

MotionMonkey User Guide

MotionMonkey

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www.typemonkey.net

Welcome to MotionMonkey!

MotionMonkey is a unique and powerful animation system for After Effects™ that offers a procedural approach to animating visuals. Like TypeMonkey and LayerMonkey, this is a keyframe-less expression-based process that is intuitive, versatile and will save you a lot of time.

MotionMonkey will work with most types of layers....text, Illustrator, Photoshop, video, still images, pre-comps, shapes, solids, and nulls.

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Getting Started

Setting the Work Area: MotionMonkey will generate a sequence of markers, which will trigger the animation of each corresponding layer in sequence. The markers will be evenly spaced across the Work Area or comp, unless you've selected a different allocation in the Markers section of the MotionMonkey UI.

MotionMonkey needs at least two frames to perform the allocation. The first frame is always left empty to prevent any layers from being immediately visible. If you set the Work Area to two frames, all the layers will be triggered within the second frame. For more information on other options, see the Markers section in this User Guide.

Randomizing Radio Buttons: The round radio buttons next to some of the main section labels are used to designate that random selection from within the entire group is active. When the button is on, MotionMonkey will choose randomly from all options within that section.

Note that the buttons will turn off if you directly select one or more options in the group. Then MotionMonkey will choose randomly from only the selected options. Clicking the Randomizing Radio Button in that situation will turn off all selected options and return to the default state where MotionMonkey will select randomly from all options.

MotionMonkey uses a unique, weighted random distribution algorithm designed to produce well-balanced motion compositions. This is intended to give very different results for each operation of the DO IT! button.

Motion

This section controls what type of motions will be present in the animation. By default, the motion is set to random, but Slide (position), Scale, Spin (Rotate) X, Y, Z and None are selectable individually, or in any combination.

The amount that each layer slides, scales and spins is controlled in the Intensity Dropdown. (See that section for more details.)

Direction

This section controls the direction options available for each Motion type. If a subsection is inactive, that means that the corresponding motion type is not active in the Motion Section.

Anchor

This section controls where the Anchor Point of each control layer will be

positioned. The choices include the center of the layer and the center of each edge. The Anchor Point selection won't affect the Slide animations, but it will affect Scale and Spin.

The way you import your multi-layered art can make a big difference in the impact that this control has on the animation. If you import it with the Footage Dimensions set to Layer Size, the anchor point of the layer will be based on its layer dimensions.

If you have Footage Dimensions set to Document Size, the anchor point will be based on the size of the entire document. So, each layer will likely end up with the same Anchor Point as other layers. This could have some very interesting results and dramatically change how the motion works.

Transition

This section controls whether your layers will transition on with a fade or a cut.

Interpolation

This section controls which ease modes are available. There are six choices:

Linear: A steady move without ease.

EZ Go: Starts with ease and ends in a hard stop.

EZ Stop: Starts with a linear move and ends with an ease.

Inertia: Overshoots the end position and eases back into place.

Bounce*: Comes to a hard stop and bounces.

Spring*: Overshoots the end position, oscillates, and eases to a stop.

*Note that both Bounce and Spring contain some "reverb" that exceeds the timing discussed in the Speed section. The length of the reverb is dependent on the Speed and Intensity settings.

Speed

This section controls the duration of the moves. A Fast move takes approximately 2/3 of a second. A Medium move takes twice that, and a Slow move three times. At 30 fps, this works out to the following durations:

Fast: 20 frames

Medium: 40 Frames

Slow: 60 Frames

*Note that for Spring and Bounce the timings represent when the layer first arrives at its final destination, but does not include the reverb time.

Intensity

This section controls the amount of movement that will occur during the duration of the motion, as determined by the Speed selection. For example, if Slide is selected, an extreme intensity slide will slide much farther than a low intensity slide. If Scale is selected it'll scale up or down more extremely. If Spin is selected, more rotations will take place.

In effect, the higher the Intensity, the more energetic the animations will appear to be, since more travel, spinning or scaling will occur in the given amount of time. Note that Intensity also affects Interpolation, making bounces higher and longer lasting. The Intensity values, by movement type, are as follows:

Slide (distance is based on comp height):

Low: 1/4 screen

Medium: 1/2 screen

High: 1 screen

Extreme: 2 screens

Scale Up:

Low: Scale from 75% to 100%

Medium: Scale from 50% to 100%

High: Scale from 25% to 100%

Extreme: Scale from 0% to 100%

Scale Down:

Low: Scale from 150% to 100%

Medium: Scale from 200% to 100%

High: Scale from 300% to 100%

Extreme: Scale from 400% to 100%

Spin:

Low: 1/2 rotation (180 degrees)

Medium: 1 rotation (360 degrees)

High: 2 rotations (720 degrees)

Extreme: 3 rotations (1080 degrees)

Motion Mixer

This control is MotionMonkey's secret sauce. When the Motion Mixer checkbox is on, more complex animations are generated because MotionMonkey will take a certain percentage of the layers and apply multiple, simultaneous motions, assuming that you have more than one selection available in the Motion section.

It won't combine different versions of the same motion--it wouldn't use two different slides--but it will combine motions from different categories. Possible combinations include Slide and Spin, Scale and Slide, Scale and Spin, and Slide, Scale and Spin.

Layer

Order: This dropdown controls the order in which MotionMonkey sequences the layer animations. There are three options: Top, (the top layer will appear first) Bottom (bottom layer first), and Random.

Timing Controls: This section applies only to time-varying layers (i.e. footage, pre-comps or anything that can be time remapped). Please note that when MotionMonkey encounters a time-varying layer, it will enable Time Remapping for that layer.

In Point: This dropdown controls where playback starts. Both options in this section only refer to the In Point of the playback, not the actual trigger point of the layer being revealed, which will always occur at its corresponding marker on the Master Control layer. There are two choices:

Marker: This selection will cause the footage to start playing when the layer's corresponding marker is reached in the timeline.

00:00:00: This selection causes the footage to begin playing at time zero, which means the playback will already be in progress when the layer is revealed.

Out Point: This dropdown controls what happens at the end of a clip. The default is Freeze, but Run Out, Loop or Ping Pong options are also available.

Color Palette: This is where you can select up to five fill colors to be used by MotionMonkey. When colors are activated (by default, none are active), MotionMonkey will apply a fill effect (to non-time-varying layers only), cycling through your selected colors.

Kuler: If you click the K button, MotionMonkey will allow you to load a Kuler (.ase) file into the Color Palette. You can download Kuler files from Kuler.com. We have

included a few Kuler files in the MotionMonkey download folder for your convenience.

Shy and Lock: When turned on, this control will hide all layers except the Master Control Layer. It will also lock all Text/Image layers as well as any 3D intersection-killing adjustment layers.

Allow Intersection: When this control is off, MotionMonkey inserts blank adjustment layers to kill any 3D intersections. These will show up as grey in the timeline between footage layers. This is useful for eliminating strange flashing of layers, which can be generated by 3D intersections. Leaving the box checked will inhibit the creation of these layers and allow the layers to intersect.

Keep in mind that adding adjustment layers will increase the build and render time, so only use it if you really need it.

Enable Motion Blur: When this control is on, MotionMonkey will enable motion blur on all animating layers in the comp.

Markers

Notes on adjusting markers...the markers that MotionMonkey distributes on the Master Control Layer are used to trigger, in sequence, each layer's reveal animation. You can slide these around to adjust the timing, but some care must be taken with them. Unfortunately, unlike keyframes, there's no way to select a bunch of markers at once and slide them around as a unit. You have to move them individually, which can be cumbersome.

Be careful not to move one marker on top of another one, because After Effects will delete one of them. If that happens, some of the expressions generated by MotionMonkey will break because of the missing marker.

In that event, the simplest way to clean things up is to use MotionMonkey's UNDO IT button and start over. To salvage what you have, you may want to use AE's native undo instead (command/control + Z) to restore the marker, but then you will need to go in and manually re-enable any disabled expressions.

We've posted a number of strategies for laying down a marker sync layer to make your life easier. Check out the tutorials on aescrpts.com/motionmonkey.

Time Span: This dropdown controls the duration over which MotionMonkey will distribute the markers. There are two choices available:

Work Area: This selection allows you to define the marker distribution range by adjusting the Work Area start and end points (B and N on the keyboard). This is particularly useful if you want to leave padding before or after the animation.

Comp Duration: This selection causes MotionMonkey to distribute the markers over the entire length of the comp.

Distribution: This dropdown selects how the markers will be distributed within the selected Time Span. There are three options:

Evenly Spaced: This selection causes MotionMonkey to distribute the markers evenly across the selected Time Span.

Marker Synch: This selection will cause MotionMonkey to synch the markers to a selected guide layer that has markers already applied. You would use this option if you have saved a marker layer from a previous MotionMonkey build during the UNDO IT process.

Or you may already have an audio layer that has a marker on every beat.

When this option is selected, MotionMonkey still creates a new marker layer, but it syncs the marker timing to that of the selected guide layer.

Play Full Clips: This selection causes MotionMonkey to put a marker at the beginning and end of every clip. So once the clip starts playing, it won't transition to the next clip until it finishes. If Play Full Clips is selected, the In Point dropdown in the Timing Controls section will be disabled.

Please note that if your comp contains only video or pre-comps (meaning no stills mixed in), MotionMonkey will build out to whatever the total running length of all the clips are, which may extend beyond the length of the comp. After the build, you may need to lengthen the comp and extend the layers.

If stills are mixed in with the video, MotionMonkey will require that the comp be of sufficient duration to fit all the sequenced videos, as well the stills. If it isn't, MotionMonkey will pop up an error message and won't perform the build.

If the comp is of sufficient duration, MotionMonkey will evenly distribute the stills over the difference between the total running time of the clips and the length of the comp. So, for example, if you have two 10-second video clips and three stills at 3 seconds each, you will need a comp about 29 sec long ...give or take a bit of time to account for the transitions.

DO IT!

This button tells MotionMonkey to start the build.

UNDO IT

This button will delete all of MotionMonkey's hard work. When initiated, a dialog with an option to save the existing Marker layer will pop up, in case you want to use it as a marker sync guide layer for the next build.

If you have spent some time adjusting the timing by moving the markers around, we suggest that you save the layer. Once the composition has been cleaned, select Marker Synch in the Markers Distribution dropdown, then select the saved layer (it will appear in yellow in the composition timeline). MotionMonkey will then synchronize the new marker layer with the old one. In the event that you attempt a build with a saved marker layer that doesn't have enough markers, MotionMonkey will pop up an error message because it will not know what to do with the extra layers in that situation.

Save

The Save button allows you to save current MotionMonkey UI settings. The settings will be saved as an XML file, stored in the folder of your choice.

Load

The Load button can be used to restore a previously saved MotionMonkey UI settings file.

MonkeyTools has a few new features that will make locking parents and children easier. You can download it from aescrpts.com in your download section