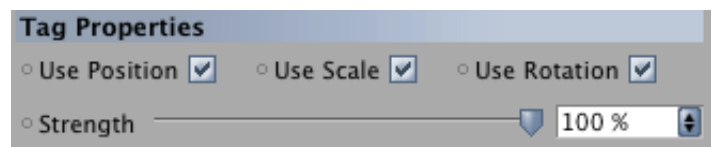# CD Springy Keys 1.0 for CInema 4D R9.6+

CD Springy Keys is a tag designed to be used on an object which has animation tracks (position, scale and/or rotation tracks) to add springiness to the animation. This allows you to quickly add secondary motion to an already animated object without having to add more animation keys or add any additional rigging to the object.
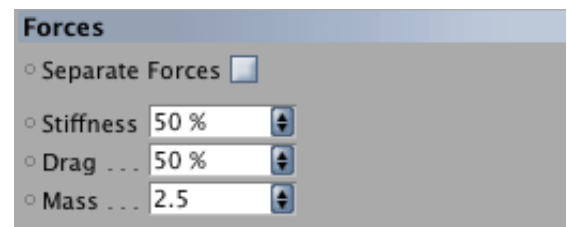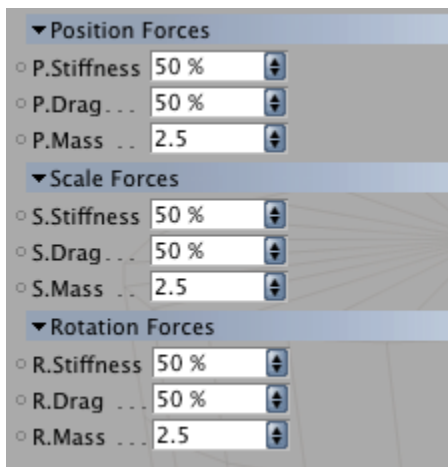
Tag Properties Tab

Use Position will enable the position spring, *Use Scale* will enable the scale spring and *Use Rotation* will enable the rotation spring. The *Strength* parameter is a blend slider which allows you to blend between normal animation and springiness. When the slider is set to 0%, the springs have no affect on the object and the animation behaves as normal. When the slider is set to 100%, the springs have full control of the object.

Forces Tab

In this tab you set the various forces that determine how the spring simulation behaves, *Stiffness* sets the spring stiffness between 0% and 100%. This parameter determines the strength the spring's pull on the object. Drag sets the spring drag between 0% and 100%. This parameter determines the resistance against the spring's pull on the object. *Mass* sets the mass (or weight) of the object between 1 and 100. The mass of an object affects the intensity of the other forces on that object. *Separate Forces* allows you to have separate control over the forces for the position spring, the scale spring and the rotation spring. When this option is enabled, three separate force groups appear under folded headings as shown in **Figure 1**. Otherwise, when this option is disabled, the main forces parameters will affect all three position, scale and rotation springs.

NOTE: The tag's parameters will only be available when the tag's object has animation keys. Otherwise the parameters will be inactive or greyed out.

Figure 1