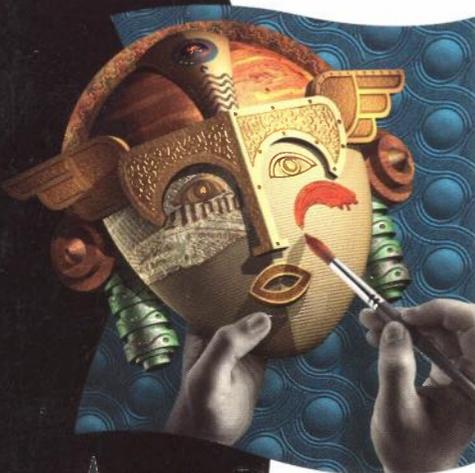


Tools

Model and Image Windows



Fractal Design DETAILER

**QUICK
REFERENCE
CARD**

FOR MACINTOSH



**FRACAL
DESIGN
CORPORATION**



Object Selection
Click on the object you want to detail.

Magnifier
Click in image or on model to view closer. Option-click to shrink.

Dropper
Click in image or on model to sample color.

Paint Bucket
Choose tool, choose material in Controls palette, click in image or on model to fill.

Light
Click on model to add light. Use Controls palette to set brightness.

Lasso
Drag to enclose a freehand selection area.

Floater Adjuster
Click a selection to float it. Option-click to float a copy. Drag floaters in image or across model surface.

Virtual Trackball
Drag the model to rotate the view.

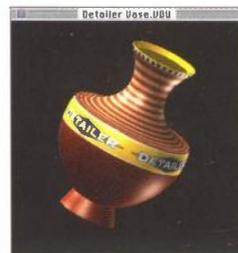
Grabber
Drag in image or on model to view different areas.

Brush
Paint in an image or on the model by applying strokes. Double-click Brush icon to open Brushes palette.

Text
Choose tool, set font/size in Controls palette, click in image or on model and type text.

Selection
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.

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 to rotate the model view around the separate axes.

Image Window



- Click to show/hide mesh overlay on map image.
- Click to show/hide grid overlay on image.
- Click to use Edit Mask mode. When the icon is dark (in Edit Mask mode), click to return to color mode. This applies to the canvas or to a selected floater.
- Press "i" for image info.



Mask Disabled

Draw anywhere in the image.



Masked Inside

Draw only outside selections/masked areas.



Masked Outside

Draw only inside selections/masked areas.



Clear View

Canvas mask is not shown.



View Red Mask

Canvas mask appears as a red overlay.



View Selection

Canvas mask is converted to a selection.

Color

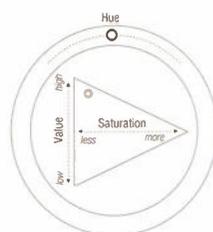
Gradation

Texture

Object

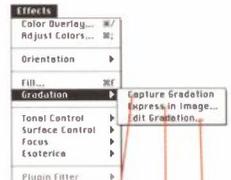


- Click/drag to set hue.
- Click/drag to set value and saturation.
- Open Color Set palette.
- Open current Color Set.
- Open Gradations palette.
- Manage gradation libraries.
- Two-point gradation. Use this with primary/secondary colors to create your own.
- Click/drag to change angle.
- Gradation preview.
- Open drawer for library of grads.
- Hue, saturation, value of current color. Click to show RGB.
- Set color variability for brush.
- Primary color.
- Secondary color.

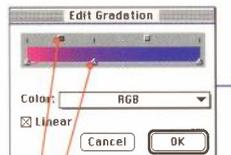


A brush stroke with high color variability.

- Other palette displays.
- Open Color Set palette.
- Open current Color Set.
- Open Gradations palette.
- Manage gradation libraries.
- Two-point gradation. Use this with primary/secondary colors to create your own.
- Click/drag to change angle.
- Gradation preview.
- Open drawer for library of grads.
- Choose the type.
- Add current gradation to library.
- Preview shows the effect of order change.
- Choose the gradation order.



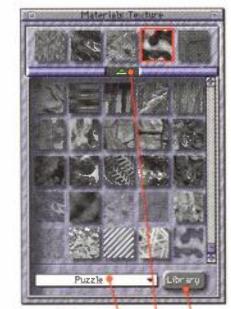
- Select narrow rectangle of image, then capture gradation.
- Put gradation's colors into image.
- Open the current gradation for editing.



- Click to add color control point.
- Drag the point where you want it.
- Press Delete to remove control point.
- Click the square, then choose a blending method (Color, Linear).



- Name of current texture.
- Choose the texture you want.
- Open drawer.
- Dimensions of texture tile in pixels: Columns=width, Rows=height.
- Make light pixels become dark and vice versa.
- Change size of texture tile.

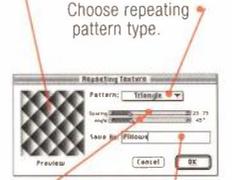


- Choose an item by name.
- Close the drawer.
- Open alternate libraries.



- Select rectangle of image, then Capture Texture to library.
- Open texture design tool.
- Manage texture libraries.

- Preview shows results of your settings.



- Choose repeating pattern type.
- Change size and angle.
- Name the texture. It will be added to the current library.

- Select an object in the model by clicking on it with the Object Selection tool.

The Materials: Object palette shows the maps and settings for the selected object.

The map control features of the Object palette are also available on the Map menu.

- Load a map for the selected (highlighted) type. You may also double-click the listing.

- Save the selected map image.



- Change the amount of color the object shows.
- Change the object's tendency to show highlights.
- Change object's tendency to reflect environment.
- Invert the bump effect.
- Change level of bump effect.

Floaters

Click the Eye icon to hide/show map on model.

Click the Pencil icon for the map you want to edit.

Name of map image file.



Change mapping method for the selected map.

Open Adjust Mapping dialog for selected map.

No maps loaded.

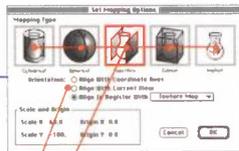
The selected map is highlighted.

 Map visible on model. Click to hide.

 Map hidden. Click to show.

 Map not active for editing. Click to activate.

 Map active for editing.

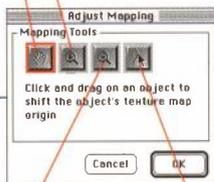


Choose the mapping mode for this map.

Set the alignment of this map (not valid with implicit mapping).

Drag on model to move map on surface.

Click on model to decrease map tiling (repetitions).



Click on model to increase map tiling (repetitions).

Click on model to set Pass-through direction.

Some Adjust Mapping tools do not apply under certain mapping methods.

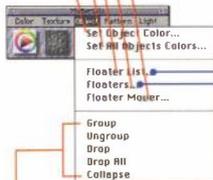
Set base color for selected object.

Set base color for all objects in model.

Open Floater List palette.

Open Floaters library.

Manage floater libraries.



These floater commands are available as buttons on the Floater List palette.



Open alternate floater library.

Choose a floater by name.

Add floaters to library by dragging them into palette.

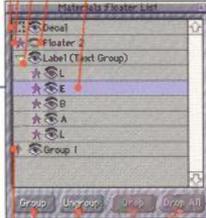
Use a floater by dragging its icon from palette into your image.

Icon of Reference floater.

Icon of Image floater.

Click to close the palette.

Floater is hidden. Click to show.



Merge all floaters/groups with the canvas.

Merge selected floater/group with the canvas.

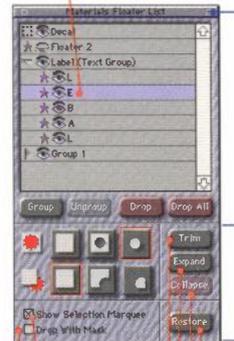
Ungroup selected group.

Group selected floaters to control as a unit.

Click to open the floater group.

Floaters higher in list cover lower floaters.

Drag floater/group names to change their level (display order) and to move them in and out of groups.



Show/Hide floater's selection marquee.

Enable to place floater's mask in canvas mask when dropping.

Reduce floater rectangle to minimum.

Increase floater rectangle.

Select floater group, then collapse into single floater.

Revert changes to selected floater's mask.

Floater Mask Modes

Floater Mask

Masking Disabled

Masked Inside

Masked Outside

Floater and Canvas Mask Interaction Modes

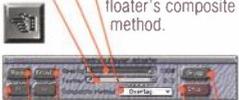
Canvas Mask

Masking Disabled

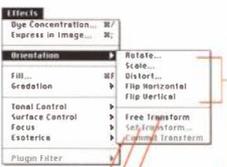
Masked Inside

Masked Outside

- Soften floater's edges.
- Change floater's opacity.
- Change selected floater's composite method.



- Merge selected floater/group with the canvas.
- Group selected floaters.
- Move selected floater to front.
- Move selected floater to back.
- Move selected floater lower/higher one level.



- Manipulate the selected floater or image.
- Convert an Image floater to a Reference floater.
- Change a Reference floater numerically.
- Convert a Reference floater back to an Image floater.



Use the Floater Adjuster tool to manipulate the selected floater(s).

Reference floater:

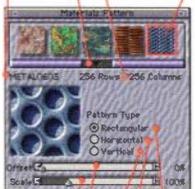
Drag corner to resize in two dimensions (x,y). Shift key down to constrain. Command key down to rotate.

Resize (y). Command key down to slant.

Resize (x). Command key down to slant.



- Name of current pattern.
- Open drawer for library of patterns.
- Dimensions of pattern tile in pixels: Columns=width Rows=height.
- Choose the pattern you want.



- No offset.
- Horizontal offset.
- Vertical offset.
- Percentage to offset.
- Change size of pattern tile.



- Choose an item by name.
- Open alternate libraries.
- Close the drawer.

- Select rectangle of image, then capture pattern to library.
- Give current image "wrap-around" characteristics.

- Create seamless fractal patterns.



- Add current image to pattern library.
- Open selected pattern file in an image window.
- Manage pattern libraries.

- Change the magnification power.
- Adjust between "few large" and "many small" features.
- Change softness of feature edges or "blending."



- Preview shows results of your settings.
- Choose size of pattern tile.
- View the fractal in other ways.

- Get saved lights from library.
- Save current lights to library.

- Click inside light icon to select that light. The Selected light's icon is bold.
- Drag an icon to move the light.
- Preview sphere.



- 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.
- Change amount of light entering rendering camera.
- Set level of ambient light.
- Set maximum ambient light.
- Show/hide light icons on preview sphere.



These commands are available as buttons on the Light palette.

Brushes

Choose a brush by clicking its icon.

Press on icon until green dot appears beneath it to lock this brush to the drawer front. Repeat (dot goes away) to unlock.



Choose a variant of the current brush.

View/change method of current brush.



Choose a brush by name.

Open other brush libraries.



Set opacity for the brush.

Choose the drawing style.

Set grain interaction.

The default brushes library:

- Pencils** **Eraser**
- Water** **Chalk**
- Charcoal** **Pens**
- Felt Pen** **Crayons**
- Airbrush** **Liquid**
- Brush** **Artists**
- Burn** **Water Color**
- Dodge** **Retouchers**
- Masking**
Paint into the mask layer.
- Image Hose**
Paint with images from a Nozzle.
Options for selecting and controlling Nozzles are on the Brushes palette:
Nozzle menu.
- Cloners**
Paint with current pattern or Control-click to sample and paint with imagery within an image.

The variants for one of the brushes:



- Build (compile) changes to brush controls.
- Create new brush dab shape, make square selection, then Capture Brush.
- Remove current variant.



- Return current variant to default settings.
- Create brush icon, make square selection of it, then Save Brush to create a new brush.
- Save settings to variant.
- Create new variant of current brush.
- Manage brush libraries.

To set brush cursor options:

choose **Edit menu > Preferences > General**.

To set stylus/mouse tracking:

choose **Edit menu > Preferences > Brush Tracking**.

- Change brush dab size.
- Change dab spacing.



- Change randomness.
- Change color flow to brush.
- Change input control factors.

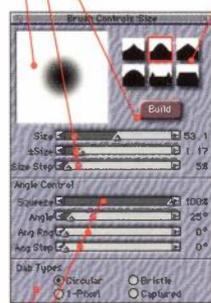
Preview of brush dab.

Click for soft view.

Change brush size with these sliders.

Build the brush.

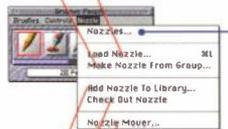
Cross-sections of available brush tips.



- Change dab angle options.
- Choose from four Dab Types.

Create Nozzle file from selected group of floaters.

Load the Image Hose from a Nozzle file.



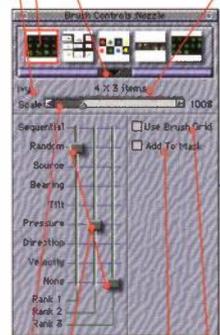
- Manage Nozzle libraries.
- Open selected (in palette) Nozzle in image window.
- Add currently loaded Nozzle to library.

Name of selected Nozzle file.

Choose a Nozzle.

Open drawer to access more Nozzles.

Nozzle description.



Add Nozzle image mask to canvas mask.

Constrain images to the nozzle grid.

Move sliders to change indexing rule for each rank.

Resize Nozzle images.

Keyboard Shortcuts

Palettes

Tools	⌘ - 1
Brushes	⌘ - 2
Materials	⌘ - 3
Controls	⌘ - 4
Hide/Display Palettes	⌘ - H

Choosing Tools

Object Selection*	o
Virtual Trackball**	v
Magnifier	m
Dropper	d
Brush	b
Paint Bucket	c
Text	t
Light*	i
Selection	r
Lasso	l
Floater: Adjuster	f

*Model Window must be in front.

**In an image window, the Virtual Trackball functions as Rotate Page.

Keyboard Commands

File

New Model	⌘ - N
Open Model/Image	⌘ - O
Close	⌘ - W
Save	⌘ - S
Print	⌘ - P
Quit	⌘ - Q

Edit

Undo	⌘ - Z
Redo	⌘ - Y
Cut	⌘ - X
Copy	⌘ - C
Paste	⌘ - V
Paste in Register	Shift - ⌘ - V
Drop Current Floater	Shift - ⌘ - D
Select All	⌘ - A
Deselect/Reselect	⌘ - D
Auto Mask	Shift - ⌘ - M
Clear Mask	⌘ - U
Invert Mask	Shift - ⌘ - I

Effects

Last Effect	⌘ - /
Second-To-Last Effect	⌘ - ;
Fill	⌘ - F
Edit Gradation	Shift - ⌘ - B
Equalize	⌘ - E
Adjust Colors	Shift - ⌘ - A
Super Soften	Shift - ⌘ - S
Quick Warp	Shift - ⌘ - F

Canvas

Resize Image	Shift - ⌘ - R
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Model Window Navigation

Rotate Model View	Space Bar - Option - Drag
Rotate Model (lights remain fixed)	Space Bar - Option - Shift - Drag
Pan View	Space Bar - Drag
Zoom in	Space Bar - ⌘ - Click
Zoom out	Space Bar - ⌘ - Option - Click
Define Magnification Area	Space Bar - ⌘ - Drag

Image Window Navigation

Zoom in	Shift - ⌘ - =
Zoom Out	⌘ - -
Zoom in	Space Bar - ⌘ - Click
Zoom out	Space Bar - ⌘ - Option - Click
Pan image	Space Bar - Drag
Center Image	Space Bar - Click
Rotate Page	Space Bar - Option
Constrain rotate to 90°	Shift - Option - Space Bar
Un-rotate Page	Space Bar - Option - Click

Define magnification Area	Space Bar - ⌘ - Drag
View Selection	Shift - 6
Shift Pattern	Space Bar - Shift - Drag

Drawing and Visibility Modes

Drawing Modes

Mask Disabled	Shift - 1
Masked Inside	Shift - 2
Masked Outside	Shift - 3

Visibility Modes

Clear View	Shift - 4
View Red Mask	Shift - 5
View Selection	Shift - 6

Painting and Materials

Brush Controls

Resize Brush	⌘ - Option - Drag
Build Brush	⌘ - B
Constrain to 45°	Shift

Adjust opacity in 10% increments	1 - 0 keys
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Load Nozzle	⌘ - L
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Cloners Brushes

Set Clone Source	Control - Click
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Water Color Brushes

Diffuse Wet Layer	Shift - D
Diffuse Wet Layer inside of a rectangular selection	D
Dry the Wet Layer	⌘ - S

(Save the image)

Color Set

Add current color to color set	Shift - ⌘ - K
Replace current color in set	Option - Dropper Tool

Gradations

Edit Gradation	Shift - ⌘ - B
Adjust spirality for spiral gradations	⌘ - Drag in angle ring

Paint Bucket Tool

Limit fill extent	Click-and-drag Paint Bucket
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Virtual Trackball Tool

Rotate model (lights remain fixed)	Shift - drag in the Model Window
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Dropper Tool

Dropper access	Click on Floater
Brush Tool	⌘
Object Selection Tool	⌘
Paint Bucket Tool	⌘
Rectangular Selection Tool	⌘
Floater Adjuster Tool	⌘
Measure mask density	Shift - Click
Replace current color in set	Option - Click
Set Object Color	Option - Click on Object

Selection Tools

Selection Tools

Constrain to square/circle	Shift
Adjust current selection rectangle	Control - Click / Drag
Edit rectangular selection	Shift - ⌘ - E

Floaters

Group selected floaters	⌘ - G
Ungroup	Shift - ⌘ - G
	Shift - ⌘ - U

Floater Adjuster

Duplicate	Option - Click / Drag
Move floater by one screen pixel	Arrow Keys
Hide/Display marquee	Shift - ⌘ - H
Delete selected floaters	Delete
Adjust opacity in 10% increments	1-0 Keys

Select floater in image	Click on Floater
De-select all floaters in image	Click outside Floaters
Set Transform (selected floater)	X

Floater List

Attribute dialog box for selected floater	Double-Click Item
Floater layer order	Drag Item
Select/Deselect	Shift - Click Item
Attribute dialog for current floater	Return/Enter

Apply Lighting (2D Effect)

Lighting Mover	Shift - ⌘ - L
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Magic Wand

Add color to selection	Shift - Wand
Find all instances in area	Selection + Wand

Imported Model Adjustments

Invert Normals	Shift - ⌘ - J
Repair Normals	Shift - ⌘ - K
Smooth Normals	Shift - ⌘ - N

