

# **PerfectPaint**

Georges HALVADJIAN"

Copyright © CopyrightÂ©1998-1999 Georges HALVADJIAN"

COLLABORATORS

	TITLE : PerfectPaint		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY	Georges HALVADJIAN"	January 19, 2025	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>PerfectPaint</b>	<b>1</b>
1.1	PerfectPaint . . . . .	1
1.2	To do . . . . .	2
1.3	Popup Menus . . . . .	2
1.4	Extra tools . . . . .	2
1.5	Example Scripts . . . . .	3
1.6	Box . . . . .	4
1.7	Circle . . . . .	4
1.8	Ellipse . . . . .	4
1.9	Spline . . . . .	5
1.10	General . . . . .	5
1.11	Line . . . . .	6
1.12	Arexx Port . . . . .	6
1.13	History . . . . .	8
1.14	Keyboard Shortcuts . . . . .	8
1.15	Author . . . . .	10
1.16	Introduction . . . . .	10
1.17	Installation . . . . .	11
1.18	Toolbox . . . . .	11
1.19	Palette Editor . . . . .	13
1.20	Undo/Redo . . . . .	13
1.21	Arexx . . . . .	13
1.22	Trashcan . . . . .	14
1.23	Warp . . . . .	14
1.24	Stencil or Mask . . . . .	14
1.25	Antialiasing . . . . .	14
1.26	Effects . . . . .	15
1.27	Spare page . . . . .	15
1.28	Zoom . . . . .	15
1.29	Grid . . . . .	16
1.30	Text tool . . . . .	16
1.31	Capture brush . . . . .	17

---

# Chapter 1

# PerfectPaint

## 1.1 PerfectPaint

PerfectPaint V1.1  
AmigaGuide documentation

This doc was translated in English by Joe Mackay

---

Introduction  
Installation

Toolbox  
Menus  
Popup Menus  
Keyboard Shortcuts

Arexx Port  
Arexx Commands  
Example Scripts

History  
Author

Extra Tools

To do

---

Copyright © 1998-1999 Georges HALVADJIAN All Rights Reserved FreeWare

---

## 1.2 To do

Certain functions are currently ghosted. The vector drawing button is not yet available.

Lots of work to be done on brush deformation, animation, antialiasing...

## 1.3 Popup Menus

Popup menus are activated by pressing the right mouse button.

- Over the toolbox:
  - New
  - Load Picture
  - Save Picture
  - Load Animation
  - Save Animation
  - Paths
  - Screen Format
- Over the picture:
  - Flip X
  - Flip Y
  - Rotate 90
  - Picture Size
- Over the 'pickup brush' icon:
  - Load Brush
  - Save Brush
- Over the 'Stencil' icon:
  - Clear Mask
  - Invert Mask
  - Edit Mask
- Over the 'Spare' icon:
  - Copy Spare to Main picture
  - Copy Main Picture to Spare
  - Swap Main picture and Spare
- 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.

### 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\textdegree{} 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

V1.0:

First version

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 tolttype, 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

## 1.14 Keyboard Shortcuts

Space Puts a pattern on the window to aid precision  
j Activates or disactivates the spare page  
p Activates the palette editor

---

u Undo  
HELP Brings up the documentation  
DEL Gets rid of the cursor

Up/down arrow keys 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)

---

ZOOM :

- + Increase the zoom factor
- Reduce the zoom factor
- Enter Refocus the zoom
- Right-Alt + arrow keys Move the zoom

---

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:

- <- Slow down animation
- > Speed up animation
- Space Stop the animation

---

## 1.15 Author

Georges HALVADJIAN  
21 allée des jardins de Francheville  
69340 Francheville FRANCE

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

## 1.16 Introduction

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

PerfectPaint is a powerful drawing program for the Amiga.

### Requirements:

Minimum 68030 + FPU  
Minimum OS 3.0  
Graphics card recommended

### Some features of PerfectPaint:

Drawing in 2 to 256 colours  
Antialiasing  
Spare page  
Stencil  
Multiple-level undo  
Text with antialiasing, bevel and outline  
Different types of pen  
Animation  
Real-time zooming  
Arexx  
Several effects  
\*Colour:  
- Shade  
- Light  
- Translucency  
- Inverse color  
- False color  
- grey  
- Treshold  
- Airbrush  
- Spray  
\*Wrap:  
- Texture  
- Brush  
- spare  
- Cloud  
- Gradient  
\*Distortion:  
- Displace

---

- Fish eye lens
- FlipX
- FlipY
- Fractal
- Ripple
- Rotate
- Sin
- Straw
- Twirl
- Wave
- \*Convolution
- \*Other:
  - Pick brush
  - Shadow
  - Grain
  - .....

Read the documentation for more information.

## 1.17 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.

Create a new assignment in your user-startup:

Assign "PerfectPaint: ..."

Example:

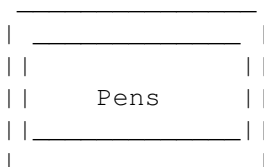
Assign PerfectPaint: DH0:PerfectPaint

Installation of RexxMast:

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

## 1.18 Toolbox

All icons with a dog-ear have an action accessible with the right mouse button. (\*)



A : Circle tool - empty, filled, Arexx (\*)

	B : Box tool - empty, filled, Arexx (*)
	C : Line tool - empty, filled, Arexx (*)
A    B    C	D : Spline tool - empty (*), filled (*), Arexx (*)
	E : Fill tool
	F : Point tool - freehand, joined, filled, Arexx (*)
	G : Ellipse tool - empty, filled, Arexx (*)
D    E    F	H : Text tool (*)
	I : Polygon tool - empty, filled, empty bézier, filled ↵
bézier	
	a : Capture brush
	b : Grid (*)
G    H    I	c : Zoom (*)
	d : Spare page (*)
	e : Effects (*)
	f : Stencil (*)
	g : Vector drawing
a    b    c	h : Specil tools: Warp (*)
	i : Antialiasing
	j : Colour selector
	k : Current colours
	l : Colour inversion
	m : Palette
g    h    i	Palette Editor
	n : Trashcan (*)
	o : Undo/Redo (*)
	p : Arexx (*)
j   k   l	
.	.
.	. All drawing actions with the left mouse button will be made in ↵
the	
.	. primary colour.
m	
.	.
	All drawing actions with the left mouse button will be made in ↵
the	
	background colour.
n    o    p	

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



## 1.19 Palette Editor

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  
...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.

**R1 R2 R3** These are the colour ranges, used by the 'Gradient' effect  
To define a range select the start colour, click on 'R1', 'R2' or 'R3'  
then select the end colour.

**UNDO** Restores the palette to the way it was before the requester  
was opened

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

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

## 1.20 Undo/Redo

LMB: Activates Undo

RMB: Activates Redo (not available)

10 levels of undo are allowed.

## 1.21 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

---

## 1.22 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.

## 1.23 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.

## 1.24 Stencil or Mask

LMB: Activates the stencil  
RMB: Brings up the stencil construction requester

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

The requester:  
You may reposition it anywhere on the screen by dragging the requester's title bar.

Click on the colours that you wish to use in your stencil. You can select the colours by clicking on the requester's palette or on the image itself.

After choosing all the colours you wish to protect, click OK to create your stencil.

The selected colours will now be protected against all attempts at drawing.

## 1.25 Antialiasing

Not all the tools can yet be used with antialiasing.  
At the moment only circles (empty and filled), lines, polygons and all tools using these will be antialiased.

If the icon is selected:

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

---

## 1.26 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

You can apply an effect to all the tools.

There are 5 types of effect:

- Colour
- Wrap
- Deform
- Pixelate
- Convolution
- Other

If the 'Antialiasing' icon has been selected, certain distortion effects such as ↔ :

- Rotate
- Wave
- Twirl
- Ripple
- Fish eye lens

will be antialiased.

Effects

## 1.27 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.

## 1.28 Zoom

RMB: Activates zooming

LMB: Zoom parameters

'x2, x4, x8' Magnification strength

'Low, M1, M2, Big' Size of zoom window:

- Low 320x256
- M1 320x512
- M2 576x256
- Big 576x512

There are two zoom modes:

- Manual mode  
This is a static mode. At any time, you can adjust the zoom position with the 'Enter' key on the numeric keypad and zoom with the '+' and '-' keys.
- Dynamic mode  
The magnification is in real-time, you can also zoom with the '+' and '-' keys on the numeric keypad.

The zoom is just a representation of the picture. For the time being you cannot draw on it.

## 1.29 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.

## 1.30 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:
  - 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.

If the brush is antialiased, it will appear with incorrect colours. However, it will be drawn correctly once it is placed on the page.

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

---

Text Requester (picture)

## 1.31 Capture brush

To capture a brush, draw a box on the picture. The background colour will 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)

Pressing F4 again shows only the brush's mask

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

Another way to capture a brush is to use the Pick Brush effect.

With this method all the available tools may be used to capture a brush.

---