

RetroScreen v1.0.3 Manual

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RetroScreen is a fast and lightweight solution that allows you to achieve a low-resolution pixelated effect. Just drag and drop the script to the main camera and it will work! You can also specify the rate of camera render to emulate low FPS without changing the actual frame rate of the game.

Components

RetroScreen

Main component. Place it on the main camera.

Quad – assign built-in quad mesh here.

Target height – the target height of the resolution, the width will be calculated according to the current screen resolution ratio.

Override FPS – when true camera will render with specified FPS.

FPS – texture render frame rate.

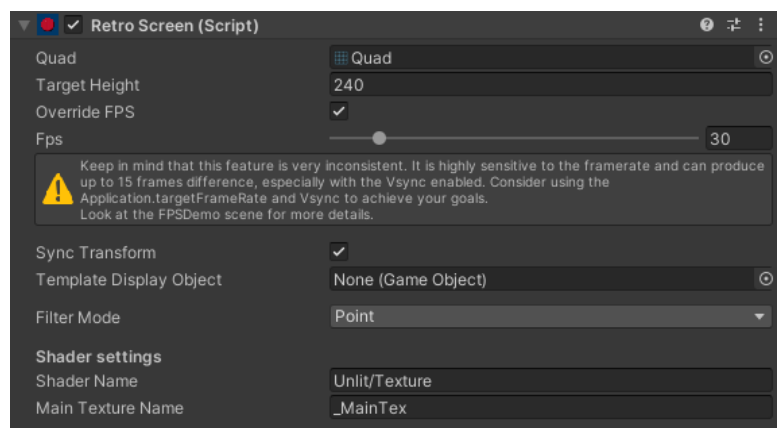
Sync Transform – sync transforms of the DisplayCamera with the RenderCamera.

Template Display Object – Template object for the DisplayCamera so you could attach components (like screen filters). If you link the prefab from the assets RetroScreen will instantiate it on the initialization.

Filter Mode – render texture filtering mode. Use Point for that retro look.

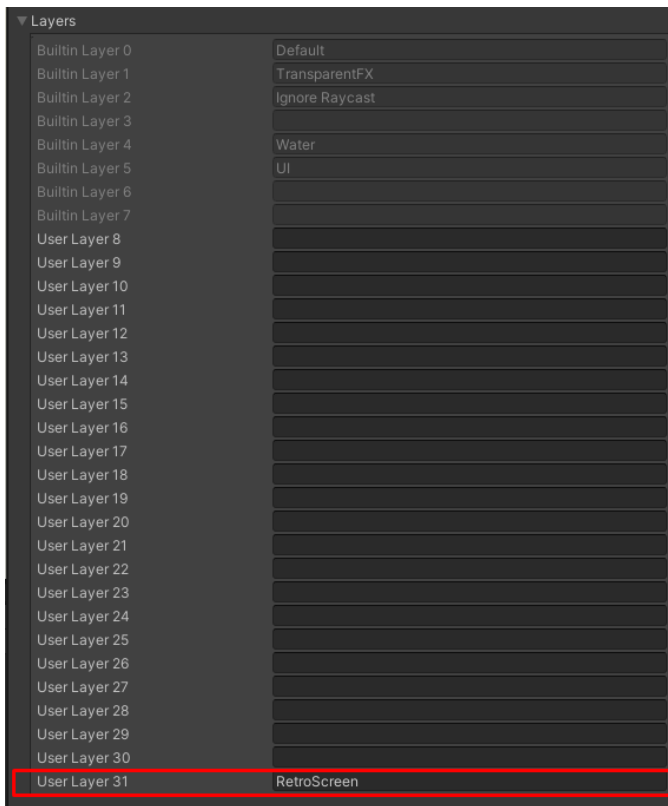
Shader Name – The shader will be assigned to the quad with render texture. Do not recommend touching these two next fields.

Main Texture Name – name of the main texture of the shader.



!WARNING!

For this asset to work you need to add the new layer “RetroScreen” to your project.

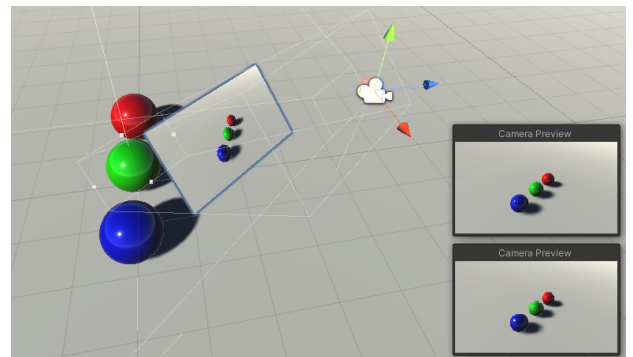


The order of the layer doesn't matter

If you don't add this layer, the script will throw an error at the start and RetroScreen won't work.

How does it work?

When you press play, the script creates a new camera that will render only a specific layer. Then it also creates a quad mesh in front of this camera and renders the render texture from the main camera to it. So you got two cameras, the main camera or “Render Camera”, which actually is disabled and only renders to the texture, and the second camera “Display Camera” that renders quad with texture. It may be difficult at first glance, but it's actually easier than it sounds.



Pink screen in the build

If you see the pink screen after building the project, you need to add “Unlit/Texture” in the “Always included shaders” array in the “Graphics Settings”. If you use another shader in the “Shader Name” parameter of the script then you need to add that shader to the array.

