

Tools



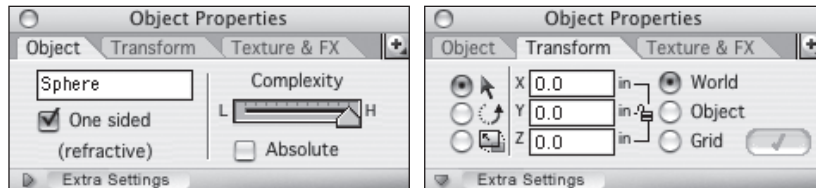
Send Model to Photoshop — **MODEL** +Ps * 3D models require Photoshop CS3 Extended
 Send Image to Photoshop — **RENDER** +Ps * Both commands require Ps plug-ins be installed

Reshape/Edit		Edit	
View Move		Object Move	Tool Palette Note: Double-clicking a tool will invoke the Tool Settings Dialog.
View Rotate		Object Rotate	
View Magnify		Object Scale	
Lathe		Extrude	
Sphere		Cube	
Cone		Rounded Cube	
Cylinder		Pyramid	
Text		Bézier Pen Tool	
Rectangle		Oval Tool	
Rounded Rectangle		Regular Polygon	
Point Light		Spotlight	<ul style="list-style-type: none"> Custom ▶ OpenGL ▶ Toon ▶ Scanline ▶ Raytracing ▶ Raydiosity™ ▶ Photons ▶ Soft Shadows ▶ Photoshop® ▶
Camera Object		Grid	
Break Joint		Joint	
Attribute Detach		Attribute Attach	
		Rendering Tool	
		Rendering Presets	
Dock Palettes		Stack Palette	
Hide/Show Palettes		Object Properties • Environment • Extensions	
		Status • Project Window • Resource	

Extensions & Object Properties

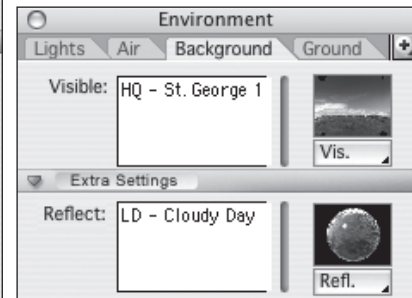
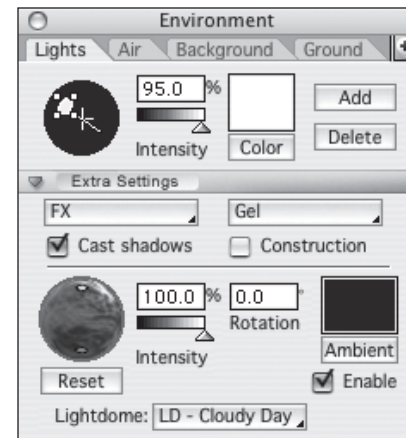


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|---------------------|---------------|--|--|
| Commands Tab | | | |
| A Align | J Unboolean | | |
| B Re-center | K Burn UV | | |
| C Alight Handles | L Hull | | |
| D Make First Point | M Unhull | | |
| E Smooth Mesh | N Fillet | | |
| F Drop A Curve | O Flip Faces | | |
| G Meld | P Subdivide | | |
| H Unmeld | Q Unsubdivide | | |
| I Alight To Path | R Thickness | | |
-
- | | | | |
|-------------------|-----------------|--|--|
| Tools Tab | | | |
| A Path Extrude | J Linked Mirror | | |
| B Intersect | K Bones | | |
| C Union | L Skin | | |
| D Subtract | M Unskin | | |
| E Cut | N Snap | | |
| F Convert To Path | | | |
| G Deform | | | |
| H Jiggle | | | |
| I Mirror | | | |



- Object Tab (Standard Objects)**
- Object name
 - One sided checkbox for refractive objects
 - Complexity slider - low to high detail
 - The Expert Settings may provide additional controls
- Transform Tab**
- Move, rotate, and scale objects - numerically
 - Transform objects relative to world, object, or grid
 - Restrict transformations - numerically
 - Convert animation path type
- Texture & FX Tab**
- List of applied Textures - drag to re-order
 - Mapping Styles, Tiling Styles, Mixing Rules
 - Texture repetition, coverage or size - numerically
 - Texture editing buttons

Environment



Lights Tab
Directional lights (top left) provide lighting similar to the sun - sharp light with crisp shadows. **Click** on the small disc to select or rotate the light(s) around your model.

Command/Control Click will toggle the light direction between front and back. Select a Directional light to modify its Intensity, Color, FX, Gel, Cast Shadows, and Construction status. Enable the **Construction** checkbox to make the Directional light visible in your modeling view only, and not rendered in your scene.

Background Tab
 In addition to being used for Lightdomes, **Backgrounds** can be applied to your model as a visible image to appear in your renderings behind the objects and/or as images to reflect in the surface of objects that have reflective textures applied to them.

Use the pop-up menu to select a **Background** from the **Resource** library, or you can create new Backgrounds using the **New** command from the menu. You can also create and load **Backgrounds** by using the Backgrounds tab of the **Resource palette**.

Lightdome lighting (lower left) is similar to light cast by an overall environment - such as the sky and clouds or an illuminated room. Choose a **Background** to light your scene from the pop-up menu. Lightdomes only cast shadows with **Raydosity** or the **Soft Shadows** rendering presets.

Once a Background is created or loaded using the Resource palette they will appear in the top portion of the pop-up menu in this Background tab of the **Environment palette**. Choose any Background you want to use and a checkmark will appear next to its name.

Ambient light (lower right) provides an overall wash of light. Ambient sets the minimum amount of light that will show in the darkest areas of your model. Use Ambient cautiously as it may reduce the realism of your renderings.

Keyboard Shortcuts (Macintosh/Windows)

File Menu

New	Command/Ctrl N
Open	Command/Ctrl O
Close	Command/Ctrl W
Save	Command/Ctrl S
Import	Command/Ctrl I
Print	Command/Ctrl P
Quit	Command Q

Edit Menu

Undo	Command/Ctrl Z
Cut	Command/Ctrl X
Copy	Command/Ctrl C
Paste	Command/Ctrl V
Duplicate	Command/Ctrl D

Selection Menu

Select All	Command/Ctrl A
Select None	Command/Ctrl 1
Hide Selected	Command/Ctrl 3
Show Hidden	Command/Ctrl 4
Make Shy	Command/Ctrl 5
Make Shy Normal	Command/Ctrl 6
Make Construction	Command/Ctrl 7
Make Const. Norm.	Command/Ctrl 8
Hide Animation Paths	Command/Ctrl 9
Show Animation Paths	Command/Ctrl 0

Rendering Menu

Render	Command/Ctrl R
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Modeling Menu

Reshape	Command/Ctrl L
End Reshape/Edit	Command/Ctrl E
Align	Command/Ctrl /
Group	Command/Ctrl G
Ungroup	Command/Ctrl U

Scripting Menu

Smaller Font	Command/Ctrl ;
Larger Font	Command/Ctrl '

Windows Menu

New Window	Command/Ctrl \
Fit Views To All	Command/Ctrl =
Fit Views To Selection	Command/Ctrl -
Fit Views to Active Grid	Command/Ctrl [
Reset Views	Command/Ctrl]

Tool palette Switch Temporary

Select Object Move	1	
Select Object Rotate	2	
Select Object Scale	3	
Select View Move	Shift 1	Space
Select View Rotate	Shift 2	Shift Space
Select Zoom (In)	Shift 3	Cmd/Ctrl Space
Select Zoom Out	Opt/Alt	Opt/Alt Space

Palette Hotkeys

Information palette	I
Object Properties palette	O
Project window	P
Resource palette	R
Environment palette	E
Extensions palette	T

Selecting Objects

Extend Selection	Shift
List objects on depth axis	Ctrl/Right Click

Moving Objects

Move origin point	Command/Ctrl
Perpendicular to grid	Command/Ctrl Shift

Polygon Mesh Editor/Reshape Tool Palette

Vertex Mode	Shift .
Edge Mode	Shift /
Face Mode	Shift ,

Tools

Move Tool	M
Rotate Tool	J
Scale Tool	K
Magic Wand	W
Extrude Tool	U
Inset (use Extrude Tool)	Left & Right arrows
Bevel Tool]
Cut Tool	\

Contextual Menu

Face Mode

Dissolve	Backspace
Bridge	B
Flip	L
Mirror	Shift M

Edge Mode

Dissolve	Backspace
Loop Select	L
Ring Select	N
Connect	C
Bridge	B
Fill	0 (zero)

Vertex Mode

Dissolve	Backspace
Connect	C
Gravity	V

Selection

Paint Select	Shift Drag
Paint Deselect	Option Drag

Working with Bézier Handles

Hinge direction handles	Command/Ctrl
Disjoint hinged handles	Option/Alt

2D Reshape

Add a vertex point	Option/Alt
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Nudging Objects (Relative To Active Grid)

Negative Z direction	Up arrow
Positive Z direction	Down arrow
Positive X direction	Right arrow
Negative X direction	Left arrow
Positive Y	Cmd/Ctrl Shift Up
Arrow	
Negative Y	Cmd/Ctrl Shift Down
Arrow	
Accelerate Nudge	Cmd/Ctrl Arrow
Decelerate Nudge	Option/Alt Arrow

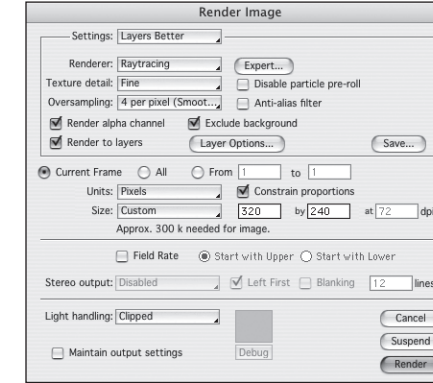
Changing View Orientation

Left	4
Front	5
Right	6
Back	7
Top	8
Bottom	9
Isometric	/

Changing Grids

Make X Grid active	X
Make Y Grid active	Y
Make Z Grid active	Z
Cycle forward all grids	+
Cycle backward all grids	-

Rendering Controls



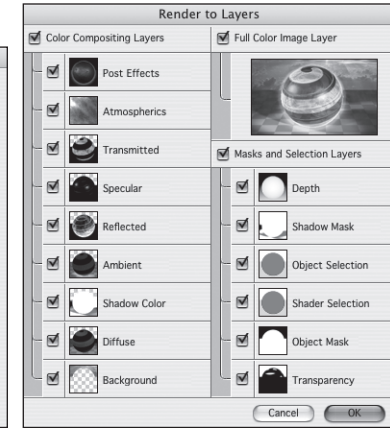
Render Image Dialog

At the top of the **Render Image** dialog is the **Settings** drop-down menu, which is identical to the Rendering tool Presets menu in the **Tool palette**.

These presets allow you to quickly switch from one rendering style to another, at varying quality levels, and even select special options for your renderings. Just selecting a preset will load its settings into all of the other areas of the Renderer Controls, and can be used to “reset” any of the options (including those hidden in **Expert** dialogs).

The **Frame** controls section of the **Render Image** dialog includes options for determining the pixel size and resolution of your image, which frames from an animation to render, and whether you want to render directly to interlaced video fields.

You can also adjust the number of dots per inch in the final rendered image. This setting determines the resolution of the final image. If **Pixels** is selected in the **Units** pop-up, the resolution is always 72 dpi and cannot be changed.



Render To Layers

To turn on **Render to Layers**, either check this option in the **Render Image** dialog, or choose one of the Photoshop® presets. The presets will automatically check the option and set certain options in the **Layer Options** dialog as well.

Once the **Render to Layers** option is checked, the **Layer Options...** button becomes active. Pressing this button opens the full **Render to Layers** dialog. In this dialog you can check which components of your rendering will be stored to individual layers in a Photoshop file when using Raytracing or Raydisoiity. The various components represent everything from individual texture attributes, to post-processing FX, to useful masks and modifier layers.

Using **Render to Layers** is ideal when combined with the **Send Image to Photoshop** command. The image will be made of **Photoshop Layers** and aid in composing and controlling your final image.