Tutorial

NOTE: All the images used in tutorials are found in the Chroma Graphics folder installed in your application's plug-in folder.

MAGICMASK TUTORIAL 1 Beach.psd

Goals

- Quick selection of multiple color ranges
- Easy pixel editing of mask

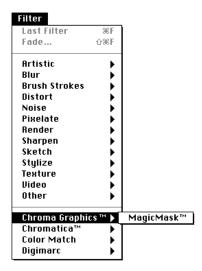
Start

If you are using Photoshop, start the application and open the image "beach.psd" in the MagicMask tutorial folder

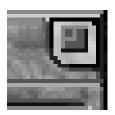


Open MagicMask

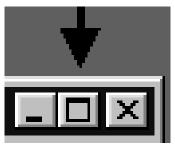
Under the "Filter" menu in Photoshop, go to Chroma Graphics and choose MagicMask. The current image "beach.psd" will be displayed in MagicMask.



Click on the small box in the top right of the image to expand the work area.



Macintosh expand box.



Windows expand box.



Double click on the Pan Tool to display the entire image. The image itself may be moved by clicking and dragging with the Pan tool.



NOTE: Double clicking on the Zoom Tool (magnifying glass) will also change the image display to 100%.

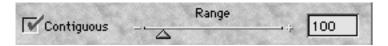
TIP: Hold down the space bar while using any tool to activate the Pan Tool. Hold the space bar and Ctrl/Cmd to activate the Zoom Tool.

Mask IN the blue sky



Click on the plus Color Brush.

A dialog box with the Range Slider appears in the top of the MagicMask window. Be sure the box next to "contiguous" is checked.



Move the mouse cursor into the image. The outline of the cursor is the actual size of the brush tool.



Change the brush size to 25 pixels by using the up/down buttons in the dialog box or by entering this value directly into the window.



Move the brush near the coordinates of x: 50 y: 50. The position of the cursor in the image is displayed in the info box under the tool bar on the left of the screen. The info box also displays the value of the mask and image color.

In the left side of the blue sky, do a short click and drag using the Color Brush.



The Color Brush has now created a mask in the sky based on the minimum and maximum values of color selected in your short click and drag.

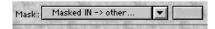
Mask Display Options

The mask can be viewed in many different ways. The mask display options are located in a pop-up window at the bottom of the work area. At this point, take a minute to view the mask using these options (grayscale, white, black, other, etc.).



Masked IN means the parts of the image selected will be displayed with the mask color chosen. Masked OUT means the parts of the image *not* selected will be displayed in the mask color chosen.

After you are finished exploring the different mask display options, choose Masked IN—other. Click on the color box next to the mask display options and select a new color. For this tutorial, use green.



Adjust the opacity of the color by clicking the preferences button at the lower left corner of the screen.

Enter 50% as your new opacity and click

OK to see the results.



NOTE: If the default color is not set as green in the preferences, the color changes back to the default when you change the opacity.

Add to the Mask

Since only part of the sky has been "masked in", add to the mask by clicking and dragging again with the plus Color Brush. Draw small brush strokes or just click once throughout the sky until the entire sky area is selected.

Once the entire sky is selected, change the display to Masked IN—Black to see any stray pixels that may not have been masked. Use the Color Brush to add these areas to the mask. Or, switch to the plus Pixel Brush to directly edit and add to the mask.

Add the water and sand to the mask

Choose the plus Color Brush and click and drag with single clicks in the water until the entire sky and water have been selected. Then move into the sand area. Once you click onto the sand, your selection may drift into portions of the woman and her hat.



To fix this, you have two choices: Use a very small minus Color Brush (less than 5 pixels) to subtract from the mask. Or use the minus Pixel Brush to directly remove unwanted portions of the mask. To get the best view possible, zoom in as close as you can to the areas you wish to edit. The Alt/Opt key is used to toggle between zoom in and zoom out.



Double click on the Pan Tool to view the entire image and mask. Any stray pixels may be cleaned up using the Color Brush or the Pixel Brush. Using the Masked OUT—Black display is also a good way to see any minor pin holes not yet masked. (Remember: changing the mask display does nothing to alter the mask itself.)

TIP: Use Cntl/Cmd to undo any action. MagicMask offers you the option of multiple undo's.

The Marquee is also useful for adding or subtracting large areas of the mask. After choosing the Marquee, click and drag in the image to create a rectangle which will add to the mask. Hold the Alt/Opt key to subtract from the mask.

When the sky, water and sand have been masked, there are two options for saving the mask.

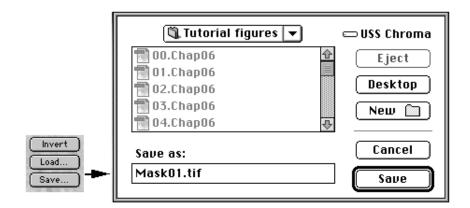
Saving a Mask

Click OK to send the mask back to Photoshop as a selection. To save this mask to a channel within Photoshop, go to the "Select" menu, choose "Save Selection," and then click OK for a new channel.

To save the mask as a standard grayscale TIFF file, remain in MagicMask, click "Save," and enter a file name.

This ends the tutorial for the Beach image.

For other questions regarding MagicMask, refer to the specific chapters concerning each tool.



MAGICMASK TUTORIAL 2 Pub.psd

Goals

- Use the Magic Lasso to "cut out" a person from a complex background
- Experiment with different Lasso options

Start

Open the image "pub.psd" found in the tutorial folder. (located in the Chroma Graphics folder under "Plug-ins").

Choose MagicMask from the "Filter" menu and expand the work area by clicking the expand box.



Zoom into the pub image (The zoom factor should be 4:1 or 400%). Use the Pan Tool to position the man's left shoulder in the center of the screen. Click onto the plus Magic Lasso.

Move to the top of the man's left shoulder. A large cross-hair indicates the mouse cursor. An 'x' indicates the snap-to-edge cursor. The cursors may be positioned on top of one another. When the mouse cursor (large cross-hair) is at the edge close to his shoulder, click once.

A control box appears which is the boundary of the tool. When using the snap-to-edge feature, you must stay within the control box.





TIP:The size of the control box may be adjusted in the preferences. A larger control box may effect the response time of the tool depending on the speed of your computer.



Move the cursor to the right along the edge of his shoulder. A snap-to-edge line will snap to the outline of his shoulder. Move to the right a short distance before clicking again to set a new anchor point. Once you click again, notice that a line of "crawling ants" and a new snap-to-edge line appears. The control box will now be centered around the new point.



Continue around the shoulder adding anchor points. Remember to stay within the control box.



Use the space bar to access the Pan Tool in order to move the image as you are making the selection. You may notice at tight corners (like the beer bottle and the glass) that the snap-to-edge line has trouble detecting the edge. Hold the Shift key down to force the creation of an anchor point in these places.

NOTE: If you make any errors, don't stop. Continue your selection until it is closed. Edits can be made later.

Continue around the perimeter of the man, using small distances between click points for greater accuracy.

NOTE: Due to the sensitivity of the edge detection, you may not always get exactly what you want. However, you will get very close. Further edits may be applied to the composite mask using other MagicMask tools.



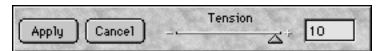
Continue around the perimeter of the man using the Pan Tool (holding the space bar) to reposition the image as you go. Continue your selection by adding anchor points along the line of the tray.

When you reach the tray, you may find that the tool may not detect the edge exactly. At this point, you have two alternatives:

- 1. Leave shorter distances between anchor points or
- 2. Change to a higher tension.

Tension Slider

The Tension Slider at the top of the page offers another option for the Magic Lasso. Adjusting the tension will adjust the sensitivity of the outline created by the snap-to-edge technology. At a lower tension, the edge detection is less sensitive and the result is a straighter line. At a greater tension, the edge detection is more sensitive to edges and the result is a more ragged line.



Use the Tension Slider to change the tension to 10. This will make a more ragged line and may not eliminate the need for short spaces between points, but it will be more sensitive to edge detection. After you have reached the other side of the tray, you may want to return to a tension of 5 before selecting the man's right hand.



Continue your selection by moving up the man's hand. Remember the Shift key may be used to force the snap-toedge cursor to merge with the mouse cursor, allowing you to place anchor points wherever you like.

Continue up the man's shoulder and neck and around his head until you click on the original start point of your selection. A small "o" will appear on the cursor to show that the selection will be closed.

Small squares around the path indicate editable anchor points. Click once on any of these points and move themto a new location. Click again to re-anchor the point.



NOTE: Freehand/polygon Lasso segments are not editable and their end points are marked with an 'x.' Only the Magic Lasso segments are editable.

Once you are satisfied with the selection, click "Apply" in the dialog area next to the Tension Slider. This converts the outline and adds it to the composite mask. You can now make additional edits using other MagicMask tools.

Using Other Options with the Magic Lasso

Click "Reset" to restart the MagicMask session with the pub image. Zoom into the man's face as much as your screen will allow. Click on the plus Magic Lasso and click once at the top of the man's head. Add two anchor points by following the outline of his head to the right.

Hold down the Alt/Opt key for a freehand Lasso. You will be able to click and drag as you would with a standard freehand Lasso. Once you release the modifier key, the Magic Lasso will return to the snap-to-edge line.

Hold the Ctrl/Cmd key for a polygon Lasso. You will be able to create straight lines as you would with the standard polygon Lasso. Once you release the modifier key, the Magic Lasso will return to the snap-to-edge line.

With either option, you are free to go beyond the control box boundaries. Experiment with these different lasso features to get an idea of how the combination of the free-hand, polygon and Magic Lasso work together.

In any Magic Lasso selection, you must return to the start point to close the selection. Another option for closing the Magic Lasso is to double click at any time to draw a straight line back to the start point.



This ends the tutorial for the Pub image.

For other questions regarding MagicMask, refer to the specific chapters concerning each tool.

MAGICMASK TUTORIAL 3 Kids.psd

Goals

- Precise, selective color masks
- Quick selection of multiple color ranges
- Mask and alter tones without "banding"

Start

Open the image "kids.psd" found in the MagicMask tutorial folder (located in the Chroma Graphics folder under "Plug-ins").

You may notice a number of pre-set channels in this image which will be discussed shortly.

Choose MagicMask from the "Filter" menu.



Density Mask Tool

Click on the Density Mask Tool.



When you click on this tool, a dialog box appears at the top of the window. The reach value should be at a default of 60 degrees. If not, change it to 60.



The Density Mask Tool determines the average color of a click and drag. Adjusting the reach affects how far away (the angle) from the average color the mask will be created. For example, a reach of 120 considers more of the image and creates a broader mask while a reach of 10 considers less of the image and creates a more specific mask. Look at Tutorial 4 (Hue Wheel) to learn more about density masks.

Mask out the skin tones in the image

Using a tool size of less than 10 pixels, click on the forehead of the child with the dark blue shirt in the left of the photograph (nine o'clock).



Notice that the color button (top left) has now changed to the average color just selected.



Mask Display

To see the mask more clearly, choose the "Mask Only" mask display. This will show a gradual density mask centered on the color selected.



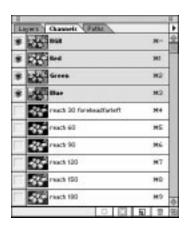


Tonal Corrections on the Skin Tones (in Photoshop)

Leave the reach at 60 and click OK to send the density mask back to Photoshop. To see what kind of tonal correction can be achieved, hit Ctrl/Cmd "H" to hide the selection and Ctrl/Cmd "M" for curves. Adjust the curve to lighten or darken the skin tones in the image. Notice how gradually the flesh tones are affected.



Click "Cancel" to eliminate the tonal correction. For comparison purposes, take a look at the pre-set density masks included in the saved channels in the "kids.psd" file.



Display the "Channels" window. Click on the different examples with a reach of 30, 60, 90, etc., to compare the different density mask results.

Change the color of a shirt

While in this image ("kids.psd"), be sure that all previous selections are deselected.

Choose MagicMask from the "Filter" menu.

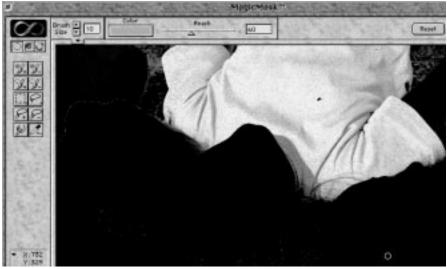
Click on the Density Mask Tool, with the reach at its default of 60.

NOTE: The default reach may be changed in the preferences.

Click once in the center of the girl's green shirt at the top of the image (one o'clock) to create a mask.



Click on the girl's shirt



Resulting density mask

Click OK to send the mask back to Photoshop. Use Ctrl/Cmd "H" to hide the selection. Adjust the color to view how the mask protects the tone in the shirt.

For example, hit Ctrl/Cmd "U" and adjust the Hue to change the color of the shirt. No matter what color adjustment is made in Photoshop, MagicMask's density mask retains smooth and accurate tonal information.

This ends the tutorial for the Kids image.

For other questions regarding MagicMask, refer to the specific chapters concerning each tool.



MAGICMASK TUTORIAL 4 Hue Wheel.psd

Goals

- Use the Density Mask Tool
- Understand how MagicMask creates density masks and how they work
- How reach affects the mask

Start

Open the image "Hue Wheel.psd" found in the MagicMask tutorial folder (located in the Chroma Graphics folder under "Plug-ins").

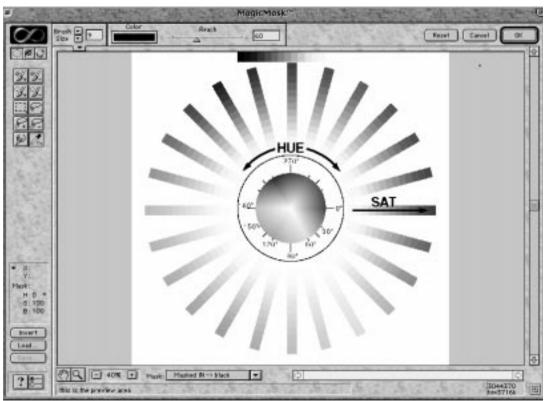
Open MagicMask by choosing it from your "Filter" menu.

What is the Hue Wheel?

The Hue Wheel image displays the following:

As you move 360 degrees around the circle, there is a specific **Hue** at each degree from 0-360°. Each color of the stepped scales is 15 degrees from the neighboring colors. The **Brightness** throughout the image is 100%. The **Saturation** from the center of the wheel to the perimeter is 0-100% and the scale is stepped in 10% increments.

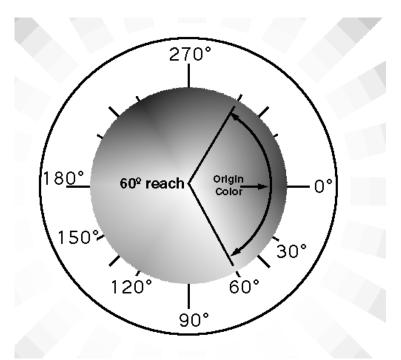
Display the entire image by double clicking on the Pan Tool.



Hue Wheel representing Hue and Saturation

What is Reach?

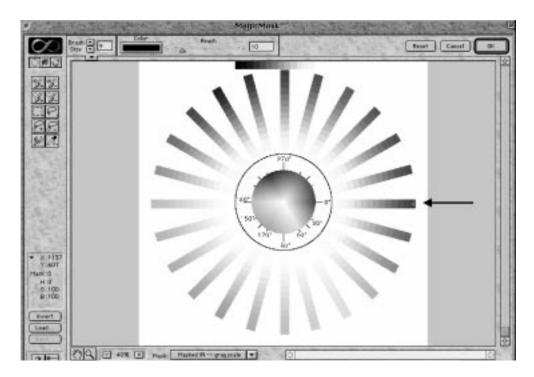
The reach value is associated with the number of colors considered for the creation of a density mask. For example, a reach of 60 degrees means that from the origin color, colors 60 degrees in either direction around the Hue Wheel will be analyzed.



MagicMask uses the reach value to create density masks.

Create a Density Mask

Click on the Density Mask Tool and make the tool size 9 pixels or less. As you move the mouse cursor throughout the image, notice the info box to the left under the tools that displays the HSB values.



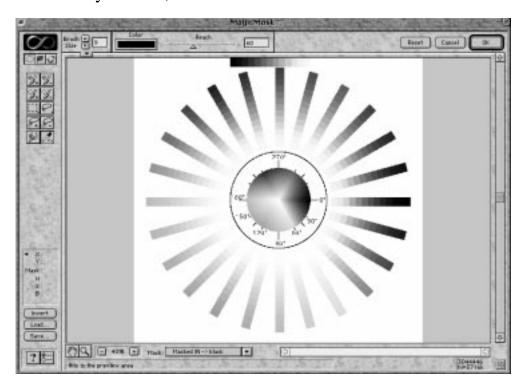
Be sure the reach is set at 60°. Move the cursor to the maximum red value in the stepped scale. The info box should read:

H 0°, S 100%, B 100%. Click once.

Display the mask as "Masked IN—black" to make the density effect more clear.

At the original click point, the mask just created will be 100% and gradually fall off to 0% as you move away from the origin. Past 60 degrees the mask will be zero.

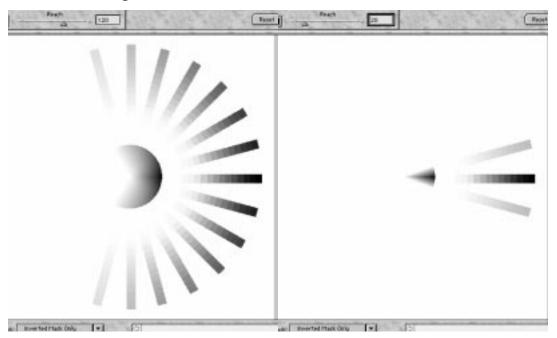
To confirm this, move the mouse over the masked areas to get the HSB values and the mask value from the info box. Leaving a reach of 60, experiment by clicking into other colors throughout the color wheel. Regardless of where you click, the reach will remain at 60°.



Adjusting the Reach

Click "Reset". Return to the point where the values are: H $\,$ 0°, S $\,$ 100%, B $\,$ 100%

Click once. Adjust the reach to 120 to see the mask expand and reduce it to 20 to see it contract.



Adding to the density mask

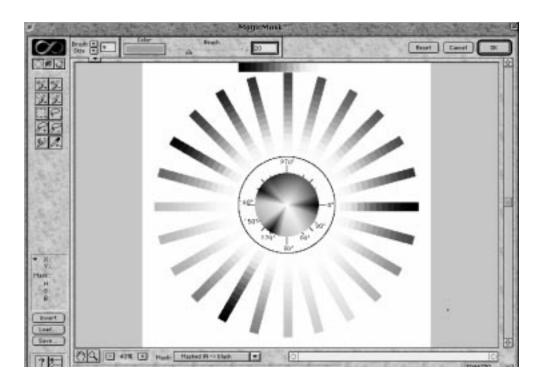
Leave the reach at 20.

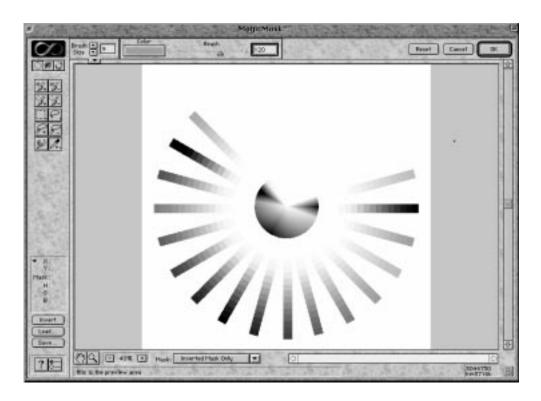
Click and hold on the Density Mask Tool and a pop-out window will display plus and minus options.



Choose the plus Density Mask Tool. Click in the image on a new color. A new density mask is created. Continue to create new density masks by clicking on different colors in the wheel.

Each mask is independent. Adjusting the reach will only affect the *last* density mask created. The same is true for the minus Density Mask Tool. The minus Density Mask Tool subtracts from the composite mask.





Choosing a Specific Color Value

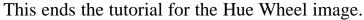
Click "Reset." Select the neutral Density Mask Tool (not + or -). Click on the color button to the left of the Reach Slider. A choice of colors appears in a color picker from which a specific color may be chosen to create a density mask.

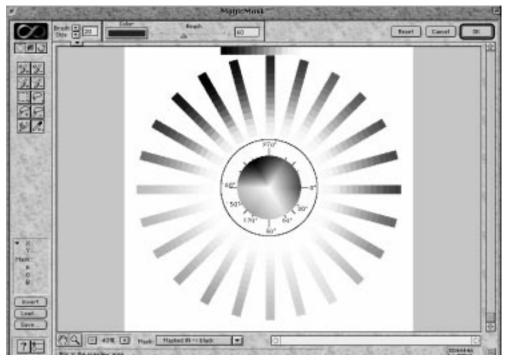


Enter these values in the menu and then click OK. H 240°, S 100%, V 100%

This produces a density mask centered on these values. To modify, click on the color box again and choose a different color from the color picker. Click OK to replace the previous density mask with a new one.

NOTE: If you have added or subtracted colors to the density mask, changing the color in the color button or the reach only alters that current part of the density mask.





For other questions regarding MagicMask, refer to the specific chapters concerning each tool.

MAGICMASKTM TUTORIAL 5: Hue Chart.psd

Goals

- Use the Color Brush and Range Slider
- Use the Pro Pane to adjust color
- Work with independent color ranges

Start

Open the image "Hue Chart.psd" found in the MagicMask tutorial folder (located in the Chroma Graphics folder under "Plug-ins").

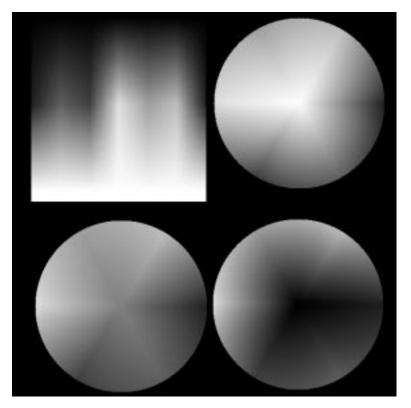
Choose MagicMask from the "Filter" menu.

Double click on the Pan Tool to display the entire image.

Understanding This Image

This chart shows how the color range tools work in MagicMask. All four figures show Hue, Saturation and Brightness.

The chart in the top left is a square where Hue values are in the X direction, with Saturation and Brightness in the Y direction. Saturation is 0-100% from bottom to top. Brightness is 0-100%, from top to bottom.



The circle in the top right has a Hue from 0-360° around the circle. The Saturation is 0-100% from the center to the outer perimeter, and the Brightness is set at 100%.

The circle in the lower right has a Hue from 0-360°, the Saturation is set at 100%, and the Brightness is variable from 0-100%.

In the last circle, the Hue is 0-360°, the Saturation is 0-100%, and the Brightness is 50-100%.

Using the Color Brush

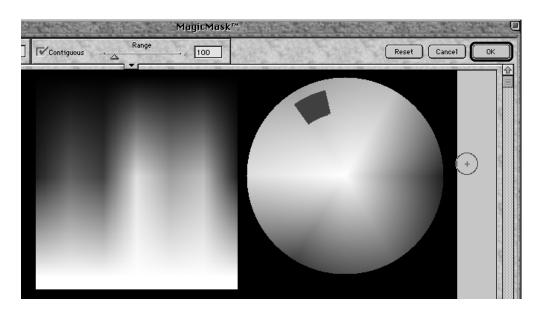
Click on the plus Color Brush.



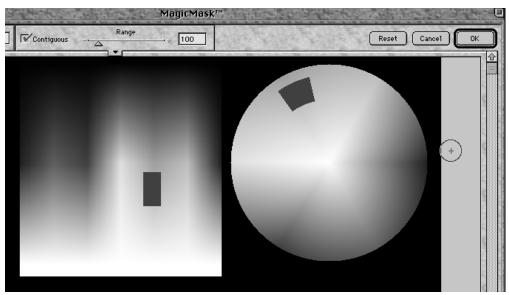
The dialog box appears with a default color range of 100.



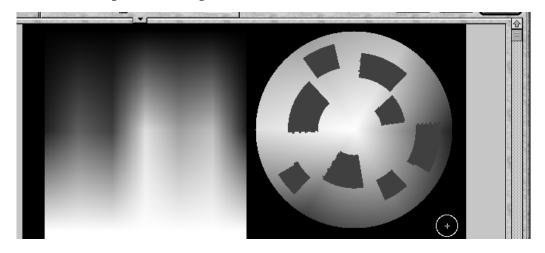
Click and drag in the Hue circle in the top right. Notice a wedge appears indicating what was selected. Because the contiguous box is checked, MagicMask will only select colors connected to pixels chosen in the initial click and drag.



Click the contiguous button off and notice that a colored area similar to the first selected is now masked in on the chart to the left.

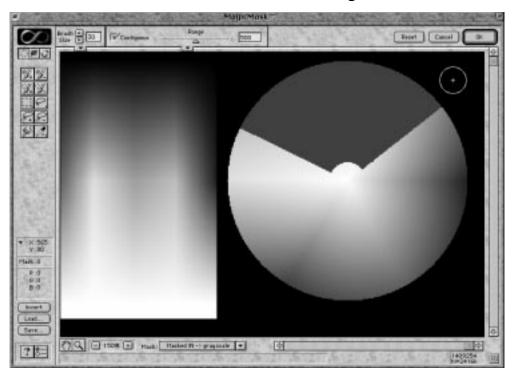


Click the contiguous button on again and continue to click and drag in several areas of the first circle to create many separate, independent selections.



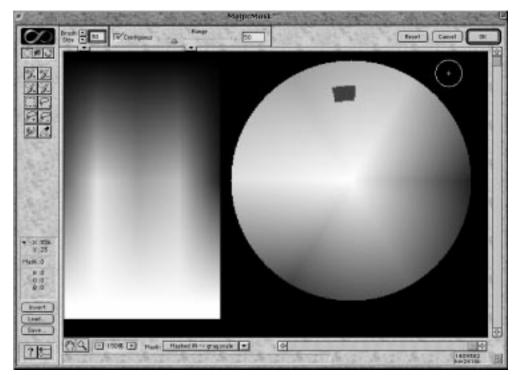
Click "Reset" to erase these selections and start again.

Click and drag again in the circle in the upper right. Adjust the range to 500 by moving the slider next to the contiguous button or entering this value directly. Notice the dramatic increase in the wedge as a result.



Now decrease the range to 50 and see the selection shrink. Continue to experiment with the Range Slider to understand how a change in the range affects the mask.

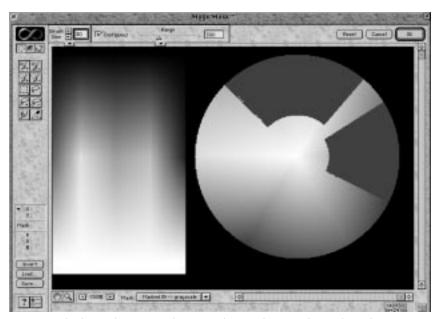
Set a range of 300. Click and drag in another portion of



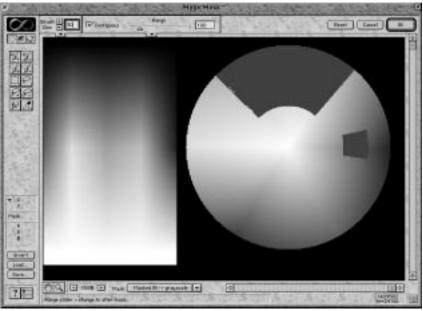
the same color wheel for a second selection. Adjust the range to 100. Notice this change only affects the last selection (see figures on following page).

NOTE: Each color range is independent and can be adjusted independently.

Every new click and drag will take on the current range displayed in the dialog box. This is also true regarding contiguous and non-contiguous options. Only the last selection will be affected.



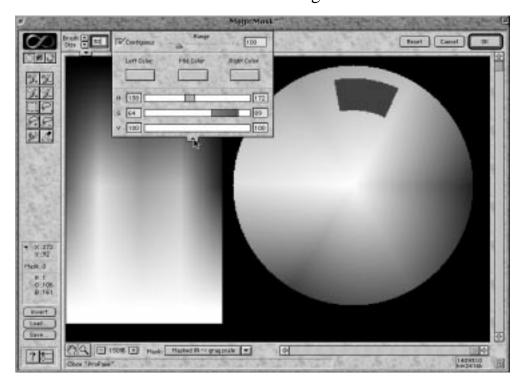
The first color range selection is the top, the second is to the right.



When the Range Slider is adjusted to 100, only the second (current) color range is affect-

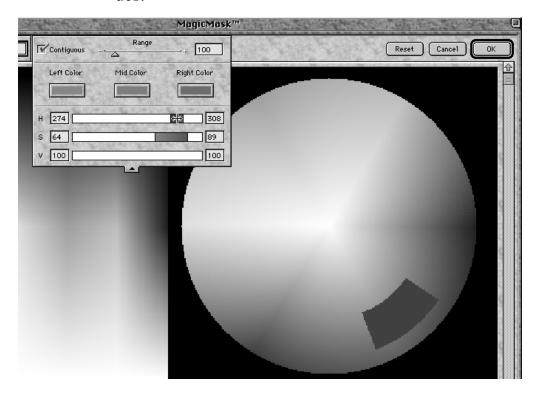
Click "Reset."

Click and drag to make a wedge in the circle again. Click on the small arrow in the dialog box under the Range Slider. This opens the Pro Pane which has specific information about the color range selected.



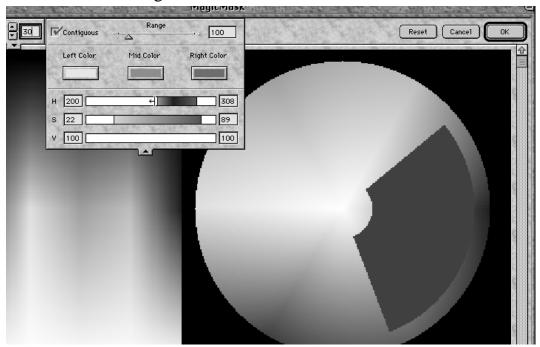
The information given includes the "Mid color", or the average color selected, as well as the minimum and maximum colors. The specific values are given in the Hue, Saturation and Value dialog boxes.

You may click on any of the color buttons to change the minimum, maximum and/or average color. Alternately, you may directly move the sliders to change the HSV values.



Move the cursor to the middle point of the Hue range. When a double arrow appears that points to the left and the right, click and drag, moving the Hue range. The range in the slider, the color button, and the mask change as well.

Additionally, if you move the mouse cursor to the endpoints of the Hue Slider, either end may be expanded or contracted. Expand both ends and view the mask results. The wedge becomes larger. Contract the ends for a smaller wedge.



NOTE: The Saturation and Value sliders may also be adjusted in this way.

Alterations made in the Pro Pane do not alter values in the Range Slider. Only the current color range (selected with the Color Brush) is altered.

The Pro Pane essentially alters the colors that were gathered with the click and drag of the brush. This allows you to be very specific about the range of colors you wish to select.

NOTE: Try selecting different portions of each of the different color charts in this image. View them using both the contiguous and non-contiguous options. Experiment with the sliders in the Pro Pane.

This ends the tutorial for the Hue Chart image

For other questions regarding MagicMask, refer to the specific chapters concerning each tool.