

Getting Started with Arnold GPU

Supported Features

Arnold GPU supports a set number of Arnold features, including arbitrary shading networks, SSS, hair, atmospheric, instancing, and procedurals. See here for a detailed list of Arnold GPU [features and known limitations](#).

System Requirements

Arnold GPU works on NVIDIA GPUs of the Ampere, Turing, Volta, Pascal, and Maxwell architectures. Multiple GPUs will improve performance, and NVLink can be used to connect multiple GPUs of the same architecture to share memory (On Windows, we recommend enabling SLI as well).

See the full list of [supported GPUs](#).

Recommended NVIDIA drivers:

- **Linux** [470.74 or higher](#)
- **Windows** [GeForce: 472.12 or higher, Quadro: 472.12 or higher](#)
- macOS is not supported

[NVIDIA Driver Downloads](#)

Selecting a Render device

You can easily switch between CPU and GPU with a single click in the [Global Settings > Device](#).

Matching Noise on CPU and GPU

Matching noise can take a little experimentation because **Arnold GPU uses Camera (AA) sampling only**. We recommend you also use *Adaptive* sampling. Here are some guidelines:

- Set the *Max. Camera (AA)* in the range of 30 to 50 (depending on the scene, you might go closer to 100). In general, the max samples should be a large value. A large max samples means that the quality is controlled by the noise falling under the threshold, instead of by clamping to the max AA.
- Set the *Adaptive Threshold* to something like 0.015 or 0.02. For a noise-free render, lower the threshold value, maybe even as far as 0.010.
- Set the *Camera (AA)* samples to around 3 or 4. One of the few reasons to go higher with AA is for motion blur. The higher the number of *Camera (AA)* samples, the less of a speedup you'll get from adaptive sampling.