

Denoising

There are two denoising options available for rendering with Arnold:

The **OptiX™ Denoiser** (based on Nvidia AI technology), is integrated into Arnold for use with **IPR** and **look dev**. It can be applied to any AOV. 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). For this reason, it is not suitable for final frame rendering or animations as it can cause flickering between frames (see below).

The **Arnold Denoiser** can be run from a dedicated UI, exposed in the Denoiser. It favors quality over speed and is, therefore, more suitable for **high-quality final frame** denoising and **animation sequences**. 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).

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

You should only use the *OptiX* denoiser for test rendering with IPR. The animation below right shows what happens when you use *OptiX* with animation (flickering occurs). The *Arnold Denoiser* should be used instead for final frame renders.

Original render using low samples

(without denoising)

OptiX denoiser

Creates flickering in animation. Use for **IPR only**.