



Deferred Night Vision

A fast Night Vision effect that uses the diffuse G-buffer in Deferred Rendering to reconstruct an accurate image

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Quick start guide/overview:

- The default values for Deferred Night Vision will work well in a low/no-light environment. You may need to tweak these values if your scene has more light in it.
- **"NV Color"** is the main color of the night vision effect (bright green by default)
- **"Target Bleach Color"** is the color that bright areas will "bleach" towards (white by default)
- **"Base Lighting Contribution"** determines how much base detail the night vision effect should pick up from the scene, independent of lighting.
- **"Light Sensitivity Multiplier"** - The higher this value, the more bright areas will become "bleached"
- **"Use Vignetting"** - Should the NV shader apply a vignette effect to the edges of the camera?
- **NOTE:** Relies on deferred rendering - will not work on forward/light pre-pass.

Using noise with Deferred NV:

Deferred NV does not apply any noise by itself, but works perfectly with the "Noise And Grain" effect supplied by Unity. Note that when using the "Noise And Grain" effect, you should tick the "Monochrome" checkbox, as any color is converted into a shade of your "NV Color" anyway.

Performance:

Below is a screenshot of GPU profiler running in an (almost) 1920x1080 scene. Supports shader model 3 and above, and doesn't use any particularly expensive operations, so should work on newer mobile devices.

▼ Camera.ImageEffects	9.9%	76	4.645
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▶ DepthOfField	7.0%	28	3.254
▶ Bloom	1.6%	42	0.748
▶ Antialiasing	0.6%	2	0.317
▶ DeferredNightVisionEffect	0.3%	2	0.185
▶ NoiseAndGrain	0.3%	2	0.141