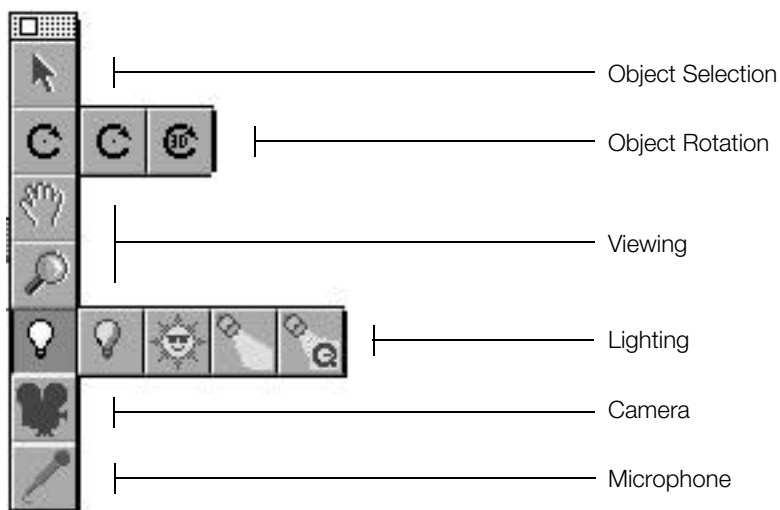## The Tool Palette

Presenter 3.0 features a powerful, yet streamlined set of animation tools. These tools are accessed through the Tool Palette. Tools are selected by simply clicking on a Tool Icon in the palette. Once a tool is activated it remains so until another tool is selected. Upon activation the cursor will change to reflect the tool in current use.

Tool Icons and Groups

There are 11 tools available through the palette. These 11 tools are organized into six tool groups based on the function they perform. Within each group there are one or more tools that can be accessed.

The Tool Palette will display only one Tool Icon from each Tool Group at a time. This approach allows for a more compact and organized palette which in turn saves screen space. All tools however, from all groups, are available at any time.

To select any of the additional tools within a Tool Group, position the mouse over the currently displayed Tool Icon for a group and hold down the mouse button. All available Tool Icons within the group are made visible. Drag to the right to activate the tool of your choice; this tool's icon will be displayed in the palette until you choose another tool from the category.

The Tool palette contains all of the tools you need for placing and manipulating objects, cameras, microphones, and lights.

Selector

Use this tool in the View windows to select and manipulate objects cameras, lights and microphones.

Rotation

Use this tool to intuitively rotate objects in the view windows. An object rotates only in the view in which it is selected (Top, Front or Right). The default center of rotation is the center of the object. Simply drag the center of rotation to a new position as desired.

3-D Rotation–Use this tool the same as the Rotation tool. Note that the rotation occurs in all three views independent of one another.

Hand

Use this tool to navigate about in the view windows. Simply Click-drag to adjust view. Note that using this tool in the Active Camera window actually changes camera/light position, not just the view.
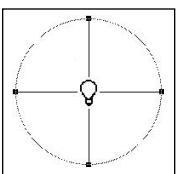
Magnifier

Use this tool to zoom in/out in the view windows. Drag a marquee around the area you want to zoom into and that area will fill the window.

Lighting

Use this tool to place the desired type of light in a scene. Simply select the Light tool (click-hold-drag to the desired type of light), then click in the appropriate view window to place a light source.

Point Light–Light rays radiate around this type of light in all directions. Intensity decreases with distance. Drag the light bulb icon to position it. Drag a control point on the "active radius" to expand or contract the range of the light.

Point Light with control points

Parallel Light–Light rays radiate in parallel lines from this type of light. Intensity remains constant over distance. Drag the target point to reposition it. Drag the sun icon to manipulate the sun position about the target point. Drag the target line to move the "assembly" in the scene.

Parallel Light with target point

Spot Light–Light rays radiate in user-defined direction and coverage from this type of light. Intensity decreases with distance. Drag the target point to reposition it. Drag the spot light icon to manipulate the light position about the target point. Drag target line to move the "assembly" about in the scene. Note that when dragging the Spot Light, the Active Camera window shows the view from the spot light for intuitive positioning and aiming. For continuous display of Spot Light in Active Camera window, select the Spot Light from the Active Camera pull-down at the top of the Active Camera window.
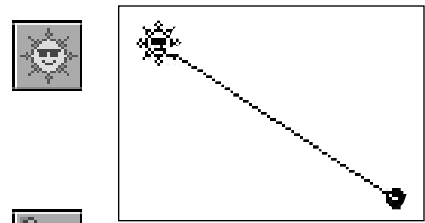
Spot Light with target point

Projector–Use this tool to project PICTs or Quicktime movies onto objects in a scene. Access the source to be projected by applying a Texture Attribute. Drag the target point to reposition it. Drag the projector icon to manipulate its position about the target point. Drag a field of view line to move the "assembly" about in the scene. Note that the Active Camera window shows the view from the projector for intuitive positioning and aiming. For continuous display of Projector in Active Camera window, select the Projector from the Active Camera pull-down at the top of the Active Camera window.

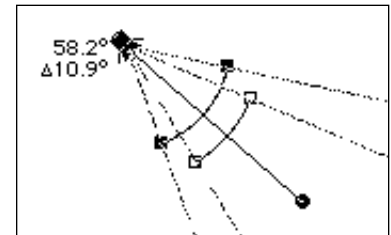Projector with target point

Camera

Use this tool to place a camera into a scene. Simply select the Camera tool, then click in the appropriate view window to place a camera. Drag the target point to reposition it. Drag the camera icon to manipulate the camera position about the target point. Drag a field of view line to move the "assembly" about in the scene.

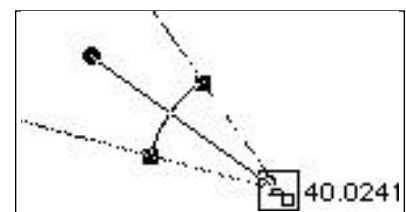Camera with target point

Microphone

Use this tool to place a microphone into a scene. Simply select the Microphone tool, then click in the appropriate view window to place a microphone. Drag the microphone icon to position it. Drag a control point on the "active radius" to expand or contract the range of the microphone.
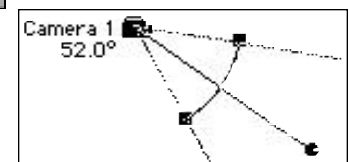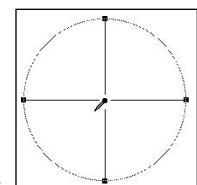
Microphone with control points

The Selector Tool

The Selector tool provides key functions within the Presenter application. It is used for all selection tasks as well as object scaling and modification. Presenter will automatically evoke the Selector tool when entering a dialogue box, window or palette other than the View windows, regardless of the active tool being used.

To Select an Object or Event Mark
1) Click on the item within any View window or the Script window.
2) Shift-click to select multiple items.
3) Click and drag to use the selection marquee.

To modify an Object's Location
1) Select the object you wish to move or shift-click to select multiple objects. The object's bounding box will be displayed. In the Top, Right or Front View windows, click within the object's bounding box and drag to the desired location. The object will move in relationship to the two dimensions represented by the View Window you are working in.

To scale an Object
1) Select the object you wish to scale. The object's bounding box will be displayed. In the Top, Right or Front View windows click and drag any of the Bounding Boxes control handles. The object will be scaled in relationship to the two dimensions represented by the View Window you are working in (hold the shift key to constrain the scale proportionally).

Rotation Tools

There are both 2-D and 3-D Rotation Tools available. Both of the Rotation tools can be used in the same manner as the Selection tool mentioned above. It is not necessary to switch to the Selection tool when selecting objects to rotate.

The 2-D Rotation Tool:

The 2-D Rotation tool allows you to rotate a model object intuitively on screen. The object will be rotated in relationship to the two dimensions represented by the View window you are working in. The object will rotate around it's own center point.

To 2-D Rotate a Model Object

1) Select the model object you wish to rotate. The objects bounding box will be displayed. In the Top, Right or Front View windows click and drag any of the bounding box control handles. The object will be rotated in relationship to the two dimensions represented by the View Window you are working in.

To Relocate a Model Object's Center Point Interactively

1) Select the model object you wish to modify. The objects bounding box will be displayed. In the Top, Right or Front View windows click and drag the object's Center Point to the desired location. The center point will move in relationship to the two dimensions represented by the View Window you are working in.
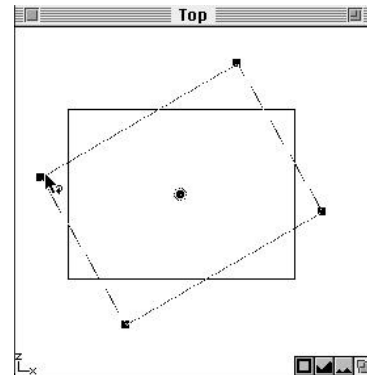
The 3-D Rotation Tool

The 3-D Rotation tool performs much like it's 2-D counterpart, with one important difference. The 3-D Rotation Tool allows you to rotate a Model Object in any of the three dimensions from within one 2-D View Window.
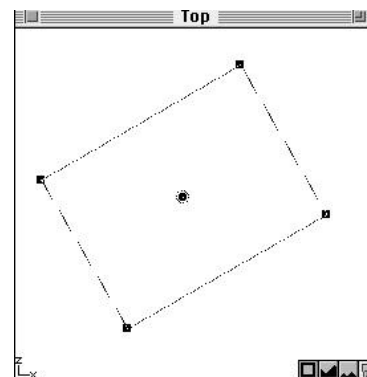
To 3-D Rotate a Model Object

1) Select the model object you wish to rotate. The object's bounding box will be displayed. In the Top, Right or Front View windows click and drag any of the bounding box control handles. The object will now rotated in all three dimensions simultaneously.

Note: The Rotation Tools do not work with Camera, Light or Microphone objects.

2-D Rotation

2-D Rotation Completed

Note: You can move an object's center point using the Selector Tool as well as the Rotation Tools

Hand Tool

The Hand tool allows you to "grab" and move your relative world view, within the Top, Front or Right windows. The view will be scrolled in relationship to the two dimensions represented by the View window you are working in.

To scroll a view
1) Select the Hand Tool.
2) Click and drag in any of the View Windows. The view within will move until you release the mouse button.

In the Active Camera window, the Hand tool allows you to intuitively change the view. The camera/light is automatically repositioned in the Top, Front, and Right View windows to correspond to the change in view. See the Presenter Windows chapter (Active Camera window) for a description of this operation.

Magnifier Tool

The Magnifier tool allows you to change the relative scale of the world view within the Top, Front or Right windows. The Magnifier tool can be used in two ways:

To Magnify or De-magnify in even increments
1) Click in any of the View Windows to magnify, or Option-click to de-magnify in even increments.

To Magnify using a marquee
1) Click and drag in any of the three View windows, a rectangular marquee will appear. Upon release of the mouse button, the view will be magnified to the maximum size which still allows for the of all objects within the marquee.

Info dialog boxes–General

Cameras, Lights, Projectors, Microphones and Objects all have access to their own Info dialog box. Double-click on the tool icon, or object, in one of the View windows, or on the item name in the Script List to access its Info dialog box.

These dialog boxes enable you to name the item, apply attributes to the item and access base information (Geometry) parameters; Object Info dialog boxes also allow access to Surface attribute parameters. Double-click on an item in the Script List, on a key frame marker, or on the item in a View window to access the Info dialog box. Note that when you access an Info dialog box, it is defined by item name and time (SMPTE). This time is a specific point in the animation and the information at a particular time is not necessarily the same as at other points in time.

Object Info dialog box

Include Parental Influences check box

This function is enabled as a default. If the item associated with this dialog is part of a group structure, then attributes applied to items higher in the structure are applied to this item.

Velocity/Time Curves

Each item in a Base Information parameters list has a Velocity/Time curve. The velocity/time curve determines how the change in a parameter occurs as the animation sequence passes through the point in time indicated at the top of the Info dialog box.

Click on a Velocity/Time curve button to access the dialog box. You may choose from some preset curves in the pull-down menu or set your own, or simply "inject" the change in parameters at the key frame. An "injected" parameter will flash "on" for that one frame without affecting other animated parameters in progress.
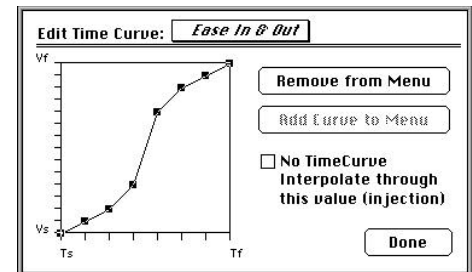
Velocity/Time Curve edit dialog

To make a custom Velocity/Time curve

1) Click and drag points on one of the pre-set curves (click in between points to add new points) until you have the curve the way you want it

2) Click on Add to Menu to save your custom curve.

3:35

Attributes

This is a holding area for drag-n-drop icons from the Attributes Window (Windows Menu).

Object Hierarchy
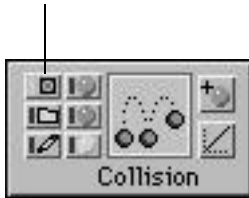
Expanded Attribute icon

To set an Attribute

1) Access the Info dialog box for the item to which you want to apply the attribute. Remember, it is possible for an item to have a unique Info dialog for each frame of an animation.
2) Open the Attributes window (Windows menu or ⌘-2).
3) Select which type of Attribute (Animators, Shaders, Textures, Sounds) you wish to apply, from the pull-down menu.
4) Drag the desired icon from the Attributes Window into the Attributes holding area at the bottom of the Info dialog box.
5) Double-click on the now-expanded icon to edit the attribute.

Once an attribute has been applied, its icon expands to include some control features. Double-click on the expanded icon to access the edit dialog for the attribute.

The control features* are displayed as buttons with green on/off "lights", and operate as follows:

*The far left column of three buttons is used to control how the attribute is applied in the object hierarchy:

The top button is a "check box" and applies the attribute to the selected item.
The middle button is a "folder" and applies the attribute to the first-level items under the current folder.
The lower button is a "pencil" and applies the attribute to all items, individually, under the current folder.

ND Cell Generation

Event Markers

Velocity/Time Curve
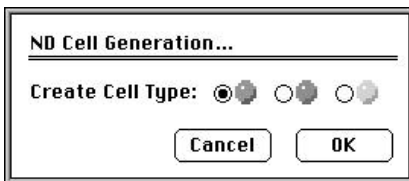
*The column of three buttons second from the left is used to apply the attribute to a specific color ND cell. Each of the three icons is a round shape—blue, yellow and green. These buttons allow you to apply a single attribute to many ND cells (i.e. "boink" sound each time a super-ball strikes a surface as it ricochets about a room).

*If the attribute generates ND cells, a button indicating this shows on the top, far right of the expanded icon. Click on this button to define the color ND cell to be generated. This flexibility in color choice is to assist in organizing a complex animation and is not function specific.
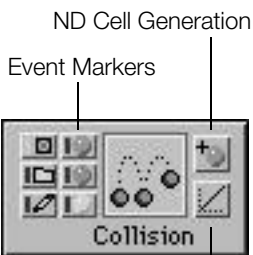
To Remove an Attribute from the Info dialog box

1) Drag it up to the menu bar and release.

The Velocity/Time curve (lower-right on the expanded icon) determines the change in a parameter over time. Click on this button to access the dialog box. See the previous page for more information.

Color boxes

All color boxes in an Info dialog box operate in the same manner. Click on the color box to access the standard color edit dialog. Enter numerical values (0-65535) for Hue, Saturation, and Brightness or Red, Green, Blue, or pick a color intuitively.

To pick a color intuitively
1) use the scroll bar at the right side to control brightness.

The numerical values update automatically. The preview color chit in the upper-left shows the existing color at the bottom, and the new color at the top for comparison.

2) click in the color wheel to select the color you want.
3) click OK to set the color.

Check boxes

All check boxes in an Info dialog box operate in the same manner. Click on the check box to enable/disable the associated feature. If the feature is enabled, an "x" appears in the box; if disabled, the box is clear.

Animation Curves button

Some Base Information parameters have Animation Curves. The animation curve determines how the parameter behaves as it passes through a point in space at the key frame. Continue to click on the button until the desired curve icon shows.

There are four Animation Curves to choose from:

Straight in - Straight out   Curve in - Straight out

Straight in - Curve out   Curve in - Curve out (smooth)

Cast Shadows

All of the Light Info dialog boxes (Point, Parallel, Spot and Projector) have a Cast Shadows check box. If the box is checked, light from this source will cast shadows. Use this feature to employ a light as a sort of reflector; add light to the scene, without casting unwanted shadows. In addition, speed rendering time by disabling shadows from light sources which do not cast a shadow (or do not cast a useful shadow) in the scene (i.e. a projector).

3:37

Lighting Tools

There are four different lighting tools available in Presenter. Each of the four tools is used to place a specific type of light into your model. For convenience, Presenter will automatically place a default Parallel light into your scene upon opening a new document or model file.

Each type of light has parameters that may be edited numerically; double-click on its icon or on its name in the Script list to access the Information dialog box for a light. General information regarding Info dialog boxes is available in this section of the Manual.
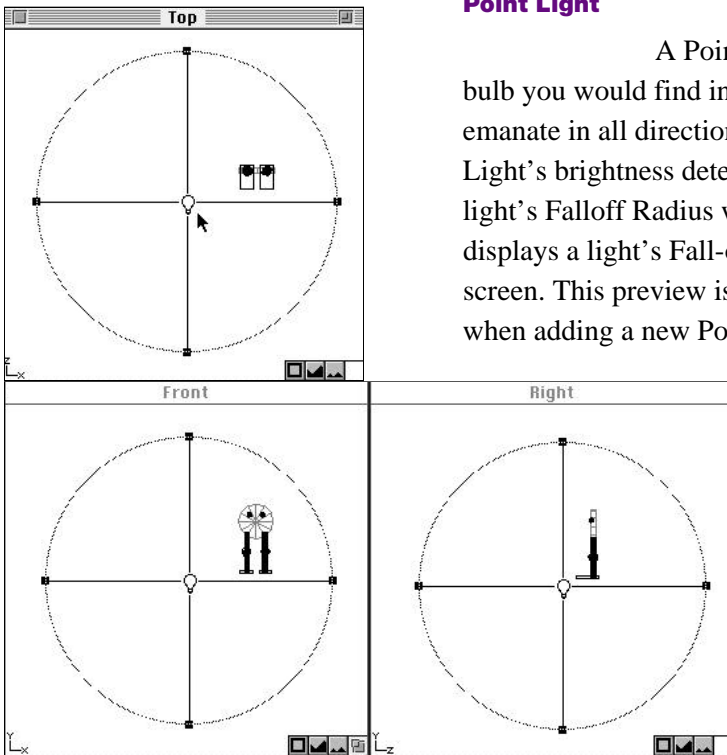
To Delete a Light After Placing It
1) Select the Light you wish to remove and press the Delete key from the keyboard.

Point Light

A Point Light most closely resembles a standard light bulb you would find in your home. The light rays of this type of light emanate in all directions from a single "point" in 3-D space. A Point Light's brightness determines it's "Falloff Radius." Objects within a light's Falloff Radius will be illuminated by the Point Light. Presenter displays a light's Fall-off Radius by drawing a spherical preview on screen. This preview is only visible when an existing light is selected or when adding a new Point Light.

To Add a Point Light
1) Select the Point Light tool From the Tool palette. Click to place the light in one of the View windows, and drag to determine it's Fall-off Radius.

To Edit a Point Light Location
1) Using the Selector tool click on the light you wish to edit and drag to it's new location.

To Edit a Point Light Fall-off Radius
1) Using the Selector Tool click on the light you wish to edit, the light's Fall-Off Radius preview becomes visible. Click and drag any of the four points along the Fall-off Radius preview to re-size.

Placing a Point Light

Point Light Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a light bulb. Also enable/disable the light bulb with the on/off switch. Double-click on a light bulb in the script list or on a key frame marker to access this base information, and apply attributes.

Base Information

Location

> x, y, z coordinates mark the position of the light. To precisely locate the light, enter x, y, z values.

Brightness

> % of color; is directly related to the size of the Fall-off radius. Enter a value in the Inches data field to precisely set the Fall-off radius shown as a sphere in the View windows.
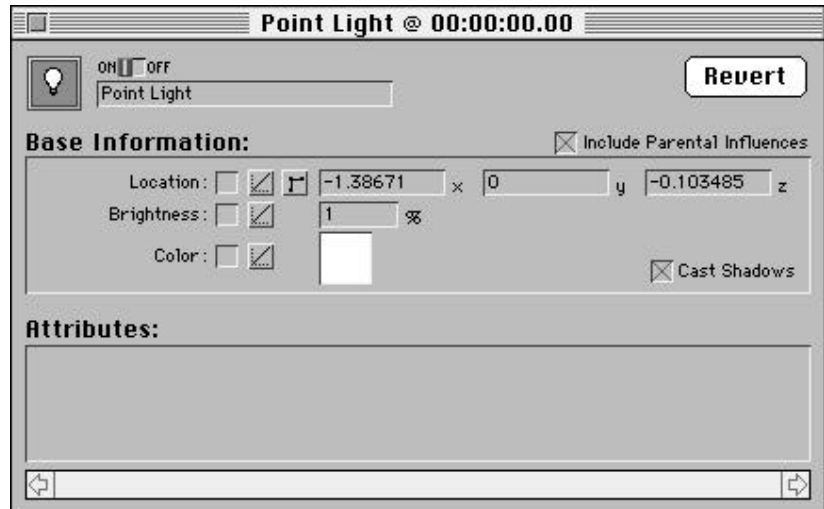
Color

> See Information dialog boxes-General in this chapter.

Attributes

> Drag and drop some icons from Attributes window (Windows Menu or ⌘-2).

Cast Shadows

> See Information dialog boxes-General in this chapter.

Note: Sounds and some Animators can be applied as Attributes. Shaders and Textures cannot.

Parallel Light

          A Parallel Light most closely mimics the light from the sun. All of it's light rays travel in one direction. A Parallel Light provides even illumination of the objects in a scene. Since this light's rays travel in a parallel direction, its illumination "falls off" in a linear rather than spherical manner. Presenter previews the direction of Parallel light rays and fall-off area by drawing a vector line emanating from the light's center and ending at its target point. This preview is only visible when an existing light is selected or when adding a new Parallel light.
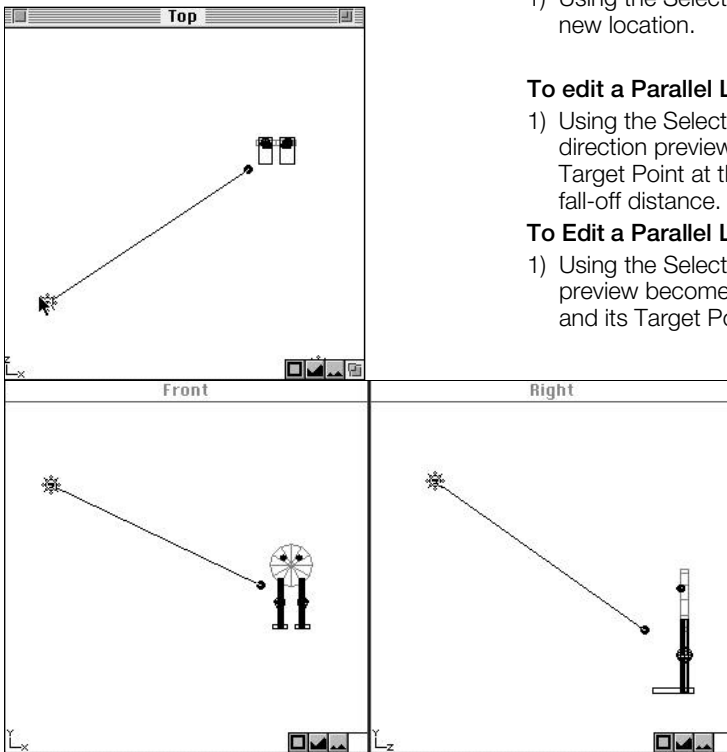
A default Parallel light is automatically placed into your scene upon opening a new document or model file.

To Add a Parallel Light

1) Select the Point Light tool From the Tool palette. Click to place the light in one of the View windows, and drag to determine the relative direction of its light rays and its fall-off distance.

Placing a Parallel Light

To edit a Parallel Light Location

1) Using the Selector tool click on the light you wish to edit and drag to its new location.

To edit a Parallel Light Direction and Fall -Off Distance

1) Using the Selector tool click on the light you wish to edit. The light's direction preview vector line becomes visible. Click and drag the Target Point at the end of the line to establish a new direction and fall-off distance.

**To Edit a Parallel Light Location while Maintaining Direction and Fall-Off**

1) Using the Selector tool click on the light you wish to edit. The light's preview becomes visible. Click the vector line segment between the light and its Target Point and drag to a new location.

Spot and Projector Lights

Parallel Light Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a sun light. Also enable and disable the sun light with the on/off switch. Double-click on a sun light in the script list or on a key frame marker to access the base information, and apply attributes.

Note: Sounds and some Animators can be applied as Attributes. Shaders and Textures cannot.
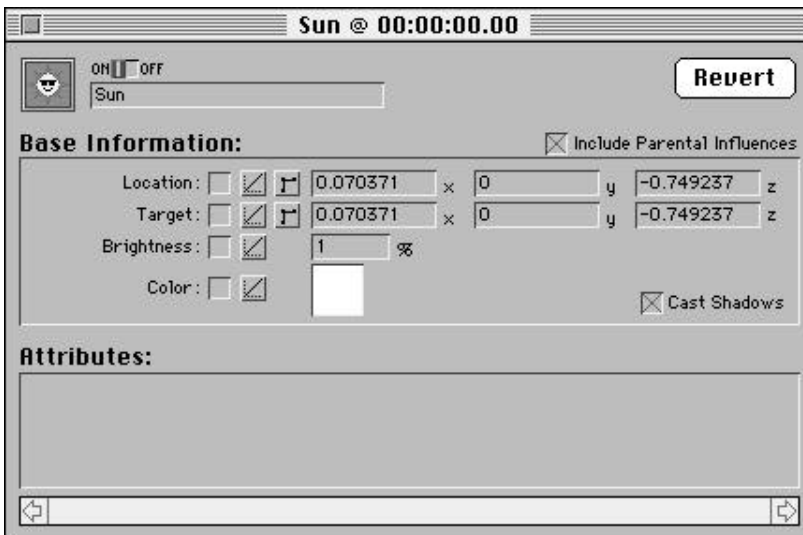
Base Information

Location

x, y, z coordinates mark the position of the light. To precisely locate the light, enter x, y, z values.

Target

x, y, z coordinates mark the position of the target point. To precisely locate the target, enter x, y, z values.

Brightness

% of color; is directly related to the size of the Fall-off.

Color box

See Information dialog boxes-General in this chapter.

Attributes

Drag and drop some icons from Attributes window (Windows Menu or ⌘-2).

Cast Shadows

See Information dialog boxes-General.

Both Spot Lights and Projector Lights are placed and edited in the same way. Presenter allows you to control the location of the Spot/Projector Light, its Target Point, and it's Field of View (the size of the area it illuminates). Presenter provides an interactive preview of these parameters on screen. In addition a "Through-the-Spot" preview is shown in the Active Camera Window to help you "aim" the light. This preview is only visible when an existing light is selected or when adding a new Spot/Projector Light.
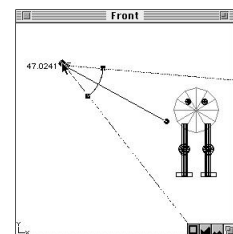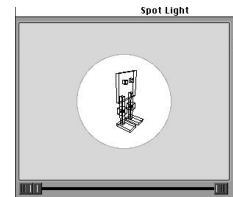
Spot Light

A Spot Light parallels it's real world counterpart by producing a focused beam of light emanating in a cone-like manner. A Spot Light is useful when illumination needs to be confined to a certain area or focused on a specific object. The Spot Light will produce a circular area of light.

Spot Light Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a spot light. Also enable/disable the spot light with the on/off switch. Double-click on a spot light in the script list or on a key frame marker to access the base information, and apply attributes.

Placing a Spot Light

Base Information

Location

x, y, z coordinates mark the position of the light. To precisely locate the light, enter x, y, z values.

Target

x, y, z coordinates mark the position of the target point. To precisely locate the target, enter x, y, z values.

Field of View

degrees; determines the area which the spot covers. Set this intuitively in the Active Camera Window.

Soft Edge Angle

degrees; determines the light Fall-Off from the Field of View.
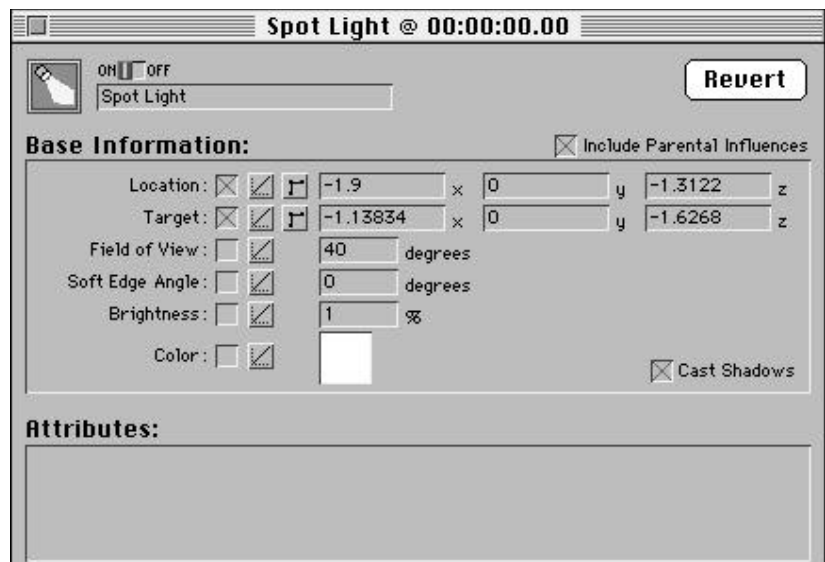
Brightness

% of color; is directly related to the size of the Fall-off radius.

Color box

See Information dialog boxes-General in this chapter.

**Cast Shadows**

See Information dialog boxes-General.

Note: Sounds and some Animators can be applied as Attributes; Shaders and Textures cannot.

Projector Light

A Projector Light behaves in much the same manner as a Spot Light with one important difference. A Projector transmits an image in the same way a movie or slide projector does in the real world. This image can be either a single still frame or series of frames such as a Quick Time Movie or PICS file. Unlike a Spot Light, the Projector Light produces a rectangular area of light, which is better suited for the transmission of an image.
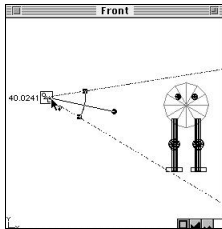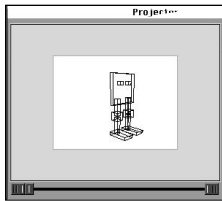
Placing a Projector

To place a Spot or Projector Light
1) Select the Spot or Projection Light tool From the Tool palette. Click to place the light in one of the View window, and drag to determine the direction and release at the desired target point.

To edit a Spot or Projector Light Location
1) Using the Selector tool click on the light you wish to edit and drag to it's new location.

To edit the Spot or Projector Light Field of View
1) Using the Selector tool click on the light you wish to edit. The light's preview becomes visible. The Spot Light's Field of View is controlled by the angle of it's light beam. This is previewed on screen by the angled lines emanating from the light's location. By changing the angle of these lines you can "widen" or "narrow" the area that the light illuminates referred to as it's Field of View. To do so, click and drag one of the two control points along the angled lines. Notice the angle is displayed numerically next to the light on screen.
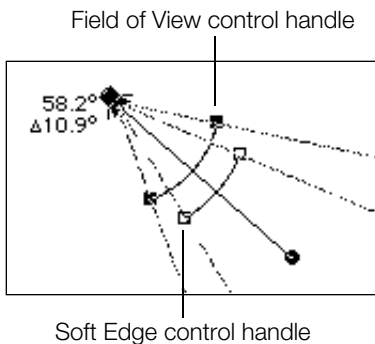
To Intuitively set the Soft Edge Angle (Spot Light only)
1) Select the Spot Light in one of the View windows.
2) Drag the Soft Edge control handles (clear, square points on the Field of View angled lines emanating from the light icon.

The angle difference from the Field of View angle is displayed below the Field of View angle display.

Field of View control handle

Soft Edge control handle

To edit a Spot or Projector Light Direction and Target Point
1) Using the Selector tool click on the light you wish to edit. The light's preview becomes visible. Click and drag the Target Point at the end of the vector line to establish a new direction and target location.

To Edit the Spot or Projector Light Location Maintaining Direction, Targeting and Field of View
1) Using the Selector tool, click on the light you wish to edit. The light's preview becomes visible. Click the vector line segment between the light and its Target Point and drag to a new location.

To Project a PICT or Quicktime Movie through a Projector
1) Access the Projector Information dialog box.
2) Enable the Attributes window and select Textures from the pull-down menu.
3) Select the PICT or QuickTime movie you want to project.
4) Drag the icon into the "Attributes" portion of the Projector Information dialog box.

Projector Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a projector. Also enable/disable the projector with the on/off switch. Double-click on a projector in the script list or on a key frame marker to access the base information, and apply attributes.

Base Information

Location

> x, y, z coordinates mark the position of the light. To precisely locate the light, enter x, y, z values.

Target

> x, y, z coordinates mark the position of the target point. To precisely locate the target, enter x, y, z values.

Field of View

> degrees; determines the area which the spot covers. Set this intuitively in the Active Camera Window.

Brightness

> % of color; is directly related to the size of the Fall-off..

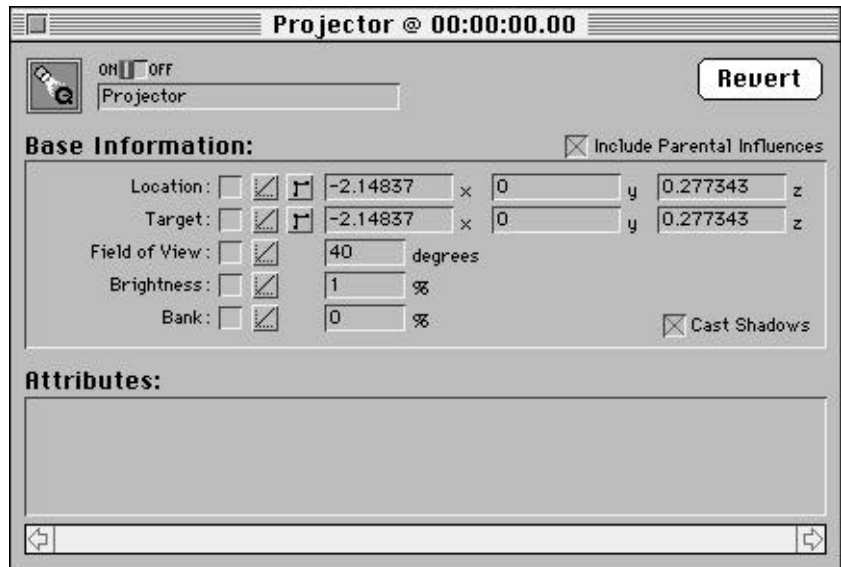**Bank**

> %; rotation of the projector about the line of sight axis. A value of 180 would project an image upside down.

Attributes

> Drag and drop some icons from Attributes window (Windows Menu or ⌘-2).

Cast Shadows

> See Information dialog boxes-General in this chapter.

Note: Sounds, some Animators, Textures, and QuikTime movies can be applied as Attributes. Shaders cannot.
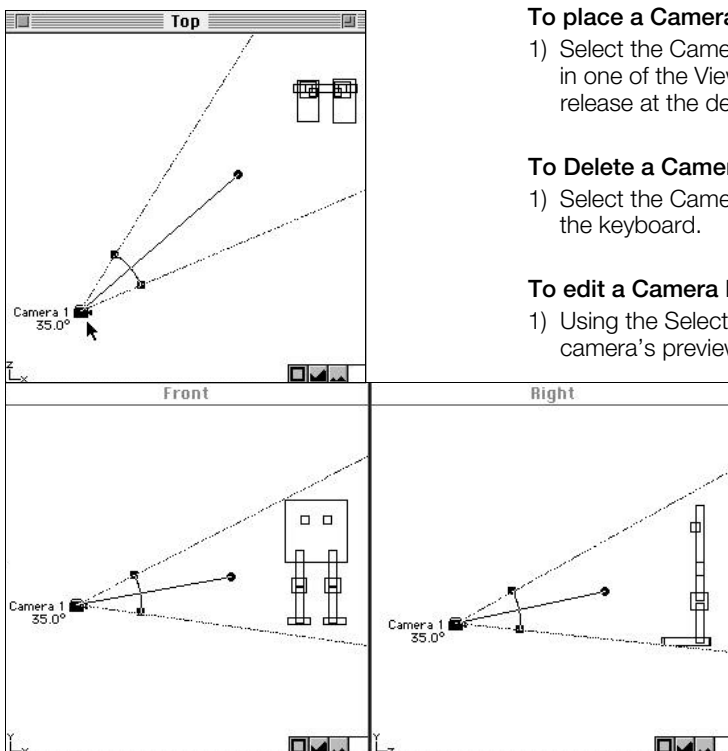
Camera Tool

The Camera Tool allows you to place cameras within your 3-D scene. Presenter allows for multiple cameras within a scene. A camera performs much like its real-world counterpart. Presenter provides an interactive preview of a camera's Location, Target Point and Field of View on screen. In addition a preview image is shown in the Active Camera Window to help you visualize what the camera is seeing. The image within the Active Camera Window also serves as a preview of what Presenter will include when rendering your animation or still frame. For convenience Presenter will automatically place a default camera into your scene upon opening a new document or model file.

Each camera has parameters that may be edited numerically; double-click on its icon or on its name in the Script List to access the Information Dialog box for a camera. For more specific information regarding Information dialog boxes, see this chapter.

Placing a Camera

To place a Camera
1) Select the Camera tool From the Tool palette. Click to place the Camera in one of the View windows, and drag to determine its Line of Sight and release at the desired location of its Target Point.

To Delete a Camera After Placing It
1) Select the Camera you wish to remove and press the Delete key from the keyboard.

To edit a Camera Field of View
1) Using the Selector tool, click on the Camera you wish to edit. The camera's preview becomes visible and the image it is "seeing" is displayed in the Active Camera Window.

The Camera's Field of View is controlled by the angle of its lens. This is previewed on screen by the angled lines emanating from the camera's location. By changing the angle of these lines you can "widen" or "narrow" the area the camera can "see" referred to as it's Field of View.

2) To do so, click and drag one of the two control points along the angled lines. Notice the angle is displayed numerically next to the Camera on screen. In this manner you can mimic real world photographic techniques using a Wide Angle or Fish Eye lens for instance.

To edit a Camera Line of Sight and Target Point

1) Using the Selector tool, click on the camera you wish to edit. The camera's preview becomes visible and the image it is "seeing" is displayed in the Active Camera Window. Click and drag the Target Point at the end of the vector line to establish a new Line of Sight and target location.

To Edit a Camera Location while Maintaining Line of Sight, Targeting and Field of View

1) Using the Selector tool, click on the camera you wish to edit. The Camera's preview becomes visible. Click the vector line segment between the camera and its Target Point and drag to a new location.

Camera Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a camera. Also enable/disable the camera with the on/off switch. Double-click on a camera in the script list or on a key frame marker to access the base information, and apply attributes.

Base Information

Location

x, y, z coordinates mark the position of the camera. To precisely locate the camera enter x, y, z values.

Target

x, y, z coordinates mark the position of the target point. To precisely locate the target, enter x, y, z values.

Bank Angle

degrees; rotation of the camera about the line of sight axis. A value of 180 would show an image upside down.

Field of View

degrees; determines the area which the camera can "see." Enter a value for lens size in mm to set the Field of View to specific lens lengths (common lens lengths: 50mm, 200 mm, 400mm).

Focal Distance

inches; focal length of the camera (lens).

F-stop

Applies only in RenderMan. Use to render with a Depth of Field.

Attributes

Drag and drop some icons from Attributes window (Windows Menu or ⌘-2).

Note: Sounds, some Animators and Textures (serving as backgrounds attached to the Camera) can be applied as Attributes. Shaders and QuickTime movies cannot.

Microphone

Using this tool you can place a "virtual" microphone within your animated scene. A Microphone performs much like its real-world counterpart. This Microphone will "record" the sounds you have assigned to the objects in your model. Presenter allows you to place multiple Microphones within a scene.

Each microphone has parameters that may be edited numerically; double-click on its icon or on its name in the Script List to access the Information dialog box for a microphone. See this chapter for general information regarding Info dialog boxes.

To Add a microphone
1) Select the Microphone tool from the Tool palette. Click to place the Microphone in one of the View windows, and drag to determine it's Range of Sensitivity.

To Delete a Microphone After Placing It
1) Select the Microphone you wish to remove and press the Delete key from the keyboard.

To edit a Microphone Location
1) Using the Selector tool click on the Microphone you wish to edit and drag to it's new location.

To edit a Microphone Range of Sensitivity
1) Using the Selector tool click on the Microphone you wish to edit, the Microphone's Range of Sensitivity preview becomes visible. Click and drag any of the four points along the preview to re-size it.

Placing a Microphone
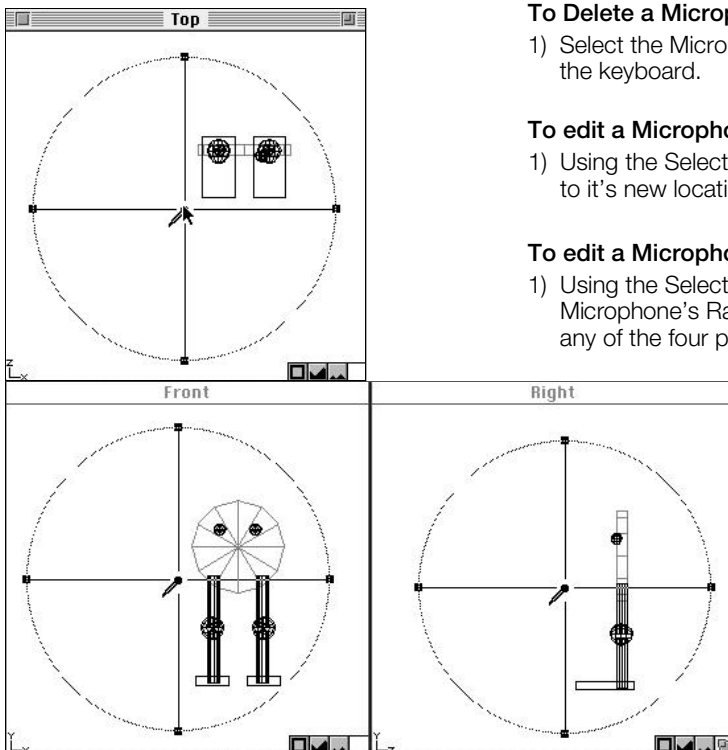
Microphone Information Dialog box

Double-click the icon to access the Info dialog for numeric information and input for a microphone. Double-click on a microphone in the Script List or on a key frame marker to access the base information, and apply attributes.

Base Information

Location
x, y, z coordinates mark the position of the mic. To precisely locate the mic, enter x, y, z values.

Sensitivity
%; determines the range of the microphone. Enter a value in this data field to precisely set the Sensitivity sphere of the mic in the View windows.

Attach to Track
Determines how the sounds perceived by this mic will be interpreted/played back. There are four choices in the pull-down menu: None, Mono, Stereo Left, or Stereo Right.
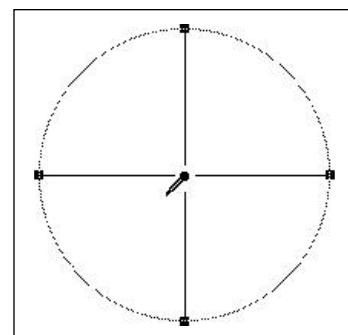
Attributes
Drag and Drop some icons from Attributes window (Windows menu or ⌘-2).

Note: Sounds and some Animators can be applied as Attributes. Shaders and Textures cannot.

A Microphone, like its real world counterpart, has a variable Range of Sensitivity. Presenter represents a Microphone's Range of Sensitivity by drawing a spherical preview on screen. This preview encompasses the area that is "in range" of the Microphone. This preview is only visible when an existing Microphone is selected or when adding a new Microphone.

Like in the real world, Presenter's Microphone responds to it's spatial relationship to a sound source. The on screen preview indicates the maximum boundary of the area a microphone is sensitive to. The relationship between an object and the microphone within this area, will ultimately determine the amplitude of the sounds recorded. The farther away from a source, the fainter the sound, the closer the source the louder the sound. Only objects emitting sound within the sensitivity area will be picked up by the microphone. Sounds produced by objects outside of the microphone's "range" will not be "heard,". regardless of their spatial relationship.

Microphone's Range of Sensitivity

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