



## WHAT IS "SNAPSHOT SHADERS PRO"?

*Snapshot Shaders Pro* is a collection of 34 post-processing shader effects designed for Unity's **High Definition Render Pipeline**, **Universal Render Pipeline** and **Built-in Render Pipeline (via Post Processing Stack v2)**.

## SETUP

**If you are met with magenta-coloured objects in the demo scene, please read:**

The pack contains a folder with all the assets for the built-in render pipeline already unpacked. If you are not using the built-in pipeline, **delete this folder**.

An auto-installer tool is included with this pack which will assist with installing the package file for your chosen render pipeline. The window should open upon installing the pack, but you can open this installer at any time via *Tools -> Snapshot Shaders Pro -> Open Installer Window*.

Each package contains documentation specific to that render pipeline.

## SUPPORT

Sometimes things break! If you've encountered an error and this README doesn't have the answers (or if you have feature requests), then pop me an email at [danielilett+snapshot@gmail.com](mailto:danielilett+snapshot@gmail.com) and I'll try to sort you out. Please **clearly** describe the problem, including the **Unity version you are using**, the **package version**, the **render pipeline**, and **attach images** where necessary to describe your problem. That'll help me fix your issue as quickly as possible!

## EFFECTS INCLUDED

The following effects are included in the collection:

### VERSION 1.6 EFFECTS

#### SYNTHWAVE

Overlays lines onto the scene in world space in the X, Y, and Z axes (or a subset of those axes).

#### NOISE GRAIN

Modifies the color of the scene slightly to simulate the physical imperfections you would find on analogue film formats.

#### WORLD SCAN

Creates a scanline that emanates from a point in space and travels across the scene. The scanline is overlaid onto the original scene contents.

#### TEXT ADVENTURE

Replaces the screen contents with text elements that simulate an ASCII text display. Different characters stand in for pixels with different luminance.

### VERSION 1.5 EFFECTS

#### HALFTONE

Creates fake “gradients” by using a series of differently-sized dots. It's used in some kinds of printing technology, but you might recognise it from comics in particular.

#### BARREL DISTORTION

Imitates the effect seen when wrapping a 2D image across a barrel with a bulge in the centre. The corners of the screen are pulled in towards the centre more than the edges.

#### VORTEX

Warps the image around a centre point in a swirling pattern.

#### DITHER 3D

Takes the luminance of each pixel and compares it to a texture containing thresholds to color pixels light or dark, resulting in a one-bit effect. The 3D version of this effect applies the threshold texture in world space using triplanar mapping.

#### COLORIZE

Tints the screen a certain color.

## VERSION 1.4 EFFECTS

### CUTOUT

Overlays a texture onto the camera with an alpha cutout.

### GLITCH

Offsets rows of pixels slightly to give the appearance of a technical glitch. Best used in combination with animations to control the offset strength.

### INVERT

Inverts the RGB colour values of each pixel. At full strength, white becomes black and vice versa.

### LIGHT STREAKS

Adds horizontal light streaks emitted by strong light sources in the scene.

### RADIAL BLUR

A Gaussian Blur which gets stronger towards the edges of the image.

### SHARPEN

Makes the image less blurry.

## VERSION 1.2 EFFECTS

### DITHER

Produces a 1-bit shading effects (the scene uses only two colours with pixels arranged in a pattern to 'fake' smooth shading).

### DRAWING

Shades in the scene with a brush stroke pattern. Darker parts of the scene have a more noticeable stroke effect.

### KALEIDOSCOPE

Reflects part of the scene radially along several mirror lines crossing through the centre of the image.

### NEON (FANCY)

An improved neon effect where the edge detection parameters can be altered to use image colours, depth or normals (or a combination).

## OUTLINE (FANCY)

An improved edge detection algorithm which can be altered to use image colours, depth or normals (or a combination).

## SCANLINES

Renders horizontal scanlines across the screen based on the input texture.

## VERSION 1.0 EFFECTS

### BLUR

Blurs each pixel based on the colours of nearby pixels.

### FILM BARS

Fits the viewport to a desired aspect ratio and displays black bars above and below the viewport. Great for cutscenes.

### GAME BOY

Quantises the image to four luminance values and tints the screen based on those values. Default values reflect those used by the original Game Boy.

### GREYSCALE

Turns the screen greyscale based on pixel luminance.

### MOSAIC

Pixelates the screen and overlays a mosaic tile texture onto each blocky pixel.

### NEON (SOBEL)

Runs a Sobel edge-detection filter over the image. Then, it saturates and lightens the original pixel colour up to a threshold and multiplies by the edge-detect image.

### OIL PAINTING

Runs a Kuwahara filter over the image, removing texture detail but preserving edge details.

### OUTLINE (SOBEL)

Runs a Sobel edge-detect kernel over the image.

### PIXELATE

Downsamples the image.

## SEPIA TONE

Turns the screen sepia-toned based on pixel luminance. Sepia-tone looks like an old yellowed photograph.

## SILHOUETTE

Colours each scene element based on its distance from the camera.

## SNES

Quantises each colour channel to a set number of levels. 6 levels gives the approximate colour palette of the SNES, and 4 gives the approximate colour palette of the NES.

## UNDERWATER

Creates waves that distort the image and adds a coloured water fog.