

## Cell Info dialog boxes

### General

#### Title Bar

Shows name of the Item and the precise frame (time) at which the cell is located.

#### On/Off (switch)

Slide the switch to turn the display of the item on/off.

The item will not show in the View windows or Active Camera Preview when off.

The item will not render when off.

#### Item name (data field)

Make entry (characters) to change the name of the Item.

#### check boxes

Click to toggle effect on/off. On activates special settings; Off reverts the

information to default.

#### Cell Velocity/Time curves (button)

Click button to access dialog box. Determines the manner in which a “changing attribute” “enters” and “exits” the Cell time frame.

For example: if you have intuitively set a camera to pass by an object at a particular frame/cell; and you want it to smoothly decelerate as it approaches the object, then smoothly accelerate as it passes by, you would set the Velocity/Time curve for the camera to Ease In/ Ease Out. In this case the “changing attribute” is Location.

If you want an attribute to “flash on” just for the one cell, use Injection (no velocity/time curve).

#### Smooth Animation curves (button)

Click to toggle between four presets (curve in/out, curve in/straight out,

straight in/ curve out, straight in/straight out). Applies only to Location changes. Automatically adjusts the path of an item as it traverses a change in location. For example: if you have set an item to move in a straight line between four successive points reaching each point at a particular frame; the item may be set to move straight in/straight out of the first point, and curve in/out of the remaining three; the curved path is automatically set using Smooth Animation curves.

**Include Parental Influences** (check box)

Applies only to items within a folder(s). Determines whether or not the attributes of applied/set for the folder(s) will apply to this object.

For example: suppose you have a folder with several spheres and cubes and wish to apply a texture to all but one of them; you would apply the texture to the folder, then turn off the Include Parental Influences for the one which you want to skip.

### **Attributes bin**

Holds externally applied attributes: Animators, Textures, Sounds, and Shaders.

**To apply an external Attribute:**

Access the Attributes window (□-2), then choose the Attribute type from the pull-down menu; drag the icon for the desired Attribute from the window and drop it in the bin.

### **Object Cell Info dialog**

**Revert** (button)

Click to return all entries in Base Information data fields to the default settings.

**Test** (button)

Makes a small test-rendering of the object using the current selected

render engine.

**Looks** (button)

Access dialog box for intuitively applying surface effects. See Surface Explore/Expert document for detailed information.

**Base Information** (two radio buttons)

Determines which set of information will display in the Cell Info dialog box:

Alter these settings in two successive Cell Info dialog boxes to animate an object using precise settings.

## Geometry

**Offset** *x, y, z* (check box; three data fields)

Make entries (inches) to determines the precise change in location of the object from its original location. With the check box off, defaults to zero.

Suppose you want the item to move in a straight line in the x-direction 12 inches, in the first second: set the Offset to zero at time 00.0 , then set the Offset to 12 at time 01.0.

**Center** *x, y, z* (check box; three data fields)

Make entries (inches) to determine the precise location of the center point of the object(s). Does not affect location of the object.

**Scale** *x, y, z* (check box; three data fields)

Make entries ( $0 < \text{number}$ ) to precisely enlarge/reduce the size of the object. ( $0.5 = 1/2$  size;  $1 = \text{same size}$ ).

**Rotation** *x, y, z* (heck box; three data fields)

Make entries (degrees) to precisely set the change in rotation from the original orientation of the object. (i.e. enter 15 in the x data field to rotate the item 15 degrees on the x-axis).

**Linear Velocity** *x, y, z* (check box; three data fields)

Make entries (inches per second) to set the object moving at a precise speed in one of the coordinate directions.

**Angular Velocity** *x, y, z* (check box; three data fields)

Make entries (degrees per second) to set the object spinning on a

coordinate axis about the the Center Point of the object.

**Mass** (one data field)

Make an entry (grams) to precisely determine the weight of the object.  
No application for this variable yet.

**Elasticity** (one data field)

Make an entry ( $0 < \text{whole number} > 101$ ) to precisely determine the rebound of the object when it strikes another object. Must be used in conjunction with the Collision Detection and Gravity Animators. Zero Elasticity would make the object stick (no rebound). 100% Elasticity would make the object bounce indefinitely.

**Breakability** (one data field)

Make an entry ( $0 < \text{whole number} > 101$ ) to precisely determine how easily the object will break away from its group (folder) when the Wind Animator is applied).

This is not a particle systems type of attribute for creating explosions etc.

**Rotation Order** (check box; pull-down menu)

Make a selection from the pull-down menu. The rotation order is important when an object is made to rotate on multiple axes from an initial orientation to some other final orientation.  
See in-depth discussion in Presenter Reference Manual.

**Cast Shadow** (check box)

Determines whether or not the object will cast a shadow.

**Surface**

In most cases, you will need to make several tests using various combinations to find the right mix for the surface effect you want, or use the Explore mode in the Looks dialog box (click the Looks button).

**Object Color** (check box; color chit; two radio buttons)

Determines object color. Choose Model Color radio button to use the color assigned in ModelPro. Choose the top radio button to make a custom color. Click on the color chit to access standard color picker.

**Refraction Index** (data field)

Make an entry ( $0 < \text{number} > 2$ ) to determine how light will distort as it passes through the object. Low values indicate little distortion, high values indicate large distortion.

### Specular Size/Ks/Color

Make entries (0 < whole number >101) to precisely determine the size and color of the highlight(s) created on the object.

Choose a Specular Color to make the highlight a color other than the light color.

### Reflectivity/Reflect Color

Make entry (0 < whole number >101) to precisely determine how mirror-like the surface will be.

Choose a Reflect Color to tint the reflection.

### Transparency/Trans Color

Make entry (0 < whole number >101) to precisely determine how “see-through” the object will be.

There must be an object behind the transparent one for the effect to show.

### Glow/Glow Color

Make entry (0 < whole number >101) to determine how much shading will occur across the surface of the object. High Glow will result in less shading (solid color object).

This does not make the item “glow” in the conventional sense, like a halo for instance.

### Diffuse/Diffuse Color

Make entry (0 < whole number >101) to determine how the shading spreads across the object (gradation of color). A high value makes the shading spread across the entire object. A low value makes the shading spread across a localized area near the highlight(s).

## Cameras, Lights, and Microphones have their own Cell Info dialogs

### Point Light Cell Info dialog

**On/Off** (switch)

The light will not affect the scene when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the light in the scene.

**Brightness** (check box; data field)

Make an entry (number > 0) to precisely determine the size of the sphere of influence of the light (observe View windows to see effect.)

**Color** (check box; color chit)

Click on the color chit to access standard color picker. Determines the color of the light.

**Cast Shadows** (check box)

Determines whether or not the light will cause objects to cast shadows.

### Parallel Light Cell Info dialog

**On/Off** (switch)

The light will not affect the scene when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the light in the scene.

**Target** (check box; three data fields)

Make entries (inches) to precisely determine the location of the target.  
Determines the direction the light is pointing.

**Brightness** (check box; data field)

Make an entry (0 > number < 101) to determines the intensity of the light.

**Color** (check box; color chit)

Click on the color chit to access standard color picker. Determines the color of the light.

**Cast Shadows** (check box)

Determines whether or not the light will cause objects to cast shadows.

### Spot Light Cell Info dialog

**On/Off** (switch)

The light will not affect the scene when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the light in the scene.

**Target** (check box; three data fields)

Make entries (inches) to precisely determine the location of the target.

Determines the direction the light is pointing.

**Field of View**

Make entry (degrees) to precisely determine the size of the spot.

**Soft Edge Angle** (degrees)

Make entry (degrees) to precisely determine to size of the soft edge of the spot.

**Brightness** (check box; data field)

Make an entry ( $0 > \text{number} < 101$ ) to determines the intensity of the light.

**Color** (check box; color chit)

Click on the color chit to access standard color picker. Determines the color of the light.

**Cast Shadows** (check box)

Determines whether or not the light will cause objects to cast shadows.

**Projector Light Cell Info dialog**

**On/Off** (switch)

The light will not affect the scene when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the light in the scene.

**Target** (check box; three data fields)

Make entries (inches) to precisely determine the location of the target  
Determines the direction the light is pointing.

**Field of View** (check box; data field)

Make entry (degrees) to precisely determine the size of the projected image.

**Brightness** (check box; data field)

Make an entry ( $0 > \text{number} < 101$ ) to determine the intensity of the light.

**Bank**

Make an entry (degrees) to determine the angle of the projected image. The projector is rotated on the axis determined by the line between the projector and its target.

**Cast Shadows** (check box)

Determines whether or not the light will cause objects to cast shadows.

### Camera Cell Info dialog

**On/Off** (switch)

The camera will not record the scene when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the camera in the scene.

**Target** (check box; three data fields)

Make entries (inches) to precisely determine the location of the target

Determines the direction the camera is pointing.

**Bank Angle** (check box; data field)

Make an entry (degrees) to determine the angle of the recorded image. The camera is rotated on the axis determined by the line between the camera and its target.

**Field of View** (check box; data field)

Make entry (degrees) to precisely determine the how much of the scene the camera can record.

**Focus** (check box; data field)

Determines depth of field. Only available when using RenderMan rendering engine.

**Fstop** (check box; data field)

Determines how much light gets into the camera. For use in creating motion blur effect.

Only available when using RenderMan rendering engine.

**Shutter Speed** (check box; data field)

Determines how long the frame exposure is. For use in creating motion blur effect.

Only available when using RenderMan rendering engine.

**Cast Shadows** (check box)

Determines whether or not the light will cause objects to cast shadows.

### Omni-directional Microphone Cell dialog

**On/Off** (switch)

The microphone will not record sounds when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the microphone in



the scene.

**Sensitivity** (check box; data field)

Make an entry (number > 0) to precisely determine the size of the sphere of influence of the microphone (observe View windows to see effect.)

**Attach to Track** (check box; pull-down menu)

Choose from the pull-down menu to cause the microphone to record sounds to Mono, Stereo Right, or Stereo Left.

### Directional Microphone Cell dialog

**On/Off** (switch)

The microphone will not record sounds when off.

**Location** (check box; three data fields)

Make entries (inches) to precisely determine the location of the microphone in the scene.

**Target** (check box; three data fields)

Make entries (inches) to precisely determine the location of the target  
Determines the direction the light is pointing.

**Active Angle** (data field)

Make entry (degrees) to precisely determine the cone of influence of the microphone.

**Drop-Off Angle** (data field)

Make entry (degrees) to precisely determine drop-off in sensitivity about the cone of influence of the microphone.

**Sensitivity** (data field)

Make entry (inches) to precisely determine the sensitivity of the cone of influence.

**Attach to Track** (check box; pull-down menu)

Choose from the pull-down menu to cause the microphone to record sounds to Mono, Stereo Right, or Stereo Left.