

# **PerfectPaint**

Georges HALVADJIAN"

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**COLLABORATORS**

	<i>TITLE :</i> PerfectPaint		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

# PerfectPaint

## 1.1 PerfectPaint

```

#####                                     ###
##      ##                               #  ##
##      ##                               #
##      ##                               ##
##      ##                               ##
##      ##      #####      ##  ##  #####      #####      #####      #####
##      ##      #      ##  #####      ##      #      ##      #      ##
##      ###      #      #      ##      ##      #      #      #      ##  ##
#####      #####      ##      ##      #####      #      ##
##      #      ##      ##      #      #      #      ##
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##      ##      #      ##      ##      ##      #      ##      #      ##
##      #####      ##      ##      #####      #####      ##  #
####      ##      ##      ##      ##      ##      ##      ##

```

```

#####                                     ##
##      ##                               ##
##      ##                               #
##      ##                               ##
##      ##                               ##
##      ##      #####      ##      ##      ##      #####
##      ##      ##      ##      ##      ##      ##      ##
#####      ##      ##      ##      ##      ##      ##
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##      ##      ##      ##      ##      ##      ##
#####      ##      ##      ##      ##      ##      ##

```

V2.5

- Introduction
- Installation

Toolbox  
Popup Menus  
Keyboard Shortcuts  
Arexx Port  
    Arexx Commands  
Example Scripts  
History  
Author  
Extra Tools  
To do  
Jpeg.library  
Render.library  
XPKmaster.library  
AsyncIO.library

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## 1.2 To do

- more effects, script, less bugs :-)
- your suggestions

## 1.3 Popup Menus

Popup menus are activated by pressing the right mouse button.

Picture: All Popup Menus

Over the toolbox

Picture Menu

---

Over the 'Animation' icon

Animation Menu

Over the 'pickup brush' icon

Brush Menu

Over the Color viewer

Palette Menu

Over the 'Stencil' icon

Edit stencil  
-----  
Smooth border  
Invert stencil  
Add Shadow

Over the 'Spare' icon

Copy Spare to Main Picture  
Copy Main Picture to Spare  
Swap Spare and Main Picture  
-----  
Copy stencil to spare  
Copy spare to stencil

Over the 'Effects' icon

Compose requester  
-----  
All Paint effects

Over the 'Text' icon

Make text  
Convert text to brush

Over the 'Arexx' icon

Load Script  
Edit User Menu  
-----  
User Menu

Over the 'Antialiasing' icon

---



Bilinear interpolation  
Bicubic interpolation ( better but slower)

- All tool icons associated with Arexx activate a popup menu which lists the contents of the Arexx script's drawer.

## 1.4 Extra tools

These tools can be found in the directory 'PerfectPaint:Tools/', with their original manuals. They can also be found on Aminet.

### Jpeg2Mov

Short : Creates a QuickTime-Movie  
Uploader : ALeX Kazik <alex@kazik.de>  
Author : ALeX Kazik <alex@kazik.de>  
Type : gfx/conv  
Version : 2.3  
Requires : 68020+, AmigaOS 2.04? (Tested: 3.x)

The latest Version can be found under: <http://www.kazik.de/en/jpeg2mov.html>  
My HomePage: <http://www.kazik.de/alx/>

### BUILDAanim

BuildAnim can do one of three operations: 1) It can build an animation out of individual ILBM pictures, 2) it can split an animation into ILBM pictures, or 3) it can convert an animation from one compression type to another.

### Auteur

Christer Sundin (d8sunch@dtek.chalmers.se)

### MKANIM

Allows you to construct an animation in ANIM5 format.

### Author

John Bickers  
214 Rata St  
Naenae 6301  
New Zealand

### E-Mail

jbickers@templar.actrix.gen.nz

---

**NewConvert**

Converts IFF images using datatypes.

**Author**

Alexander Lärz  
Neustädter Str.45  
07768 Kahla  
Germany

**E-Mail**

alexlaerz@t-online.de

**tapgif**

Converts an IFF image to GIF format.

**Author**

John Bickers  
Level 6, Grand Arcade  
16 Willis St  
Wellington  
New Zealand

**E-mail**

jbickers@templar.actrix.gen.nz

**WhirlGif**

Converts a series of GIF images to a GIF animation.

**Author**

Kevin Kadow kadokev@msg.net

## 1.5 Example Scripts

Directory PerfectPaint:Rexx/

Box

Circle

Ellipse

General

Line

Point

Spline

## 1.6 Box

AnimPainting\_Box.rx

Simulates AnimPainting with the Box tool.  
You need to create an animation beforehand.  
The box will be drawn throughout the length of the animation.

Funny\_Border.rx

Several ways to draw a border.

## 1.7 Circle

AnimPainting\_Circle.rx

Simulates Animpainting with the Circle tool.  
You have to choose the circle's direction of rotation.  
You need to create an animation beforehand.  
The circle will be drawn throughout the length of the animation.

AnimPainting\_Circle\_Whirl.rx

Simulates Animpainting with the Circle tool.  
You have to choose the circle's direction of rotation.  
The circle will be drawn starting from its centre.  
You need to create an animation beforehand.  
The circle will be drawn throughout the length of the animation.

Anim\_Pulsar.rx

Creates a pulsar effect (an expanding circle).  
You need to create an animation beforehand.

Make\_AnimStar.rx

This script will create a star. You may choose the number of points it has and whether it is empty or filled.  
Then the star will be drawn on each frame of the animation, rotating through  $90^\circ$  throughout the animation's length.  
You need to create an animation beforehand.

Star.rx

This script will create a star. You may choose the number of points it has and whether it is empty or filled.

Total\_Circle.rx

This script will create a circle with the specified number of points.

Sun.rx

This script will create a cartoon's sun.

## 1.8 Ellipse

AnimPainting\_Ellipse.rx

Simulates AnimPainting with the Ellipse tool.  
You have to choose the ellipse's direction of rotation.  
You need to create an animation beforehand.

---

The ellipse will be drawn throughout the length of the animation.

Make\_Star.rx

This script will create a star. You may choose the number of points it has and whether it is empty or filled.

Total\_Ellipse.rx

This script will create an ellipse with the specified number of points.

## 1.9 Spline

AnimPainting\_Spline.rx

Simulates AnimPainting with the Spline tool.  
You need to create an animation beforehand.  
The spline will be drawn throughout the length of the animation.

Total\_Spline.rx

This script will create a spline with the specified number of points.

## 1.10 General

FadeInBlack.rx

This script will fade an animation to black.  
You must specify the start and end frames, and whether it should fade in or out.

SaveAnimGif.rx

Saves the current animation in AnimGIF format.

SaveGif\_Brush.rx

Saves the current brush in GIF format.

SaveGif\_Picture.rx

Saves the current picture in GIF format.

SaveNewIcon.rx

Takes the two supplied brushed and creates a NewIcon.  
This script needs the executable 'Injectbrush' in your C: directory.

Warp.rx

Uses the current picture to create a 10-frame animation, performing a random warp on each frame. The animation is then played.

Communication with ADPro

LoadADPro\_Brush.rx

LoadADPro\_Picture.rx

SaveADPro\_Brush.rx

SaveADPro\_Picture.rx

## 1.11 Line

---

AnimPainting\_Line.rx

Simulates AnimPainting with the Line tool.  
 You need to create an animation beforehand.  
 The line will be drawn throughout the length of the animation.

Funny\_Line.rx

Several ways to plot a line.

Line\_Measure.rx

Gives the exact length of a line.

Angle repare.rx

Arrow.rx

Make Arrows.

## 1.12 Arexx Port

The Arexx port may be accessed in different ways.

If the script is started from within PerfectPaint, the first parameter passed to the script is the name of the port to use.

Example:

```
/* Title of script*/
Options results
parse ARG Port ..... b
ADDRESS value Port
.....
```

There are many ways to execute a script from PerfectPaint:

In the simplest way, the script is not associated with any tool.

Example:

```
/* Title of script*/
Options results
parse ARG Port b
ADDRESS value Port
.....
```

If the script is associated with a tool:

Line:

```
parse ARG Port x1 y1 x2 y2 b
/* x1, y1: co-ordinates of the start of the line
   x2, y2: co-ordinates of the end of the line */
```

Circle:

```
parse ARG Port x1 y1 r b
/* x1, y1: co-ordinates of the centre of the circle
   r: the circle's radius */
```

Box:

```

parse ARG Port x1 y1 x2 y2 b
/* x1, y1: top-left corner of the box
   x2, y2: bottom-right corner of the box */

```

Ellipse:

```

parse ARG Port x1 y1 r1 r2 b
/* x1, y1: centre of the ellipse
   r1, r2: the ellipse's radii */

```

Point:

```

parse ARG Port x1 y1 b
/* x1, y1: co-ordinates of the point */

```

Spline:

```

parse ARG Port x1 y1 x2 y2 x3 y3 b
/* x1, y1: Co-ordinates of the start of the spline
   x2, y2: Co-ordinates of the end of the spline
   x3, y3: Point of curvature */

```

If the script is associated with the Bridge function:

```

parse ARG Port1 Port2 b
/* Port1: Source port
   Port2: Destination port */

```

---

If the script is not started by Perfectpaint, an instance of PerfectPaint must be searched for and its port found.

Example:

```

/* Script name */

found=0
Port="Perfect_Paint."
DO i=1 to 7
  IF SHOW('P',Port||i) THEN DO
    Port=Port||i
    found=1
    LEAVE
  END
END

if found=0 then EXIT
/* No instances of PerfectPaint are running, so quit */

ADDRESS value Port
...

```

---

If a script is called 'StartUp.rx' and is found in the PerfectPaint drawer

---

along with the main program, this script will be executed at startup.

## 1.13 History

V2.4  
January 2001

V2.3  
November 2000

V2.2  
September 2000

V2.0  
August 2000

## 1.14 V2.4

- Improve some requester
- Improve Brush Mosaic
- Raylab Factory:
  - RayLab Factory is a powerfull and simple gui for RayLab.
  - With this gui, you can:
    - Select a predefined shapes or 3D font.
    - mappe you shape with predefined textures or a mapping image.
    - rotate your shape, place your light ...
    - and build you picture or brush directly in perfectpaint.
  - RayLab is a freeware raytracer made by Marcus Geelnard.
  - Include in PerfectPaint package, the raylab881 executable and the ↔  
documentation (with the permission of the author).
  - There is a Wos version of Raylab on Aminet (raylabwos.lha) and a 'PPC elf' ↔  
version , on the  
official Raylab homepage:  
<http://www.etek.chalmers.se/~e4geeln/raylab/>
- fixed a bug while saving CMAP palette
- New tool: Rotated ellipse
- New picture format: PPM (Load and save).
- several bugs corrected with CMAP brush
- small bugs corrected with gradient effect, starfield effect, zoom, TurboPrint ↔  
and Symetrie
- Add Load and Save Stencil
- Use AsyncIO.library
- Fix a bug with the arexx command: pp\_Render, the script for saving Gif anim ↔  
will works well now
- Animation can be cropped.
- Improve PerfectPaint aspect: Desktop and Requester can have pattern (in PPM ↔  
format)  
(see prefs/Backgrounds)
- You can ,now, manage 10 different brushes. With these brushes you can create, ↔  
loading and saving Albums.

- Little bug fixed with XPK requester
- New Color effect: Adjust levels and Auto levels.
- If you change depth of your picture, Current brush is automatically remapped
- Improve balance requester
- Improve Rubber stamp
- Improve arexx script: LoadPS (postscript)

## 1.15 V2.3

- A nasty bug corrected with the Mask.
- New tools: Square and Triangle with rotation.
- Screen's BarHeight is respected.
- Improve stencil with 'Add shadow' item
- Improve antialiasing:
  - Choice between Bilinear interpolation and bicubic interpolation
- Improve Antialiasing when resizing Brush and Picture.
- Improve popupmenu: Double level, Now popupmenu content all intuition menus...  
So i remove intuition menu (That's what i wanted in the beginning)  
(see PopUpMenu.Showme)
- Zoom is not closed anymore when you use page size, picture size or rot90.
- Improve spray effect with color range option.
- fix a bug when loading 24bits picture with a CMAP chunk.
- Add floodfill with tolerance
- New effect: Inner bevel/Line Art/Gaussian Blur/Mosaic/Bevel Mosaic/Brush ↔  
Mosaic/  
Bump Mapping/Point Cellular/Colorize.  
and their Arexx commands.
- More Arexx commands
- Several small bug corrected.
- Add Crop function
- New Arexx Script: Plastic Wrap,Church
- Improve Color saturation and Grey effect

## 1.16 V2.2

- Works well with VisualPrefs and MagicMenu
- Improve ToolBox with Fast color selection and Fast brush selection.
- Little bug corrected with the arexx command: pp\_Plot
- Bug corrected when sending picture to TurboPrint
- pp\_StencilStat
- pp\_StencilOn
- pp\_StencilOff
- New Box Arexx Scripts: MotionBlur, RotateBlur, ZoomBlur, Puzzle
- Improve Box Arexx Script: Neon, Ectachrome and Fresco.
- Effect Under/Spare works well with CMAP picture
- Fixed a bug whith perspective when (rotx or roty)=90 or -90
- New function: Fix Brush
- Fixed a small bug with FloodFill
- CMAP Deep Brush is load correctly
- Bug fixed when you use brush+Effect in CMAP mode
- Load and Save: Raw 24bits, Sculpt 24bits or Grey
- Better window detection (more system friendly)



- Improve cloud effect: Range color can be use to create clouds
- New effect: Liquid
- New tools: Rubber stamp, finger, RealTime paint,Sponge,Burn.

## 1.17 V2.0

- Sorry for AGA users, but this version works only with graphics card and Cybergraphics or Picasso 96.
- Works well now with Picasso 96
- Improve GUI
- One aplication to manage pictures and animations from 1Bit to 24Bits.
- More Arexx commands.
- Add brush effects with real time preview.
- Improve zoom with real window
- you can convert pictures, animation or brush to CMAP or RGB.
- add several tools to edit your mask: magic wand,lasso, polygon,elliptical ↵  
marquee...
- Print command with TurboPrint
- New Boing effect: Grab alpha-channel, Grab RGB
- Color and Gamma correction
- New arexx script: Button\_On, Button\_Off, LensFlare
- Add arexx drawer: Anim
- .....

## 1.18 V1.3

PerfectPaint (1-8bits) & PerfectPaintPro (24bits)

-----

- Right mouse button on Undo icone: Redo Object
- Improve Shine Effect
- Improve popup menus
- Improve polygone filling
- Fix a bug with very big antialiasing circle
- Improve Spray Effect
- New text effect:
  - Azzaro
  - Emboss
- New Arexx command
  - pp\_UpdateUndoBox (Undo only a part of the picture)
  - pp\_GetWidthT (Width of curent text)
  - pp\_GetHeightT (Height of current text)
  - pp\_freebrush
  - pp\_PickBrush
  - pp\_ScaleBrush
- Improve Pick-Brush  
if you pick a brush with shift key, Background color will not be transparent.
- Improve memory allocation, Now PerfectPaint & PerfectPaintPro are compatible ↵  
with  
virtual memory (Gigamem, VMM)

PerfectPaintPro (24bits) only:

-----

- Big work on Brush:
  - Load & Save With or without alpha chanel.
  - Effect: Smooth border, Mapping density, Opacity
- Animation is available
- Palette menu is available
- More effects available
- New text effect:
  - Stone
  - Motion\_Toolkit
- SpeedUp undo,brush preview (zoom)
- little bug fixed with Load&Save Jpeg
- Improve Compose requester and add a popupmenu for it.
- Load HAM6 and HAM8 Picture
- New commands: 'save Render Image' 'Save Render brush' 'Save Render Anim'  
With the help of "render.library" you can reduce nb of colors of  
your picture, brush or animation with various dithering.  
(you need render.library)
- New arexx command

#### COMPOSE REQUESTER

- \* pp\_ComposeReqOn
- \* pp\_ComposeReqOff
- \* pp\_Compose

#### CONVOLUTIONS

- \* pp\_ConvInit
- \* pp\_Conv y C1 C2 C3 C4 C5

#### RENDER REQUESTER

- \* pp\_RenderReq
- \* pp\_Render
  
- \* pp\_BrushOpacity
- \* pp\_SavePrefs
- \* pp\_PickBrush x y width height
- \* Improve pp\_Bsave
- \* pp\_AskMultiFile

- Improve Gif script (Save GIFPicture,GIFBrush,GIFAnimation)  
Now these scripts can work on 24Bits version of Perfectpaint
- New script: - Save QuickTime movie (you need Jpeg2mov)
  - Load Postscript (you need Ghostscript)

## 1.19 V1.2

### 1-8 Bits

- Some bugs fixed with PopUp Menus and animation
- Better look with VisualPrefs

- Improve cloud effect
- Little bug corrected with arexx
- Little bug corrected with the spreadcolor
- Little bug corrected with Antialiased line.
- Some shortcuts are changed (see doc)
- Improve displace effect
- Xdpi and Ydpi can be used with the font requester
- New tool on the toolbox: Symmetry (see doc)
- Fastest antialiased circle
- Improve 'Pick brush', you can now directly select in the tool box, the way to pick it.
- Brush deformation:
  - Size (with or without antialiasing)
  - Rotation (with or without antialiasing)
  - Shear

## 24 Bits

- Beta version
- Load ilbm (1-24 bits)
- Load & Save Jpeg (with Jpeg.library)
- Not all menus, effects, commands are available, it's really a beta version.
- Fastest then 8bits version
- Improve effect with compose requester (add,sub,alpha...)
- Improve convolutions, fastest, preview, popupmenu...
- New palette requester

## 1.20 V1.1

- New function: "Adjust Palette", you can modify your palette with R,V,B,Contrast,Color and Brightness.
- Improve GUI:
  - \* All Window can be moved.
  - \* Buttons are more system friendly
- Stencil icon have now a PopUp menu with
  - \* Clear Mask
  - \* Invert Mask
  - \* Edit Mask
- Add a tooltype: 'DPAINLIKE', with this tolype, toolbox will always be opened on the right of the screen, and zoom window on the left.
- Improve Popup Menus
- No more assign is needed.
- Improve zoom window:
  - \* Add a popup Menu
  - \* Add a closed button
  - \* Window can be moved
  - \* less bugs
- 22 new Arexx commands
- Animation keep in memory Jiffies.
- Improve 'GifAnim' script
- New script:
  - \* Arrow for line tool

- \* Sun for circle tool
- \* Angle repare
- Improve texture requester with popup menu (">"), Preview guide ("?")
- Improve Text:
  - \* Special effects (Bicolor,Deco,Granit,Relief,Shadow...).
  - \* Full animation.
  - \* rotation, Shear, scaleX and ScaleY.
- Improve text requester with popup menu (">") and preview guide ("?")
- 'Make/Redo Object' are now Ok with polygons,freedraw, Text and arexx.
- Picture and brush can be saved with thumbnail (with NewIcons)
- and many more improvements

## 1.21 Asyncio.library

short: AsyncIO library for fast IO. V39.2a  
uploader: cmh@lls.se (Magnus Holmgren)  
type: dev/c

On Aminet: dev/c/AsyncIO.lha

This link library (optionally shared library) provides DOS-like functions for using double buffered asynchronous IO on files. This provides very good performance on DMA devices.

The code was originally written by Martin Taillefer. A few bug fixes and updates were made by Magnus Holmgren, with inspiration from Olaf 'Olsen' Barthel.

News in version 39.2a

AsyncIO.guide was missing from the archive, making it difficult for new users of AsyncIO. Also added a few icons. These are the only changes in this release.

Re-release of version 39.2

The version string in the last archive wasn't correct. This is the only thing changed in this release.

News in version 39.2:

Fixed bugs in ReadLineAsync(), ReadCharAsync() and WriteCharAsync().

SeekAsync() is now more DOS-compatible, in that it allows seeks to succeed after seeks past EOF. Thus, it is now possible to seek back to a valid position in the file and continue reading there.

## 1.22 XPKmaster.library

Short: V5.2 Compression package, user edition  
Author: Dirk Stoecker, Christian von Roques, Urban Dominik Mueller, ...

---

Uploader: stoecker@amigaworld.com (Dirk Stoecker)  
 Version: 5.2  
 Type: util/pack

on Aminet: util/pack/xpk\_User.lha

#### Description

XPK is an interfacing standard between application programs and packer libraries. Every XPK application program can pack data with any XPK packer.

#### Distributability

XPK is copyrighted, but freely distributable for non-commercial use. Some parts of XPK have a different legal status, ie. PD, GPL or shareware.

This is the main part of the xpk distribution. In this archive are all the files you really need.

How to install the files: Decrunching XPK archives you want to install into ONE directory and double click Install icon in xpk\_User directory. You need at least Installer program version 42.9 to do that. Installer can be found in Aminet (util/misc/Installer\*.lha). Current version is 43.3.

#### Changes to last release:

bug work around in Query function

#### Try WWW addresses

<http://www.amigaworld.com/support/xpkmaster/>  
 or <http://home.pages.de/~Gremlin/xpkmaster.html>

Here all files are accessable (also the xpk\_Crypt.lha archive).

Please contact me or any of the other authors stated in the docs:

```
*****
* snail-mail:                * e-mail:                *
* Dirk Stoecker              * stoecker@amigaworld.com *
* Geschwister-Scholl-Str. 10 * dstoecker@gmx.de       *
* 01877 Bischofswerda        * world wide web:       *
* GERMANY                    * http://home.pages.de/~Gremlin/ *
* phone:                     * pgp key:              *
* GERMANY +49 (0)3594/706666 * get with finger or from WWW pages *
*****
```

## 1.23 Render.library

Short: image processing kernel  
 Author: Timm S. Müller  
 Uploader: Timm S. Müller (timm.mueller@darmstadt.netsurf.de)  
 Type: dev/misc  
 Version: 30.0  
 Requires: Kickstart 2.04 (v37), MC68020

on Aminet: dev/misc/RenderLib.lha

## render.library

---

render.library is an amiga shared library that serves an image processing kernel. it is an interface between truecolor and chunky graphics, and it supports all amiga-specific pixel and color schemes. render.library provides palette-management, histograms, alpha-channel processing, color reduction, scaling, rendering, dithering, texture-mapping, and many conversion and support functions.

## author

---

bifat / TEK neoscientists

tim.mueller@darmstadt.netsurf.de

<http://come.to/neoscientists>

Timm S. Müller  
Bartningstraße 15  
64289 Darmstadt  
++49 (0)6151 715917

## requirements

---

- mc68020 or better
- kickstart 2.04 (v37) or better

## features

---

- histograms up to 24 bit
- rendering
- dithering
- color quantization
- heavy alphachannel support
- HAM mode support
- custom memory management
- scaling
- low-level texture-mapping
- conversion functions
- fully documented with autodocs, charts, tutorials
- supplied with C, Assembler, and E includes
- freeware

## 1.24 Jpeg.library

Short: V5.1 shared library to load/save jpegs

Uploader: paulh@mafeking.scouts.org.au (Paul Huxham)

---

Author: paulh@mafeking.scouts.org.au (Paul Huxham)  
Type: util/libs

On Aminet: jpeglibrary50.lha

For anyone who wants to use/manipulate jpeg files in their own applications, this library makes it very easy.

jpeg.library is a shared library that can be used to examine, load and save jpeg images. You can have multiple jpegs objects (load/save), supports all the standard jpeg quality and smoothing parameters and can scale loaded images (smaller). Jpeg image data can reside on disk or in memory.

Example programs included.

\* Version 5.1 fixes a problem with previous 020ffp and 040ffp versions of the library.

\*\* This software is based in part on the work of the Independent JPEG Group.

For the latest version of jpeg.library and to check out other software I have written, check my home page at:

<http://mafeking.scouts.org.au/~paulh/>

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## 1.25 Keyboard Shortcuts

Space Puts a pattern on the window to aid precision  
j Activates or deactivates the spare page  
p Activates the palette editor  
u Undo  
U Redo  
HELP Brings up the documentation  
DEL Gets rid of the cursor

Up/down arrow keys + right Alt Change the pen size

n New  
l Loads a picture  
s Saves the current picture  
q Quit

b Loads a brush  
c Saves the current brush

| Displays co-ordinates  
/ Bridge function

x Flips the brush about the X-axis  
y Flips the brush about the Y-axis  
z Rotates the brush by 90\textdegree{}

X Flips the picture about the X-axis  
Y Flips the picture about the Y-axis  
Z Rotates the picture by 90\textdegree{}

F5 Lets you specify an object's dimensions manually  
(circle, line, curve, ellipse, box)

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ZOOM :  
+ Increase the zoom factor  
- Reduce the zoom factor  
Enter Refocus the zoom  
arrow keys Move the zoom or current picture

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BROSSE :  
F1 Transparency  
F2 Colour  
F3 Solid  
F4 Previews the brush in box form  
Pressing F4 again shows only the brush's mask.

---

---

ANIMATION :  
1 Previous frame  
2 Next frame  
3 Go to frame...  
4 Play animation  
5 Play animation once  
6 Ping-pong animation

During animation playback:  
Space Stop the animation

## 1.26 Author

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[HTTP://gothic.fr.free.fr/amiga/index.html](http://gothic.fr.free.fr/amiga/index.html)

## 1.27 Introduction

Throughout the documentation:  
LMB = Left Mouse Button  
RMB = Right Mouse Button  
Bg = Background  
Fg = Foreground

Paint, Anim and manipulate pictures from 1bit to 24bits

---



**Requirements:**

68030 minimum + Coprocesseur  
OS 3.0 minimum  
Graphics card (Cybergraphx min cgxv41\_r71 or Picasso96)  
Jpeg.library  
Render.library  
XPKmaster.library (used to save your 24bit animation)

**Some features of PerfectPaint:**

Drawing in 1-24 bits  
Antialiasing  
Spare page  
Stencil  
Symmetry  
Multiple-level undo  
Text with antialiasing, bevel, outline and effects  
Different types of pen  
Animation  
zoom  
Arexx  
Brush: Mapping density, Opacity, Smooth border (24bits)  
Several effects  
.....

Read the documentation for more information.

## 1.28 Installation

Unarchive the file PerfectPaint.lha and copy the entire "PerfectPaint" drawer wherever you like.

This drawer contains a font called "Xen.font".

Copy:

Xen.font  
Xen.font.info  
Xen.info  
The XEN directory

to your FONTS: directory.

Installation of RexxMast:


If it is not already there, copy the RexxMast executable to your WBStartup drawer.

Install

Render.library  
Install  
Jpeg.library  
Install  
XPKmaster.library  
Install  
Asyncio.library  
Last version of Cybergraphx V3 can be found here



[http://www.vgr.com/v3/cgxv41\\_r71.lha](http://www.vgr.com/v3/cgxv41_r71.lha)  
[ftp://ftp.vgr.com/cgxv41\\_r71.lha](ftp://ftp.vgr.com/cgxv41_r71.lha)  
[http://www.vgr.com/meanmachine/cgxv41\\_r71.lha](http://www.vgr.com/meanmachine/cgxv41_r71.lha)

## 1.29 Toolbox

All icons with a dog-ear have an action accessible with the  right mouse

button. (\*)

```

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|
| ___ ___ ___ |
|| || || || ||
|| A || B || C ||
|_____|_____|_____|
| ___ ___ ___ |
|| || || || ||
|| D || E || F ||
      H
      : Text tool (*)
|_____|_____|_____|
      I : Polygon tool - empty, filled, empty bézier, filled 
      bézier
| ___ ___ ___ |
|| || || || ||
      a
      : Capture brush (*)
|| G || H || I ||
      b
      : Animation (*)
|_____|_____|_____|
      c : Zoom
|
      d
      : Spare page (*)
| ___ ___ ___ |
      e
      : Effects (*)
|| || || || ||
      f
      : Stencil (*)
|| a || b || c ||
      g
      : Processing Tools (*)
|_____|_____|_____|
      h
      : Special tools: Warp (*),Grab alpha-channel,Grab RGB,RayLab 
      Factory
| ___ ___ ___ |

```

```

        i
        : Antialiasing
||  ||  ||  ||
|| d || e || f ||      m : Colour selector
||__||__||__||      n : Current colours
|  __  __  __  |      o : Colour inversion
||  ||  ||  ||      p : Palette
|| g || h || i ||

        Palette Editor
        ||__||__||__||
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|   __
|  |  |
| m | n | o 2 |
|   __
.
.
.   p
.
        q
        : Symmetry (*)
|  __  __  __  |
        r
        : Grid (*)
||  ||  ||  ||
|| q || r ||  ||
        t
        : Trashcan (*)
||__||__||__||
        u
        : Undo/Redo (*)
|  __  __  __  |
        v
        : Arexx (*)
||  ||  ||  ||
|| t || u || v ||
||__||__||__||
|
|_____

```

All drawing actions with the left mouse button will be made in the primary colour.

All drawing actions with the left mouse button will be made in the background colour.

The circle, box, line, spline, ellipse and point tools may have an Arexx script associated with them.

You can select this script by right-clicking on the tool icon, when it appears with the Arexx crown symbol.

Some example scripts are supplied:

Circle script

Box script

Line script  
Spline script  
Ellipse script  
Point script

### 1.30 Animation

Select This icon if you want to animate brush and text.  
You just have to put brush or text on your current picture.

### 1.31 Processing Tools

All these tools are in Real time.  
They work in 24bits only.  
They need a brush.

#### Rubber Stamp

Also called 'Pantograph', When you select it, a second pointer will appear, offset from the main pointer.

The second pointer follows exactly the movements of the normal pointer, but offset horizontally and vertically. When you draw, everything that passes ←  
under  
the first mouse pointer, will be copied under the second one.

Use the Left Shift key to set the offset of the second pointer. You then draw a line between the source point to the destination point.

#### Rubber Stamp with Spare

Same tools, but now the Spare picture will copied under the second pointer.

#### Finger

Same effect than if you were running your finger through fresh paint.

#### Burn (Left mouse button)/Dodge (Right mouse button)

#### Saturate (Left mouse button)/Desaturate (Right mouse button)

#### Paint

Real time painting.

### 1.32 Palette Editor

#### Image

You can edit a palette using either the RGB or HSV systems.  
To select a colour, click with the LMB on the required colour.

---

**COPY** Copies one colour to another  
Select a colour, click on 'COPY' then select the destination colour.

**EX** Exchanges two colours in the palette  
Select a colour, click on 'EX' then select a second colour.  
The first colour will become the second colour and vice-versa.

**SWAP** Exchanges two colours in the palette ( $\leq 8$ Bits)  
...but without modifying the current picture.  
(The current image will be remapped.)

**SPREAD** Creates a colour gradient  
Select the start colour, click on 'SPREAD' then select the destination colour. A colour gradient will be made between the two colours.

**CANCEL** Closes the requester and discards any changes made

**OK** Closes the requester and keeps any changes made

### 1.33 Undo/Redo

**LMB**: Activates Undo

**RMB**: Activates Redo Object

10 levels of undo are allowed.

### 1.34 Symmetry

Symmetry can be used with all tools.

**LMB**: Activate Symmetry

**RMB**: Lets you choose the type of Symmetry, center and radius

### 1.35 Arexx

**LMB**: Activates an Arexx script

**RMB**: Brings up a requester which lets you select a script for that icon as well as for the circle, box, line, spline, ellipse and point icons.

Arexx Port  
Arexx Commands

Example Scripts

---

## 1.36 Trashcan

LMB: Erases the current picture, replacing it with the background colour  
RMB: Brings up an erase requester for animation, allowing you to erase one frame or a series of frames

The stencil will be used, if it is active.

## 1.37 Boing tools

Warp

LMB: Activates the warp tool

RMB: Lets you choose the warping strength

Deforms the picture using a warping technique.

If the 'Antialiasing' icon is selected, the effect will be antialiased.

Grab alpha-channel

This command let you copy the brightness of your picture over your current brush (useful for texture or pre-defined mask)

Grab RGB

This command let you copy the RGB value of your picture over your current brush.

Raylab Factory

RayLab Factory is a powerfull and simple gui for RayLab.

With this gui, you can:

- Select a predefined shapes or 3D font.
- mappe you shape with predefined textures or a mapping image.
- rotate your shape, place your light ...
- and build you picture or brush directly in perfectpaint.

RayLab is a freeware raytracer made by Marcus Geelnard.

Include in PerfectPaint package, the raylab881 executable and the documentation ↔ (with the permission of the author).

There is a Wos version of Raylab on Aminet (raylabwos.lha) and a 'PPC elf' ↔ version , on the

official Raylab homepage:

<http://www.etek.chalmers.se/~e4geeln/raylab/>

Original Doc

## 1.38 Stencil or Mask

LMB: Activates the stencil

RMB: open the popup menu

Creating a stencil allows you to paint around an image without painting over it, as if it were protected by a mask.

---

## 1.39 Antialiasing

If the icon is selected:

- Any reduction in size of the picture will be antialiased.
- Certain distortion effects will be antialiased.
- Drawings are antialiased

## 1.40 Effects

LMB: Activates the current effect. If you haven't chosen an effect a requester will appear listing all the available effects.

RMB: Brings up the effect requester or the compose requester

(the compose requester will allow you to compose between the current effect and the current picture)

compose: Opacity, Add, Sub, Darken, Alpha, Inv-Alpha

You can apply an effect to all the tools.

There are 4 types of effect:

- Colour
- Wrap
- Deform
- Pixelate
- Other

Effects

## 1.41 Spare page

LMB: Activates the spare page (if you have enough memory) or disactivates it.

The spare page has the same size and depth as the current picture.

RMB: Parameters

You can:

- copy the spare image to the current image
- copy the current image to the spare image
- exchange the spare and current images

All modifications to the current image (loading, size and depth changes) initialise the spare page.

## 1.42 Grid

RMB: Activates the grid

LMB: Grid parameters

'X spacing' and 'Y spacing' represent the grid's size.

'View grid' makes the grid visible in the window, you can also choose its colour.

'Grab' is not currently available.

---

## 1.43 Text tool

If you select the text tool with the right mouse button, the text editor will appear.

If you select the text tool with the left mouse button, the text brush will become active. If one does not exist, the text editor will appear.

Accepted fonts:

- Vector:
  - Options: Outline and Bevel with a specified thickness
  - Two levels of antialiasing
  - Rotation, Shear, ScaleX, ScaleY and Animation.
- Bitmap:
  - Options: Outline and Bevel with a specified thickness
  - Two levels of antialiasing
- Colour: (available soon)
  - Options: Use the font's palette
  - Remap the brush without modifying the current palette
  - Colourize: For greyscale or antialiased fonts

Once the brush has been created, you may at any time choose a primary colour. The brush will automatically adapt itself to the new colour.

The text brush may have all the available effects applied to it.

Text Requester (picture)

## 1.44 Capture brush

To capture a brush,

- select 'pick brush' icon
- select a tool (box, circle...)
- draw the object on your picture

If you press Left Shift, the background colour will not be transparent.

You may use 2 brushes simultaneously. To go between the two brushes, click the right mouse button on the 'Brush' icon in the pen part of the toolbox.

If you capture the brush with the right mouse button, the captured image will be erased from the picture.

There are 3 brush modes:

- F1 Transparent
- F2 Colour
- F3 Solid

F4 The brush appears as a preview (in box form)

---



The captured brush may be placed on the page with all the available effects.

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