MatchWare Chameleon Version 1.10
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File Menu

The file menu contains commands to open and save pictures on disk and exit chameleon.

Open	Opens a picture from disk.
Close	Closes the active picture.
Save	Saves the active picture on disk.
Save as	Saves the active picture under a new name.
Convert	Converts a list of files
Print	Prints the active picture.
Print Preview	Shows a print preview of the active picture on the screen.
Printer setup	Changes the printer set-up.
Exit	Exits Chameleon.

The exit menu will show the last 4 used picture files.

File|Open

File|Open command shows a Windows file dialog where you can select   the file to open in Chameleon.

File|Close

File|Close closes the active picture window.

File|Save

File|Save saves the picture in the active window on disk. If the picture has no file name (if the picture has not been saved on disk before) the Windows save as dialog will appear, and you can then select name and destination for the picture file.

File|Save as

Use File|Save as to save a picture under a new name or, if the file already exists, confirm the replacement of the existing file.

File|Print

File|Print command prints the picture in the active window. Use printer setting to select printer and settings <u>printer setup</u>

File|Preview

File|Print Preview opens a special window that shows how the active document will appear when printed.   The preview window shows one or two pages of the active document as they would be laid out on printer pages.   Controls on the window allow you to page through the pages of the document.

File|Print setup

File|Print setup shows the Printer setting dialog, where you can select a printer and adjust the printer settings.

File|Exit

File|Exit command ends the Chameleon program.

Edit

The Edit menu contains commands to undo actions and commands to access the Windows clipboard.

Undo   Will undo the last action.
Copy   Copies the active picture to the clipboard.
Paste   Pastes the current contents of the clipboard.

Edit|Undo

Edit|Undo command will undo the last action performed on the picture in the active window. You can restore the action again by clicking Undo once more.   (i.e. undo the last undo).

Edit|Copy

Edit|Copy command copies the picture in the active window to the Windows clipboard. The picture is copied to the clipboard in both DIB and bitmap format. If the picture contains a palette this will also be copied to the clipboard.

Use Edit|Paste. to copy pictures from the clipboard

Edit|Paste

Edit|Paste command creates a new picture window with the current contents of the clipboard. Chameleon can use data in both DIB and bitmap format.   DIB has priority if both formats are on the clipboard.

Transform

The Transform menu contains actions to mirror and rotate pictures.

Flip horizontal	Mirrors the picture left-right.
Flip vertical	Mirrors the picture up-down.
Resize	Scales the picture to a new size.
Rotate	Rotates the picture.

    90 CW
    90 CCW
    180
    Angle

Transform|Flip vertical

Mirrors the entire picture in the active window around a vertical axis.

Transform|Flip horizontal

Mirrors the entire picture in the active window around a horizontal axis.

Resize

Changes the size of the picture in the active picture window.   Enter the new height and width in the dialog. If you wish to blur the picture when the size is changed, place a checkmark in the checkbox.

Transform|Rotate|90° clockwise

Rotates entire picture in the active window 90° clockwise. The picture will change size to the new height and width.

Transform|Rotate|90° counter-clockwise

Rotates entire pictures in the active window 90° counter-clockwise. The picture will change size to the new height and width.

Transform|Rotate|180°

Rotates entire pictures in the active window 180° counter-clockwise.

Transform|Rotate

Rotates entire picture in the active window   to an arbitrary angle.

Image menu

[Tune](#)
[Smoothing filters](#)
[Sharpening filters](#)
[Special filters](#)
[Convert to](#)
[Info](#)

Image|Tune menu

This menu contains actions to adjust and correct colours in a picture.
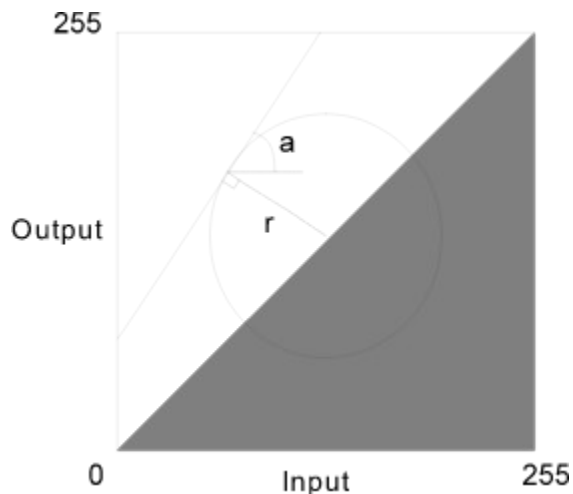
Colour correction
Negative

Image|Tune|Colour correction

Colour correction is defined in a dialog where lightness, contrast and gamma correction can be adjusted. Colour correction can be made separately on the red, green, blue and luminance part of the picture.

Technical description of colour correction parameters

Parameter	Interval	
Brightness	0-100(%)	50 = neutral
Contrast	0-90()	45 = neutral
Gamma	0-400	100 = neutral

(The dark area is used when r < 50)
a = Contrast
r = brightness

Brightness and contrast correction are adjusted as indicated in the figure. Input values are transformed through a line that is at a tangent to the circle with radius r. Contrast (a) indicates the tangent angle between the line and horizontal.

The Gamma function corresponds to a correction with an exponential function. Factor 100 gives a complete linear function.

Factor > 100   Factor < 100

Image|Tune|Negative

Inverts a picture or a selected area <u>selected area</u>. A dialog will appear when the negative command is chosen. Select the colour channels (red green blue) to invert.

Image|Smoothing filter menu

This menu contains filter functions to soften a picture.

[Blur](#)
[Despeckle](#)

Image|Smoothing filter|Blur

This filter function blurs a picture (softens the picture) or a selected area. Use the slidebar to select a factor 1-10 to determine the blur degree.

Image|Smoothing filter|Despeckle

The Despeckle function removes "noise" from a picture or a selected area <u>selected area</u>. This function is suitable for removing "noise" from scanned pictures,

Technical description of the Despeckle

The cell size on small, medium and large corresponds to a rectangle of respectively 3x3, 5x5 and 7x7 pixels. The value of the centre pixel is compared with the average of all values in the rectangle and if the value is more than the sensitivity value, the center pixel will be set to the average value.

Image|Sharpening filter menu

Contains functions the improve the sharpness of a picture.

Sharpen
Edge
Lines

Image|Sharpening filter|Sharpen

This filter function increases the sharpness of a picture or a selected area <u>selected area</u>. Use the slidebar to select a factor from 1-10 to determine the degree.

Image|Sharpening filter|Edge menu

This menu Contains 4 edge enhancement filters

[Thin](#)
[Thick](#)
[Horizontal](#)
[Vertical](#)

Image|Sharpening filter|Edge|Thin

This filter function enhances edges in a picture or in a selected area using a thin line
<u>selected area</u>

Image|Sharpening filter|edge|Thick

This filter function enhances edges in a picture or in a selected area using a thick line
<u>selected area</u>

Image|Sharpening filter|edge|Horizontal

This filter function enhances horizontal edges in the picture or a selected area <u>selected area</u>.

Image|Sharpening filter|edge|Vertical

This filter function enhances vertical edges in the picture or a selected area <u>selected area</u>.

Image|Sharpening filter|Lines

This menu Contains 4 line enhancement filters

Horizontal
Vertical
Horiz & Vert

Image|Sharpening filter|Lines|Horizontal

This filter function enhances horizontal edges and softens the rest. This function works in the entire picture or a selected area <u>selected area</u>.

Image|Sharpening filter|Lines|Vertical

This filter function enhances vertical edges and softens the rest. This function works in the entire picture or a selected area <u>selected area</u>.

Image|Sharpening filter|Lines|Horiz & Vert

This filter function enhances horizontal and vertical edges and softens the rest. This function works in the entire picture or a selected area <u>selected area</u>.

Image|Special filter menu

These design filters can create special effects with a picture.

[Emboss](#)
[Sculpt](#)
[Pixelize](#)
[Posterize](#)

Image|Special filter|Emboss menu

All emboss filters will make the picture look as if the edges are raised in the same way as the Windows buttons. The filters work in the entire picture or in a selected area <u>selected area</u>.

<u>Above</u>	Light from above.
<u>Left</u>	Light from the left.
<u>Diagonal</u>	Light from the top left corner.

Image|Special filter|Emboss|Above

Will make the picture look as if the edges are "raised" with light from above. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Emboss|Left

Will make the picture look as if the edges are "raised" with light from the left. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Emboss|Diagonal

Will make the picture look as if the edges are "raised" with light from the top left corner. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Sculpt menu

All sculpt filters will make the picture look as if it was carved in stone. The filters work in the entire picture or in a selected area <u>selected area</u>.

<u>Above</u>	Light from above.
<u>Left</u>	Light from the left.
<u>Diagonal</u>	Light from the top left corner.
<u>Metallic</u>	Metallic look.

Image|Special filter|Sculpt|Above

Will make the picture look as if it was carved in stone with light from the top. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Sculpt|Left

Will make the picture look as if it was carved in stone with light from the left. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Sculpt|Diagonal

Will make the picture look as if it was carved in stone with light from the top left corner. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Sculpt|Metal

Gives the picture a metallic look. The filter works in the entire picture or in a selected area <u>selected area</u>.

Image|Special filter|Pixelize

Pixelizes a picture or a selected area. Pixel size and colour channels (red, green, blue) are selected in a dialog.

Image|Special filter|Posterize

Reduces the number of significant bits for selected colour channels (red, green, blue). This can give the picture a "poster-like" appearance. The function works in the entire picture or a selected area. selected area The number of bits and colour channels are selected in a dialog.

Image|Convert to menu

This menu contains functions to convert between various picture types.
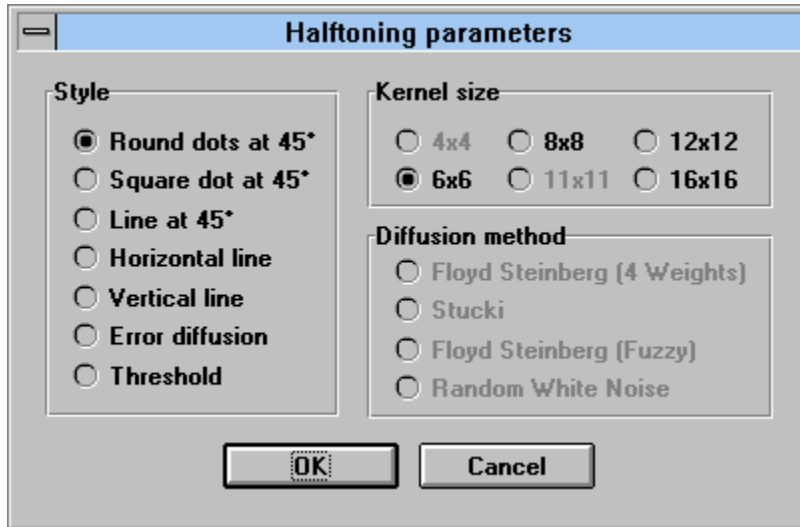
Black/white
Grey scale
Palette
[RGB](RGB)

Image|Convert to|Black/white

This function converts a picture to black and white. The conversion parameters are set in the dialog:

In the menu on the left there are 7 different conversion types. Select matrix size on the right. This will indicate how many pixels from the present picture to use for one pixel in the new black and white picture.   In this case the term pixel means the 'screen' you can see in black-and-white newspaper pictures. This is because gray scales are shown by the use of pixel density.

Image|Convert to|Grey scale

Converts the picture to grey scale (256 levels). Grey scale pictures can be saved in JPEG format just like RGB

Image|Convert to|Palette menu

This menu contains functions for converting to a picture with a palette of 16 or 256 colours.

[16 colours](#)
[Fixed palette](#)
[Reduce colours](#)

Image|Convert to|Palette|16 colours

Converts the picture to a picture with 16 colours (4-bit).

Image|Convert to|Palette|Fixed palette

Converts the picture to a picture with fixed palette (3 bit red, 3 bit green and 3 bit blue). A technique using colour patterns is used to obtain better colour resolution.

Image|Convert to|Palette|Reduce colours

Converts the picture to a picture with fixed palette. The palette is adjusted to the original picture. The palette size (number of colours) is selected in a dialog.

Image|Convert to|RGB

Coverts the picture to RGB (24 bit True colour). An RGB file takes up a lot of space but is the most photo realistic. The JPEG format is suitable for saving RGB pictures.

Image|Info

This function shows information about the picture in the active picture window. This information is shown in a dialog which also contains two fields for artist and description. At the present time only the TIFF file format supports these parameters.

View menu

The commands in the view menu are used to choose how to zoom in the picture Windows.

1:1
Zoom in
Zoom out
Fit to window

View|1:1

This command will show the picture in the active window in the proportion 1:1. I.e. in the ratio of one pixel in the picture to one pixel on the screen.

View|Zoom in

This menu contains menus with the numbers 2 - 8. The number corresponds to the zoom in degrees. A zoom factor 2 means that one pixel in the picture corresponds to 2x2 pixels on the screen.

View|Zoom out

This menu contains menus with the numbers 2 - 6. The numbers corresponds to the zoom in degrees. A zoom factor 2 means that 2x2 pixels in the picture corresponds to one pixel on the screen.

View|Fit to window

When zoom is set to "Fit to window", the picture will be adjusted to the window size. The X and Y proportion is fixed.

Window

This menu contains functions to control the placement and layout of Chameleon picture Windows.

Cascade   Places all Windows in an overlapping pattern
Tile   Places all Windows as tiles.
Arrange icons   Arranges icons at the bottom of the Chameleon window.
Close all   closes all picture Windows.
Adjust window   Adjusts window to picture.

Arrange icons

The Window|Arranger Command arranges all icons (minimized picture Windows) at the bottom of the Chameleon main window.

Cascade

The Window|Cascade command arranges all picture Windows from the top and left side of the Chameleon main window leaving the title of all picture Windows visible.

Close all

The Window|Close all command closes all picture Windows.

Tile

The Window|Tile command tiles all picture side by side.

Adjust window

The Window|Adjust window command adjusts the active picture window and fits the window to the picture size, This command is ignored if the picture is to large to fit the Chameleon main window.

Options menu

[Capture](#)
[Language](#)

Options|Language

Select the language for Chameleon to use with this function. The selected language will be used for menus, dialogs help etc.

Drag and drop from File Manager

You can open a picture in Chameleon by dragging a picture file from the file manager and dropping it in the
Chameleon main window.

Cropping pictures

Crop a picture by first <u>selecting an area</u> in the picture. Then double-click the left mouse button in the selected area.

Selecting areas

Select a picture area by dragging a rectangle with the left mouse button. The selected area will be indicated with a dotted line. Change the size of the area by dragging the edges. remove a selected area by pressing the [Esc] key on the keyboard.

File|Convert

This command enables you to convert batches of files in one step. The dialog is divided into two sections:

Source:

Select the files you want to convert. You can only select files from one directory. If you want to delete the old source files when the conversion is finished, check the field "Delete source file(s)"

Destination:

Select a directory where the converted files will be placed. Also decide what file format and colour resolution you want them saved in.

File formats

Chameleon supports the following file formats at the present time:

BMP　　　　　**Windows bitmap (or OS/2 variation)**

Formats　　　　Black and white, 4 and 8 bit gray scaled, 4 and 8 bit palette, 24 bit RGB.
Compression　　None and RLE

BMP file format has the largest possible compatibility with other programs (especially when compression is not used). The pictures take up space. However, they load fast from disk.

CUT　　　　　**Halo Device Independent Image File Format**

Formats　　　　8 bit gray scaled and 8 bit palette
Compression　　RLE (variation of RLE)

Compatible with Media Cybernetics Dr.HALO, HALO DPE, Gray F/X, HALO F/X and Image Pro.

GIF　　　　　**Graphics Interchange Format**

Formats　　　　Black and white, 4 and 8 bit gray scaled, 4 and 8 bit palette.
Compression　　LZW

Compatible with the GIF89a specification. The GIF format is suitable for pictures in 256 colours (gives a good size/velocity proportion) and is supported by almost all drawing programs today.

JPEG　　　　**File Interchange Format**

Formats　　　　8 bit gray scaled and 24 bit RGB.
Compression　　JPEG

JPEG is the best   format when it comes to the size of photo realistic pictures. The format does not preserve the picture pixel by pixel. Instead it creates a   general impression close to the original picture (depending on the compression factor). A high compression factor gives a relatively slow data read.

PCT　　　　　**Apple Macintosh PICT Format**

Formats　　　　Black and white, 4 and 8 bit palette, 24 bit RGB.
Compression　　None and Macintosh PackBits RLE

Reads ICT version 1 and 2, only bitmap data (i.e. bitmap data, not vector).

PCX　　　　　**Zsoft Image File Format**

Formats　　　　Black and white, 4 and 8 bit palette, 24 bit RGB.
Compression　　None and RLE (variation of RLE)

Compatible with PC Paintbrush®, Publisher's Paintbrush® and Microsoft Paintbrush read files marked as Zsoft software version 2.0, 2.8 and 3.0 answering to PCX file format version 5.

TGA   **Truvision TGA**

Formats   Black and white, 4 and 8 bit palette, 24 bit RGB.
Compression   None and RLE (variation of RLE).

TIF   **Tag Image File Format**

Formats   Black and white, 4 and 8 bit palette, 24 bit RGB.
Compression   None, Macintosh PackBits RLE,
                 LZW, LZW w. Horiz diff,
                 CCITT Huffman 1D, CCITT Group 3 and 4   fax encoding

Reads TIFF files up to Revision 5 of the TIFF specification.

Options|Capture

MatchWare Chameleon contains an easy to use, but very advanced screen capture function. This is a powerful alternative to the Windows screen capture function.

The normal Windows screen capture, captures the whole screen and saves it as a picture on the clipboard. You can now paste the picture into an image processor where you can cut and convert the picture.

MatchWare Chameleon does it all automaticlly. First you press the hotkey (default [Ctrl] + [F12]). Now the whole screen is marked. You can resize by dragging the handles, or you can select an object or window by clicking   it with the right mouse button. If you also press [Ctrl] only the client area will be marked. If you press [Shift] and the right mouse button simultaneously you are able to capture more objects in one step. When you are satisfied with your selection, double click inside your selection and the picture is ready for you in Chameleon.

In the screen capture dialog you can select:

1)   A hotkey (The key you press to activate the screen capture).
2)   If you want the captured picture to be pasted in Chameleon, the clipboard or both.
3)   If you want the caputred picture to be saved as a file (BMP).
4)   A fixed size capture area.
5)   Automatic colour converting to 16 system colours.

When the screen capture is activated you have the following options:

Left mouse button:
1) If fixed size capture is NOT   selected you can drag a rectangle which specifies the capture area. You resize the area by dragging the handles.
2) if fixed size is selected, you can place the area by pressing the left mouse button and move the mouse.

Right mouse button:
1)   Will select the window object you click. If you also press [Ctrl] only the client window will be selected
2)   If you press [Shift] and the mouse button you are able to add to the capture area.

Keyboard:
[Enter] Capture the selected area.
[Esc]   Cancel capture function.