# SIMPLE SPIN BLUR

AIKODEX

Simple Spin Blur is based on a multiple mesh rendering technique wherein multiple meshes are rendered through a translucent (Transparent/Fade [Render Queues 2450,3000]) mesh.
This technique preserves the depth of the model and provides a realistic blur motion unlike Blurred texture quad meshes.

SimpleSpinBlur.cs is the main script that is attached to the main rotating object with a mesh filter, single transparent material (mesh with multiple materials requires Sub Material Index pointing to the transparent material. Refer: Mesh renderer component to get this index value). The script repeats the mesh with the specific material multiple times (Samples) between the quaternion indices in the transform queue.
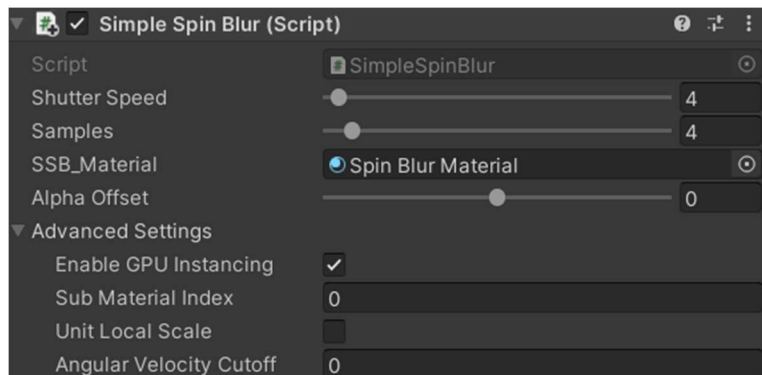
- Shutter Speed: The number of frames delayed for the samples to cover. A larger value will provide a stronger motion blur. Unlike linear motion blur, motion blur in an arc if increased could provide diminishing returns. As the delayed frames complete 2π radians the motion blur will equal nil. For most practical purposes, a small delay value should be aesthetically pleasing. A very large value may drain memory.
- Samples: The number of transparent frames to be rendered between to quaternions in regular intervals. Larger values provide a better result. Can cause performance issues if this value is too high.
- SSB_Material: The material that the ghosted meshes have. Preferably a fade or a transparent shader.
- Alpha Offset: Slider to adjust the opacity of the ghosted mesh's material.
- Enable GPU instancing: An optimization feature which allows for materials to be instanced by the GPU. Use GPU Instancing to draw (or render) multiple copies of the same Mesh at once, using a small number of draw calls.
- Sub Material Index: By default set to 0 will target the first material in the mesh renderer. If the mesh has multiple materials, select the index of the sub material that has the transparent material that should receive the effect.
- Unit Local Scale: An optimization feature which renders the effect marginally faster if the mesh has a Global (not local) scale of 1,1,1.
- Angular Velocity Cutoff: An optimization feature which cuts off all SSB effects if the angular motion is below this cutoff or threshold value.

For convenience, all the aforementioned points are included in the Tooltips.
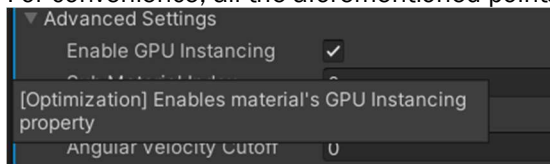
If you have any questions, suggestions, bugs, features that you would like us to include please reach out to us at info@aikodex.com