MonkeyCam Pro
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Welcome to the first official MonkeyCam Pro User Manual.

MonkeyCam Pro is a procedural camera system designed to create complex camera moves in 3D space quickly and easily.

Installation

MonkeyCam Pro requires AE CC 2014.2 (13.2) or later. To install MonkeyCam Pro as a dockable panel, place the (.jsxbin) and accompanying (.ffx) files in After Effects/Scripts/ScriptUI Panels (MAC) or After Effects/Support Files/Scripts/ScriptUI Panels (Windows). The (.ffx) files contain presets for the Effect Controls, so make sure that they are placed in the same location as the (.jsxbin) file.

The trial period is seven days.

Overview

MonkeyCam Pro will target any unlocked, 3D layer with its video switch (eyeball) turned on. Once the build is done, all layers that MonkeyCam Pro targets will be labeled yellow and tagged as shy.

There are two phases to a MonkeyCam Pro project, the pre-build and the post-build. Pre-build is controlled by the **User Interface** (or **UI)**, which can be launched from the After Effects Windows menu. This is also where the main structure of the camera motion is specified. The post-build includes a set of effects controls found on the **Master Control Layer** (which also contains the camera's timing markers). This is where all the bells and whistles are applied and where you can fine-tune and embellish the camera movement.

UI Breakdown

*There are three basic parts to the MonkeyCam Pro UI, the **Layer** section, the **Markers** section and finally the **Camera** section.*

Layer Section:
The dropdown control in this section is where you specify in which order the layers will be targeted by the camera. There are three options, Top, Bottom and Random.

This will not physically change the order of the layers in the timeline, but rather it dictates the order in which the camera will move.

Conversely, once a build is complete, changing the order of the layers in the timeline will not affect the order in which the camera targets them.

Marker Section:
Markers are used by MonkeyCam Pro to mark the midpoint of the camera's transition from one layer to the next. Timing adjustments can easily be made by sliding a marker along the Master Control Layer.

Time Span:
This control is used to specify the duration over which MonkeyCam Pro will evenly distribute the markers. The choices are Work Area and Comp Duration. Work Area is particularly convenient for pad at the end and ensures a camera move completes without being cut off.

Marker Sync:
When this control is turned on, MonkeyCam Pro will sync the markers of the new build to an existing guide layer that has markers already applied.

Camera Section:
This part of the script UI controls the camera's movement and other attributes.

Movement:
There are nine basic motions types, or interpolations to choose from.

The various eases are listed at the top of the dropdown. These ease types are roughly equivalent to ease names you may be more familiar with, as follows:

Extreme = Exponential
Large = Quintic
Medium = Circular
Small = Cubic (Easy Ease)
Extra Small = Sine

Next are the physics-based moves, Inertia and Anticipate, then Linear, and lastly, Cut, which is a simple cut from one camera position to the next.

When **Cut** is selected, many of the options in the UI are disabled (Crash, Ease Type, Continuity and Transition Speed), since they deal with motion characteristics and cuts have no motion.

Crash:
Turn this control on if you want the camera to come crashing to a stop at the end of a move. The amount of crash can be controlled post-build in the Master Control effects area. The physics of Crash only works with Ease In, so the *Ease Type* dropdown (see below) is defaulted to that setting and deactivated.

Ease Type:
This dropdown controls when during the camera transition from one layer to the next the selected Movement interpolation will occur: at the start of the camera move (In), at the end (Out), or both (In & Out).

Continuity:
This dropdown controls whether the camera moves continuously from one layer to the next, or if pauses at each layer.

The default setting is **Pause**, meaning the camera will automatically pause at each layer.

The amount of pause is determined by the length of time between

markers, as well as the settings in the *Transition Speed* dropdown in the script UI. (see below)

Visually, if there is a more extreme ease selected, the length of the pause will appear to increase, even though it's being triggered at the same time as other ease types.

The other setting is **Continuous**, which will create a constant move between layers. Keep in mind that Movement type affects this   setting as well, so a camera can appear to pause even when set on Continuous if an ease is selected.

Transition Speed:
This sets the amount of time it takes for the camera to move from one layer to the next and only applies to the Pause setting of the Continuity dropdown. If Continuous is selected this section will be deactivated since the speed is determined by of the amount of time between markers.

The available speeds are not based on hard frame counts. The timing isn't exact, but basically amounts to:

Fast: .3 Sec
Med: .5 Sec
Slow: 1 Sec
Sloth: 3 Sec

MonkeyCam Pro will adapt the speed of the move to the time between markers. For example, if Sloth is selected and only 10 frames exist between markers, MonkeyCam Pro will adjust to make the move as slow as possible within the time allotted.

Auto Frame:
Auto Frame will cause the camera to move closer or farther away in order to consistently frame each target layer. There are five basic settings: Off, Loose, Medium, Tight, and Best Fit, which will fit the layer to the height of the raster.

Note: Full Frame will fill the frame either horizontally or vertically (or both if the aspect ratio matches the comp), depending on which choice doesn't clip the other dimension.

Include Camera Light:
This checkbox will create a light and parent it to the camera. It also creates an effects control that allows you to select from several post-build lighting effects, such as flash and light leak simulations.

Motion Blur:
This control will activate the Motion Blur checkbox on each of the layers that MonkeyCam Pro recognizes. It will not affect non-Monkey layers; those will have to be done manually if needed.

DO IT! / UNDO IT!
Save / Load
See below

Master Control Layer:

This layer is created during the building process and is the only MonkeyCam Pro layer that isn't shy'd automatically. It is also the only layer labeled with an orange color. It houses the markers as well as all the effects controls.

The MonkeyCam Pro build will add a series of Effect Controls to the Master Control Layer to give you control over many of the camera behaviors. Most of these controls will be in an effect named Camera Controls, but you may also end up with Crash Controls and Light Controls, depending on your script UI selections.

Camera Controls

Camera Position;
The Camera Position controls allow you to adjust the global

positioning of the camera.

Camera Rotation:
These controls allow you to adjust rotation on each axis of the camera.

Camera Wiggle:
Wiggle is a random position and rotation fluctuation applied to the camera. The end result is like a hand-held camera effect.

Camera Drift:
Drift allows you to cause the camera to move towards or away from the target layer at a consistent rate. It resets itself and starts again at each marker. You can set the speed and direction of the drift by adjusting the slider. A positive setting will move the camera towards the layer and a negative setting will move it away.

Vertigo:
This control allows you to simulate the Zoom Dolly effect made popular by Alfred Hitchcock. It adds a zoom component to counteract the specified Camera Drift. This yields a weird, compressed or expanded space effect.

Lens Controls:
These controls deal with the camera's depth of field and zoom properties.

The Zoom Control in this section will add or subtract to the camera's current zoom setting. Keep in mind you can also unshy the camera and physically change the settings there too.

Lens Jitter Controls;
Jitter adds a very quick, JJ Abrams-like random motion to the camera's zoom and/or focus point settings. The effect occurs at end of each move, and can be keyframed on and off. It results in a high energy, lens-lock-up or finding-focus effect.

There are individual controls, which determine the amount and frequency of each effect.

The Positive Zoom Only checkbox forces the camera to only zoom in the positive direction. One use for this could be if you were using MonkeyCam Pro as a video editor (Auto Frame: Full Screen) and wanted to use the jitter effect without revealing the video frame.

Glitch Controls:
Glitch is a quick random X or Y slide that can occur at any point in   the timeline. Included are amount and frequency controls.

Crash Controls:
This control only appears if Crash was selected in the script UI. The crash always occurs at the end of a move. You have control over the intensity of the crash.

Light Controls;
This is created if **Include Camera Light** is selected in the script UI and gives you the option of choosing from a variety of light effects which will happen at the end of a move. There are strobes, flashes and light leak effects to choose from.

DO IT!
When clicked, this sets the MonkeyCam Pro build in motion.
It will recognize all the active layers (unlocked, 3D layer with its video eyeball switch turned on) and include them as target layers for the MonkeyCam. Once the build is complete these will be labeled yellow and shy'd.

Any non-recognized layers will be left untouched.

If you have Marker Sync selected in the UI, you will need to have the layer you will be syncing to Selected.

If an old Master Control Layer (labeled grey) exists (*see Undo It below*), a prompt will pop up to ask if you want to transfer the effects control settings from the old master control layer to the new one.

Note: Only one MonkeyCam Pro build can exist within a comp.
If one already exists, you will be prompted to either unbuild it
or cancel out.

Similarly, if you are working with any other Monkey products
in the same comp, MonkeyCam Pro cannot be included.
For example, if you have a MotionMonkey build and you want
to use MonkeyCam Pro in the same comp, the only way to do it
is to bring the MotionMonkey project in as a separate comp
and turn on the collapse icon.

Undo It:
Once a build is complete, any changes to the basic UI settings will
require an unbuild and rebuild. Changes to the effects controls can
be made live. To do this, click Undo it.

During an unbuild, you will be given the opportunity to save the
existing Master Control Layer.

There are two main reasons why this might be a good idea:

1) To use as the marker sync reference layer on a rebuild if changes
were made to the marker timing.

2) To restore your effects controls settings after a rebuild. If an old
Master Control layer exists in a comp, MonkeyCam Pro will detect
the top one (if there are multiples) and ask if you want to apply the
existing effects settings to the new Master Control Layer.

We strongly suggest you save your old Master Control Layer if you
have already made adjustments to the effects controls (static settings
or keyframes), and/or you made changes to the marker timing and
will reference it as a marker sync layer in the next build.

Save:
Will save all the UI settings as an .xml file.

Load:
Will load save .xml files into the UI.

Notes on Rotation:
MonkeyCam Pro was designed to automatically rotate to match any X, Y or Z rotation of the target layer.

However, in the case of a layer already having a 2D rotation when imported (i.e. as a Photoshop or Illustrator layer), or if you want to override the camera's rotation, we've created a series of key commands that adjust the camera rotation. These commands can be used to rotate in increments of 90 degrees on the Z-axis.

You can view these key commands by clicking the question mark button (?) at the top of the script UI. They are as follows:

  90º: >

180º: >>

270º: >>>

 - 90º: <

-180º: <<

-270º: <<<

The way it works is that you would insert one of these commands at the beginning of the layer's name to force a camera rotation for that layer. For example, if your layer is named "Layer 1" you can force a 90 degree clockwise rotation by changing the name to ">Layer 1" in the timeline.

Key commands can be added to a layer's name either before or after the build, and can be changed at any point.

General Workflow:
MonkeyCam Pro is designed to be as intuitive and easy to learn as possible. Simple projects are very easy to create and manipulate.

However, as projects get more complex, with multiple active and

passive layers intermixed in the timeline, and numerous builds and unbuilds are required, things can get confusing.

We recommend keeping your comp as organized as possible. A good strategy for this is coming up with a system for tagging and locking layers.

We will be posting more FAQs, tips and tricks on the aescripts.com product page, so please check there for additional info.

Until then, thank you and good luck with your brand new Monkey!