and max object movement (moving nearer and moving off).

For JVC cameras:

- Degree of zooming, characterizes the pace of object moving nearer and moving off.

6.2.8. Adjust brightness (*JVC cameras only*)

To adjust the camera brightness, use the **Lighter** and **Darker** control keys below the **Preset Position** keys.

Use the **Auto** key to reset the camera to **Auto Iris** function (Fig. 6.7.).

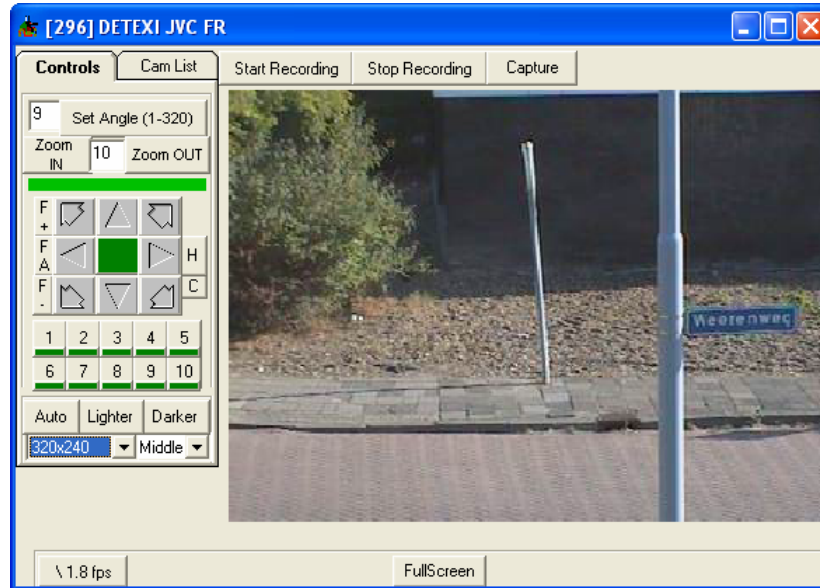


Fig. 6.7. Camera Control keys: Reset Key, Brightness Keys (Auto, Lighter, and Darker), Start Recording Key, Stop Recording Key. Capture Key. Adjust Resolution, Adjust Compression.

6.2.9. Adjust picture resolution and compression

You can also adjust the camera [picture resolution](#) and [compression](#) choosing the resolution and compression level from the lists provided below the Preset position keys (Fig. 6.8.).

For maximum image quality use high resolution and low compression.

Note: 320x240 resolution and middle compression are recommended for optimum performance.

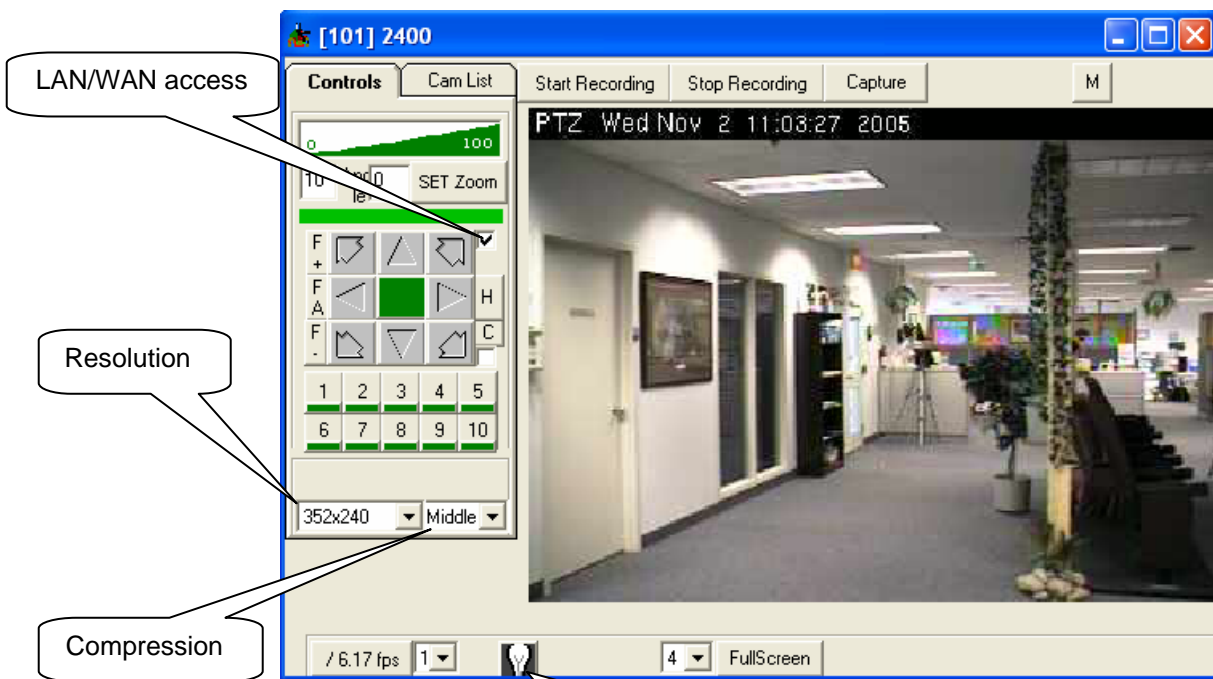


Fig. 6.8.

Toggle checked (in **NVR Setup** for client-server mode)
Light checked (in **Setup** for registered/stand alone client)

6.2.10. Capture Image

While viewing live video, you can capture any frame by clicking on the [Capture](#) key. The [Captured Image](#) tab activates giving various opportunities to edit and save the captured image. Any image can also be captured during playback of the archived video (Fig. 6.9.).

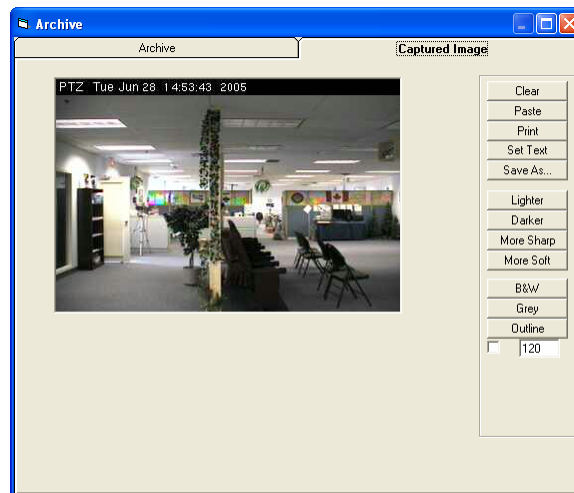


Fig. 6.9. Captured Image tab

Saving keys

- | | |
|---|---|
| <ul style="list-style-type: none">▪ Clear key▪ Paste key▪ Print key▪ Set Text key▪ Save As... key | <p>Clear captured image and buffer.</p> <p>Restore the image from the buffer.</p> <p>Print edited image.</p> <p>Title just before Print/Save.</p> <p>Saves edited image in <i>jpg</i> format.</p> |
|---|---|

Quality editing keys

- | | |
|--|--|
| <ul style="list-style-type: none">▪ Lighter key▪ Darker key▪ More Sharp key▪ More Soft key▪ B&W key▪ Grey key▪ Outline key | <p>Lightens the image.</p> <p>Darkens the image.</p> <p>Sharpens the image.</p> <p>Softens the image.</p> <p>Makes the image Black & White.</p> <p>Makes the image grayscale.</p> <p>Contour the image. When implemented with the checked check box below it, only shows the image outline.</p> <p>The value (0-120) below the key, adjusts the contour's frequency. (Default value = 120).</p> |
|--|--|

Mouse use – change image size, zoom, position, selection

- | | |
|---|---|
| <ul style="list-style-type: none">▪ Enlarge/shrink image▪ Move image▪ Resize image window▪ Select part of image▪ Deselect | <p>Click the right-mouse-button near the right down corner and drag it.</p> <p>Press the right-mouse-button on the picture and drag it.</p> <p>Click the left-mouse-button near the right down corner and drag it.</p> <p>Press the left-mouse-button and draw a rectangle around the area.</p> <p>Click the left-mouse-button anywhere outside the selection.</p> |
|---|---|

Note During the process of [quality editing](#), changes are not saved in the buffer. [Paste](#) key restores the original image only.

If [mouse use](#) changes are made (size, zoom, position, selection), the new image condition is saved in the buffer.

6.2.11. Record Live Video

You can record live video from the camera by clicking on the [Start Recording](#) key. Program will continue recording until you click on the [Stop Recording](#) key. The format in which the video files are saved, depends on the [Online Recording](#) settings ([JPEG/AVI](#)) in [Program Settings](#):

Online Recording

- IF [JPEG](#) is set, the recorded video files are saved in *jpx* format – set of *jpeg* frame.
- IF [AVI](#) is set, the recorded video files are saved in raw *avi* format that can be played on any video player.



Fig. 6.10. Start Recording Key, Stop Recording Key.

Note AVI format does not support resolution changes. If user changes the resolution during the writing of live video in *avi* format, program warns the user (Fig. 6.11.) and skips the new frames.

- If user changes back to the original resolution, recording will continue,
- If not, all frames with the new resolution will be skipped.

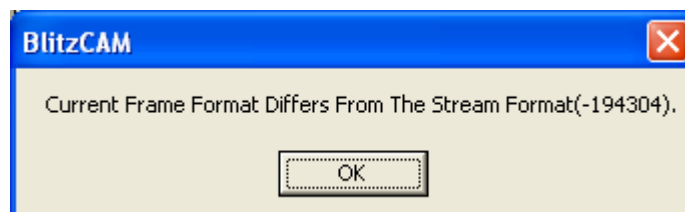


Fig. 6.11. Warning message: During the recording in *avi* format, resolution of video was changed – return to previous resolution or all changed frames will be skipped.

6.2.12. Control Camera Connected to Multiplexer

If camera is connected to a multiplexer, user can get additional controls that are provided by the multiplexer. The special **MUX Control** settings should be done in the camera settings (Fig 4.1.). Additional control keys will appear on the camera control keyboard (Fig. 6.12.).

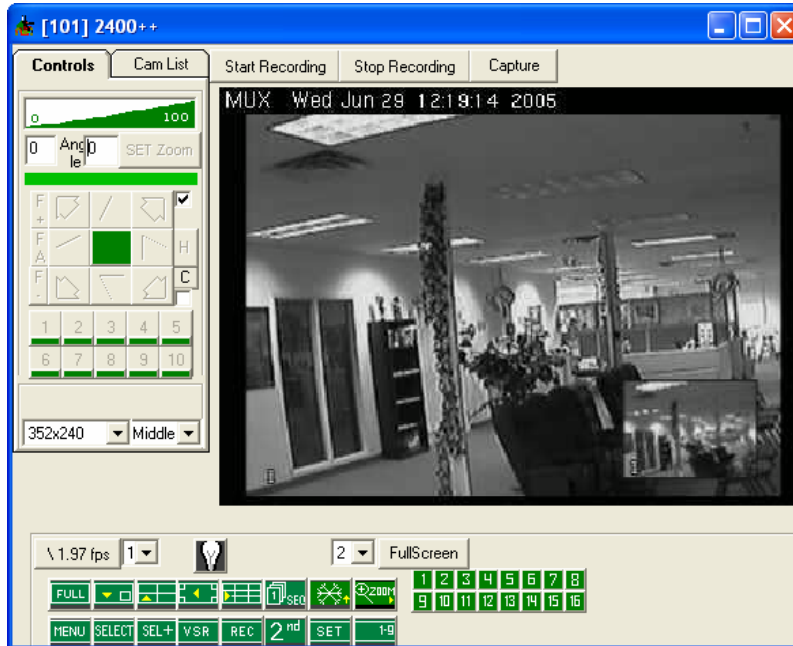


















Fig. 6.12. Cameras connected to a multiplexer. Below the camera videos there are additional control keys

Note: The number of additional control keys depends on the status of the user:

- If the user is an “Exclusive Master User”, it will have two rows of additional control keys as shown in Fig. 6.12.
- If the user is a “Remote User”, it will have one row of additional control keys.

	MENU	Enters the setup mode. Clicking again exits the setup mode.
	SELECT	Reset the alarm action.
	SELECT+	Enable secondary functions of particular keys: Recording Preview - (SELECT+VCR). Assign Camera - (SELECT+camera number). Assigns a camera to a picture in the PIP and multi-screen modes.
	VCR	Changes the video source from live cameras to the VCR input (playback).

 LIVE RECORD	VCR output is changed to record only one selected camera instead of multiplexed video output.
 FULL	Displays the currently selected camera in the full-screen format.
 PIP	Displays the currently selected camera in the full-screen format, inset with a picture of another camera.
 2x2	When in normal mode, this key switches to a view of four cameras (two by two). Four different cameras can be assigned to the windows and displayed. The remaining cameras can be sequenced in the last window (lower right).
 OVERLAY4	Displays the currently selected camera in the full-screen format, inset with four 1/16-size picture of another camera. The remaining cameras can be sequenced in the last window (lower right).
 3x3	When in normal mode, this key switches to a view of nine cameras (three by three). Nine cameras can be assigned to the windows and displayed. The remaining cameras can be sequenced in the last window (lower right).
 SEQUENCE	This key begins automatic sequential switching of cameras in the full-screen and multi-screen mode.
 FREEZE	This key freezes the current screen display until the key is pressed a second time.
 ZOOM	Clicking ZOOM displays the 2X zoom picture of the current camera in full-screen mode or of the camera in the first window of the multi-screen mode. Clicking again exits the zoom mode.
 2 nd	Clicking this key will change the Primary Display keys (PIP, Quad, OL4 and 3x3) to the secondary display keys.
 SET	This key functions as SET control in the setup mode.
 1-9	Camera number keys are used with the SELECT key to position cameras on the screen in the PIP and multi-screen modes. These keys are also used to select cameras to view in full-screen mode and to setup the activity detection grids in the setup mode.

Note: Currently we support several popular brands of multiplexers. Please contact us for additional information.

6.2.13. Switch between the cameras

You can switch between different locations (cameras) by clicking on the “Cam List” tab (Fig.6.13.), and double clicking on location you wish to view.

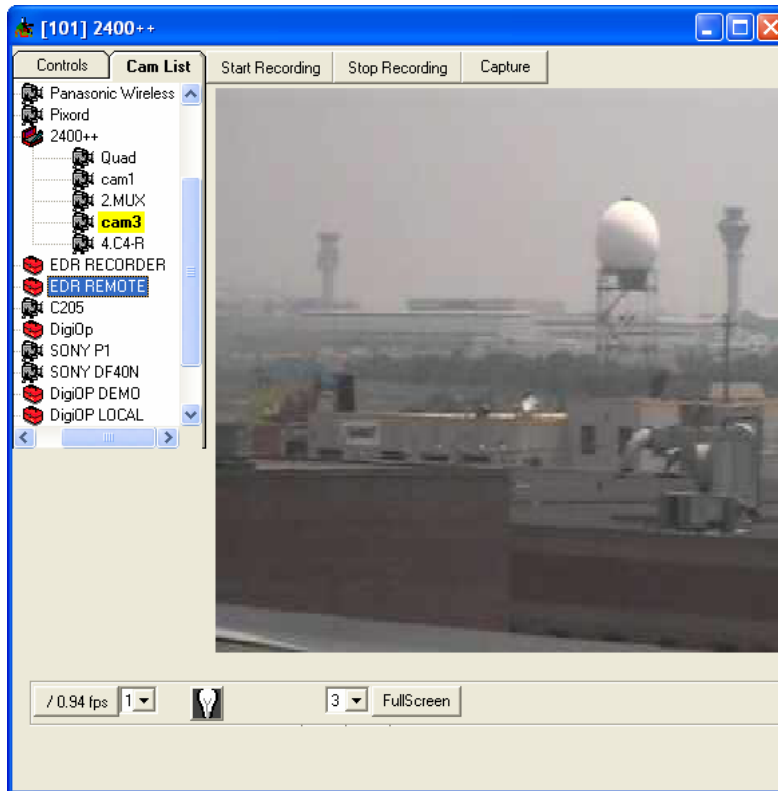


Fig.6.13. Switch between the cameras

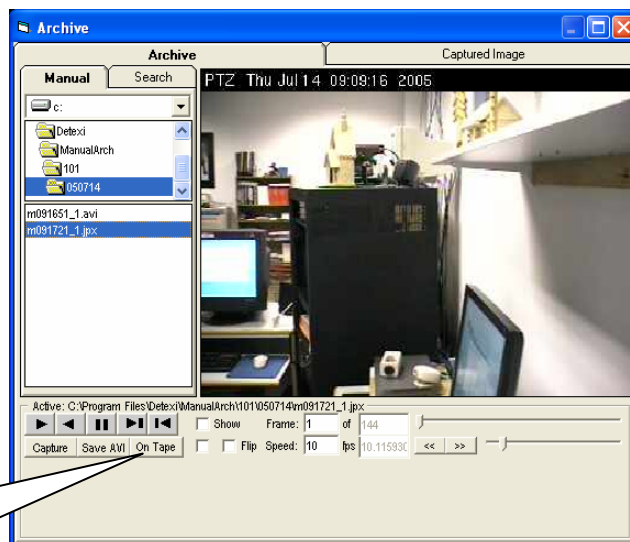
7. How to Play the Recorded Video

7.1. Search Archive in Manual Mode

To play previously recorded video:

- Click on the **ARCHIVE** key on the main screen.
- Program activates the archive **Manual** tab and gives access to the directory defined in the **Program Settings (TMP Storage Directory)** (Fig. 7.1.).
- Choose the file you wish to view (files are named by **time & date**). The first frame of video appears on image window.

Note: Camera number is required when a manual search is being done. Thus, when in **search** mode, moving the mouse over the camera list will provide the camera number (Fig. 7.2).



Recorded material can be saved **on Tape** using this option.

Fig. 7.1. Archive: Manual tab is activated.

User can place the recorded material on Tape. If **“On Tape”** button is pressed, the following window will appear (Fig. 7.1.1.).

Note: When **ok** is clicked, user will be able to view the recorded material in full screen even if the **“Full screen”** option on the **setting** window is unchecked.

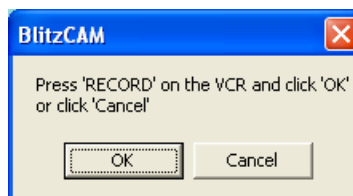


Fig. 7.1.1.

7.2. Search Archive (Client-Server Mode)

In **Client-Server** mode, user can have additional access to the **Central Archive** if s/he is authorized to do so. **Central archive** is organized on the **server** without any user efforts. User gets access to the video files that meet the search request criteria.

To play video from the **Archive** in Client-Server mode:

1. Choose **Search** tab from the Archive
2. Select the Camera/Sub-camera by Double-clicking on the line (camera name).
3. Select the day (optional – ‘TODAY’ by default)
4. Select a time interval by holding the **Right-mouse-button** and dragging the mouse from left to right (optional – whole interval by default).

Note: Before step five [Get Button] you can reselect a new interval inside the previous selected interval.

5. Click on “Show” button to get a visual graph
6. Click on “Get” button to get the information

Search Parameters

- **Date** Date to start the search. Choose from the popup calendar.
- **Time Interval** Time to start the search.
- **Camera(s)** Choose one from the list.
- **Duration** Time interval of search (From Min.).
- **With Motion Only** **Checked** – search for video with motion detected only.
- **Alarm** **Checked** - search for Alarm event video only.

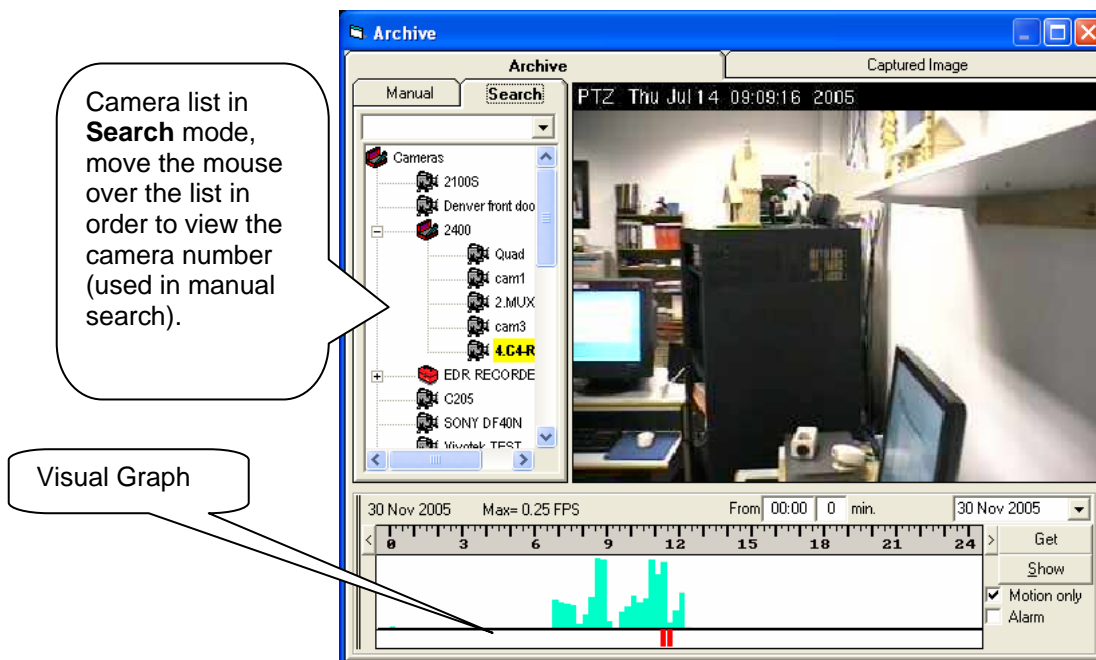


Fig. 7.2. Archive: Search tab is activated

After clicking on the “Get” button, program starts searching and organizes the files that meet the search criteria. The information about the search result is provided to the user when the search process is complete. This information is located in the list box below the image window (Fig. 7.3.). Double click on any line of information to view its content.

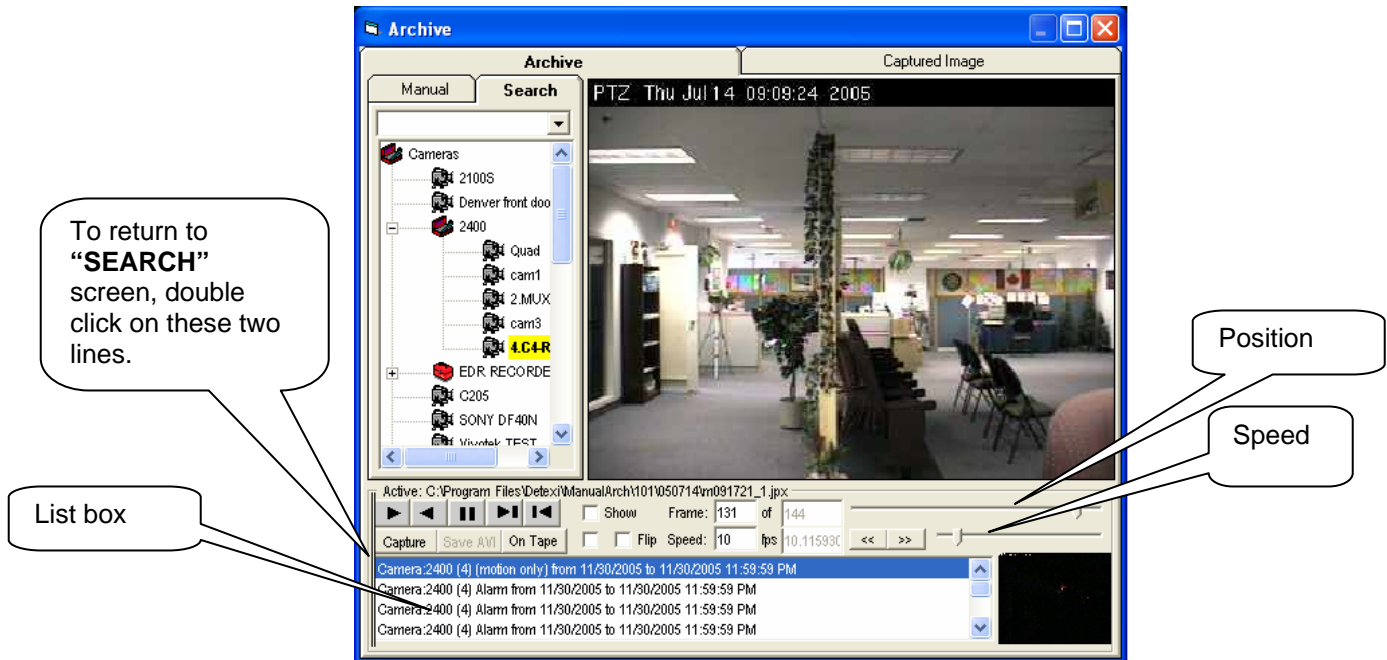


Fig. 7.3. Archive: Search result

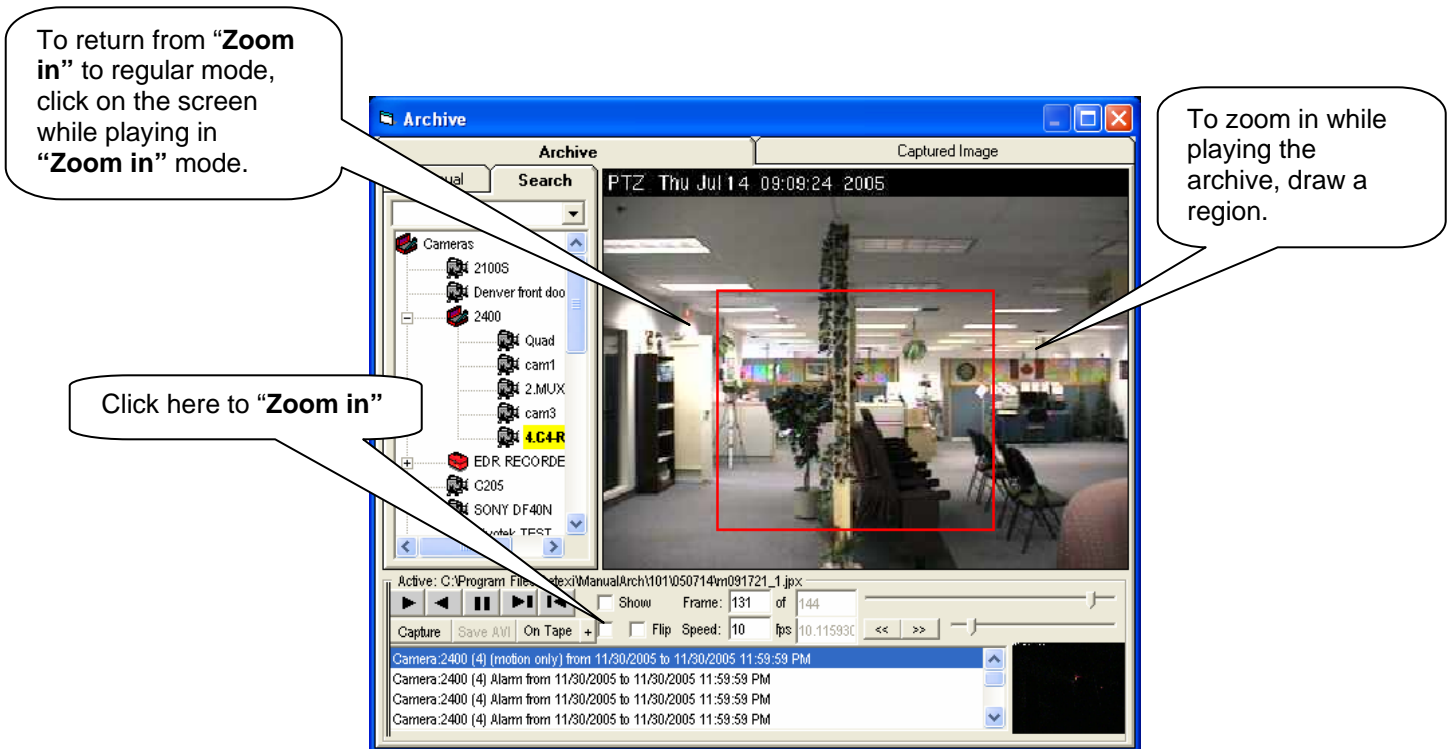


Fig. 7.3.1. Search result. Zoom

Note: If “Indicate Motion”

- **Is checked** on NVR settings, any significant motion will be highlighted in green when the content of archive is viewed (Fig. 7.3.2.).

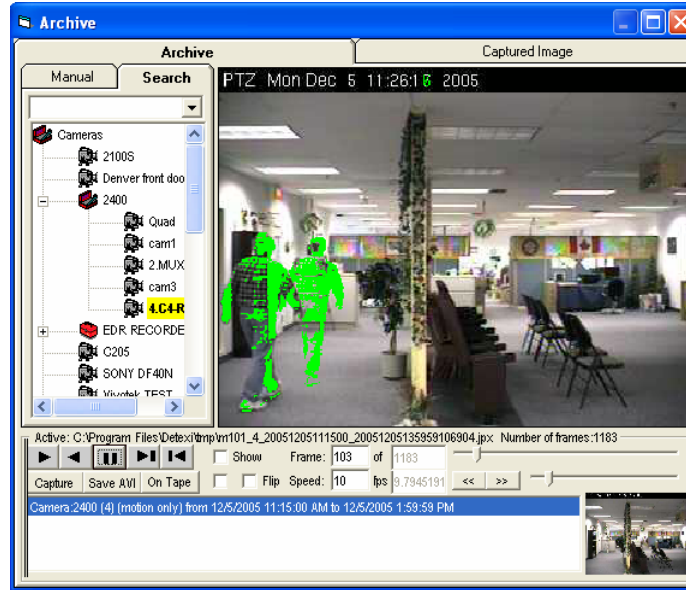


Fig. 7.3.2. Motion is highlighted in green

- **Is not checked** on NVR settings, there will not be green highlighting in case of any significant motion while viewing the content of archive (Fig. 7.3.3.).

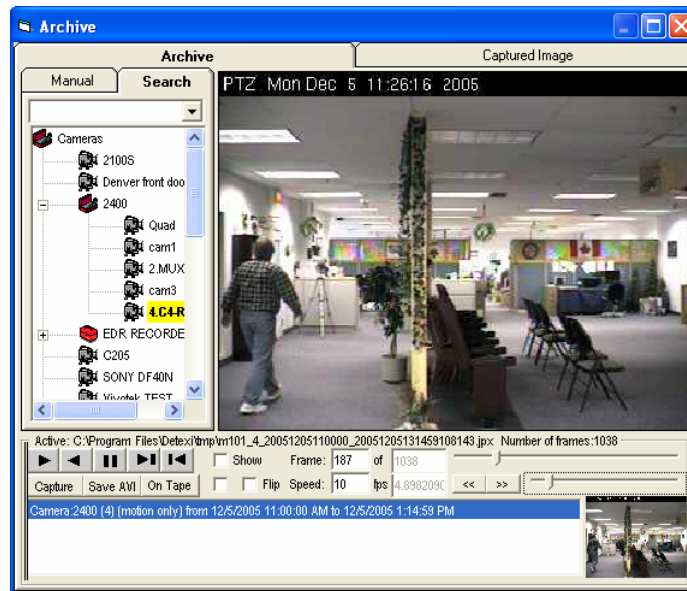


Fig. 7.3.3. Motion is not highlighted

7.3. Play Video

When the first frame of the video appears, user can use the provided keys to view it:

- **Play** key | Play video forward.
- **Back** key | Play video backwards.
- **Stop** key | Stop video.
- **Prev/Next** key | View the recordings frame-by-frame.

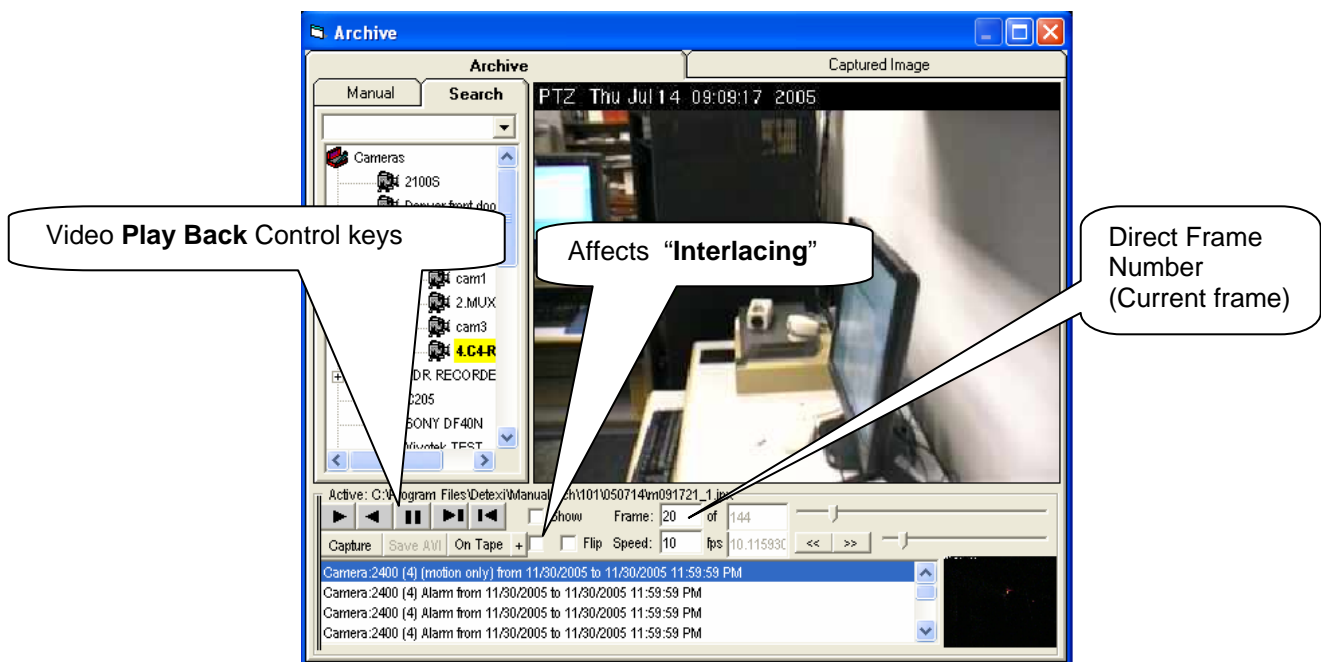


Fig. 7.4. Archive: Play, Back, Stop, Previous, Next Keys.

- OR -

You can go directly to the frame you want to see by entering a frame number.

Note: System will not play forward, if the current frame is the last frame of the video (no looping). You must manually rewind the recording.

Note: Interlacing check box (Fig. 7.4.),
- **If checked** decreases interlacing.

7.4. Capture Image

You can capture any frame or any part of the frame by clicking on [Capture](#) key and activating the [Captured Image](#) tab. Please refer to section 6.2.10. for more information.

7.5. Save Archived File in AVI Format

In [DETEXI](#) program, video format in which files are saved depends on the [Online Recording](#) settings (JPEG/AVI) in [Program Settings](#).

User can make an *avi* copy of the archived video file saved in *jpx* format and the *avi* format that can be played on any video player:

- Choose file from archive
 - [Save AVI](#) key
- Save the selected file in *avi* format

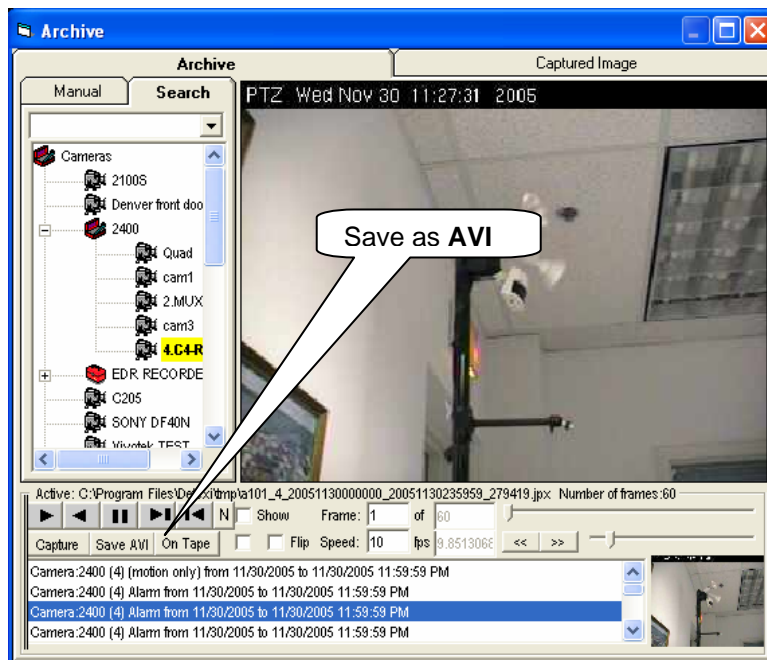


Fig. 7.5. Archive: Save AVI Key.

Note: As *avi* files do not support resolution changes, resolution should not be changed during the recording of *jpx* files that you may wish to convert to *avi* format later on.
Conversion of *avi* files to *jpx* format is not supported at this time.

8. Client in Alarm Mode (Client-Server mode)

Client can pop up multiple alarm windows if the program setting “**Alarm Port to Listen**” is set (Fig. 3.6.)

In this case, client will talk to the **NVR Server software** to manage the alarms.

When the NVR Server receives an alarm, it sends the alarm notifications to up to 3 clients per site. (See **Network Video Recorder Software** document).

8.1. How to Investigate the Alarm

Client

- Plays the message received from the NVR Server
- Adds (or replaces) the message in the Alarm Notification Box
- Pops up the site where the alarm occurred (depending on the client settings – see “**Can overwrite previous alarm**” checkbox “**No Popup**” and “**No List**” checkbox on Fig. 3.6.)
- If “Write on Alarm” option, located on the **setting** dialogue box
 - Is **checked**, client will start recording locally immediately.
 - Is **not checked**, no immediate recording, only instant real-time view.

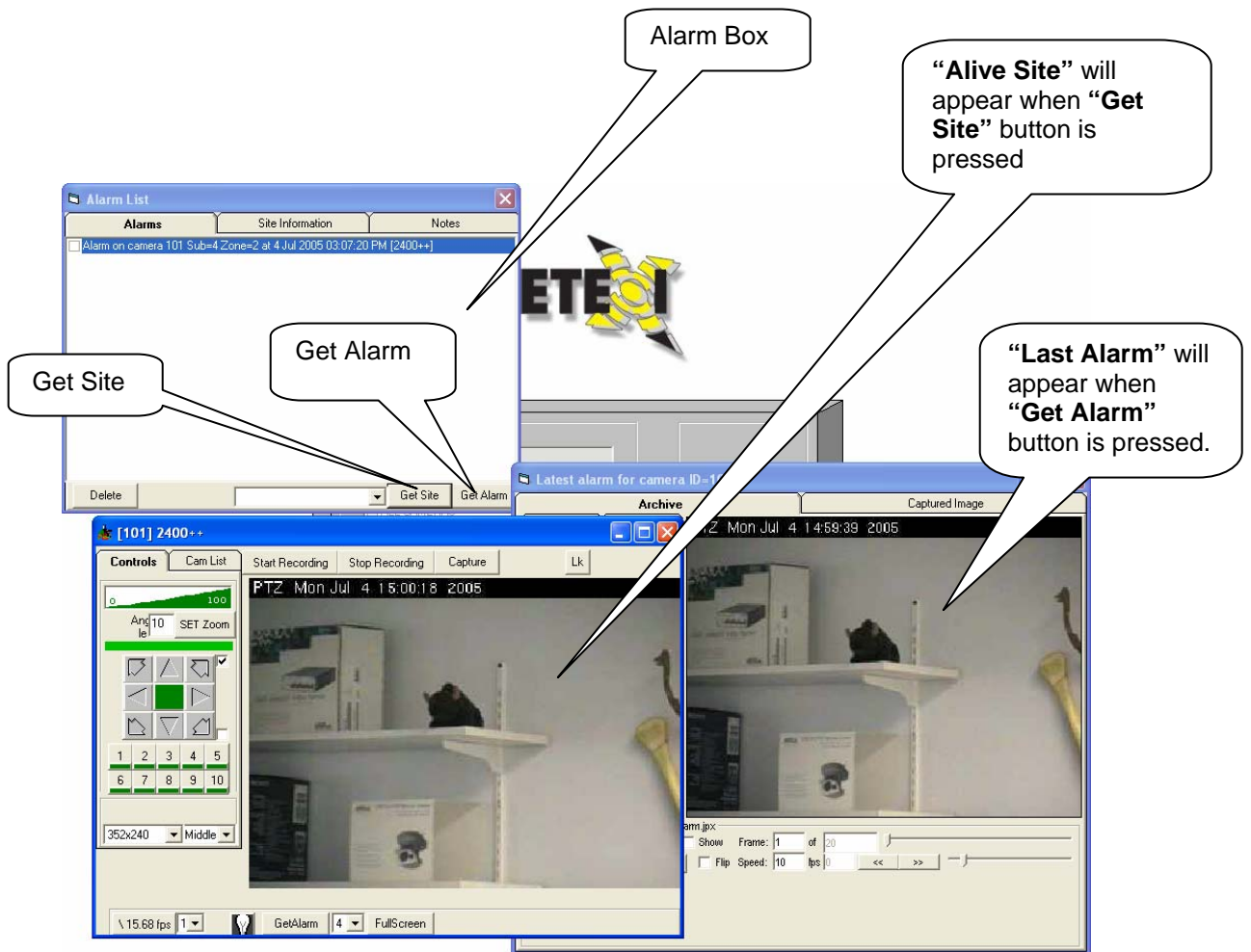


Fig. 8.1.

You can investigate an alarm by selecting the alarm event line in the Alarm Notification Box (Fig. 8.1.).

When you select an alarm event line, and click on the “**Site Information**” tab in the Alarm Notification Box, you will see information pertaining to the site (Fig. 8.2.)

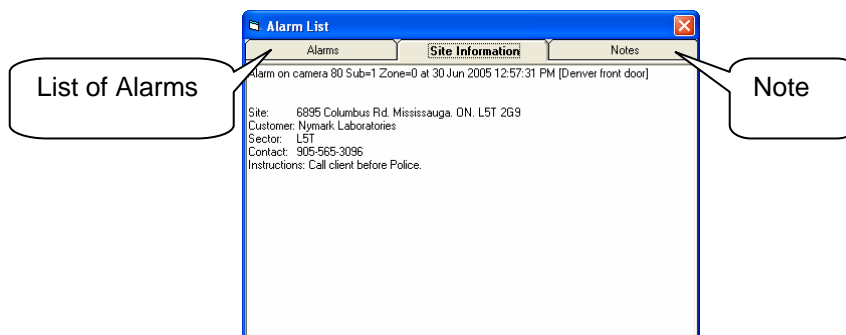


Fig. 8.2. Alarm List window

When you select an alarm event line, and click on “**Get Site**” button in the Alarm Notification Box, program brings up the camera connected to the selected alarm event. (See **Alive Site** on Fig. 8.1.)

When you select an alarm event line, and click on “**Get Alarm**” button in the Alarm Notification Box, program brings up the last alarm video connected to the selected alarm event. (See **Last Alarm** on Fig. 8.1.)

User can write notes for an alarm event:

- Select an alarm from the alarm list located at the **Alarm List** window
- Click on the “**Notes**” button located at the top right corner of the **Alarm List** window
- Write a note for that specific alarm event
- Save

When a note is written for an alarm event, user will be able to access that note when s/he searches the archive. This implies that if there is a note written for an alarm event, an “**N**” button will be available on the archive window (Fig. 8.3).

For more information on archive please refer to section 7 of this manual.

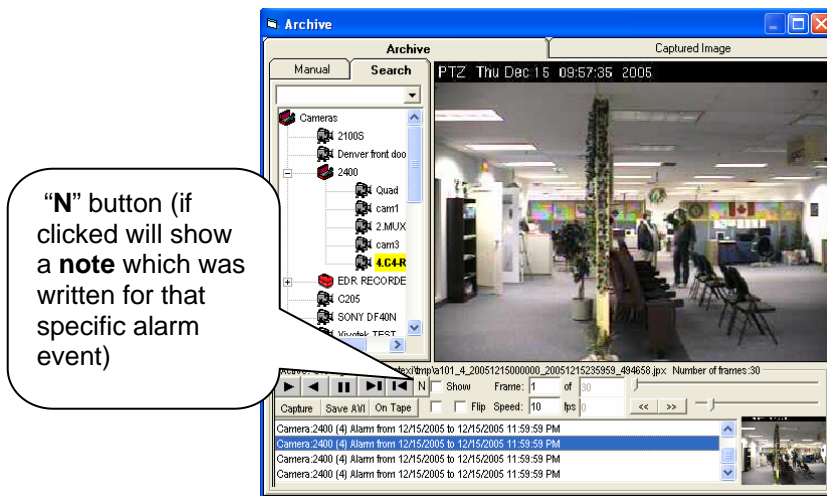


Fig. 8.2. Archive window contains the “**N**” button to view the notes that might have been written for an alarm event

Note:

When a **Task** contains “**Client notification**”, its “**Message can be changed automatically**” is checked, and does not contain “**Camera Record**” action for this camera, **Get Alarm** button

- Will not bring up any recorded alarm.
- If Get Alarm brings up a recorded alarm, that alarm is the last recorded material of the same day for another task that contained “**Record Camera**” action for the same camera.

This implies that “**Get Alarm**” functionality depends on the existence of “**Record Camera**” action in a task

For more information on **Tasks**, please refer to the NVR full manual.

9. How to control « Multi Screen »

Sometimes you should be able:

- To limit maximum number of cameras you are able to see at the same time
- To place different parts of the multi-screen at the different monitors or at the different places of the monitor

To achieve that goal you can set number of different “virtual Monitors” and set number of cameras (places) on each “Monitor” (see Fig.9)

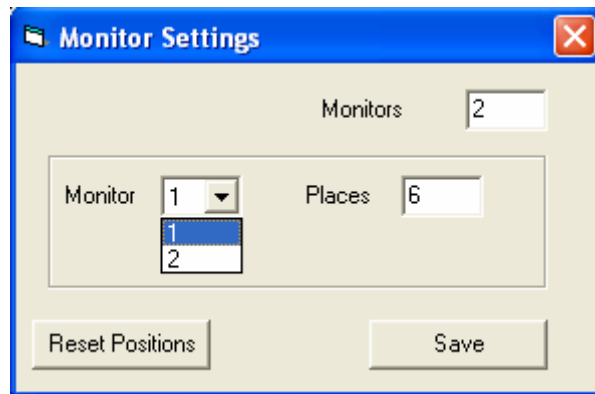


Fig. 9.

When you select several (or all) cameras you will see them “through” number of “virtual monitors” you define in “Monitor Settings” dialog.

For example we can define two monitors:

Monitor 1 -> has 6 places

Monitor 2 -> has 32000 places

If you select 16 cameras you will see “multi screen” view consists of 2 monitors:

- *first monitor with 6 cameras*
- *second monitor with the rest of them (10 cameras)*

If you set up Monitors first time you have to uncheck “Full Screen” checkbox and move each “virtual monitor” to the place you want it to be.

To limit maximum number of cameras for the current user (up to 4 for example) you can define one monitor with 4 places. In this case you will be able to see not more than 4 cameras at the same time.

To see different groups of cameras on the different physical monitors (if you have for example 8-monitors-configuration video card with 8 physical monitors connected to it and 70 cameras in your system) you can define 7 “virtual monitors” with 10 cameras each. After you uncheck “Full screen” checkbox (Fig. 3.6) you can bring up 7 “virtual monitors” and move each of them in the middle of corresponding real physical monitor. You can use real monitor “8” for single

screen form. When you check “Full Screen” checkbox after this positioning is done every “virtual monitor” takes full physical monitor space.

“Reset Positions” button (on Fig. 9.) allows you to have all “Virtual Monitors” again on one main physical monitor. This button is useful if you had some hardware changes (For example now you have 4 monitors only instead of 8 you had before)