

The Animators

One of the four types of Attributes which may be applied to Objects, Cameras, Lights, and Microphones is Animators. The four discussed here are: Track, Gravity, Jiggle, and Path.

Animators are powerful tools which you may use to easily create unscripted animations.

To apply Animators, access the Attributes Window (Windows menu or ⌘-2), and drag the desired Animator icon from the Attributes Window to the Attributes holding area in the Info dialog box for the item to which you want to apply the Animator.



Track Animator expanded icon

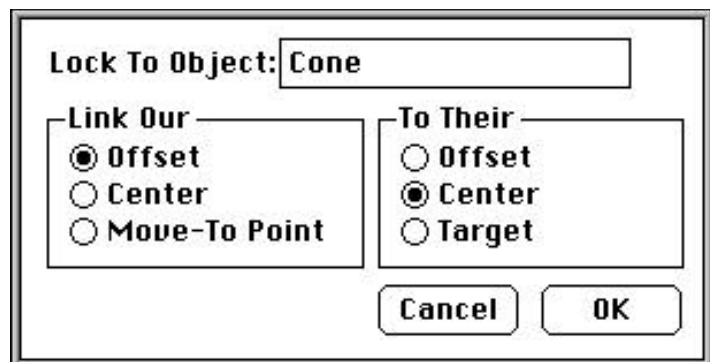
Note: Refer to the Tool palette chapter, Info Dialog boxes-General for more discussion regarding the use of the buttons on the expanded icon.

The Track Animator

Use the Track Animator to make an item (object, camera, light, or microphone) automatically follow the movement of another item.

Double-click on the expanded icon in the Attributes holding area of the Info dialog box to access the Track Animator dialog box. Type the name of the item you wish to link to in the Lock to Object data field.

The “Link Our” section of the dialog defines what part of the item (carrying the rest of the item with it) will follow the Lock to Object item. Click on the radio button for Offset, Center, or Move-to Point to link that parameter.



Track Animator dialog box

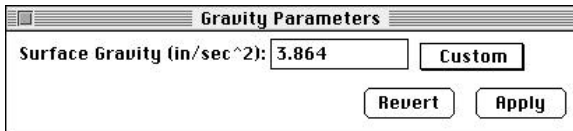
The “To Their” section of the dialog defines what part of the Lock to Object item will be followed. Click on the radio button for Offset, Center, or Target to link that parameter.



Gravity Animator expanded icon

The Gravity Animator

Use the Gravity Animator to automatically set an item in motion straight down in the y-direction. The velocity of the item will continuously increase as time progresses.



Gravity Animator dialog box

Double-click on the expanded icon in the Attributes holding area of the Info dialog box to access the Gravity Animator dialog. The Surface Gravity to be used is displayed as an acceleration (in/sec² – inches per second per second).



Surface Gravity pull-down

An example of how Gravity works

Say the Surface Gravity is set to 10 in/sec², and the item starts at rest. At the end of the first second the item will have a velocity of 10 in/sec in the y-direction, and will have moved a certain distance in the y-direction. At the end of the next second, the item will have a velocity of 20 in/sec in the y-direction and will have proceeded further in the y-direction; and so on.

Select a pre-set surface gravity from the pull-down menu, or enter your own custom acceleration in the data field. Enter a negative value to set the item in motion up in the y-direction.

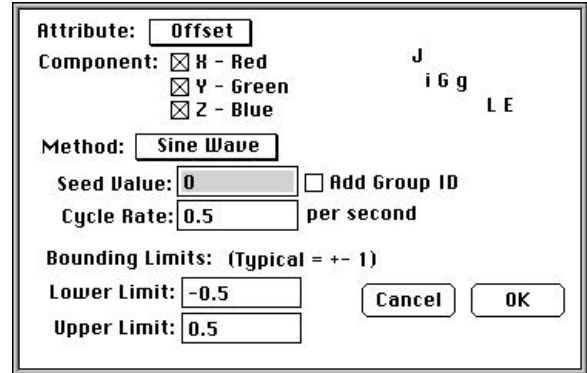
The Jiggle Animator

Use the Jiggle Animator to automatically set an item attribute to “jiggle” following a wave-form method. Apply the Jiggle Animator two or more times (each with a different attribute selected in the dialog box) to generate complex unscripted animation.



Double-click on the expanded icon in the Attributes holding area of the Info dialog box to access the Jiggle Animator dialog.

Select the attribute to “jiggle” from the Attributes pull-down menu. Use the check boxes to determine which parts of the selected attribute will be affected. Select the wave-form to follow from the Method pull-down menu. All of the attributes have either x-y-z location components or Red-Green-Blue color components.



Jiggle dialog box

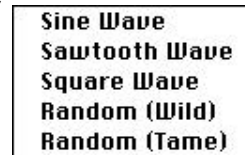
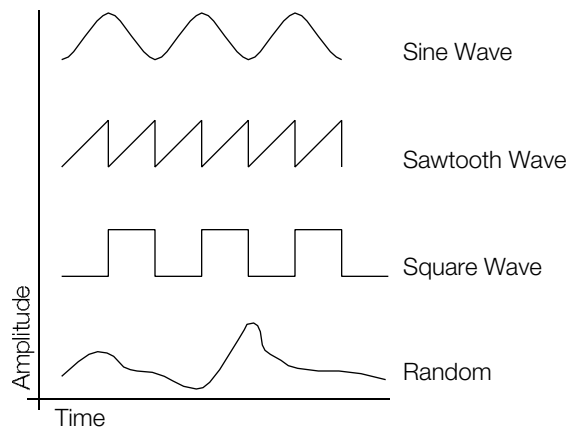
The Seed Value may be any whole number. If you are not satisfied with the jiggle you get from the Random (Wild or Tame) method, then set a new Seed Value and return to the Active Camera Window to preview the results.

The Cycle Rate determines the length of time for the jiggle to cycle between the Lower Limit and the Upper Limit. The typical Bounding Limits values for the selected attribute is shown. The Lower and Upper Limits may be altered by typing the custom settings in the data fields.

Enable the Add Group ID check box to apply the “jiggle” to all of the elements in the current group (folder), so that each element jiggles independent of the others.



Attribute pull-down menu

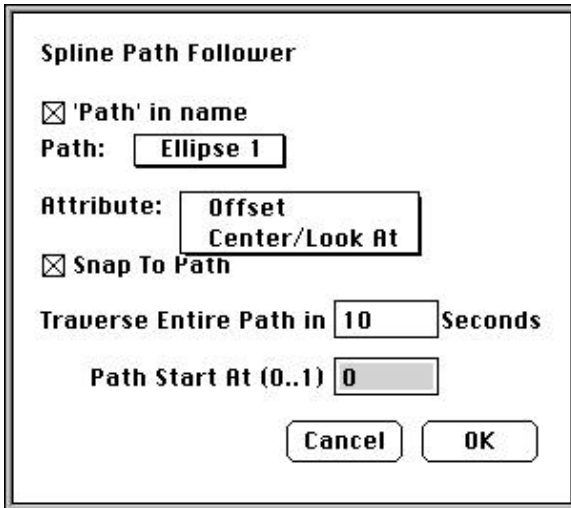


Method pull-down menu



The Path Animator

Use the Path Animator to make an item (Object, Light, Camera, or Microphone) follow a spline path. The path must have been created in ModelPro, and may be an independent spline path specially drawn to be used with the Path Animator, or may be part of a model.



Path dialog box

The Path pull-down menu allows you to choose the spline path for the item to follow. All of the available paths in the database will show in this menu. If the 'Path' in name check box is enable, then only paths with that word in the name will appear in the pull-down menu. This is useful when you have an extensive, complex database and wish to easily find the path you want to find.

The Attribute pull-down menu has two options from which to choose: Offset and Center/Look At. Use Offset to make an item follow the selected path. Use Center/Look At to make the Camera target point follow the path.

Enable the Snap to Path check box to make the item follow directly on the path. Otherwise, the item will follow the path from the item's initial location, regardless of the location of the path.

Enter a whole number value in the Traverse Entire Path In data field to determine the amount of time the item will take to go from the beginning of the path to the end.

Enter a value between zero and one in the Path Start At data field to determine how far along the path the item will begin to follow. For example: a value of 0.5 will start the item half way along the path.