Skip to content

Vector Blur Node

The Vector Blur node is a fast method for simulating Motion Blur in compositing. It uses the vector speed render pass to blur the image pixels in 2D.

Inputs

Image

Image input, to be linked to the "Combined" render pass.

Z

Z depth, to be linked to the "Depth" render pass.

Speed

Input for the "Vector" render pass. See Cycles render passes.

Properties

Samples

Quality factor.

Blur

Scaling factor for the motion vector (actually the "shutter speed" in frames).

Outputs

Image

Motion blurred image output.

Usage

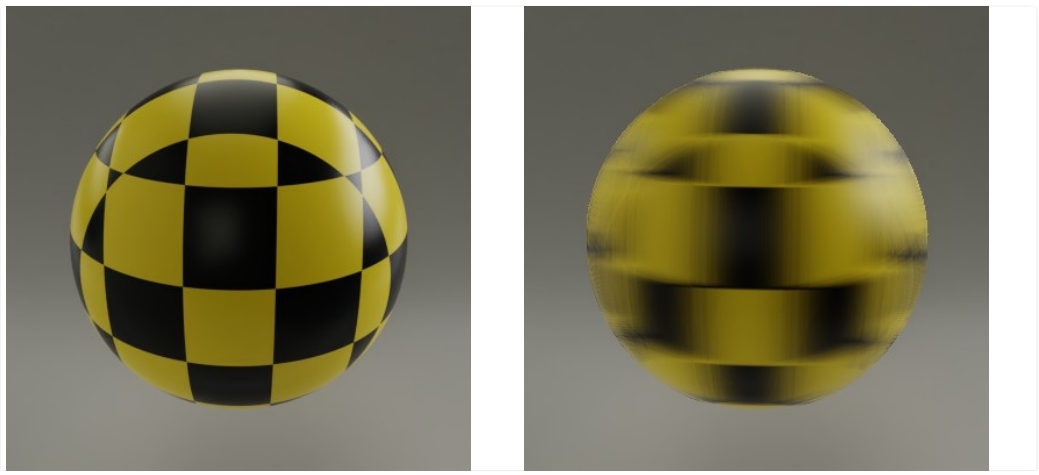
Even with a correct compositing setup with Image, Z and Speed nodes all linked to the appropriate passes, there may still be artifacts. The 2D render passes does not contain 3D information, and so the information what is behind a moving object or outside the camera view is lost.

Better results can be achieved by rendering the scene into multiple render layers, applying vector blur to each render layer, and then compositing the resu together. Typically an animated character would be rendered in a separate render layer than the background set. Especially if hair or transparency is involved this is important.

For other artifacts it can help to slightly blur the Speed pass or to set a Maximum Speed limit. This helps to smoothen out the motion, but too much blurr leads to its own problems.

Example

The *speed vector* in this example was created by animating the patterned sphere horizontally and using a frame at the mid-point of the sequence.



Render result, no post-processing.	Composite, with Samples set to 32 and Blur set to 1.0.

Previous
Directional Blur Node

Anti-Aliasing No

View Source
View Translation
Report issue on this page