# New\_in\_2.0

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# **Chapter 1**

# New\_in\_2.0

#### 1.1 Changes and additions of version 2.0

Dear Users,

this AmigaGuide-file contains all changes and additions made to ArtEffect since version 1.1.

Before you proceed, please read this note

Most likely you will not notice the biggest change - the entire program that was originally developed with SAS/C and made use of the bgui.library has now been completely converted to our own StormC-Compiler and relies on StormWizard for its GUI:

However, you as a user will be more interested in the "real" additions and changes made:

If you'd like a little more information on each topic without having to read each section,  $\operatorname{go}$ 

here

for a short description of all new and changed features.

ARexx

through the addition of ARexx, ArtEffect has become even more flexible and powerful.

Layers Working on several planes Eraser

Erasing made easy

PopUp-Menu more comfort in the project window

virtual Memory 1.745.604 Chip RAM, 320.435.769 other RAM...

	multiple Unde Should I?	o/Redo-steps Wasn't it better before?
	new plugins Well, yes,	plugins
	Emergency Ex. The life-v	it ests are under your seat
	Program-Sett	ings changes
Toolbox	Smudge/Finge are now fu	paint nctions in their own right How it looks now
	Menu-Items Gone with <sup>-</sup>	the wind!
	Lighten/Darken Now works slightly different	
Moved!		"Blur" now resides in the Blur-submenu
Transparent Background		When you generate a new project, the background may now be transparent, too
Arithmetic Operations		"1+1", "3*5", etc. are now valid entries in integer-gadgets
Copy/Paste		The Copy and Paste items from the Edit-Menu now affect the current brush.

# 1.2 Overview

Additions:

With the introduction of layers we place in your hands a very powerful tool to work on several parts of a picture without risking to loose vital parts of it. ArtEffect now features a dedicated Eraser . Every project-window now has its own PopUp-Menu . Furthermore we have equipped ArtEffect with a complete virtual memory-manager thus eliminating the need for VMem or other 3rd party virtual ↔ memory handlers. As a direct result ArtEffect now also offers multiple undo/redo - there is no longer the danger of completely destroying a project by making more than one accidental change to it. Last but not least we also generated a couple of new plugins for ArtEffect. Changes: The space in the Toolbox that was formerly occupied by the trashcan is now taken by the REDO-icon. Also, we added two new icons to the toolbox. Due to the increased number of prefs-options we have changed the preferences а little bit. For all those of you who have always enjoyed fingerpainting we have made the airbrush-modes Smudge/Fingerpaint a tool in its own right an gave it an icon in the toolbox. In the process of converting the program to StormC, a few menu items have become temporarily unavailable. The Lighten and Darken modes now work slightly different You can use arithmetic operations into integer-gadgets: 1+1, 2\*3+4, etc. are all valid entries. When generating a new project you can now choose a transparent background. The menu-items Copy and Paste in the Edit-menu no longer affect the current project but the current brush. Finally, the Blur-plugin has been moved from the Pixelate-submenu into the Blur-submenu.

## 1.3 Layers

#### What are layers?

Layers are several "planes" you can split your project into - just imagine painting on several transparent films that are then placed on top of each other.

You could, for example, paint the background of a picture on one layer, the sky on the second, and the foreground on the third one. No changes made to a particular layer will affect any of the others.

How do I work with layers?

By default, every document consists of one layer called "Background". If you open the Layers-Requester you can add layers to your project, delete them, rename them, set their opacity, and decide whether you want them displayed at all. You can access the Layers-Requester by choosing Layers from the Windows-Menu or by pressing F6. The maximum amount of layers available is three.

In this requester you can see a list of all layers currently available in your project with the active layer being highlighted in a different color. Each entry in the list has three parts:

- The area to the left (with the lightbulb in it) allows you to switch the layer on and off just toggle-switch the bulb by clicking on it.
- to the right of that there is a small preview of the layer
- and to the far right you can see a big area that contains the name of the layer

The order of the layers in the list equals their order in your project - this means the topmost layer will be completely visible with only its transparent areas letting the layers below show through.

#### Arranging layers

By simply dragging and dropping the layers up and down in the list you can put them in any order you want. While using Drag&Drop a white-and-black dashed line shows you where the layer will end up. In case you don't know what Drag&Drop means - just click left on the layer to move and keep the left button pressed, move the mouse to the desired position and then let go of the button. (Note: if you chose a non-transparent background for your project, the background-layer will completely cover all layers below it. You could then use the

eraser

to punch holes into this layer in order to let the other ones  $\, \hookleftarrow \,$  show

through.)

Combining Layers If your project contains two layers that you don't need to edit separately anymore, you can combine those two layers into one. First of all, make sure these layers are next to each other in the list - then drag&drop either one of them on top of the other - they will be combined into one layer.

#### Setting layer opacity

At the very top of the layers-requester there is a slider that controls the current layers's opacity. The higher the value set by this slider, the less transparent the layer will be.

Naming layers Directly below the slider you'll find a string-gadget which allows you to change the name of the current layer. Creating/deleting layers Finally, at the very bottom of the Requester, you'll find buttons to create and delete layers. If your project has only one layer, this layer can not be deleted. If this last layer still contains transparency information, this information will be deleted if you apply the Delete button. Saving Layers Please note that pictures containg more than one layer can only be saved in IFF (ArtEffect will generate a separate chunk for each layer). The Save-Requester also gives you the options flatten Layers which will combine all layers into one (not recommended unless you don't need to edit the separately anymore) and include alpha channels which will preserve all

Important Note When used with anything else than the cloner, the impressionist-mode only "sees" one layer - this leads to very strange effects if applied to layers that contain transparent areas.

Examples:

transparency information.

- Here you can take a look at the layers-requester. The corresponding project-window would then look like this.
- In this case, the layers "Foreground" and "Middle" were exchanged. See how the planet is now in front (or on top) of the logo.
- 3. Here you see a picture of the requester with the "Background" layer turned off ↔ . And here the corresponding project-window.
- 4. And here, to top things off, an example for an opacity of 84 set for the topmost layer.

#### 1.4 Radierer

The eraser

The eraser is located in the toolbox, directly below the airbrush.

The function of the eraser varies: if you only use one

layer

, the eraser will

always paint with the current background color while it will completely remove all color if you use several layers, thus allowing lower layers to shine through. Erasing on the lowest layer will cause the chessboard-pattern of the window-background to appear.

In the prefs-window for the eraser you will find the usual slider for the strength and the "pressure" switch. Aditionally, there is an "Erase Image" gadget which takes the function the trashcan-icon in the toolbox used to have. You can also achieve this by clicking on the eraser-icon with the shift-key held down. Either way, if you have more than one layer in your project, only the current layer will be erased.

#### 1.5 Window-PopUp

The popup-menu in the project window

If you have already taken a look at ArtEffect 2.0 before reading this manual, you will probably have noticed the new gadget in the top left-hand corner of every project-window.

Using this gadget opens a popup-menu.

This menu has five items:

- mark as Source has the same effect as clicking on the top left corner of the window with the left ALT-key pressed.
- mark as Destination has the same effect as clicking on the top right corner of the window with the right ALT-key pressed.
- Pixel
- cm
- Inch

The last three items allow you to select the unit of measurement used for the project's ruler. Please note that this replaces the menu-item Settings/Ruler.

#### 1.6 Virtual Memory

#### Virtual Memory

You probably know already: Working with computer-based graphics takes lots and lots of memory and you can never have enough of it...

Granted, the prices for RAM have been quite low for a considerable amount of time, but not everybody is willing or able to get another 32 MByte-SIMM for his computer. Therefore some smart person came up with the idea to use the computer's harddrive as a (slow, but big and cheap) RAM-expansion.

Programs for providing and managing virtual mem have been around on the Amiga for a good while now, but those are often difficult to set up and/or use.

For this reason, the current version of ArtEffect features its own built-in virtual memory handler - some of the new functions even require the use of virtual memory: without VMem you cannot make use of

layers and there is no

unlimited undo/redo

As long as you are not extremely low on harddisk-space, we suggest you give ArtEffect a generous amount of virtual memory to use - about 32 MB (or more) are ideal for most tasks.

In the VMem-area of the program-settings you can set the size and location of the swapfile that serves as your virtual memory.

#### 1.7 Unbegrenztes Undo/Redo

Multiple Undo/Redo-steps

One disadvantage of many graphicsprograms is the lack of undo-buffers. Most of the programs (including older versions of ArtEffect) would only allow you one step of undo, making it virtually impossible to revert more than one false step without loosing hours of work.

ArtEffect 2.0 allows you to save as many undo-steps as your (virtual) memory permits - this means you can actually click yourself "backwards in time" by repeatedly applying undo until you reach a stage when everything still was to your liking.

If you have gone back one or more steps too far, you can redo any number of steps to finally end up where you want to.

If for example you have undone 10 steps and then come to the conclusion that you liked the situation better before undoing those, you can simply use redo 10 times to get back where you came from.

If you are low on RAM and/or HD-space, you can set a maximum number of undo-steps to save in the Other-area of the program-settings

Furthermore, UNDO can now take back all operations, including Imagesize/Canvassize/Crop.

#### 1.8 New plugins

Description of new plugins

The following blur-filters have been added:.

Radial Blur

Generates a circular blur-effect around the middle of the picture. You can control the strenght of the effect with the slider or the integer-gadget.

Zoom Blur

Generates a blur-effect very similar to the distortions generated towards the rim of a strong magnifying-lens. Again, the strength can be controlled through the slider or the integer-gadget.

#### Motion Blur

This filter generates the popular effect of an object that moves very quickly past a camera. The sliders control the speed and angle of the simulated movement while the two radio-buttons determine whether the movement occurs at constant speed or is accelerated.

Note: the Blur-Plugin has been moved from the Pixelate-submenu to the blur-submenu.

These plugins have been added to the Other-submenu:

Make Tile

This plugin generates a tile out of a picture by generating a smooth transition between the left and right as well as the top and bottom edge. Tiles generated in this way can be seamlessy placed next to each other using the Tile-plugin. aneinandergereiht werden.

The strenght-slider determines how many pixels of each edge are taken into account for making the transition - the higher the value, the better the result.

Tiles that are generated this way are ideal for use as textures in raytracing programs or as background-pictures for WWW-pages

Tile

This plugin completey fills the active project with the current brush. It is ideally used with a brush that was generated by the Make Tile-plugin - to do this, use Make Tile on a picture then use "Pic->" from the brush-manager and finally use Tile in the desired destination-project.

#### 1.9 Emergency Exit

The "Emergency Exit"

To keep crashes from happening, ArtEffect now monitors the condition of several parts of this program, automatically terminating itself if everything is not well, but allowing the user to save all his work before doing so.

If this case ever occurs, ArtEffect will mostly output the number of an "internal error" - please note down the number and send it to Haage&Partner along with a detailed description of the steps leading to it, we will then try and remedy this in future releases of the program.

#### 1.10 Changes made to the preferences

Changes made to the preferences

The four tabs in the prefs-window now have the following names and functions:

Screen This section has remained unchanged

VMem Here you can set everything concerning virtual memory

In the upper area you can select how much RAM ArtEffect is supposed to leave free for use by other programs and how much RAM it is allowed to use.

In the lower area you can specify a pathname and the size for the swapfile.

Priorities With the upper slider you can specify a task-priority for ArtEffect and its plugins when you are actively using it. The lower slider allows you to set a priority for the occasions when ArtEffect has do do time-intensive calculations in the background (such as the twirl-effect). The Plugins will always have a priority that is one lower than ArtEffect's thus keeping your machine usable even if ArtEffect has to some heavy calculations.

Other In the upper area you can control how ArtEffect frees undo-memory if your (virtual) memory starts to run low:

- oldest : the oldest undo-step of the active project is freed
- · all oldest: the oldest undo-step of all projects is freed
- other : only undo-steps of non-active projects are freed

Please be aware, that this only controls the desired behaviour - even if you chose other, ArtEffect will delete Undo-Buffers from the current project as soon as there aren't any left in other projects.

The slider below controls the maximum number of undo-steps to save - if you move this slider all the way to the right this means "unlimited undo/redo".

In the lower half you will find a slider to control the number of available colors (formerly located in the "Other 1" section of the prefs).

Below the slider there is a checkmark to toggle the One picture path option that used to reside in Other 2.

In addition to the program settings-requester there also is a settings-requester.

In this requester you will find the options for Brush display, Anti-Alias, Snap windows, auto Preview, Auto. activation, and Stencil color, all of which used to be in the Other 1 and Other 2 sections of the program settings.

## 1.11 Smudge/Fingerpaint

Smudge/Fingerpaint

The Smudge/Fingerpaint-tool provides these two paint-modes that were part of the airbrush in earlier version as separate tools in their own right.

The behaviour of the tool is toggled with the Fingerpaint-checkmark in the tool-settings:

No checkmark - the tool acts as "Smudge"

checkmark - the tool acts as "Fingerpaint"

The actual function of the tools is still identical to the description provided in the printed manual.

#### 1.12 Removed menu-items

These menu itmes are not available anymore:

```
- Window/Create Workspace
```

- Window/write back Workspace

```
- Settings/Crosshair
```

The item Settings/Ruler has been rendered obsolete through the introduction of the

window-popup

### 1.13 Lighten/Darken

Lighten/Darken

The function of these paint-modes has been slightly changed:

Lighten only lightens up to the current pencolor, while Darken only darkens down to the currecnt background-color.

Using a white foreground and a black background reproduces the behaviour you are used to from earlier versions.

## 1.14 Note

To make this manual even better we have included links to graphics in several places - these graphics are there to help you understand certain functions of the program better and are displayed through the "Multiview" program.

For this reason, Multiview should be located in your SYS:Utilities/ drawer, wehre it is very likely to be unless you run a very customized workbench.

Because these graphics are displayed in a separate window, the manual should be opened on the workbench screen, so that the text and images can be viewed at the same time.

If this manual does open on its own screen, just de-select the Use separate screen item from the Window-menu.