VIDEO CAPTURIX
USER MANUAL

About Video Capturix...

In December of 1997, I bought a Video Capture Card (ZOLTRIX FACE-TO-FACE) I had try to find a good software to do some experiences with this hardware. I download many applications and didn't find any that I like.
So in March 1998 I decide to create a good video capture utility and I start to program Video Capturix, I finish this program in June, after I decide to post it on the newsgroups and I include capture wizard.

In 24 st July i decide to create a site to host this program. Few days after this site are on-line i started to receive many congratulations e-mails, (some of then funny asking to send the source code :)))).
For this new version, everything was changed, new graphical interface and new functionality.
I can't believe that i made this version in 50 days !!!

In December 1998, i re-program all 2.2 version to increase speed and functionality to this application, now Video Capturix 99 can do more things and i think that is more simple to use.

But in the beginning of 1999 i have many suggestions from the users and i decide to continue this project. When i start Video Capturix 2000 development i change everything to increase functionality.

Now in 2004 there will be a new version with more features to offer and compatibility with almost all video capture devices.

Well this was the Video Capturix story.

Thanks to all of you !

Alexandre Simões
Video Capturix Author

Capture Device selection...

If you have more than one capture device, you can now select witch device you want to use at any time.
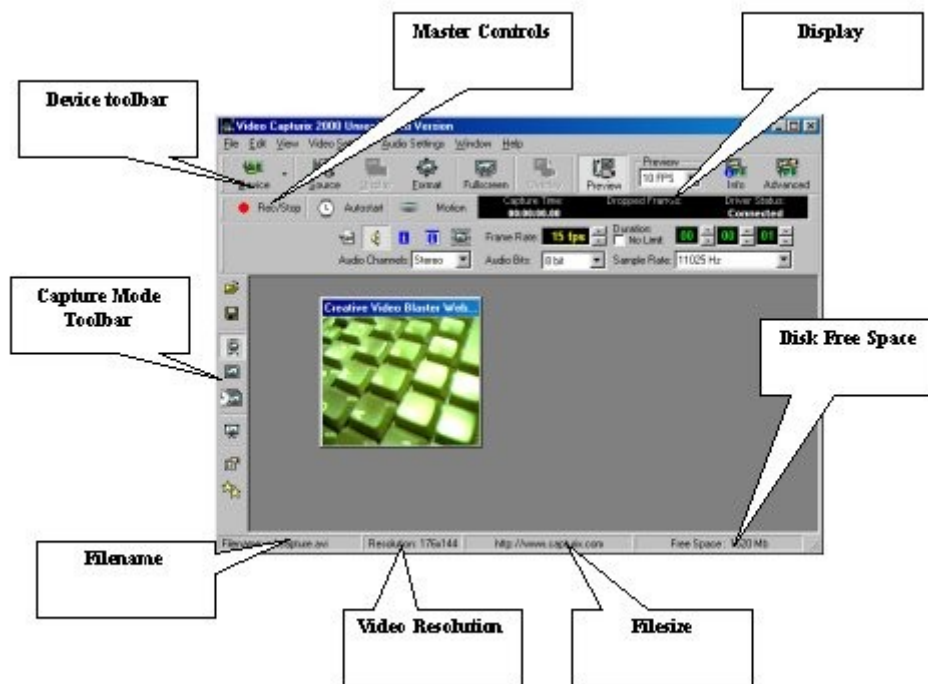

Just click on desired device and Video Capturix will turn on the Video Capture Device...

Video Device Information - Will display video capture device information.

Disconnect driver to unplug external device - You can use this option if you want to unplug any USB device without leave Video Capturix.

Map of Video Capturix

Video Capturix Toolbars

Video Capturix Main Toolbar

OPEN, This button allow user to open any compatible file (BMP,JPEG,AVI,VCP) . You can open Images, Movie File and Video Capture Parameters.

SAVE, This button allows user to save Video Capture Parameters.

MOVIE, Lets you capture a video sequence.

IMAGE CAPTURE, Lets you capture a single image from any video source.

Multiple Capture, Lets you capture a multiple frames and adjust time between each frame or just capture manually.

AVI Builder, Lets you create a Video Clip (AVI) from multiple image files (.BMP).

Web Share, Ables you to share a live image on the Internet.

Movie Viewer, Lets you open a AVI file and see a movie file.

About Video Capturix, Here you can see author information.

Video Capturix Video Device Toolbar

Video Display:
The options available in this window will be determined by your specific capture card, usually allow users to adjust the appearance of video on screen.

Video Source:

This option will allow users to adjust color functions such as contrast and brightness. And here you can select what video source you want to work with.

Video Format:
This option allow users to adjust image size and quality. See on your hardware documentation.

Full Screen:
This option allow users to see video signal in all screen area, with this option you can transform you monitor into a TV set.**(CTRL-F)**

Instant Snapshot:
Ables you to take a instant snapshot with one simple button click.

View mode : Overlay
Overlay is the most efficient way to display video, because it does not use CPU resources. However ,not all capture devices support overlay; refer to the documentation for your capture device to find out whether or not it supports overlay.**(CTRL-O)**

View mode : Preview
You preview movies before you capture them. You can specify the frame rates for previews that you play either before or during capture. Decreasing the frame rate reduces the processing time; increasing the frame rate gives a more accurate preview.**(CTRL-P)**

Preview frame rate:
Preview frame rate affect the way the preview is processed, this option sets the number of frames captured per second. Decreasing the frame rate reduces the processing time; increasing the frame rate gives a more accurate preview.

Advanced Settings:
This window allow user to adjust some internal settings of the active video capture driver.

View menu

```
✔ Overlay        Ctrl+O
  Preview        Ctrl+P

  Full Screen    Ctrl+F
```

Overlay - Overlay is the most efficient way to display video, because it does not use CPU resources. However ,not all capture devices support overlay; refer to the documentation for your capture device to find out whether or not it supports overlay.**(CTRL-O)**

 Preview – You preview movies before you capture them. You can specify the frame rates for previews that you play either before or during capture. Decreasing the frame rate reduces the processing time; increasing the frame rate gives a more accurate preview.**(CTRL-P)**

Full Screen - This option allow users to see video signal in all screen area, with this option you can transform you monitor into a TV set.**(CTRL-F)**

Capturing a Movie with Video Capturix...

Recording video images and sound directly to your computer is called capturing, the analog video and audio signals.
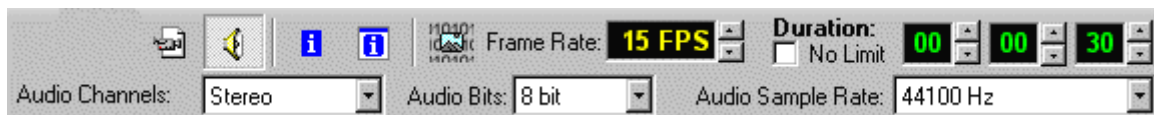**To record video, you need a video source (such as a video tape, camcorder) and a video capture board. For recording sound, you need an sound board (such as Creative Labs Sound Blaster).**

To capture video using *Video Capturix*, the capture board must be compatible with Video for Windows. Your system must have the appropriate Video for Windows drivers installed on it. You need to connect the your video source to your video capture board. See in your hardware manual for the hardware setup and configuration.

To record digital video you need a fast computer and lots of disk storage space. The video resolution, the number of colors, and the frame rate all affect the file size of the motion video.

If you want to capture a motion video using the best resolution and quality, you will need lots of disk storage space.

1. Select "Movie Capture" . This option will activate movie capture tool bar.

2. You have to set filename and destination, press .

3. If you want to capture video with audio press , the default position is on, to turn off press again. **(CTRL-A)**

See Audio settings.

4. If you want to insert other information in your AVI, must be on, if you press you will edit copyright information.

5. Adjust frame rate. **This option sets the number of frames captured per second. Decreasing the frame rate reduces the processing time.**

   NEW!! - If you want to adjust frame rate to 29.97 fps (some NTSC formats) double click on FPS display.

6. Adjust duration of your movie, if you want to stop manually capture operation, press "No Limit".

7. Choose compression method, press .

See Video Compression.

8. To begin capture you have three possibilities "AutoStart", "Record" and "Motion"

Autostart – Used to capture after a preset time.

See AutoStart Window

Recording – Start capture immediately.

Motion – Used to start capturing when video image changes.

See Motion Detector

9. If "Attach other information to AVI file" option is activated.

See Other information

Capturing a single image…

If you want to capture a single image from any video source, first remember that image resolution will be the same of video screen resolution. To increase resolution change Video Format.

Video Capturix ables you to capture a still frame, just clicking one key, if you press **F11** you will capture a frame from the actual video source.

To capture a single image use a medium resolution like 384x288 or more because after you can re-scale in a image editor.

To change Video Format, press

1. Select Capture Image, press .

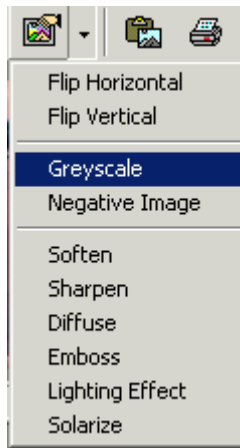You will see another toolbar:

2. If you want to insert data on image just press Insert Data if not just leave it unpressed.

3. If you want to use Autostart option or Motion , press "Autostart" or "Motion"

To capture a image from video source, press , and you will see this window and this toolbar:

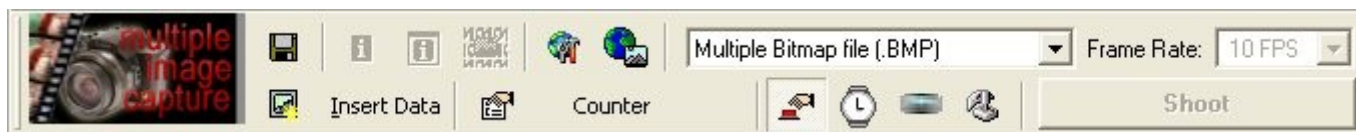|	
Open a image file (.BMP,.JPG)
Save image to image file format (.BMP,.JPG)
Image Effects Button
Put image on clipboard, for other application use.
Send image directly to printer.

Multiple frame capture

This capture type allow user to set a time between each image or just capture frame-per-frame using manual shoot button. Brings you many possibilities to your video capture card, for example, make animations or capture clouds movement.
It gives you three diferent save type: Avi file, Multiple BMP files or Refresh same file.
To capture a multiple frame sequence:

1. Select Multiple frame capture, press

You will get this toolbar:

2. Choose save type:

Movie file .AVI – All frames will be saved on a movie file (.AVI)

>   **Viewer Frame Rate** – set this option to select movie viewer
>   frame rate.

Multiple file .BMP or .JPG – Each frame will be saved on a different file (eg: PIC01.BMP,PIC02.BMP, PIC03.BMP,…)

Refresh same file – All frames will be saved on the same file, updating this file continuous

3. Set filename and destination, press

4. If you select "Movie file .AVI" ,choose compression method, see "Video Compression"

5. **Internet Broadcast**:

>   **If you want to upload each image to a FTP Server just click in** **,** first you
>
>   must set all Internet Settings (Internet Settings):

Directory must be the entire path. (Leave blank if you want to save in root)

If you leave unpressed you will disable FTP operation.

6. Select

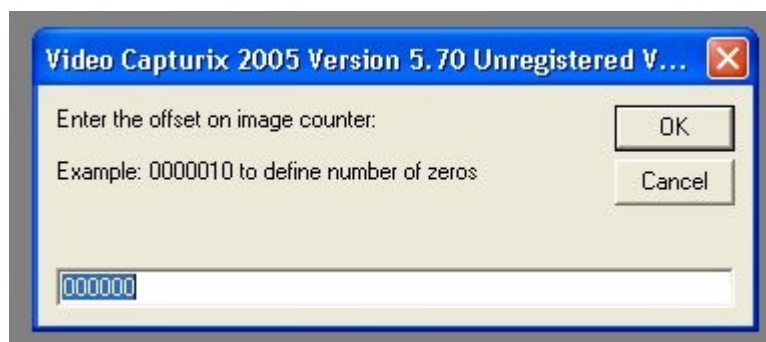 Manual Shoot if you want to control each frame capture.

 Timed Shoot if you want to capture with time interval.

 Trigged Motion if you want to capture each frame when image have motion.

7. If you don't want to use "Manual Shoot" adjust Time between frames.

8. Press "Record" , "Autostart" or "Motion"

Counter

Counter – This feature ables use to costumize the counter of the multiple frames:

Example if you enter:

Filename: capturix.jpg

000156 - the counting will be capturix000156.jpg, capturix000157.jpg, ...

0000000000 - the counting will be capturix0000000000.jpg, capturix0000000001.jpg, ...

1 - the counting will be capturix1.jpg, capturix2.jpg, ...

Webshare

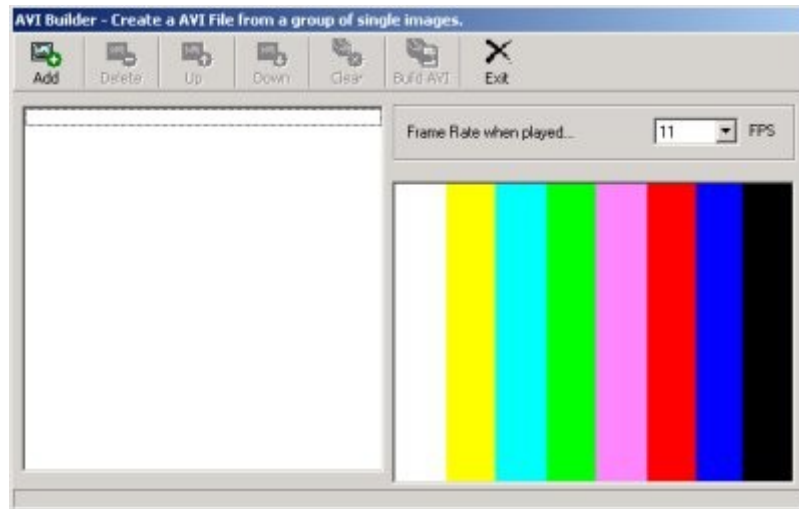| Streaming Port:		0	Compression:	
Stand by			http://192.168.1.103:1504	

This feature ables user to share the live video over the web:

1. Select the listen port of the built-in webserver

2. Adjust the image compression of the transmission.

3. After the server is ready to broadcast.

AVI Builder

If you want to create a Video Clip with a group of images (Bitmaps), use AVI Builder.

Just press ADD and select the files that you want to add to the list, then order the files and press **Build AVI.**
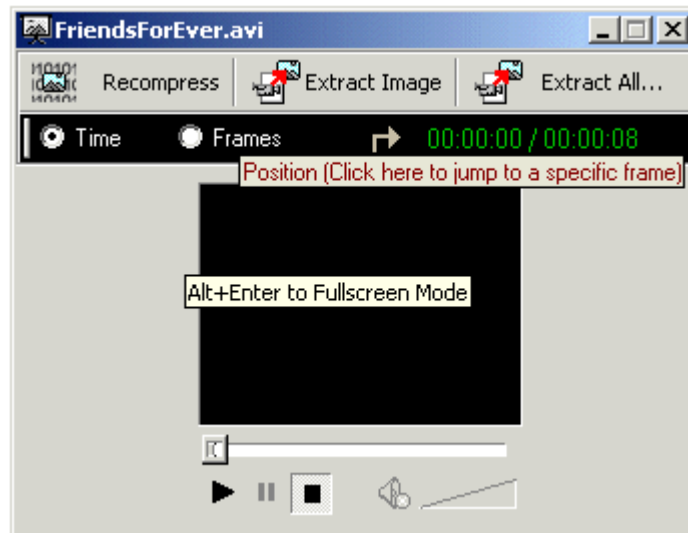

Add	Adds a BMP File to the list
Delete	Delete selected File from the list
Up	Changes the position of the file in the list (UP)
Down	Changes the position of the file in the list (Down)
Clear	Clear All
Build AVI	Build the AVI using all files from the list
Exit	Leaves AVI Builder

Don't forget to choose the frame rate, this is very important when you are playing the file.

The files must have the same resolution !

Movie Viewer window...

With Video Capturix, you can play and recompress AVI files, you can even extract single images to JPG or BMP Format. To do this operation just click on button and you will get this toolbar...

This window opens AVI movie files.

You can select view mode between Time or Frames, this will display current position and duration.
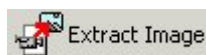
To view in **Fullscreen Mode** press **ALT + ENTER**

Special Features...

Recompressing is saving the same AVI file using another CODEC, just press Recompression Button, then choose the new filename and CODEC and wait while video capturix compress this file.

(This can take a while, depends from the filesize)

You can extract a single frame from any AVI file, then you can print, add effects or just save in BMP or JPEG format.

You can extract each frame from any AVI file, to multiple BMP or JPEG format.

Video Compression

Compression is the process to decrease the size of a file. Motion video files are very large, requiring high data transfer rates for capture and playback. **CODEC'S** are **co**mpression/**dec**ompression algorithms available for compressing Video for Windows and QuickTime movies.
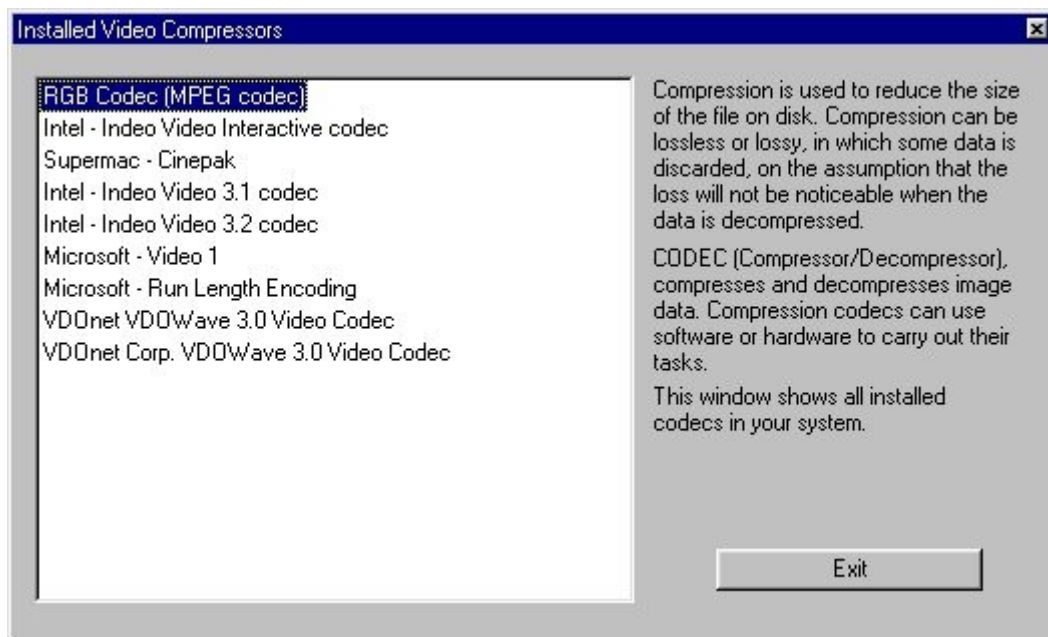**CODEC'S** can be software-based or hardware-based. The codec you choose will affect the visual quality of the movie and the capture speed.
You can compress your motion video using any of the software codecs that come with Video for Windows.

With Video Capturix you can list all CODEC's installed on your system and search for a codec that compress a AVI file.
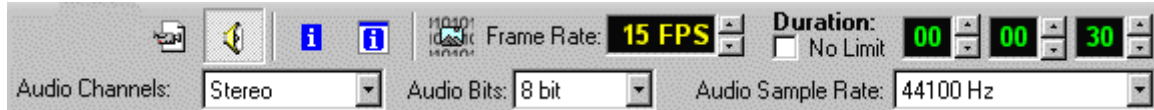
CODEC Setup

This option allow user to know how many CODEC are installed on computer. You must go to Video Settings and Video CODEC.

If you want to know which CODEC compress a specific file, go to Video Settings and select What CODEC, just point to the file and Capturix will show CODEC.

Audio Settings

If you want to capture audio you have to press and ajust audio settings, when capture audio is selected you will see:

1. Choose how many channel's your sound source will be recorded. If your sound source is mono choose mono it will save many disk space. Choose Stereo only if you want a great sound quality.

2. Adjust sample rate. This describes how many times per second to take a snapshot of the   audio. The human ear can perceive sounds up to about 17,000 cycles per second, or 17 Khz. So to reproduce frequencies up to 10Khz, you must choose a sample rate of at least 20Khz. Increasing sample rate you are increasing sound quality. (44 100 Hz is used by CD-AUDIO).

3. Sound quality. To select the audio digitizing quality 16 bit's or 8 bit's (16 bit's is used by CD-AUDIO).

If your movie do not have sound, select no audio this will save many file size.

Other Information...

Video Capturix allow user to attach information about the captured video sequence, like Copyright information, Artist, Source, Subject, Comments and more…

To see this information the user see File Properties >> Details of the file.

To attach this information is very simple, press ![i] , after capture you have to edit this data, press ![i] and this window will appear.

After you edit this information you may close this window.

Remember: Video Capturix only write this information if you have ![i] pressed.

Autostart window...

If you need a couple of seconds to get ready the videotape or camcorder before capturing video. You should use Autostart, with this option you can set the needed time and Video Capturix start after this time. Or just set a date and time to begin capturing.

Autostart by countdown you can set a time to wait before capturing.
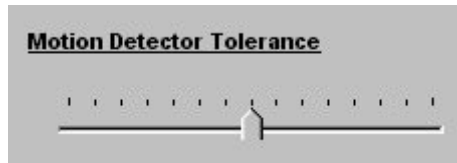

Autostart by date & time allow user to set a date and time to start capture.

Motion detection

Motion detector ables you to start capture when video image changes.

There are two problems that may occur, in full black images like no signal, probably capturix will detect movement every time because this is a motion detector.

You can ajust the sensibility of motion detector, i named it tolerance because this controls the trigger with this method:

When a image is displayed this image takes a value of 100%, then trigger is activated when image changes x %.
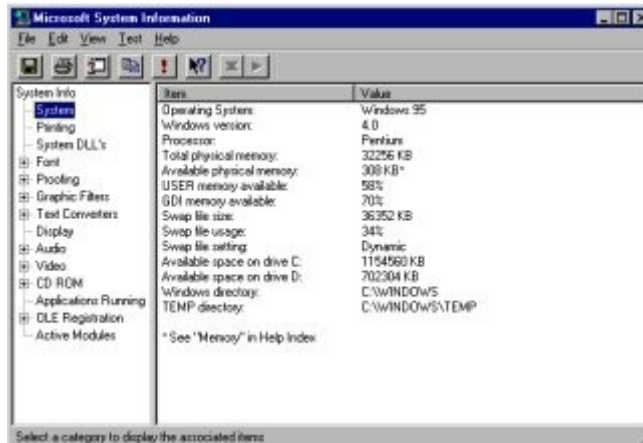
The minimum is 1% (will start capture when image changes 1%) and maximum is 15 % (will start capture when image changes 15%)

The default value is 8 %, then you may adjust tolerance if you want more or less sensibility

Atention: **If you increase tolerance you will decrease sensibility.**

Hardware Information & Advanced Settings...

This is a information window about your computer.

Hardware Advanced Settings

Capture Operation (Exclusive / Background Task) – Exclusive means that every other tasks will be disable (even real-time counter) / Background task is normally the best solution.
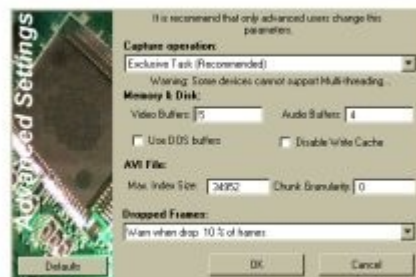
Memory & Disk

Video Buffer – Default is 0 to autocalc

Audio Buffer – Default is 0 to autocalc

Use DOS Buffer – This option is now obsolete, but this will reserve DOS buffers to use during capture operation.

Max Index Size – This option sets maximum number of frames in a AVI file, default value is
324000 (30 fps * 3600 sec * 3 hour, 3 hours at 30 fps)

Demonstration version limitations…

Video Capturix Demonstration have some limitations:

Copyright information in all output images and files
Avi capture limited to 30 seconds.
Time between frames 1 minute.
Video Capturix Information on AVI Comments.
Video Capturix copyright on Full screen mode