

Amberfisharts Deluxe Paint Tutorial #2 or...

DELUXE PAINT - and the quest for FOA-lity

An overview for creative retro-game fans
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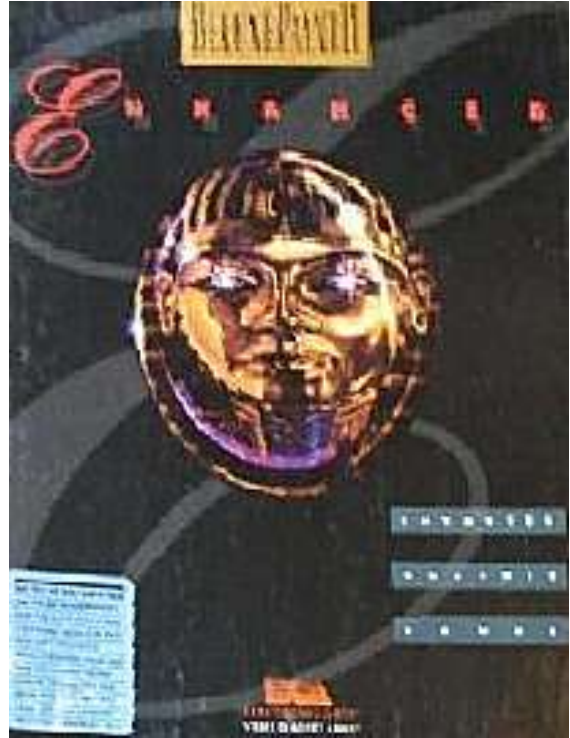
Amberfisharts Deluxe Paint Tutorial #2 or... DELUXE PAINT - and the quest for FOA-lity

1. Why Deluxe Paint?

The possibility to create gradients simply by spreading basic colours and to be able to apply different kinds of gradients to any structure in any angle, combined with all the nice features it offers and the easiness of editing, makes DeluxePaint II to one of the most powerful and most useful tools that you can find to create a retro-game like Fate of Atlantis 2 with the very same look (because of the same techniques) as its prequel. Yet, it is very rare and as stalwart pointed out in the previous tutorial you should get hands on a package whenever you have the possibility to get one.

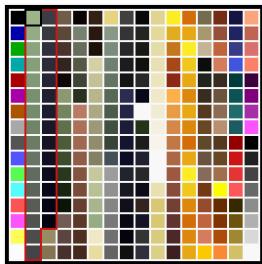
Unfortunately, just owning a copy of it is not enough to create backgrounds, you also have to get a knowledge of how to use it – and to use it like those who created Fate of Atlantis. The only way to get this knowledge is to practice. To help you going into the right direction with your attempts, I will try to share my experiences with you.

Therefore I may repeat things that have already been mentioned by stalwart. Please skip what you already know patiently ;)



img.1: the DeluxePaint-package

2. Gradients



img.2: red frame: a FOA-typical gradient; bright green to darker green/blue; 30 clrs.

2.1 What is a gradient and what is it used for?

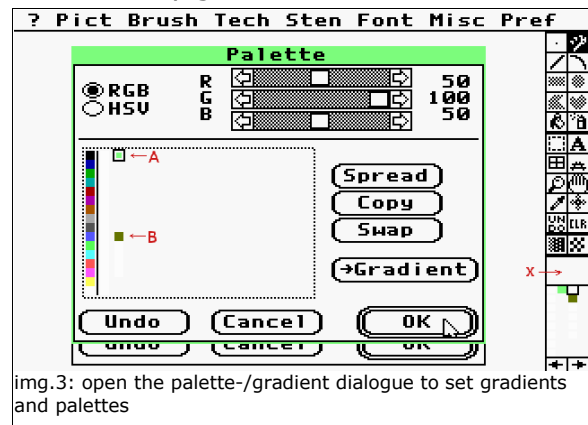
A gradient is a set of colours that start with a bright colour A and end with a darker colour B. The colours between those two are mixed colours, steps from A to B. Gradients can be used for many purposes, mainly for structuring surfaces like walls, a floor or the sky. DP2-gradients are an important point to achieve FOA-lity.

2.2 How do I create the colours that my gradient should use?

Click on the **colour-field** (x marks the spot) to open the Palette-/Gradient-dialogue (use button to switch between both).

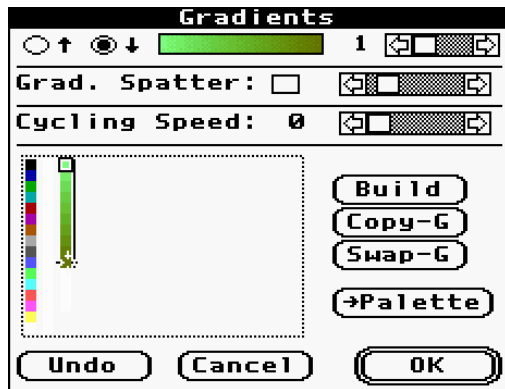
You will see the first 16 colours (EGA-palette) to the very left. Next to it you have 239 free fields to set all those beautiful colours you have on your mind by changing the RGB values.

Note: The 4 rows to the right in img.2 (the last 64 colours of the palette) stay always the same in every FOA-screen. They are used for characters, toolbar and other gui-related stuff.



img.3: open the palette-/gradient dialogue to set gradients and palettes

Set the brightest and darkest colour of the gradient you want to build with as much space in between as you want mixed colours to be created. Once you have done so, chose colour A by left-clicking on it, then click on **Spread** and on colour B.



img.4: The „Gradients“ dialogue creates gradients from existing colours

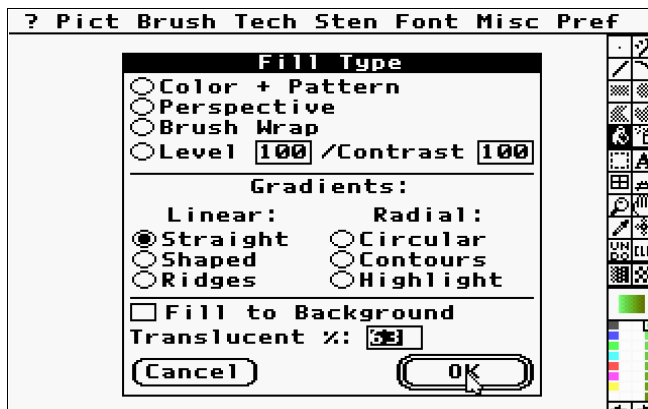
Open the gradient-dialogue (button →**Gradient**) and chose the first colour of your gradient (A). Click on **Build**. You will see a four-arrow-cursor which you use to point on the last colour of the gradient (B).

An example of the result will be shown on top of the window, next to the both arrows and the counter which is set on „1“ in img.4.

The number indicates, that you saved your gradient as the first of 16 possible gradients that the programm will remember.

Use the arrows to let the program inverse your gradients when you use them.

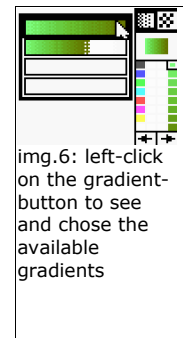
2.3 How do I apply the gradient to a surface?



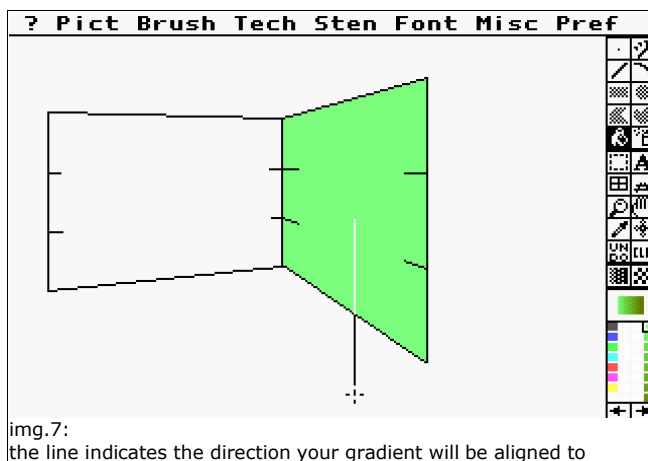
img.5: Many options of which we just need a few.

Right-click on the **fill-tool** to open the „Fill Type“-dialogue. There you chose the *Straight* type of gradient and click ok. Keep the rest as it is.

Now you still need to set the correct colour (a bunch of colours, in fact) for the fill tool by left-clicking+holding the **gradient-button** and choosing the gradient of your choice (the upper one in our example).



img.6: left-click on the gradient-button to see and chose the available gradients



img.7: the line indicates the direction your gradient will be aligned to

Now you are finally ready to fill a surface – you click left on the desired place and... still have to set something for the gradient: With your mouse cursor you tell the gradient how it should be aligned, i.e. where the first colour starts (and the darkest colour ends).

If there is no direct light in closed rooms things appear darker the farer away they are from the point of view. That is valid for the depth of an image, as well as for the height.

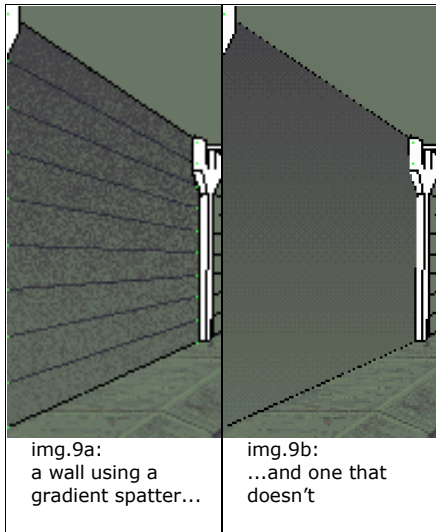
You will have to get a feeling for lighting and perspective or copy it from good reference material (sketches) to set gradients right.

Another important gradient style is the *Circular* one. Here the position of your mouse cursor will determine the center of the gradient.



img.8: circular-shaped gradients; the 3rd one is made by reversing the gradient (see 2.2)

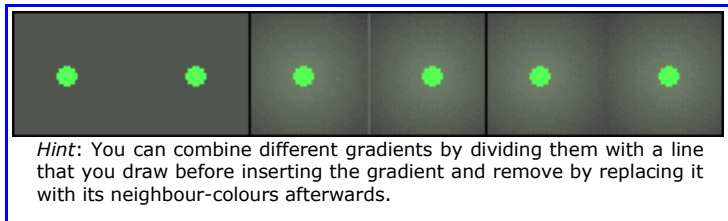
2.4 What is the gradient spatter for?



Gradients that don't make use of a gradient spatter make the surface look very even (see img.9b) and give them an artificial impression.

The spatter mixes up the colours of the gradient randomly and saves you the time to make the gradient look irregular (for example by using the **smear-function**, see 4.1.2).

Make your experiences with the spatter-value and how it is used. For maximum FOA-ishness, chose something in the middle. The difference from bright to dark should be noticeable enough.



3. Drawing tools

Here I will explain the most important (non self-explanatory) drawing tools. I have just noticed that I should have put this chapter before the one about drawing gradients as it is more about the very basics of drawing. Hm... too late ^^

3.1 The drawing style

Click and hold the left mouse button on the brush icon to chose one of the three styles.



the one-dot style – one click, one pixel

the dotted-line style – click+hold-> a few pixels. Move your mouse fast to create a „random“ effect; comes to more use with other **Drawing techniques** (see 4.)

the normal style – click+hold while moving the cursor will draw normal lines with a fluent flow

3.2 The brush shape



Press and hold the left mouse button on the upper left icon that shows your brush to chose a different size or shape.

Customize your own brush size by right-clicking on the icon and left-click-and-drag somewhere in the picture. Also the [+] and [-] key will change the brush size.

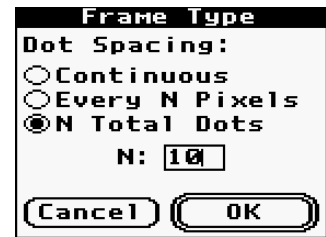
3.3 The straight-line-tool



The normal line tool is frequently used to draw the outlines of nearly most objects and elements of the picture. Especially when combined with the **Anti-Alias-function** (see 4.2.1) it is really useful.

Rightclicking on the icon reveals the *Frame-Type-dialogue* that gives you the option to draw dotted/interrupted lines.

A special use that I found out for myself is the creation of lines for walls. Have a look at image 9a. To the left and right you can see 10 green dots. I found it faster to draw brick lines by connecting the green dots than to align them to a vanishing point. Especially for curved walls like those in the 2nd inner circle of the Colossos this technique is a lot easier.



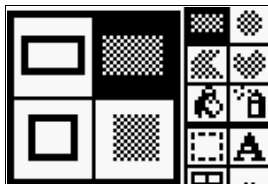
3.4 The curved-line-tool



Use this to draw regular curves. Also useful for any kind of strings, especially for all those clothes-lines you can see in FOA.

Right-click to get the *Frame-Type-dialogue*.

3.5 Geometrical figures



Pressing and holding the left mouse button on one of the four icons for geometrical figures will give you the option to chose between a frame or a filled area.

If you chose a filled area and right-click on it, the *Fill-Type-dialogue* will pop-up, if you decided for a frame, it is the *Frame-Type-dialogue* you will see.

3.6 zoom-function



Inevitable for precise drawing. Left-click+hold to get the different zoom modes.

3.7 The copy-to-brush-tool



Left-click+Hold to chose between a rectangular and a self made figure that you use to copy parts of your image to your brush. Once you have „cut out“ a part you will use this part of image as brush and paste it wherever you click. Clicking on the brush-shape-icon (3.2) resets your brush.

Areas that are of your secondary colour will become transparent! (Chose a secondary colour by rightclicking on the palette.)

Make your brush and load a new picture or change to your **spare page** (see FAQ) to copy parts of one picture into another. In case the brush has a different palette than the picture you are about to load, you have the option to adopt the palette of the brush by clicking *Misc* → *Palette* → *From Brush*.

You can flip your brush or rotate or stretch or bend or do all with it by becoming familiar with the *Brush-menue*. This is useful when you have often used objects (like those typical spiral signs in FOA) that have to made fit to the perspective.



img.10: The copy+paste-technique is very frequently used in FOA.

3.8 Undo



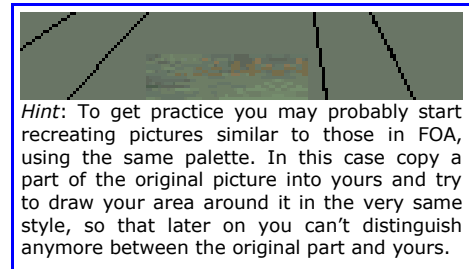
Save your picture *often* then you don't have to rely on this function. It can only undo the last click you have made.

If you are trying to find a good alignment for a gradient, place it and then UNDO. This works quite fine if you don't do anything else like zooming in or out. So if you are drawing in full screen mode and press F10 to show the menu again and undo – you may become disappointed or even angry because for UNDO „pressing F10“ is also an action that it tries to undo...

4. Drawing techniques

4.1 The Tech-Menu ...or... „The four big S“

Important for our purposes are the techniques **Shade**, **Smear**, **Smooth** and **Single Colour**, of course.



4.1.1 Shade

Click on Shade, choose a gradient as primary colour and draw with a drawing tool of your choice (I recommend to use the *line-tool* (see 3.3)). Sounds easy, doesn't it? But to be able to use Shade correctly, it is necessary to understand how it works.



Here is a reduced scheme of a typical palette. Let's say the gradient for a wall we want to draw goes from 1 to 8.

We already have filled the area with a spattered gradient and want to add darker spots now by using our Brush combined with the shade-function. What Shade now does is this: It always checks for the current colour under the mouse cursor. If that colour is part of the gradient we are using, Deluxe Paint will automatically replace this colour by the next one of your gradient (e.g. replace colour 5 by colour 6). This has the consequence, that *you can only shade areas, that are of the same gradient*. If you have already spread colours of another gradient (e.g. colours 9-12) on the area, you will have to shade those separately by using that second gradient.

What you also could do in this case is creating a new gradient that goes from colour 1 to 12. This way Deluxe Paint will recognize every colour and turn it to the next colour – which is normally a darker one. And here comes the critical point: Colour 8 will be replaced by color 9, which is apparently much brighter and belongs to another gradient-colour-set.

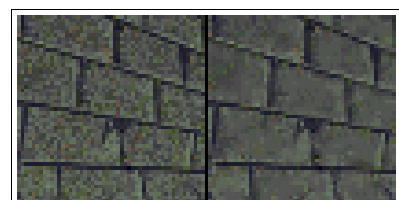
So Shading is better done before *colorizing* (4.2.2). At least where it's possible. (hotkey: F5)

4.1.2 Smear

As the name says. Mixes up pixels with their neighbours. Best combined with dotted-line-technique. (hotkey: F4)

4.1.3 Smooth

Connects similar pixels and combines them to one color. Nice to disguise gradients here and there. It makes use of colours of the whole palette, so remember doing shading before. (hotkey: F7)



img.11:
a roughly pixelated...and a smoothed wall

4.2 Techniques in the Misc-Menu ...or... „art“

4.2.1 Anti-Alias

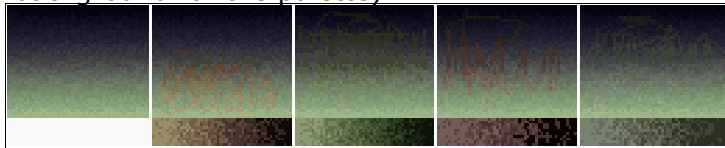
Combine this function with the line drawing tool and a single primary color. It creates smoothed lines by adding colours of the whole palette. This is the way how you should do the bricks/seams of walls (pick a darker colour for darker parts of the gradients). (shortcut: alt+a)

4.2.1 Colorize

You may agree that a wall that consists of only one gradient might look more boring than one that has also some different colors on it. The walls in FOA's Colossos make use of

other gradients. In the picture below I have colorized the basic gradient with other gradients (see Img.2 or FOA's airlock-background for the palette).

It is bad as I have done it there for demonstration purposes. However, you should use the dotted-line-technique to spread those additional colours randomly as well as depending on environmental circumstances.



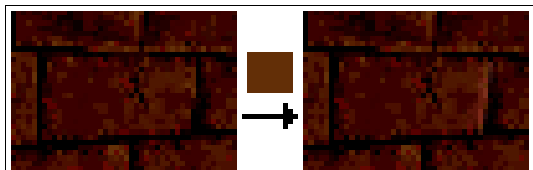
img.12:
The 2nd picture (brown) makes a more dirty impression, while the 3rd one uses the gradient that indicates slime and very humid, mossy areas.

In case you want to create your own gradients for colourizing, I recommend to copy colour A and B of the basic gradient-colour-set to new indexes and shift the RGB-values just very slightly into the direction you are thinking of. Then create a new (probably smaller) gradient by using the *Spread*-function (see 2.2). (shortcut: alt+r)

4.2.3 Translucency

Creates a softer overlay-effect than the above and can be used in unison with Colorizing.

You can also use it to brighten up edges of objects by picking a bright colour of the main gradient-set or colour of the object you are working on and use the *line-tool* and the *Anti-Alias*-function to mix your bright primary colour with the existing colour. (shortcut: alt+t)



img.13:
If it isn't completely lost in this picture-format you can notice that the right edge of the brick has become brighter because of (red) light coming from the right.

5. Color-Cycling

In the past, Color-Cycling was an easy method to bring movement into a scene without really animating anything. Nevertheless, doing fluid looking „animations“ needs some practice.

The first thing to do is to get the right colours. Right, that means that the gradient-set doesn't end with a dark colour, but with nearly the same colour as it begins.



Let's say we have a gradient-set of 1 to n colours. Every x milliseconds Colour-Cycling takes colour n and sets it as colour 1. Every other colour is increased by 1. This way it looks like as if the colours were moving.

Try to have several colours of the same type in your gradient for example by setting 3 bright and 3 dark colours which you connect by the *spread*-function, because only one bright-to-dark gradient looks boring.

The speed of movement can also be controlled by how you design the „animated“ area. When the area is to move slow, draw for every colour only one pixel, followed by the next colour. The more pixels you draw with one colour, the faster the movement will appear.

Another possibility to speed up movement is to use only every 2nd or 3rd colour of the gradient-colour-set.



Here you can see the colours that are used for FOA-typical spiral signs.

Remember the statue-room in FOA's Colossos where you had to place the ladder on the gap in the floor? The slime you can see dripping down there is also made by color-cycling.

6. FAQs

„Can I load more images than one at the same time?“

- Yes. Two (hey, that's better than nothing). Press „j“ to switch between both.

„Which resolution do I choose on start-up?“

- MCGA – press „f“ (320x200) or „g“ (640x400). This resolution is crucial, because of the aspect ratio. For example a circle that has been drawn in modern resolutions looks stretched in 320*200.

„Where do I get the original FOA-Palettes?“

- Use a screen grabbing program that also saves the video memory (e.g. Screen Thief).

„Is there another way to brighten up parts of my image?“

- Yes and no. If you have read 4.1.1 carefully, you may guess that a reversed gradient-colour-set placed directly after a gradient-colour-set with the colours you want to change can give some interesting results if both are united to one gradient. This method can also be used to colorize things in a very complicated way. And because everything can be done a lot easier by the use of other features, I will not explain this further here.

„Help, my gradients look messed up!“

- Uncheck the „Video Patterns“ and „Halftones“ options in the Pref-menue. [Thanks to BlackStar]

„Can you add my question to the FAQ?“

- Sure. If it is Deluxe Paint related ... ;P [Mailto:neworest@amberfisharts.com](mailto:neworest@amberfisharts.com)