

Compression



To allow a **“Video for Windows”-file (AVI)** to play back faster and also to save storage space, you can compress the file. The file type still remains **AVI**.

The main disadvantages of compression are the high amount of computing time usually required and the loss in quality typically associated with it.



You can use **File/New** to create a new document of type **Create AVI (*.BAP)**. Then you can select one or several AVI files to be compressed and set the options for compression (the algorithm, quality, etc.) before starting compression.

To repeat the same settings save the file as a batch file. Since the program uses the “Video for Windows” interface Version 4.0 of MS Windows, all supported (and installed) compression and file formats and hardware accelerators can be used.

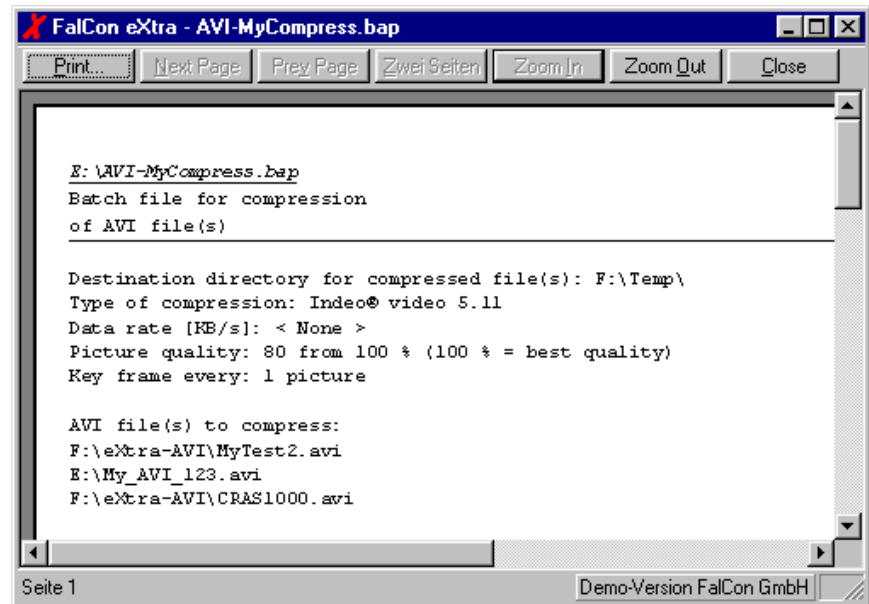
The File Menu



In the **File** menu you can create new documents, open existing ones, close and save picture documents, create a printout, set up the printer or exit the program. Please note that only the additional menu items corresponding to the document type under discussion are explained in this section.

- | | |
|---------------------|---|
| Print | Prints a text log of the document. |
| Page Preview | Shows a text log of the document on the screen as it would look if it were printed out. |

Page Preview



Use this menu entry if you want to be able to evaluate how a printout of the text log will appear.

The AVI Compression Menu

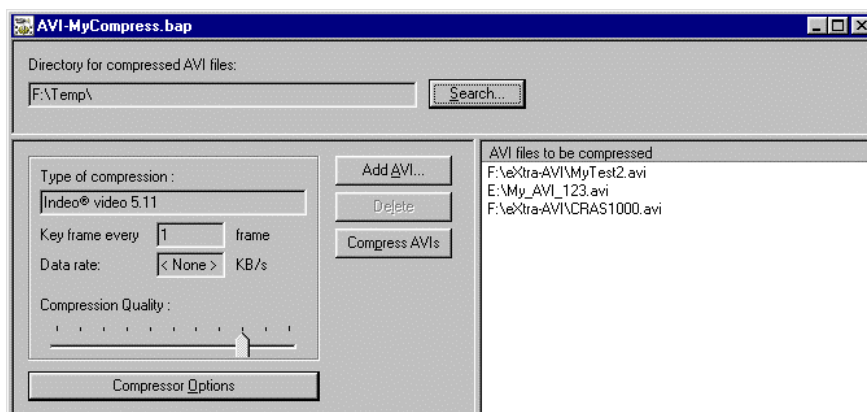


The individual menu entries are:

Destination Directory	Enter the name and the complete path of the destination directory for the compressed AVI file to be created.
Add AVI	Use this option to add AVIs to the creation list.
Remove AVI	Removes entries from the AVI list.
Compress AVI Files	Begins compression of the AVI file.
Compressor Options	Here you can make adjustments to the compression program and to its parameters.

The functions are described in more detail below.

AVI Compression: Document Window and Functions



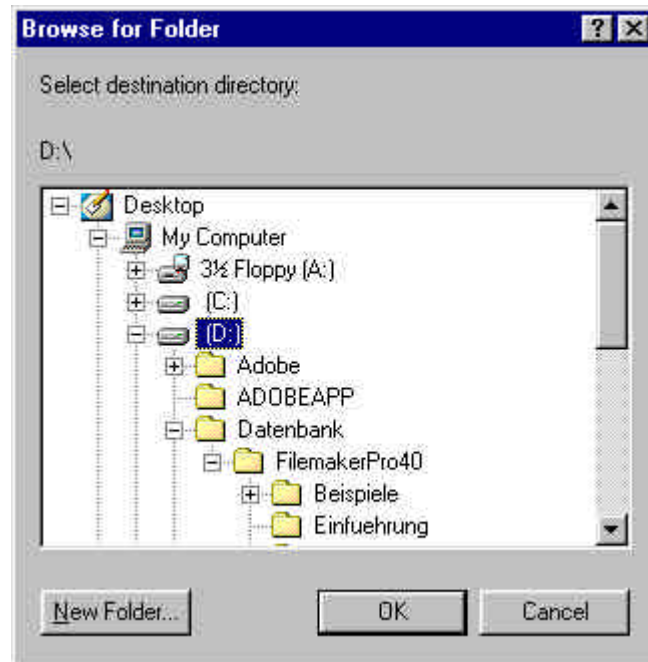
The input dialog box is divided into three areas:

- Target directory for the AVI output file
- Settings for compression of AVI files
- List of AVI files to be compressed

The individual functions are:

Search	Use this search dialog box to enter the name and the complete path of the target directory for the compressed AVI file to be created.
Add AVI	Use this option to add AVIs to the creation list.
Delete	Deletes entries from the AVI list.
Compress AVIs	Begins compression of the AVI file.
Compressor Options	Here you can make adjustments to the compression program and to its programs.

Search

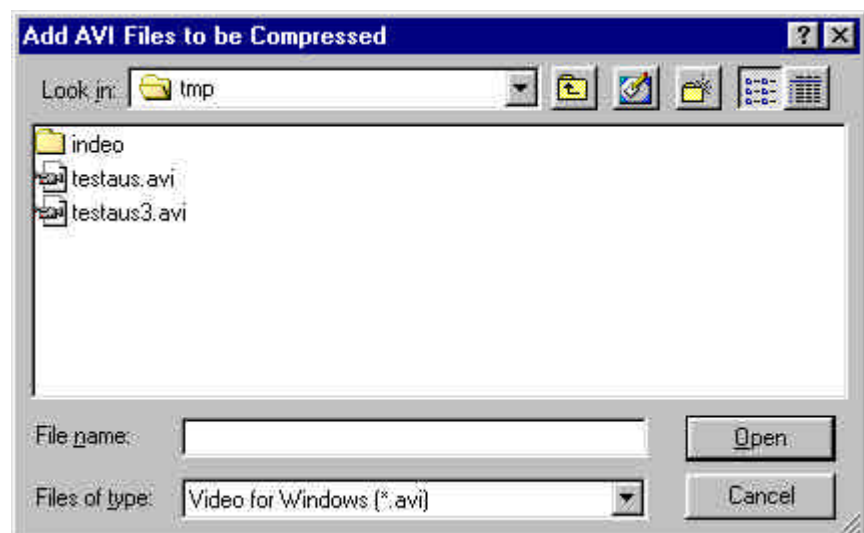


The names of the original and compressed AVI files are identical!

To avoid having to assign a new name for each file when several AVI files are being compressed, the output files are created with the same name as the input files.

Since Windows does not distinguish different versions of a single file, however, they must be saved in a different directory. You can use this dialog box to specify the target directory of the AVI files to be compressed. For each file to be compressed, FalCon eXtra checks whether it is really to be created in a different directory, and if necessary prompts you to enter the target directory again.

Add AVI



Use this command to select existing AVI files for compression.

The following options will allow you to indicate the files to be added:

- File name** Enter the name of the file or select it from the list. This box displays only file with the filename extension selected by you in the **File type** box.
- File type** Select the type of the file to be opened:
*.AVI “Video for Windows” file (AVI)

You can specify these additional details under **Look in:**

- Drive** Select the drive on which FalCon eXtra saved the file you want to open.
- Directory** Select the directory in which FalCon eXtra saved the file you want to open.
- Network** Use this button to assign a link to a network drive to a drive letter.

You also have the typical Windows option of multiple selection.

Please note: Windows sometimes mixes up the order of the selected files when you have made a multiple selection. To avoid this, select the last file first, then go to the first file and select it with **“Shift” + mouse click**.

Delete

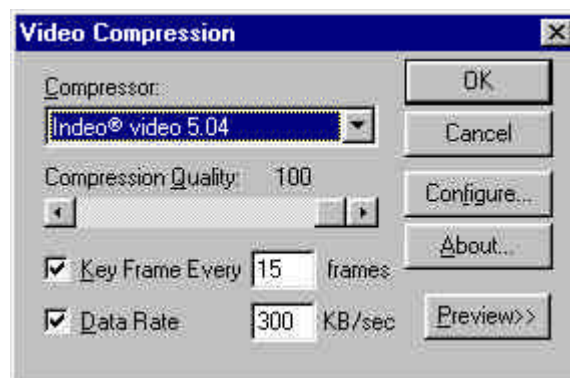
To delete an AVI file from the list of files to be compressed, select the corresponding file in the list with the mouse. As soon as you have selected the file, the **Delete** button is selectable and you are able to remove the file from the list. This process removes the file **only** from the list, not from the hard drive.

Compress AVIs

Use this button to begin the compression of the AVI file. As soon as the compression process is underway, you can stop it by clicking on this button (its label then changes to **Cancel**).

No other buttons can be activated during the compression process. A percentage **<..%>** appears just after the AVI file that is currently being compressed to indicate how much of the file has already been processed. After the compression has been successfully completed, **<compressed>** appears and FalCon eXtra begins to compress the next file from the list.

Compressor options



You can use this dialog box to specify how the AVI files should be compressed. Since the program is based on the “Video for Windows” interface Version 4.0 of MS Windows, all supported (and installed!) compression and file formats and hardware accelerators are available.

Please note: Depending on the operating system, the design of the dialog box may be slightly different. The list of available compression programs depends on the procedures installed in Windows.

The higher the **Compression Quality** you select, the less loss of detail will occur in the individual pictures, but at the same time the degree of compression will be reduced – in other words the amount of space required for storage that you save will be less. Depending on the application and compression program, you may have to determine the optimal value for a given case by trial and error.

If exact positioning of the picture within the AVI file is required, you should select **Key Frame Every** for each individual picture. This does, however, increase the size of the compressed file.

The **Data Rate** must be determined if you want to play the compressed AVI file on CD-ROM and if the only way to achieve jitter-free playback is with double-speed CD drives. Making this restriction will automatically result in loss of detail and is generally not required for hard disks.

Please note: If your AVI recording rate is much greater than 25 frames (pictures) per second, the result in this case will be very poor and computing times will also be extended!!

A simple computing example will illustrate this point:

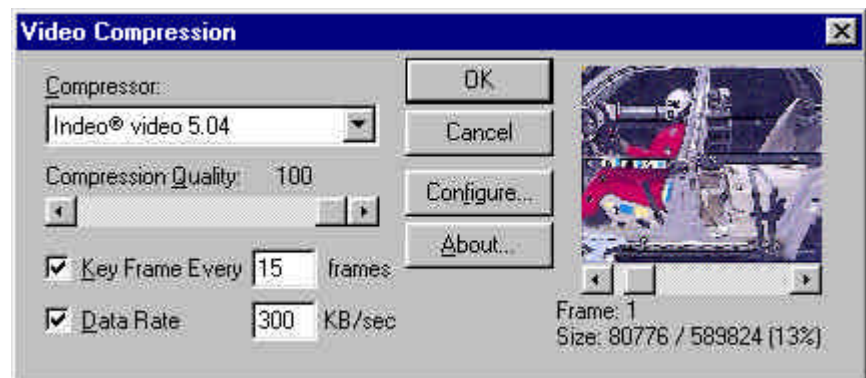
At a recording rate of 1000 frames/s and with the data rate restricted to 300 KB/s, the compression factor would have to be 2000. But no compression algorithm is capable of achieving compression of this magnitude.

Tip:

If you are working with high-speed videos, i.e. typically with recording rates of 1000 frames/s, remove the marking from the Data Rate check box.



You can use the **Preview** button to test compression of several pictures so that you can check your settings. The option for preview only appears if you have already selected AVI files for compression.



When you press the **Configure** button, a number of special settings appear (which ones depends on the compression program).

