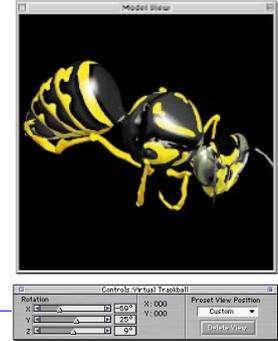


- Object Selection (q)**  
Click the object you want to detail.
- Magnifier (m)**  
Click image or model to view closer. Option/Alt+click to shrink. Double-click this tool to fit model to window
- Dropper (d)**  
Click in image or on model to sample color.
- Paint Bucket (k)**  
Choose tool, choose material in Controls palette, click image or model to fill.
- Light (l)**  
Click model to add light. Use Controls palette to set brightness.
- Lasso (l)**  
Drag to enclose a freehand selection area.
- Floater Adjuster (f,s)**  
Click a selection to float it. Option/Alt-click to float a copy. Drag floaters in image or across model surface.

- Virtual Trackball (h)**  
Drag the model to rotate the view. Shift-drag to unlock lighting while rotating.
- Grabber (g)**  
Drag in image or on model to view different areas. Double-click this tool to center visible items
- Brush (b,v)**  
Paint in an image or on the model by applying strokes. Double-click this tool to open Brushes palette.
- Text (t)**  
Choose tool, set font/size in Controls palette, click in image or on model and type text.
- Selection (r,o)**  
Hold down to pop up icon and choose between Rectangular and Oval Selection. Drag in image to select an area. Use Shift key to constrain proportions.
- Magic Wand (w)**  
Click image to select contiguous color area based on color similarity.

Model Window

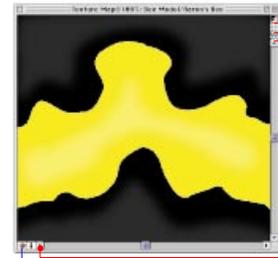


- Choose **Edit menu > Preferences > Model** to change background color and tracking display.
- To resize window, choose **Window menu > Set 3D View Size**.

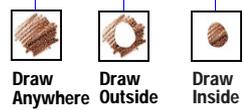


When the Virtual Trackball tool is selected, drag the sliders or enter values in the Controls Palette to rotate the model view around the separate axes. Choose preset views or create custom view settings.

Image Window



- Tracing Paper**  
Lets you see through to the clone source image so you can trace it.
- View Grid**  
Click to show/hide grid overlay on image and model. Set options in **Canvas > Grid > Grid Options**.
- View Mesh**  
Click to show/hide mesh overlay in image window.  
Press "i" for image info.



- Draw Anywhere**  
Draw anywhere in the image.
- Draw Outside**  
Draw only outside selections.
- Draw Inside**  
Draw only inside selections.

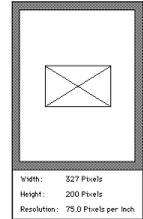
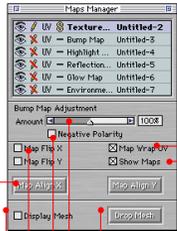


Image Information

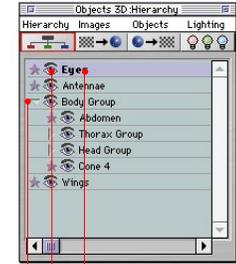


- Name of map image file.
- Link icon indicates if map is shared by multiple objects.
- Icon indicates mapping type.
- Click the Pencil icon for the map you want to edit. Shift-click Pencil icons to edit multiple maps simultaneously.
- Click the Eye icon to hide/show map on model.



- Drop mesh as a graphic element into image.
- Change the level of bump effect.
- Invert the bump effect.
- Flip map along the X and/or Y axis.
- Show/hide selected image map. Option/Alt-click to hide/show all Image Windows
- Enable/disable wrap-around painting in the Image window.
- Show/hide object mesh in image map.
- Align map to X and/or Y axis.

## Objects 3D Hierarchy Palette

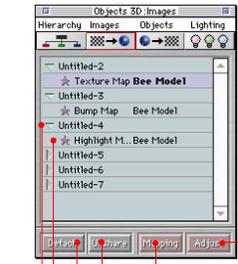


- View all objects that make up a model in the Hierarchy list.
- Click the Eye icon to turn visibility on and off for individual objects.
- Click the triangle to expand/collapse grouped objects.

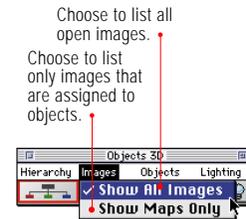


- Show or hide all objects in the Model window.
- Invert the visibility states of all objects.
- Set object colors globally or individually.

## Objects 3D Images Palette

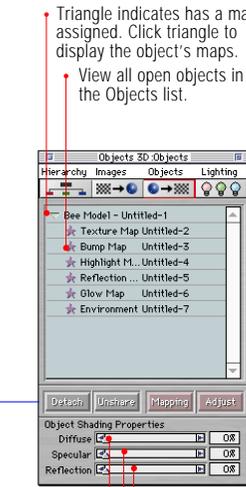


- Change mapping type.
- Stop sharing a map across objects.
- Detach map from object; imagery remains as 2D image.
- Adjust map position on model (except UV maps).
- View all open images in the Images list.
- Triangle indicates image is a map. Click triangle to display the map's objects(s).



- Choose to list all open images.
- Choose to list only images that are assigned to objects.
- Choose to list all open objects.
- Choose to list the currently selected object.

## Objects 3D Objects Palette

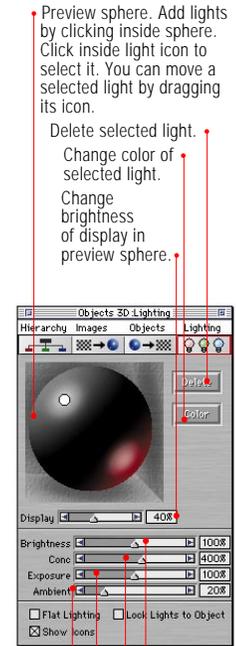


- Triangle indicates has a map assigned. Click triangle to display the object's maps.
- View all open objects in the Objects list.
- Set the object's tendency to reflect environment.
- Set the object's tendency to show highlights.
- Set the amount of color the object shows

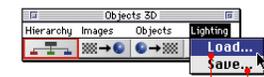


- Choose to list all open objects.
- Choose to list the currently selected object.

## Objects 3D Lighting Palette



- Preview sphere. Add lights by clicking inside sphere. Click inside light icon to select it. You can move a selected light by dragging its icon.
- Delete selected light.
- Change color of selected light.
- Change brightness of display in preview sphere.
- Set brightness of selected light.
- Set concentration of selected light.
- Set amount of light entering the rendering camera.
- Set level of ambient light.

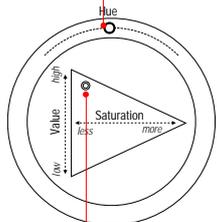


- Load a saved set of lights from a library.
- Save current lights to a library.

# Art Materials

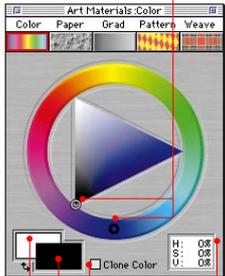


Click and drag the marker around the circle to change hue.



Click and drag the marker inside the triangle to change saturation and value simultaneously.

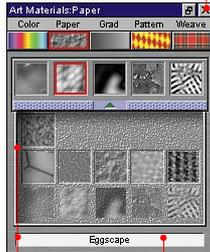
Note the border of the control marker—the hue control is solid, the value and saturation control marker is open.



Specify that the Brush paints with colors from a clone source.

- Primary Color
- Secondary Color
- Hue, Saturation, and Value components of the selected color.

Click the grow box to extend the palettes.



Access other paper libraries from the pop-up menu or by clicking the icon.



Invert current paper texture.

Change paper scale.

Preview of current paper texture.

Create and save your own paper textures.

Click the pushbar to view the current Grad Library.

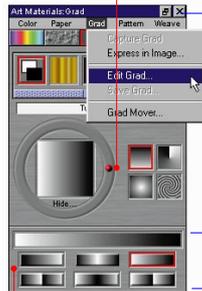
Choose Grads from the pop-up menu or by clicking the icon.

Grad name.



Grad Types

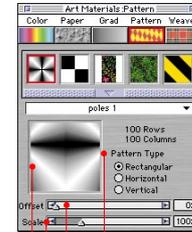
Change the angle of Grads by clicking and dragging the red ball around the ring.



Use the Orders buttons to change the order of the colors in the Grad.



Choose Patterns from the pop-up menu or by clicking the icon.



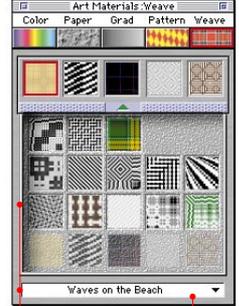
Choose the type.

Vary the offset—how pattern tiles align with one another.

Change the scale of the pattern tiles.

Preview pattern choices.

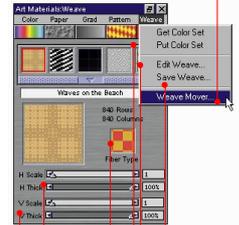
Access tools for creating, editing, capturing, and organizing patterns.



Access other weave libraries.

Choose weaves from the pop-up menu or by clicking the icon.

Move weaves between libraries.



Save weaves.

Edit weaves.

Change color sets.

Toggle between 2D and 3D fibers.

Vary the horizontal scale and horizontal thickness.

Vary the vertical scale and vertical thickness of the threads.

# Objects

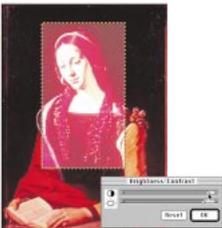
## Objects Plug-in Floater Palette



Click the pushbar to view more Plug-in Floaters.  
Choose a Plug-in Floater icon and then click Apply to open the options dialog.  
Choose from the Library pop-up menu or click an icon.



Commit the Plug-in to an image floater and freeze current state, removing dynamic options.  
Return to the original image floater, removing dynamic changes.



A brightness/contrast Plug-in Floater and its options dialog.

## Objects Floater List Palette

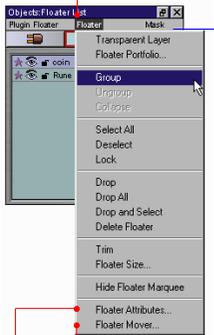
Move floaters higher or lower in the image stack by dragging a floater name up or down in the list.

Floater type (Reference, Plug-in, or Image Floater).  
Click the Eye to show/hide a floater.  
Click to lock/unlock a floater.  
Floater names.



Drop a floater to merge it with the canvas.  
Trim excess area around floater.  
Group or ungroup floaters.  
Collapse a group to merge all of the items in the group into one floater.

Pull down the Floater menu for more Floater options.



Configure floater libraries.  
Open Floater Attributes dialog.



Choose a floater by clicking its icon, then drag the floater icon into your image.

Use **Effects menu > Orientation > Free Transform** to transform an image floater to a reference version of the floater. While in the state of transform, these floaters are called Reference Floaters.

Use the Adjuster tool to make transformations.



Move a floater.



Press the **⌘/Ctrl** key and drag a corner point to rotate a floater.



Press the **⌘/Ctrl** key and drag a mid-point to skew a floater.



Press the **Shift** key and drag a corner point to resize a floater while maintaining aspect ratio.

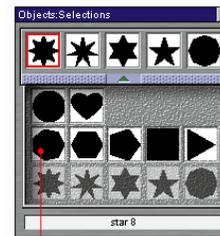
## Objects Mask Palette

View/Hide Masks  
Select Mask to use it.



Make a new mask to work on.  
Load mask as a selection.  
Save current selection as a mask.

Choose **Select menu > Selections Portfolio** to open this palette.



Choose a Selection by clicking its icon. The drag the selection into your document.

Create a new mask, or select an existing mask and pull down the mask menu for more options.



Invert to select the inverse area: for example, the window box or the stucco wall.



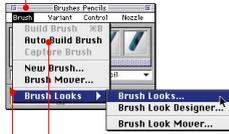
Perform Boolean operations (Add to, Subtract from, intersect) when you load a mask as a selection.

# Brushes Palette



Choose Brushes by clicking the icons in the Brushes Palette. Click on the Pushbar to access the Brush Library.

Access controls for building custom brushes from the Brushes menu.



Build and Capture Brushes

The Brush Look Designer together with the basic Brush Looks Library provides an environment for developing Brush variants quickly.



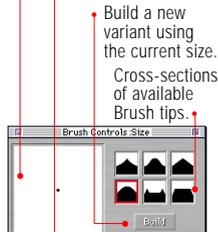
Brush Controls palettes can be accessed from the Control menu. Not all palettes are available for all brushes.



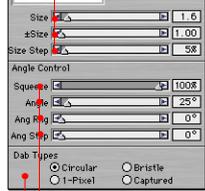
Choose Brushes and load new Libraries. Choose Brush variants. Click grow box to display methods.

Brush strokes interact with existing color depending on their Method. Change Methods by choosing from either or both of these pop-up menus. Transform regular brushes into amazing brushes by choosing a Plug-in Brush Method and Method Subcategory.

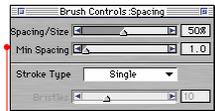
Shows current Brush Size. Click for alternate preview. Control the size with these sliders.



Build a new variant using the current size. Cross-sections of available Brush tips.

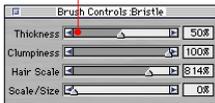


Control the angle of the Brush dab as well as to what degree the angle affects the appearance of the variant. Choose among four Dab Types.



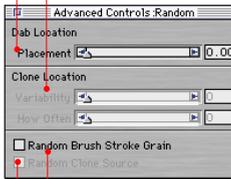
Control the spacing of Dabs; determine whether the Dabs operate singly or in groups.

Vary attributes of Brush Bristles.



Part of the Natural-Media® Brush responsiveness comes from greater or lesser amounts of randomness.

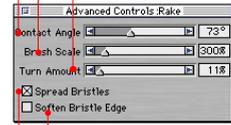
Vary randomness of Dab placement. Vary randomness of the clone source location and frequency.



Vary the location of paper grain placement. Completely randomize the location from which clone pieces are picked up.

Rake Strokes are made up of sets of strokes.

Adjust how much of the Brush touches the painting surface. Control spacing between individual bristles in a Brush. Control the degree to which bristles displace while painting a curve.

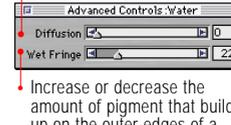


Dynamically adjust Brush scale with pressure. Make the outermost bristle of a Brush transparent.

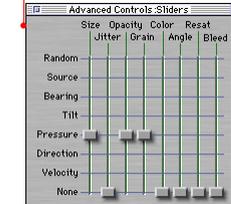
The adjustments in the Well Palette affect the way a medium (ink, paint etc.) flows from a brush.

Make color last longer through a stroke. Control how much colors will mix together. Determine how quickly a brush runs out of its medium.

The Water Palette works with Painter's wet layer. Adjust how much the edge of a brush stroke interacts with the grain of the paper texture.



Increase or decrease the amount of pigment that builds up on the outer edges of a watercolor stroke. Adjust Brushes to react to a variety of parameters using the Sliders Palette.



The settings in this example show that the amount of pressure applied to a stylus will determine how much the grain of the paper shows.

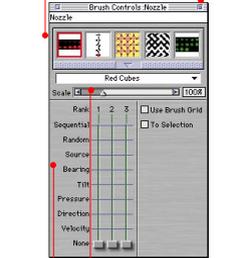
Access the Nozzles Palette from the Nozzle menu.



Move and organize Nozzles. Add Nozzle to or check out from Library. Open other Nozzles or create your own Nozzle files.

Click in the grow box to display the Nozzle Controls.

Choose a particular Nozzle by clicking its icon.



Change the size of Nozzle images.

Set input factors for controlling which images are selected from the Nozzle.

# Keyboard Shortcuts

UNIVERSAL    **MACINTOSH**    WINDOWS

## Palettes

Toolbox	⌘-1	Ctrl-1
Objects 3D	⌘-2	Ctrl-2
Maps Manager	⌘-3	Ctrl-3
Brushes	⌘-4	Ctrl-4
Art Materials	⌘-5	Ctrl-5
Objects	⌘-6	Ctrl-6
Controls	⌘-7	Ctrl-7
Color Sets	⌘-8	Ctrl-8
Nozzles	⌘-9	Ctrl-9
Floater	⌘-0	Ctrl-0

## Menu Keyboard Commands

### File

New Model	⌘-N	Ctrl-N
Open Model	⌘-O	Ctrl-O
Close	⌘-W	Ctrl-W
Save	⌘-S	Ctrl-S
Get Info	⌘-I	Ctrl-I
Print	⌘-P	Ctrl-P
Quit	⌘-Q	Ctrl-Q

### Edit

Undo	⌘-Z	Ctrl-Z
Redo	⌘-Y	Ctrl-Y
Cut	⌘-X	Ctrl-X
Copy	⌘-C	Ctrl-C
Paste	⌘-V	Ctrl-V
Paste in Register	Shift-⌘-V	Shift-Ctrl-V

### Effects

Last Effect	⌘-/	Ctrl-/
2nd-to-Last Effect	⌘-;	Ctrl-;
Fill	⌘-F	Ctrl-F
Equalize	⌘-E	Ctrl-E
Adjust Colors	Shift-⌘-A	Shift-Ctrl-A
Apply Surface Texture	Shift-⌘-S	Shift-Ctrl-S

### Canvas

Tracing Paper	⌘-T	Ctrl-T
Resize Image	Shift-⌘-R	Shift-Ctrl-R

## Select

Select All	⌘-A	Ctrl-A
Deselect	⌘-D	Ctrl-D
Reselect	⌘-R	Ctrl-R

## Windows

Hide/Display Palettes	⌘-H	Ctrl-H
Zoom in	⌘-+	Ctrl-+
Zoom Out	⌘--	Ctrl--
New View	⌘-K	Ctrl-K
Detach Image from Model	⌘-M	Ctrl-M

## Screen Navigation

Scroll image with Grabber	Space	Space
Center Image	Space-Click	Space-Click
Zoom in	Space-⌘	Space-Ctrl
Zoom out	Space-⌘-Opt	Space-Ctrl-Alt
Rotate Image	Space-Opt	Space-Alt
Constrain rotate to 90°	Shift-Opt-Space	Shift-Alt-Space
Un-rotate image	Space-Opt-Click	Space-Alt-Click
Define magnification Area	Space-Ctrl-Drag	Space-⌘-Drag

## 3D View Navigation

Reference	⌘-Opt-2	Ctrl-Alt-2
Top	⌘-Opt-3	Ctrl-Alt-3
Right	⌘-Opt-4	Ctrl-Alt-4
Front	⌘-Opt-5	Ctrl-Alt-5
Left	⌘-Opt-6	Ctrl-Alt-6
Back	⌘-Opt-7	Ctrl-Alt-7
Bottom	⌘-Opt-8	Ctrl-Alt-8
Custom	⌘-Opt-1	Ctrl-Alt-1
View/Hide Mesh	⌘-Opt-;	Ctrl-Alt-;

## Brush Tools

### Brush Controls

Dropper	⌘	Ctrl
Resize Brush	⌘-Opt	Ctrl-Alt
Constrain to 45°		Shift
Adjust opacity in 10% increments		1-0 keys
Unconstrained Draw		Shift-1
Draw outside		Shift-2
Draw inside		Shift-3
Load Nozzle	⌘-L	Ctrl-L

### Cloning

Set Clone Source	Ctrl-Click	Shift-Click
Set Clone Destination		Ctrl-Shift-Click
Re-link Clone Source	Opt-Clone Cmd	Alt-Clone Cmd

### Colors

Add current color to color set	⌘-Shift-K	Ctrl-Shift-K
Set object Color	⌘-Click	Alt-Click

### Gradients

Edit Gradation	⌘-Shift-G	Ctrl-Shift-G
Adjust spirality for spiral gradients		
⌘-Angle Adjuster		Ctrl-Angle Adjuster

### Paint Bucket Tool

Limit fill extent		Drag
Dropper	⌘	Ctrl

## Selection Tools

### Selection Tools

Constrain to square		Shift (after mouse down)
Add to selection		Shift
Subtract from selection	⌘	Ctrl
Selection adjuster	Ctrl	Ctrl-Shift
Float		Click
Float a copy	Opt-Click	Alt-Click

### Magic Wand

Add color to set		Shift-Click
Add range of colors to color set		Shift-Drag
Remove color from set	⌘-Click	Ctrl-Click
Remove range of colors from set		⌘-Drag
Toggle contiguous & noncontiguous		Ctrl-Shift-Click
Define noncontiguous region		⌘-Shift-Drag
		Ctrl-Shift-Drag

## Adjuster Tools

### Floater Adjuster

Floater Adjuster		⌘-Opt-Shift	Ctrl-Alt-Shift
Duplicate		Opt-Click	Alt-Click
Move floater by one screen pixel			Arrow Keys
Hide/Display marquee		⌘-Shift-H	Ctrl-Shift-H
Delete selected floaters		Delete	Backspace
Attribute dialog box for current floater			Enter
Adjust opacity in 10% increments			0-1 Keys
Select all floaters		⌘-Opt-A	Ctrl-Alt-A
Deselect floaters		⌘-Opt-D	Ctrl-Alt-D
Drop current floater		Shift-⌘-D	Shift Ctrl-D
Group floaters		⌘-G	Ctrl-G
Ungroup floaters		⌘-U	Ctrl-U

### Selection Adjuster

Duplicate		Opt-Click	Alt-Click
Move selection by one screen pixel			Arrow Keys
Delete current selection		Delete	Backspace

### Free Transform

Resize		Corner Handles
Resize/preserve aspect		Shift-Corner Handles
Resize/one dimension		Side Handles
Skew		⌘-Side Handles
		Ctrl-Side Handles
Rotate		⌘-Corner Handles
		Ctrl-Corner Handles