

Smooth Shake Free

Documentation

Made by mardt (also known as daburo)

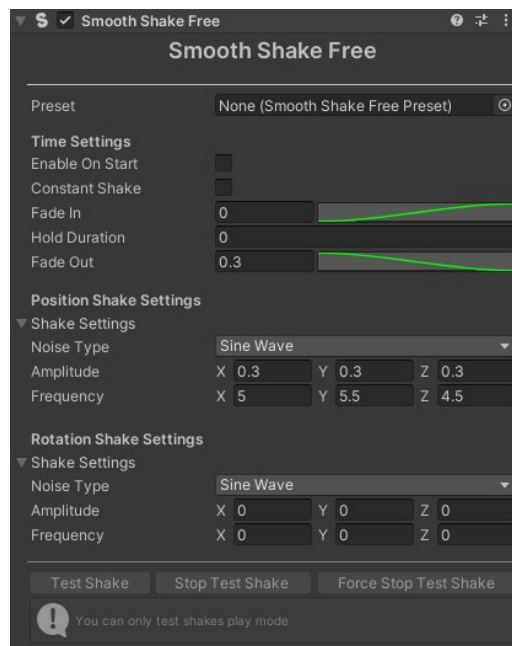
Contents

Introduction	1
How to start	2
Main Functionality Explained	4
Time Settings	4
Shake Settings	4
2D or 3D use	5
Smooth Shake Free	5
Presets	5
Smooth Shake Scripting	6

Introduction

Thanks for trying Smooth Shake Free! This document lists all the functionality included.

As the name suggests, this is the free (demo) version of Smooth Shake. This version is very simplified and allows you to easily shake position or rotation values based on sinewaves or white noise.



The following functionality is limited to the pro version:

- Additional Shake Outputs
 - o Scale shake
 - o FOV shake for cameras
 - o Rigidbody shake
 - o Custom material property shake
- Compatibility with Cinemachine
- Additional settings
- Layering of multiple shakes with 7 blending modes
- 6 additional noise types (square wave, triangle wave, sawtooth, custom curve, constant, brownian noise)
- Shake timeline track for cutscenes and sequences
- Realtime shake preview window
- Manager to store references and organize / name shakes
- Shaker randomizer tool to randomize multiple shakes
- Save and edit presets directly from component
- Over 40 presets
- + More features to be added in the future

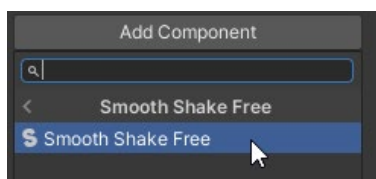


Because not everyone might need such advanced features, I decided to create this free version for those who just want a quick, simple, but effective shake.

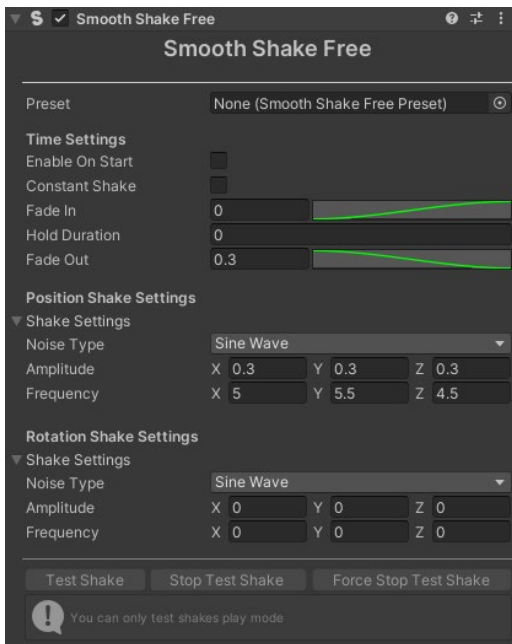
How to start

For a quick start guide you can also watch this video I made explaining the tool [\(to be added\)](#)

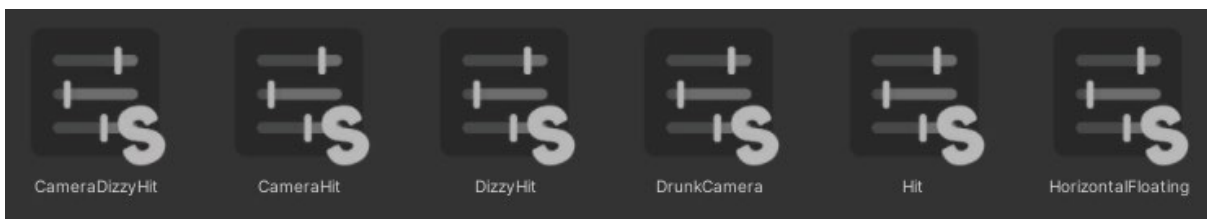
All you need to do is add the SmoothShakeFree component to the object you want to shake.



This will show the settings.



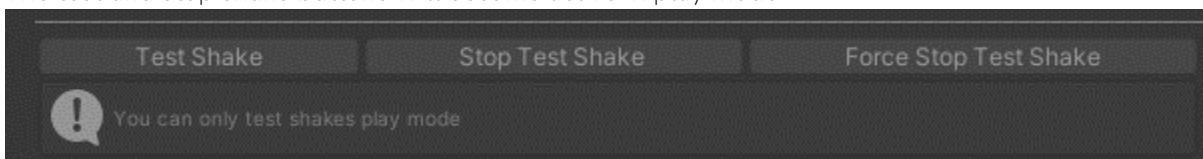
If you want to quickly try different effects try the presets! Inside the preset folders there are examples of object and camera shakes. Otherwise, try playing around with the settings and see what happens.



Drag a preset into the preset slot and you're done! (More info on creating and using presets further down.)

In Smooth Shake Free testing does not work in edit mode.

The test and stop shake buttons will become active in play mode.



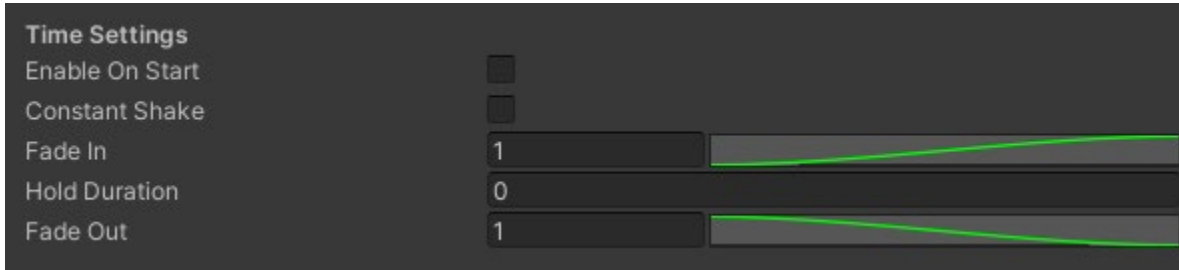
Test shake simply calls `StartShake()` to start the shake, stop test shake calls `StopShake()` to fade out a currently active shake. Force Stop Test Shake calls `ForceStop()` and forcefully stops it immediately.

Changes you make in play mode aren't automatically saved, unless you are using a preset. Preset changes are always saved locally in the preset and will be saved after exiting play mode.

Main Functionality Explained

Time Settings

Underneath the preset slot you first have the time settings.



This consists of the following:

Name in inspector	Variable name	Description
Enable On Start	<code>bool timeSettings.enableOnStart</code>	Play this shake on start.
Constant Shake	<code>bool timeSettings.constantShake</code>	Use an infinite hold duration (until stopped).
Fade In Duration	<code>float timeSettings.fadeInDuration</code>	How long the shake fade in should last.
Fade In Curve	<code>AnimationCurve timeSettings.fadeInCurve</code>	Animation curve to control fade in over time.
Hold Duration	<code>float timeSettings.holdDuration</code>	How long the shake should hold at full strength .
Fade Out Duration	<code>float timeSettings.fadeOutDuration</code>	How long the shake fade out should last.
Fade Out Curve	<code>AnimationCurve timeSettings.fadeOutCurve</code>	Animation curve to control fade out over time.

Functions:

<code>float timeSettings.GetShakeDuration()</code>	returns the full duration of the shake (ignores constant shake if used)
----------------------------------------------------	-------------------------------------------------------------------------

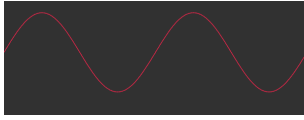
Shake Settings

Next up you have the shake settings. The settings vary per noise type, but the only possible settings in SmoothShakeFree are:

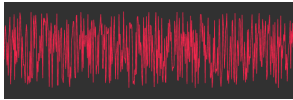
Name in inspector	Variable name	Description
Amplitude	<code>Vector3 shaker.amplitude</code>	Strength / intensity of the shake
Frequency	<code>Vector3 shaker.frequency</code>	Frequency (speed) of the shake.

The two noise types available in the free version are:

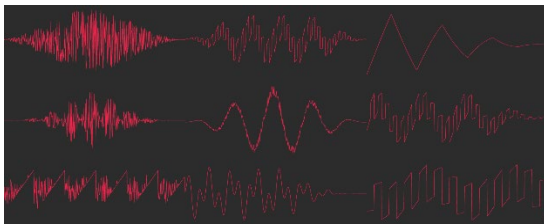
Sine Wave



White Noise

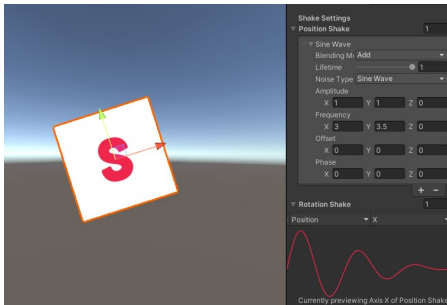


For more noise types, check out the pro version



2D or 3D use

Smooth Shake can be used in 2D and 3D (or UI) use cases. You are free to use any axis you want after all. The only thing you need to pay attention to is that in 2D use cases, you most likely only want to shake the X and Y of the position and just the Z of rotation. (You are free to break these rules with 2.5D games or experimental games of course.)

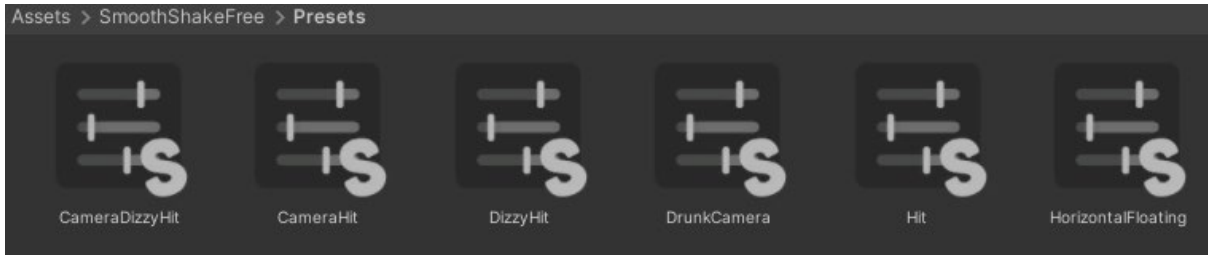


Smooth Shake Free

The Smooth Shake Free component can be used in any situation where you want to affect the transforms. This works with for example, GameObjects, regular Unity cameras or UI elements. (Tip: you can also use this in combination with something like the Animation Rigging package from Unity to shake bones.)

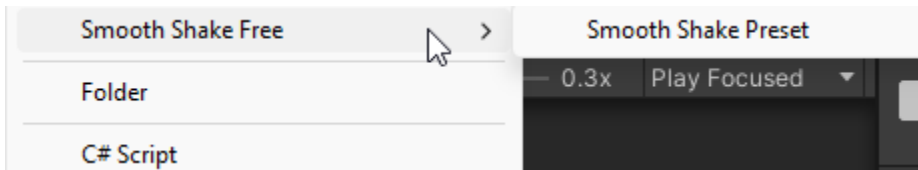
Presets

Smooth Shake Free comes with a couple of presets. They can be found in SmoothShakeFree/Presets.

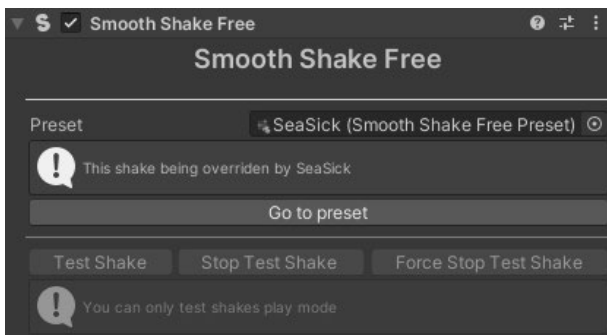


But besides using the existing presets, you can also easily make your own.

You can create a new preset from the create menu (right click in the project window).



When you drag a preset into the preset slot, the inspector changes.



You don't directly see all the settings anymore, but you can press the "Go To Preset" button to directly go to the preset and edit the settings there (or find it in your project).

Important note: working with presets means all changes are now saved locally in a preset file. This means changes you make in play mode are saved and will affect all objects using this preset. This is ideal when you have multiple objects with the same shake and you want to change settings for all of them at the same time and make changes while testing in play mode, but you should be aware of this and don't unintentionally change settings of a preset.

Smooth Shake Scripting

From any script, make sure you are using `SmoothShakeFree`; to start;

Here are all the available functions:

Function	Description
<code>StartShake()</code> or <code>StartShake(preset)</code>	Start a shake. (You can also start it with a custom preset)
<code>StopShake()</code>	Stops fade in or hold duration and directly goes to fade out

<code>ForceStop()</code>	Forcefully stops a shake and resets the values to the default values
--------------------------	----------------------------------------------------------------------

You might notice there are some other functions publicly available such as `SaveDefaultValues()`, `ResetDefaultValues()` and `Apply(Vector3[] value)`, these are generally not recommended to be used but if you are an advanced user, feel free to look into the scripts to see if they might be useful to you.