

OLD SCHOOL PIXEL FX

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ABOUT

Old School Pixel FX is the ultimate tool to apply any old school or retro pixel fx on your project. Using your carefully picked color maps can now be applied to your project. Suitable for **Unity 4 Pro** and **Unity 5 (Personal and Pro)** Windows/Linux/Mac/Web builds. Also supported (and tested) for **Unity 4 Pro Android** and **Unity 5 Android (Personal and Pro)**.

Suspected to work on **other mobile devices** (however untested) as well if you have Image Effects in your license.

FEATURES

- Choose any resolution for your game that is lower than the resolution of the viewport.
- Apply ANY image to be used as colormap. Old School Pixel FX will automatically creates a new color map for you.
- Maximum of 512 colors.
- Attached 23 colormaps from: <https://code.google.com/p/grafx2/wiki/PaletteRepository>
- Grayscale suppressor slider for tweaking the color vs grayscale distribution.
- Dithering support with own kernels (see https://en.wikipedia.org/wiki/Ordered_dithering)
 - Kernels must be a multitude of 2 in dimension (e.g. 2x2, 4x4, 4x2, 8x8, 2x16, etc).

SETUP

Since many assets include the standard Unity (Pro) packages over and over I've decided to let them out as much as possible to prevent conflicts and overwrites. So in order to make this work you **MUST** include these yourself as shown in the setup below.

MINIMAL:

- Make sure you have this package includes as well as the "Image Effects" (Unity 4 Pro) or "Effects" (Unity 5 Personal or Pro) that comes as a standard asset.
- Attach "OldSchoolPixelFX.js" to your camera you want to apply the effect to ("OldSchoolPixelFXMobile.js" if you want to use this on a mobile device).
- Set the checkboxes for the use of the downscale of resolution and the use of the colormap.
- Choose your preferred width & height (320x200 and below recommended).
- (Optional) Change the Grayscale Suppression slider to suppress excess gray.
- (Optional) Choose a colormap and hit "Convert and Apply" or "Redo Convert".
- Enjoy your Old School / Retro look.

DEMO SCENES:

- Make sure you have this package includes as well as the “Image Effects” (Unity 4 Pro) or “Effects” (Unity 5 Personal or Pro) that comes as a standard asset.
- Open one of the four demo’s.
 - Normal
 - Normal + Dithering
 - Mobile
 - Mobile + Dithering
- Tweak what you want.

CONSIDERATIONS

- Maximum of 512 colors possible
- Using color map images with more than 512 colors will result in ignoring a part of the palette.
- Certain color maps have a lot of gray in them that can result in too much greyness in the scene. In order to suppress this effect you can slide the “Grayscale Suppression” slider to make the colormap generator to use more non-gray colors.
- Try to use images as palettes that are 256 pixels or lower in the width and height as well as 256x64 / 128x128 (16384) or less pixels in total. Only 512 colors will be picked based on nearest match.
- Try to choose either the screen resolution or pixel screen resolution so that the screen resolution is a multitude of the pixel screen resolution. E.g. for a pixel screen resolution of 320x200 it is recommended to use screen resolution of 640x400, 960x600, 1280x800, 1600x1000, 1920x1200, etc. **This is not mandatory but does result in the best graphical outcome!**

DITHERING MOBILE VS WINDOWS/LINUX/MAC/WEB

The mobile dithering shader has a very small difference in the red color range compared to the other builds. This results in a minute offset of the effect for a very select number of pixels within a certain range (depending on your colormap). This effect is not noticeable ingame and colors are still only picked from the colormap provided.

NOTE 1

For maximum performance there is a dithering and non-dithering version of both the normal and mobile shader. These are separated on purpose.

NOTE 2

The final step of this image effect (LUT application) is a modified version of the built in “Color Correction (3D Lookup Texture)” of Unity Pro image effects. In older versions of Old School Pixel FX the shader component was just a clone of the one default in the Image Fx. There have been some modifications to give a perfect representation of the actual color palette.

The rights to the original “Color Correction (3D Lookup Texture)” shader belong to Unity.

QUESTIONS

Ask your questions in this forum thread: <http://forum.unity3d.com/threads/old-school-pixel-fx.274610/>

You can also contact me via PM or the profile page:
<http://forum.unity3d.com/members/gobla.108812/>.

(Do note that this does not result in a quicker answer of your question.)