# Graphicconverter V1.5.3

A converter for the Macintosh®

# Documentation

©1992, Thorsten Lemke

Date: 10/4/92

# Table of contents

# 1.  Introduction

## 1.1.  Possibilities

Graphicconverter converts the most famous ATARI, Amiga and IBM formats to Macintosh formats and back.

Additional you can edit pictures and generate lists with picture informations.

## 1.2.  Requirements

Graphicconverter needs a Mac II (or LC), System 7 and 2 MB free memory.

## 1.3.  Registration

Graphicconverter is Shareware. You can test the program. If you like it, you should registrate yourself.

The registration costs:

      Germany                $20
      Europe                 $25
      Rest of the world     $30

Send the money to the following address:

      Thorsten Lemke
      Insterburger Str. 6
      W-3150 Peine
      Germany

The registration contains two updates.

A german version is also available.

## 1.4.  Restrictions

Graphicconverter should only be copied in the complete version with the program, documentation and 'read-me' file.

## 1.5.  New Features

Version 1.5.1

- program reads CCITT3 and LZW compressed TIFF´s
- diashow shows films (PICS, FLI etc.)
- diashow can display the content of subfolders
- new functions: Segment and Select exist
- you can rotate, mirror and invert selections
- Graphicconverter has new better icons for documents

Version 1.5.2

- you can´t open windows with the same name
- the information window opens direct under then picture window
- I added some forgotten translations
- in the open dialog is a new button "Open PICT with 32 bit", you need this for JPEG compressed PICT´s because the picture utility package analyze 1 bit

Version 1.5.3

- I display now the popup menus in the toolbox so that they are visible everytime

## 1.6.  Errors
If you find some errors in the program, please send me a list.

## 1.7.  For me
If you have informations about other graphic formats, please send me a copy and a disk with some files in that format.

## 1.8.  Thanks
I thank the following persons for their help: Wolfgang for the dither algorithms and Jochen for testing.

## 2. Installation

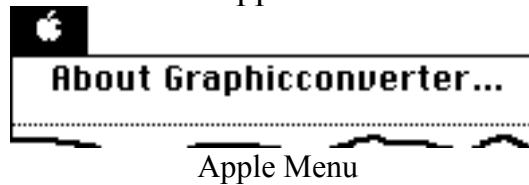The Installation is very simple. You only have to copy the Graphicconverter on your harddisk. No other files are needed.

# 3. Menus

## 3.1. Apple-Menu

The **Apple** Menu gives you information about the Graphicconverter. Also it contains the desk accessories and the files in the apple folder.



Apple Menu

### 3.1.1. About Graphicconverter…

This function gives you information about the version and the shareware agreement.

## 3.2.  File Menu

The **File** Menu contains all functions for the in- and output of pictures.

```
┌─────────────────────┐
│ File                │
├─────────────────────┤
│ New           ⌘N    │
│ Open          ⌘O    │
│ Close         ⌘W    │
│ ·················   │
│ Save          ⌘S    │
│ Save as             │
│ ·················   │
│ Diashow             │
│ ·················   │
│ Page Setup          │
│ Print         ⌘P    │
│ ·················   │
│ Preferences         │
│ ·················   │
│ Quit          ⌘Q    │
└─────────────────────┘
```
File Menu

### 3.2.1. New
You get a dialog to set the following things:
① Width - the width of the picture
② Height - the height of the picture
③ Depth - the bits per pixels (1, 2, 4, 8, 16 or 32)
Graphicconverter sets the color table to the system color table of the choosen depth.

### 3.2.2. Open
You can open a picture or a layout with this function.
You have to select the format with the popup-menu.
You need "Open PICT with 32 bit" for JPEG compressed PICT´s because the picture utility package analyze 1 bit.

### 3.2.3. Save
With this function you can save the content of the active window with its name.

### 3.2.4. Save as
You save the content of the active window with a new name and format.
You choose the format with the popup-menu.
If you choose "Save only selection", Graphicconverter saves only the selection.

### 3.2.5. Diashow
You choose one file of a folder. Graphicconverter then displays all pictures in that folder.
You stop the diashow with ⌘-..

### 3.2.6. Page Setup
You choose the format and quality for prints.

### 3.2.7. Print
Graphicconverter prints the content of the active window.

### 3.2.8. Preferences
You get a dialog to set the preferences:
- automatic display information window
- automatic display toolbox dialog
- don´t show error alerts in the diashow

### 3.2.9. Quit
You exit the Graphicconverter.
Graphicconverter saves the changes of the preferences automatically.

## 3.3.  Edit Menu

You find in this menu functions to edit pictures and exchange them with other applications.

```
┌─────────────────────────────────┐
│ █Edit█                          │
├─────────────────────────────────┤
│  Undo                    ⌘Z      │
│  ·····························    │
│  Cut                     ⌘H      │
│  Copy                    ⌘C      │
│  Paste                   ⌘U      │
│  Clear                           │
│  ·····························    │
│  Select all              ⌘A      │
│  Select exist                    │
│  ·····························    │
│  Segment                         │
│  ·····························    │
│  Show Clipboard                  │
│  ·····························    │
│  New Picture with Clipboard      │
└─────────────────────────────────┘
```

Edit Menu

### 3.3.1. Undo
You undo the last drawing in the active window.

### 3.3.2. Cut
You copy the content of the selection in the active window to the clipboard and delete the content of the selection.

### 3.3.3. Copy
You copy the content of the selection in the active window to the clipboard.

### 3.3.4. Paste
If a PICT is in the clipboard, then the program insert it in the active window.

### 3.3.5. Clear
Graphicconverter deletes the content of the selection in the active window.

### 3.3.6. Select all
You select the complete content of the active window.

### 3.3.7. Select exist
You select only the content of a picture and not the unique coloured borders.

### 3.3.8. Segment
You destroy the non selected parts of a picture and get the selection as the result.

☞  You save memory with this function.

### 3.3.9. Clipboard
You get a window with the content of the clipboard.

### 3.3.10.　　　New Picture with Clipboard
You get a new picture with the content of the clipboard.

## 3.4.  Picture Menu

The **Picture** menu allows you to change the complete content of a picture.



Picture Menu

### 3.4.1. Information

A little information window appears in the right, lower edge of the screen, which shows some details about the picture in the active window (size, depth etc.).

### 3.4.2. Size

You get a submenu to select the displaysize of the active window.
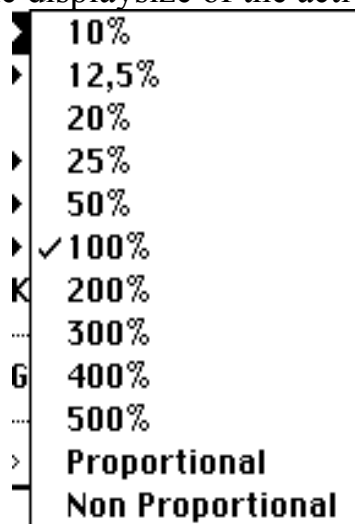


Submenu for the size

### 3.4.2.1.      Selection of a procentnumber

You resize the window with the procentnumber.

### 3.4.2.2.      Proportional

You get a dialog to type in a procentnumber in the range from 10 to 1000%.

### 3.4.2.3. Non Proportional
You get a dialog to type in the width and heigth of the window in pixels.

### 3.4.3. Colors
You get a submenu to change the colortable of the active window. You can only change the colors of pictures with a depth from 1 to 8 bit.

```
Greyscale
Edit Colortable
```
Submenu for the colors

### 3.4.3.1. Greyscale
You change the colortable to a greyscalecolortable.

### 3.4.3.2. Edit Colortable
You get a dialog to edit the colors of the colortable.
If you click behind the numbers, then you increment or decrement the number by 100.

### 3.4.4. Invert
You invert the colortable of the picture in the active window. This is only possible for picture from 1 to 8 bit.

### 3.4.5. Special
This sub menu contents very hard function.

☞  Undo not possible!
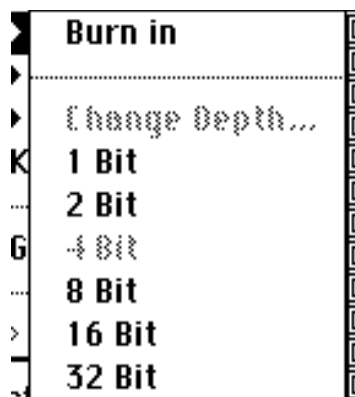
```
Burn in
┄┄┄┄┄┄┄┄┄┄┄
Change Depth...
1 Bit
2 Bit
4 Bit
8 Bit
16 Bit
32 Bit
```
Submenu for special

### 3.4.5.1. Burn in
You copy the picture in the changed size in a new bitmap.

☞  Undo not possible!

### 3.4.5.2. Change Depth
You change the color depth of the picture. Often you get very "funny" results.

☞  Undo not possible!

### 3.4.6. Rotate
You get a submenu to select the rotation (90˚, 180˚ or 270˚).

### 3.4.7. Mirror
You get a submenu to select the mirror (horizontal or vertical).

### 3.4.8. Toolbox

You get a new window with drawingtools. See also "Toolbox".

### 3.4.9. Full Screen
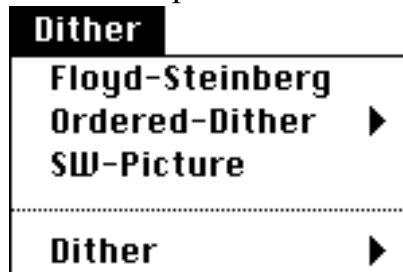You display the picture in front of a black background.

## 3.5.  Dither Menu

The Dither-Menu contains function to convert a color-picture to a black-and-white-picture.

☞   All dither-functions generate a new picture and don´t change the original.


Dither menu

### 3.5.1. Floyd-Steinberg

You convert the picture with Floyd-Steinberg-Algorithm in a black and white picture with the same size.

### 3.5.2. Ordered-Dither

You get a submenu to select the squaresize (2x2, 4x4 oder 6x6). Graphicconverter dithers your picture with the selected size.

### 3.5.3. S/W-Picture

You convert the picture direct to a black and white picture.

### 3.5.4. Dither

You get a submenu the select the size (2x2 to 8x8) of one point in the destination picture.

You use dither do print out a color-picture with a printer with a better resolution than the  monitor.

☞   If you print a 72dpi picture with 300dpi printer use a 4x4 matrix for dithern.

## 3.6. Special Menu

The **Special** menu contains function for additional use.

```
┌─────────────────────────────┐
│ Special                     │
├─────────────────────────────┤
│ Layout...                   │
│ New Page                    │
│ Options                     │
│·····························│
│ List...                     │
│ Generate                    │
│ Open Window                 │
│ Options                     │
│·····························│
│ Copy File into Resource     │
│ Generate STR# List          │
│ Invert SW-GIF's             │
│·····························│
│ Convert direct GEM to PICT  │
└─────────────────────────────┘
```

Spezial Menü

### 3.6.1. Layout…

You generate and edit with the following two points a layout.

### 3.6.2. New page

You open a new page.

### 3.6.3. Options

You get a dialog to change the parameters of the layout:
- font, size und style
- name of a picture
- display the picture on the screen

### 3.6.4. List…

You generate and edit with the following three points a list

☞ You can open only one list.

### 3.6.5. Generate

You select in the standard getfile dialog a file of a folder. Graphicconverter opens then all files in the folder and looks on them. You get the result in a window. If a list-window is already open it is closes automatical.

### 3.6.6. Open Window

If you close a list-window, you reopen it with this function.

### 3.6.7. Option

You get a dialog to change the parameters of the list:
- font, size und style
- margins

### 3.6.8. Copy File into Resource

You copy with this function the datafork of a file into the resourcefork of another file:

1. You select the source file.
2. You select the destination file.
2. You select the new resource type.

### 3.6.9. Generate STR# List

You generate a list with the contents of one STR# resource.

☞ I added this function because it is in ResEdit not possible to print a complete STR# resource

### 3.6.10. Invert SW-Gif´s

You invert all SW-GIF´s of a folder.

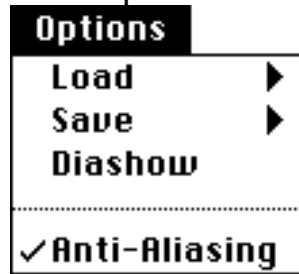☞ You need this function because SW-GIF´s from an IBM are often inverted.

### 3.6.11. Convert direct GEM to PICT

You convert a GEM-Metafile direct to a PICT.

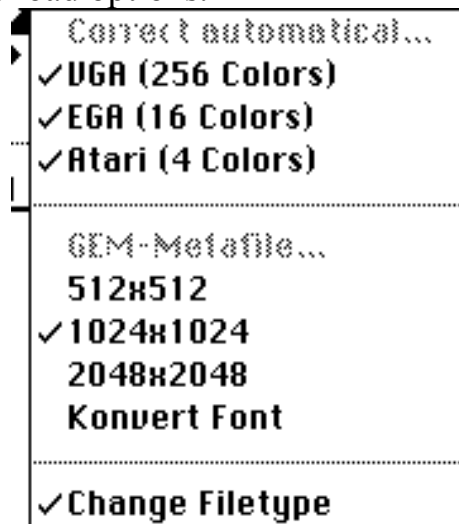☞ You don´t lose the vectors of the GEM-Metafile.

## 3.7.   Options Menu
The **Options** Menu allows you to set the preferences for the top functions.



Options Menu

### 3.7.1. Load
You get a submenu with the load options.



Load Submenu

#### 3.7.1.1.      Correct automatical
If you select one of the following three points the graphicconverter resizes the picture:

| Format | Source Pixels | Dest. Pixels |
|---|---|---|
| VGA (256 Colors) | 320x200 | 320x240 |
| EGA (16 Colors) | 640x350 | 640x480 |
| Atari (4 Colors) | 640x200 | 640x400 |

#### 3.7.1.2.      GEM-Metafile
You set with the following four points the options for GEM-Metafiles.
#### 3.7.1.3.      512x512, 1024x1024, 2048x2048
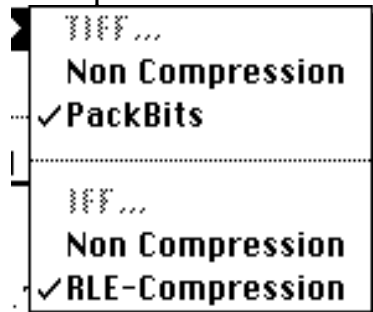You set the maximal size of a bitmap.
#### 3.7.1.4.      Convert Font
You get a dialog. You set the relations between GEM- and MAC-fonts.
#### 3.7.1.5.      Change Filetyp
If you check this point graphicconverter automatic sets the filetype of a picture to his own when you load a file.

### 3.7.2. Save

You get a submenu to select the compression mechanism for the TIFF and IFF Format.



Save submenu

### 3.7.2.1.    TIFF…

You set the compression algorithm for TIFF.

☞    Prefer "Non Compression".

### 3.7.2.2.    IFF…

You set the compression algorithm for IFF.

☞    Prefer "RLE Compression".

### 3.7.3. Diashow

You get a dialog to set the preferences for a diashow.

The dialog contains the following points:

① 	Display name - displays the name of the current picture at the left top corner
② 	Grow up little pictures - resizes little pictures to the full screen size
③ 	Minimal showtime - sets the minimal time the picture appears

### 3.7.4. Anti-Aliasing

You allow the MAC to dither pictures if they have not the original size. You get so a better view.

☞    Anti-Aliasing slows the display.

## 3.8.   Window Menu

The **Window** Menu allows you to arrange and select windows.



Window menu

### 3.8.1. Arrange

You get a dialog to arrange the open windows. You have the following possibilities:

1.     2.  

3.     4.  

### 3.8.2. Windownames

You bring the window with the selected name to the top.

# 4. Edit

I discripe in this capital the tools to edit a picture.

## 4.1. Toolbox

You have the following tools in your toolbox:

| | | |
|---|---|---|
| Lasso | | Select |
| Rubber | | Paint |
| Finger | | Fill |
| Line | | Zoom |
| Filled Rectangle | | Rectangle |
| Filled Rounded Rectangle | | Roundes Rectangle |
| Filled Ellpie | | Ellpie |
| Pen Size | | |
| Pattern | | |
| Foreground Colour | | Background Colour |
| Pen Mode | Copy 50 50 | |
| Lightness Control | | Contrast Control |

Toolbox
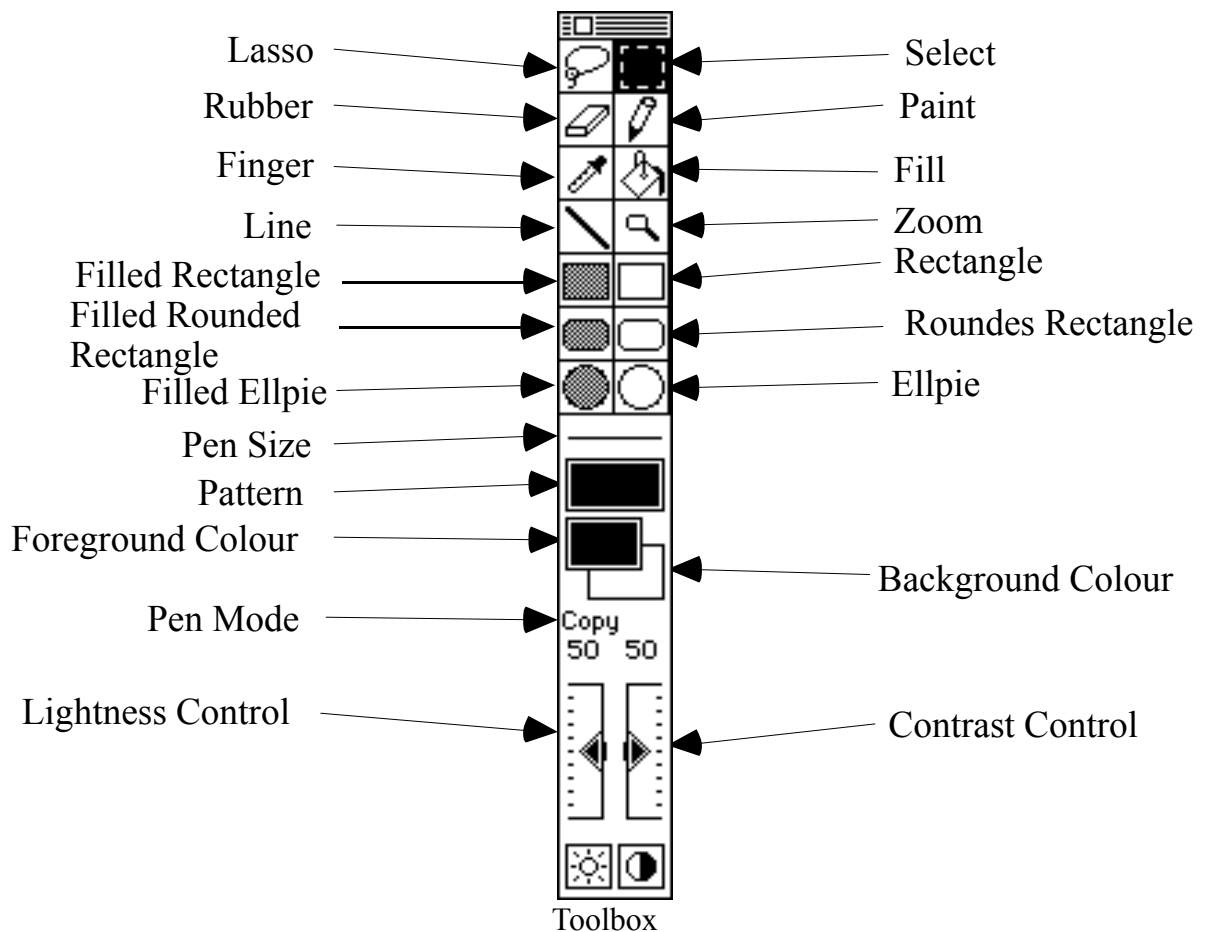
### 4.1.1. Lasso

You select and move a non rectangluar selection.

### 4.1.2. Select

You can select or move a frame.

☞ If you press the apple key, you select only the content of the frame.

### 4.1.3. Rubber

You erase with the background colour.

### 4.1.4. Paint

You draw with the current foreground colour and pensize.

### 4.1.5. Finger

You touch a pixel to make his color the foreground colour.

### 4.1.6. Fill

You fill a figure with the foreground colour and pattern.

### 4.1.7. Line
You draw a line.with the foreground colour and pen size.

☞  If you press the shiftkey, you can only draw vertical or horizontal lines.

### 4.1.8. Zoom
You zoom in the picture.

☞  If you press the altkey, you zoom out.

### 4.1.9. (Filled, Round) Rectangle
You draw a (filled, round) rectangle.with the foregroundcolour, pensize and pattern.

☞  If you press the shiftkey, you can only draw a square.

### 4.1.10.        (Filled) Ellpie
You draw a (filled) ellpie.with the foreground colour, pensize and pattern.

☞  If you press the shiftkey, you can only draw a circle.

### 4.1.11.        Pensize
You get a popup menu to select the pen size between one and ten points.

### 4.1.12.        Pattern
You get a popup menu to select the pattern for filling.

☞  You can tear of the menu.

### 4.1.13.        Foreground and Background Colour
You get a popup menu to select the foreground or background colour.

☞  You can tear of the menu.

☞  If you have a black and white picture the colours toggle between black and white.

### 4.1.14.        Pen Mode
Yout get a popup menu to select the transfer mode. You have the following modes:
Copy, Or, Xor, Bic, Not Copy, Not Or, Not Xor and Not Bic

### 4.1.15.        Controls
You set the lightness and contrast with the controls.

## 4.2.  Changing the Selection
You change the size of a rectangluar selection with the little boxes on the frame.

# 5.    Layout

You can generate simple layouts. This means that you can place some pictures on a page with different sizes.

## 5.1.  Insertion

You get a popup menu to choose one of the open pictures if you click in a layout window with pressing the apple key.

## 5.2.  Moving

You move a picture if you click in one and move the mouse.

## 5.3.  Change Size

If you select a picture, you change the size with the little squares.

# 6.  List

The list window gives you an overview about pictures or "STR#" resources.

## 6.1.  Change Page

if you click in the "+" or "-" button you change the page.

## 6.2.  Borders

The black frame shows the printable size. The red border shows the selected frame.

# 7. Filme

The Graphicconverter can play the following film formats:

①    *PICS     - Animated PICT´s
②    *.ANI- Animated NeoChrome
③    *.FLI - Autodesk Animator
④    *.GIF - Animated GIF´s

If you load a film the Graphicconverter displays in the left bottom corner of the window a play button.
If you click in this button you get the film. You stop the film with a mouse click.

# 8. Shortcuts

## 8.1. Everytime

| Shortcut | Result |
| --- | --- |
| Alt key and click in the window title | You get a popup menu with all open windows. You bring the selected window to the front. |

## 8.2. In Pictures

| Shortcut | Result |
| --- | --- |
| Ctrl key in the content | You get a popup menu to select the picture view size. |
| Alt key in the content | You change the drawing funtion to finger. |
| Cursor keys | You change the size of a rectangluar selection. |

## 8.3. In Layouts

| Shortcut | Result |
| --- | --- |
| Apple key and click in the content | You get a popup menu with all open pictures to insert one. |
| Apple key and click in the content over a picture | Yout get a popup menu to select the picture size. |

# 9. Formats

I show in the table the picture formats my program can read and write.

| Name | Read | Write | Discription |
|------|------|-------|-------------|
| PICT | x | x | standard Macintosh format, include bitmaps or vectors |
| MacPaint | x | x | black and white picture, Resolution 512x768 pixels |
| TIFF | x | x | complex format from 1 to 24 bit per pixel<br>Graphicconverter reads all classes (B, G, P, R)<br>and the following compression algorithms:<br>uncompressed, packbits, CCITT3 and lzw<br>it writes uncompressed and packbits |
| PICS | x | | Animated PICT´s |
| GIF | x | | from CompuServe Incorporated for pictures from 1 to 8 bit per pixel |
| PCX | x | x | from PC-Paintbrush for pictures with 1, 4 or 8 bit per pixel |
| SCR | x | x | from the Capture program for word for Windows and DOS, same as PCX |
| BMP | x | | standard Windows format, not compressed |
| PIC | x | | for pictures with 16 bits per pixel, not compressed |
| FLI | x | | from Autodesk Animator, contains 8 bit film with the size 320x200 pixels |
| IFF | x | x | standard format of the Amiga |
| LBM | x | x | same as IFF for the IBM |
| PAC | x | | from ATARI program STAD for black and white pictures with the size 640x400 pixels |
| Degas | x | | from the ATARI program Degas for the following pictures:<br>- 320x200 pixels, 16 colours (*.PI1, *.PC1)<br>- 640x200 pixels, 4 colours (*.PI2, *.PC2)<br>- 640-400 pixels, 2 colours (*.PI3, *.PC3) |
| NEO | x | | from the ATARI program NeoChrome for 320x200 pixels, 16 colours pictures |
| PIC | x | | ATARI screen shot, 640x400 pixels, 1 bit |
| SPC | x | | from the ATARI program Spectrum 512 for 320x200 pixels, 512 colours pictures, automatically converted to 16 bit |
| ANI | x | | film from NeoChrome, you need additional a NEO-file |
| GEM | x | | GEM-Metafile, vector format from the ATARI program GEM-Draw |
| Imagic | x | | from ATARI program Imagic, contents pictures in the |

| | | | three ATARI standard formats |
|---|---|---|---|