040b73747265616d747970656481a203840163c48403737373810a0a810b0b815f5f84012584067f411b312d37

OVDensitometer.tiff ¬ Densitometer

The densitometer is used for reading out color values from images. The color values can be displayed in different color models and data formats.

paste.tiff ¬
Figure: A densitometer

Color values are read out by moving your mouse cursor within a selected image. The pixel below the hot spot of the mouse cursor is evaluated and its data are displayed.

Hint: You can detach the densitometer panel from the tool bar by dragging it away. This creates a fixed connection between the panel and the current image. When selecting another image, a further densitometer panel will appear. So you can have a densitometer for each image. When reading out color values from an image, the values are always displayed in its proper densitometer.

Data Display
The color well icon in the middle of the densitometer shows the color of the pixel on which the hot spot of the mouse cursor is currently placed. On the right of this icon there is another color well, which in most cases is empty. This color well displays the color of the sensed pixel if preview data are used. (The Gradation Controller (;../TMSClut/TMSClut.rtfd;;¬), for example, uses preview data, allowing you to compare the original data with the preview data resulting from modified gradation curves.) The radio buttons above the color wells let you determine, if the numerical display of the color values should be applied for the original data or, if available, for the preview data.

Image Type Selection
Color values can be displayed in different color models. If you move the mouse into the left half of a densitometer and press the left mouse button, a pop-up list appears, from which you can choose your preferred color model. In addition to <*Grayscale*>, <*RGB*>, <*HIS*>, and <*CMYK*>, you can also choose <*Variable*> or <*Special*>.

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Figure: Selecting a color model

The setting <*Special*> is only enabled for single-channel images or bit masks. For such images, two color wells for the original data are shown. The lower one contains the base color of the image with its full tonal value, i.e., 100%. The upper one shows the base color with the tone value of the sensed pixel. This value is also displayed numerically on the left, labeled with ªV: º for *Value*. If you are using a color with a name as base color (e.g., a spot color, a pantone color, or a custom color) this name also appears in the densitometer.

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Figure: The display for a single-channel image with the color ªSpot Color-1ª as base color

The *Densitometer* panel offers two densitometers for displaying sensed color values. This is for displaying the values of a pixel in two different color models at the same time. If, for example, you are examining an RGB image, you can view its RGB values in one densitometer and the CMYK values in the second one. When calculating the CMYK values, existing separation parameters are observed.

Sensor Matrix
At the right bottom edge of each densitometer, a sensor matrix is displayed. Clicking inside this matrix and dragging the mouse cursor lets you modify the sensor size. The smallest size is one pixel, evaluating exactly the single pixel underneath the hot spot of the mouse cursor. If you use a larger sensor size, the average of all color values within the sensor area is calculated.

Clicking inside the sensor matrix toggles a weightening of the pixels at the outer area of the sensor for creating the impression of a circular sensor. This is indicated by different shades of gray in the matrix display.

Color Transfer
On the right of each densitometer, you find an additional color well icon for storing the currently read out color. Pressing the *Alternate* key transfers the color into that color well.

Data Format
This pop-up list offers some data formats for displaying the sensed color values. You can choose among <*%*>, <*8 Bit*> and <*16 Bit*>.