

Denoising



Rollover to view denoised images

There are three denoising options available for rendering with Arnold:

Denoisers available in Arnold

| Denoiser | AI | Speed | Device | Animation* | AOVs |
|---------------------------------|----|---------|--------|------------|------|
| NVIDIA OptiX Denoiser | Y | Fastest | GPU | N | Y |
| Intel Open Image Denoise (OIDN) | Y | Fast | CPU | N | N |
| Arnold Denoise (Noise) | N | Slow | CPU | Y | Y |

OptiX™ Denoiser imager

This imager is available as a post-processing effect. The imager also exposes additional controls for clamping and blending the result. It is based on Nvidia AI technology and is integrated into Arnold for use with IPR and look dev. The *OptiX™* denoiser is meant to be used during IPR (so that you get a very quickly denoised image as you're moving the camera and making other adjustments).

Oidn Denoiser imager

The *OIDN* denoiser (based on Intel's [Open Image Denoise](#) technology) is available as a post-processing effect. It is integrated into Arnold for use with IPR as an *imager* (so that you get a very quickly denoised image as you're moving the camera and making other adjustments).

Arnold Denoiser (Noise)

The *Arnold Denoiser (Noise)* can also be run from a dedicated UI, exposed in the [Denoiser tab](#) of the Render Settings window, or as an *imager*. To use the Arnold denoiser, you will need to render images out first via the Arnold EXR driver with variance AOVs enabled. It is also available as a stand-alone program (noise.exe).

This imager is available as a post-processing effect. You can automatically denoise images every time you render a scene, edit the denoising settings and see the resulting image directly in the render view. It favors quality over speed and is, therefore, more suitable for high-quality final frame denoising and animation sequences.



A denoising tutorial can be found [here](#).



imager_denoiser_noice does not support temporal denoising (required for denoising an animation).