The Complete Smooth Shake (3D)

Documentation

Made by mardt (also known as daburo)

Thx for purchasing Smooth Shake 3D, this document lists all the functions included.

With Smooth Shake 3D you can make any camera or object shake smoothly. Intensely, very slowly, make something look drunk or whatever you want! With slowly fading out shaking or fading in or both at the same time!

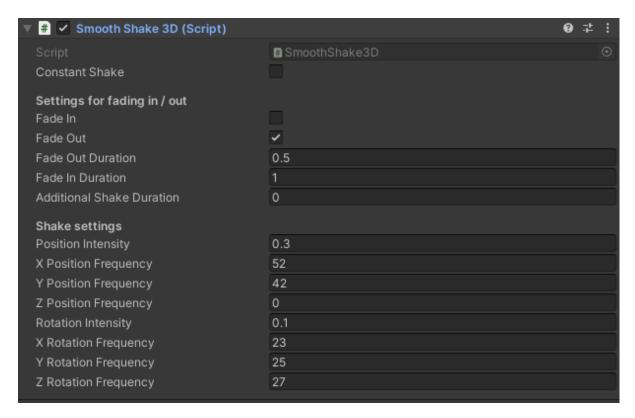
(Smooth Shake 2D is also available in the Unity asset store)

For a quick start guide you can also watch this video I made explaining the tool: https://www.youtube.com/watch?v=1KSNafN_3Ws

How to start

Simply all you need to do is drag the SmoothShake3D script onto any object. If you want a camera shake drag it onto your camera, or a parent object holding your camera. If you want an object to move or shake drag it onto that object.

The script will show the following settings.



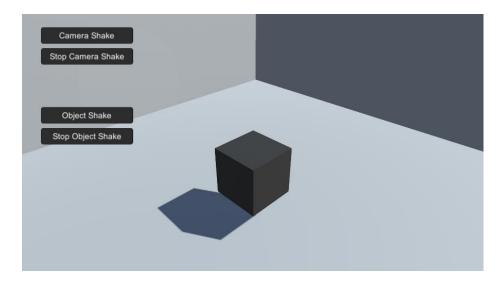
Settings for fading in / out

Constant Shake	Enable to continue the shake until specifically asked
	to stop. Disable to use automatic fade out's.
Fade in	Enable to use fade in. Also works with constant
	shake.
Fade out	Enable to use fade out. Does not work with constant
	shake, but it's possible to both automatically fade in
	& fade out. (Starts after fade in is over and & or the
	additional shake duration finishes)
Fade out duration	The amount of time it takes for the shake to fade
	out.
Additional Shake duration	The amount of time you want the shake to go on
	before the fade out starts or the shake stops.

Shake settings

Position Intensity	Intensity of the position X & Y shake.
X Position Frequency	The speed it shakes on the X axis.
Y Position Frequency	The speed it shakes on the Y axis.
Z Position Frequency	The speed it shakes on the Z axis.
	Tip: The X, Y & Z frequency should slightly vary so
	you get a more organic looking shake.
Rotation Intensity	Intensity of the rotation shake.
X Rotation Frequency	The rotation speed of the X axis.
Y Rotation Frequency	The rotation speed of the Y axis.
Z Rotation Frequency	The rotation speed of the Z axis.
	Tip: The X, Y & Z frequency should slightly vary so
	you get a more organic looking shake.

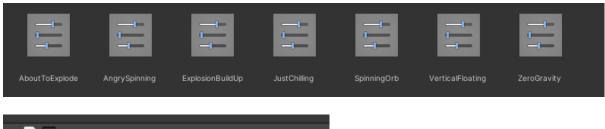
An easy way to try out different settings to see what works for you is using the demo scene. There is a convenient start camera shake & object shake button.

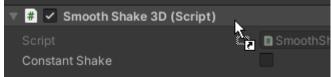


Use the "CameraShake" & "ObjectShake" objects to try out different settings.



Tip: try out all the funky presets from the preset folder to see what is possible. Just drag an drop a preset onto the script.





Usage

To trigger a shake from any other script, first make sure you are 'using SmoothShake;'

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using SmoothShake;
```

To start a shake from any script create a reference to it. Add the SmoothShake3D script to any object you want to shake.

Either use the <u>GetComponent</u> function from Unity to reference the objects you want to shake or manually create a reference to the script before the start function.

Make sure you create separate references for each individual object you want to shake like this:

```
public SmoothShake3D cameraShake;
public SmoothShake3D cubeShake;
```

Assign the mentioned objects that have the SmoothShake3D script in the inspector.



Functions

With references to each object you want to shake created, simply activate the function you need.

To activate it from another script using the reference from earlier it would (for example) look like cameraShake.StartShake(); or cubeShake.StartShake();

The available options are:

StartShake();

Start the shake with the settings applied on said object.

fadeOutCurrentShake(float duration);

After having started a shake with "Constant Shake" or "shakeUntilStopped" enabled use this function to fade it out to make it stop.

Example use: cameraShake.fadeOutCurrentShake(1f);

StopShake();

Instantly stop all shakes and resets values.

SimpleShakeFadeIn(float fadeInDuration, bool shakeUntilStopped, float customPositionIntensity, float customRotationIntensity);

Start a shake with a fade in and custom intensity.

Enter true or false for "shakeUntilStopped" to have it continue after fading in or end there.

Example use: cameraShake.SimpleShakeFadeIn(1f, true, 2f, 1f);

SimpleShakeFadeOut(float fadeOutDuration, float customPositionIntensity, float customRotationIntensity);

Start a shake with a fade out and custom intensity.

Example use: cameraShake.SimpleShakeFadeOut(1f,1f,1f);

SimpleShakeFadeInOut(float FadeInDuration, float FadeOutDuration, float additionalShakeDuration, float customPositionIntensity, float customRotationIntensity)

Start a shake with both a fade in & out with a custom intensity.

To add time in between the fade in / out increase the additional shake duration.

Example use: cameraShake.SimpleShakeFadeInOut(1f,1f,0f,1f,1f);

CustomShakeFadeIn(float FadeInDuration, float AdditionalShakeDuration, bool shakeUntilStopped, float customPositionIntensity, float customXFrequency, float customYFrequency, float customYFrequency, float customTequency, float customTequency, float customTequency, float customTequency)

Start a shake with a fade in & complete custom settings. Enter true or false for "shakeUntilStopped" to have it continue after fading in or end there.

 $\label{lem:example use:camera.CustomShakeFadeIn(1f,0f,true,1f,23f,24f,22f,1f,23f,22f,21f);} Example use: camera. CustomShakeFadeIn(1f,0f,true,1f,23f,24f,22f,1f,23f,22f,21f);}$

CustomShakeFadeOut(float FadeOutDuration, float AdditionalShakeDuration, float customPositionIntensity, float customXFrequency, float customYFrequency, float customYRotationIntensity, float customXRotationFrequency, float customYRotationFrequency, float customYRotationFrequency, float customZRotationFrequency)

Start a shake with a fade out & complete custom settings.

Example use: cameraShake.CustomShakeFadeOut(1f,0f,1f,23f,25f,24f,1f,24f,23f,22f);

CustomShakeFadeInOut(float FadeInDuration, float FadeOutDuration, float AdditionalShakeDuration, float customPositionIntensity, float customXFrequency, float customYFrequency, float customYFrequency, float customPositionIntensity, float customYRotationFrequency, float customZRotationFrequency, float customZRotationFrequency)

Start a shake with both a fade in & out and complete custom settings. To add time in between the fade in / out increase the additional shake duration.

Example use: cameraShake.CustomShakeFadeInOut(1f,1f,0f,1f,23f,24f,22f,1f,25f,24f,22f);