

**The choice for scanning professionals**

***PowerColor*** 

# **Quick Start Guide**

**Version 4.0**

**UMAX<sup>®</sup>**

# UMAX PowerColor Quick Start Guide

This guide will introduce you to the fundamentals of UMAX's PowerColor Photo and Press edition professional scanning software. You will launch the application, perform basic setups, and execute an Overview scan and Region scan using some basic tools and commands. This guide begins with basic operations and then moves into some of the finer points of the software.

## Image Selection Tools



**Probe Region:** The Probe (or Pointer) tool is used to select items and to move around the image to sample pixels. The tool deselects the Crop and Zoom tools.



**Zoom:** Click on the image with the Zoom tool to enlarge the image for more precise examination of a region. If necessary, resize the image window to accommodate the new view. The magnification is shown at the bottom left-hand corner of the image window. To reduce the view again, hold down the Option key (Macintosh) or Control key (Windows) while clicking on the image with the Zoom tool. Note: The point where the Zoom tool is clicked becomes the new center of the image in the window.



**Crop Region:** Use the Crop tool to select a portion of the image, for example to cut out the black edges of a film frame or tape used to hold images on the scanning surface.



**Auto Range:** Automatically adjusts the tonal range, setting the highlight and shadow points.



**Pick Neutral Point:** Uniquely selects multiple gray points in an image by holding down the Option key (Macintosh) or Control key (Windows) and clicking on quarter, mid, and three quarter tone values.



**Highlight Value**



**Shadow Value:** Automatic values for each image highlight and shadow range are made with both buttons selected (default setting). Deselecting either button will result in a new auto range without the deselected value. Edit/Undo, from Main Menu reverts to last values.



**Refresh:** With automatic updating off, click on the Refresh key to update the active region with all changes since the last update.

## Queue Manager Tools



**Prescan all:** Batch previews all the regions in the Queue Manager



**Final scan all:** Batch scans all the regions in the Queue Manager





**Prescan one region:** Previews the single region located above the icon. During scanning the region's Preview button appears red, green and blue. Once the preview is complete, the button turns all red.



**Final scan one region:** Scans the single region located above the icon.

## PowerColor Shortcuts

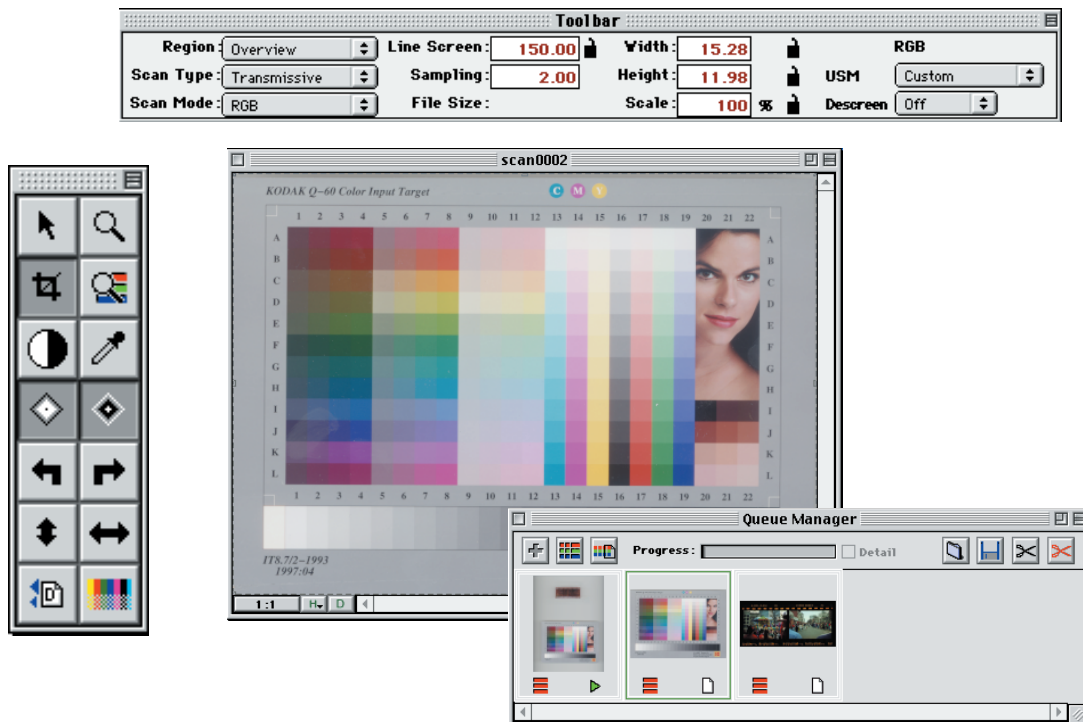
Macintosh Version	Windows Version	Function
⌘ + . (Period)	Escape Key (Esc)	Stop a preview
⌘ + D	Control + D	Launch the Descreening window
⌘ + I	N/A	Get info on PowerColor, change memory allocation (Mac Only)
⌘ + K	Control + K	Update image manually
⌘ + M	Control + M	Close Queue Manager window
⌘ + P	Control + P	Launch the RGB Probe
⌘ + S	Control + S	Save
⌘ + U	Control + U	Launch the USM window
Option + 	Control + 	Reduce view

The following shortcuts are for Press mode

⌘ + 0	Control + 0	Display 4 plates
⌘ + 1	Control + 1	Display the Cyan plate
⌘ + 2	Control + 2	Display the Magenta plate
⌘ + 3	Control + 3	Display the Yellow plate
⌘ + 4	Control + 4	Display the Black plate

## Performing a scan


1. Launch PowerColor by double-clicking on the Application Icon . First, the Splash Screen appears, indicating which version of the application is being used. Then the Control Bar, Toolbar, Queue Manager and Overview Region windows appear.



Note: The History (H) and Duplicate (D) Icons are located at the bottom of the Region Window when using the Macintosh version of PowerColor. For the Windows version, the icons are located in the Toolbar.

2. For new users or for the simplest controls, we recommend you set your preferences to **Photo (RGB)** and **Basic**. Preferences are found in the **Edit** drop down menu. This is using the **RGB** scan mode only.
3. On the left side of the Tool Bar, the current Region should be the Overview, the current Scan Type should match the type of media being scanned, and the Scan Mode should be RGB.




4. Choose Preview from the Command drop down menu, or double-click on the three horizontal parallel bars  in the bottom left corner of the Queue Manager.

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**The scanner performs the Preview and displays all of the images that are mounted on the scanner inside of the crop box area. The Progress Bar in the top of the Queue Manager Window indicates the current status of the scan.**

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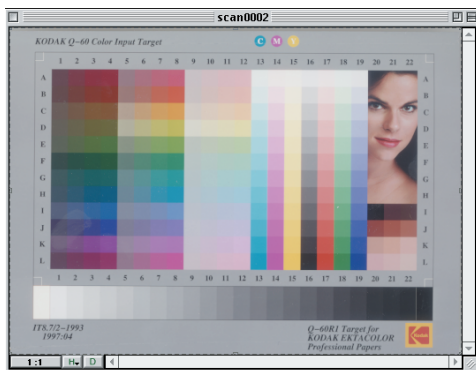
5. The Crop Tool  should be active. The Crop Tool is used to select the area of the flatbed to be scanned. Resize the Crop Area so that only the desired image, or portion thereof, is selected. When adjusting the Crop Area on the Overview, the Crop does not have to be precise. The crop can be adjusted at any time in its respective Region Window to allow image correction and to set final image size.


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**⌘-Dragging on a Mac, or Ctrl-Dragging on Windows inside of the Crop Area marquee moves the Crop Area. Dragging on any corner(s) of the marquee resizes the Crop Area. A new Crop Area can be created by drawing a new marquee starting on the outside of the current Crop Area, but only one Crop Area can exist at any one time.**

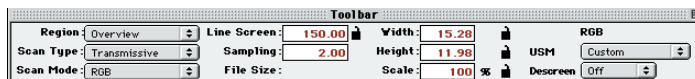
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6. Double-click inside of the Crop Area, then name and save the region to add it to the Queue Manager Window as a new Region. Add as many new Regions to the Queue Manager Window as desired. At this point the Queue will contain the Overview as well as any cropped regions.
7. Make the Queue manager Window active by clicking anywhere in the window, and then double-click on the desired image. This opens the Region Window for the selected image, and the Overview Window disappears. Only one Window (Region or Overview) can appear at a time.



8. The image is now ready for a Preview Scan. Click on the three horizontal parallel bars  in the bottom left corner of the region in the Queue Manager.



9. In the Tool Bar Window, when Inches is selected as default, the default values are 150 for Line Screen, 2.00 for sampling, and 100% for scale. The Width and Height dimensions reflect the final dimensions of the Crop Area. The File Size is dependent on the Crop Area, the Sampling resolution, and the Scale value. These functions are further discussed in the manual.



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**When adjusting the Line Screen, hit enter or click on another setting inside the Toolbar window for the change to take effect.**


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10. Choose Recall Default  from the Settings drop down menu or click the Recall Default button in the Control Bar. When the Settings dialog box appears, check Color, Tone & Cast Histogram, and UnSharp Masking. Click OK.
11. Click the Auto Range button , the half-black, half-white circle in the Control Bar Window.


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**The Auto Range automatically sets the Highlight and Shadow points on the image, effectively increasing the amount of contrast. The color engine will only evaluate the data inside of the Crop Area. Sticky Densitometers are set for the Highlight and Shadow points, and can be moved to a new location by holding the mouse button down over the densitometer and dragging it to the new location. To do this, the Pointer from the Control Bar must be selected.**

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12. Now that the image has been Auto Ranged, it is ready for color correction. Select the Pointer from the Control Bar Window, then the Color tab within the RGB Controls window. To open the RGB Controls window, select Color from the Correction drop down menu. Click on the area of the image that you wish to adjust. The Color Sliders will now change in color, and allow you to accurately adjust the color of the image. This can be repeated in various areas of the image until you are satisfied with the result.
13. The last step to perform is adjustment of Unsharp Masking, or USM. The USM is applied by selecting a pre-set value in the Tool Bar Window (Heavy, Medium or Light), or by selecting Custom, and applying your own custom settings.
14. The image is ready for a Final Scan. Double check the parameters in your Tool Bar. In the Queue Manager, select the Cropped Region you wish to scan, and click on the white page symbol  in the lower right corner of the region. The image will be scanned to disk.

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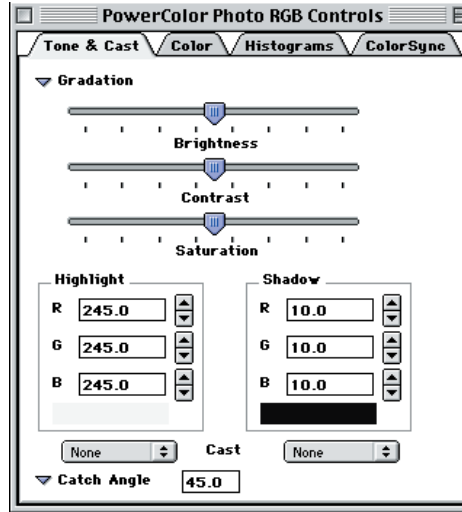
**To Batch Scan all of the images at the same time, click on the third button to the right in the Queue Manager Window . This will cause all of the Cropped Regions to be scanned to disk in the order that they appear in the Queue Manager.**

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15. To switch to the Press scanning package, select **Press** as your Separator from the **Preferences** window, choose CMYK scan mode from the Toolbar. For more information on how to scan using the Press mode, please refer to your PowerColor User's Guide.

## Photo RGB Basic Controls

The RGB Basic Controls give the user the option of correcting with sliders as opposed to curves. The sliders are easy to use yet give exceptional control over image correction features.



**Brightness:** Controls the lightness and darkness of the image. Usually referred to as the midtone point on a gradation curve.

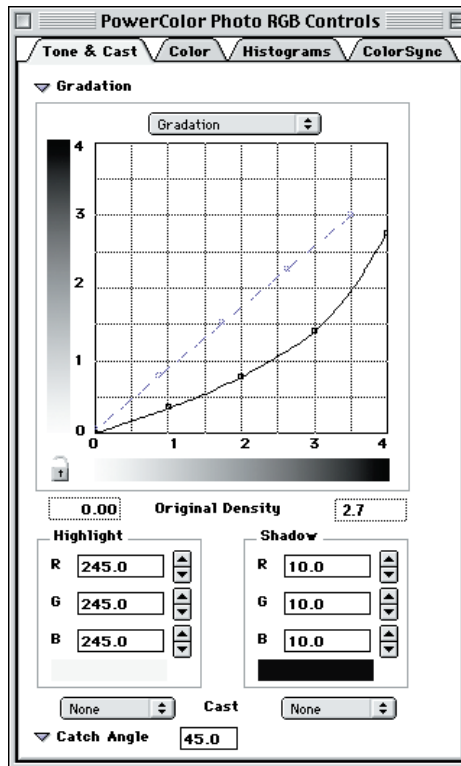
**Contrast:** Controls how fast the transition is between light and dark pixels. On a gradation curve this would be the correlation between the quarter-tone and three-quarter points.

**Saturation:** The amount of chromaticity present in all hues. 0% saturation would yield a black and white image.

## Photo RGB Expert Controls

### Tone & Cast

The RGB Expert Controls give the user the ability to correct using gradation and color curves.



Every original, film or print, has a specific density range which defines the points where the image data starts and ends. This density range is measured on an optical density scale of 0 (lowest) to 4 (highest). The “output density range” is usually set to different values than the input range. The default output density value is 2.7, which is the maximum value that modern CRT monitors are capable of displaying. Knowing the density range of your intended output device and using that value in the RGB control window helps optimize the quality of the final image.

The density range of an image can also be set manually. This is done by adjusting the RGB curves for the image in the Tone & Cast section of the RGB Control window. The purpose of the tone curves is to define what is neutral by removing unwanted casts, and to specify tone compression and contrast using the gradation curve. Therefore, color correction should only be performed in the Selective Color window, where neutrals and hues are treated separately.

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**To adjust neutral tones, use Tone & Cast; to adjust hues, use Selective Color.**

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The gradation curve (black) defines how tone compression is handled. The horizontal axis shows input density while the vertical axis displays the output density. The points (called “anchor points”) are located, from left to right, at the following values: highlights, quarter tones, midtones, three-quarter tones, and shadows. By selecting an anchor point and dragging it up or down, you can alter the gradation value for that point.

The black lock icon at the bottom left-hand corner of the grid is open by default. By clicking on it, you can lock the anchor points on the curve. This allows you to move the points individually without affecting the others. Locking the anchor points is useful for fine-tuning the gradation curve.

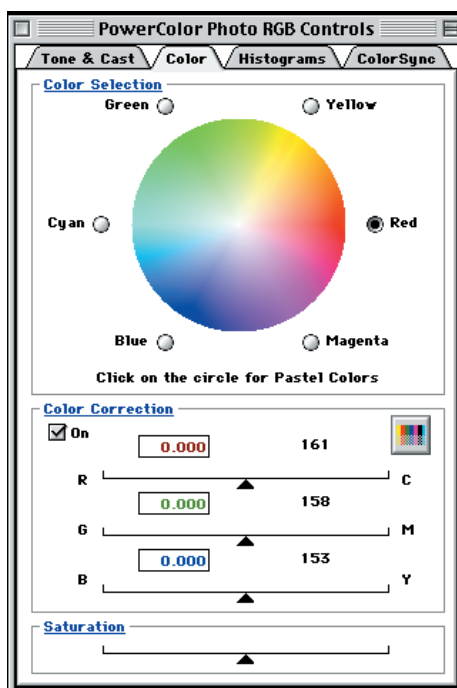
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**Remember that adjustments in the gradation curve change the input-to-output tonal compression. For example, moving the three-quarter tone point down expands the shadow area of the image by starting the three-quarter tone range at a lower optical density.**

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## Color

The Color option in the RGB Control window provides control over high chroma (saturated) and low chroma (pastel) in all primary and secondary colors independently.



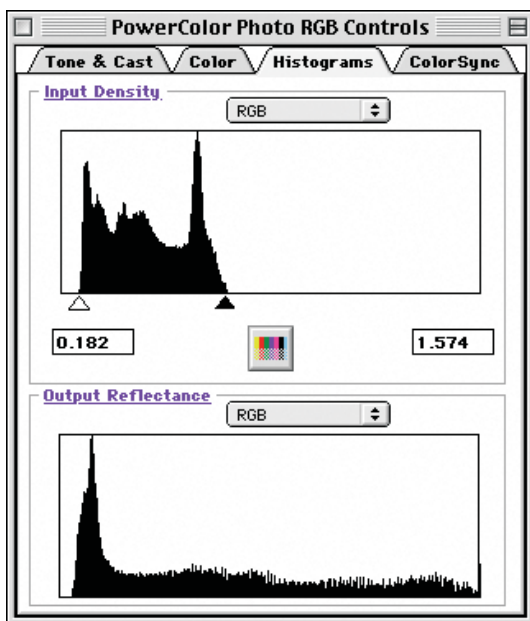
Use the Color Selection color wheel to select the individual color to be corrected. You can also click on any area of the image and the software automatically detects the selected pixel's high value and whether it is a pastel or saturated color. To toggle between the high and low chroma colors, click on the color wheel. This toggle feature allows you to make changes in the darker or lighter colors without affecting the other.

The checkbox in the Color Correction section of the RGB Control window toggles selective color on or off. The Color Correction checkbox should always be checked.

The sliders in the Color Correction section allow you to perform color correction in the three separate color channels. This is performed by clicking on the area of the image that you wish to adjust, and then using the sliders to adjust the color.

## Histograms

Another way to set the tonal range is by manipulating the image's histograms. To do so, click on the Histograms in the RGB Control window. The window displays the input density histogram and the output reflectance histogram.



The input histogram can be adjusted to show all three RGB channels together or each channel individually. To adjust the limits, slide the white slider (highlight) and/or black slider (shadows) to the desired position.

The Output Reflectance histogram is a static display that cannot be adjusted. It is designed to show how your adjustments will affect the image when output.

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**Minor adjustments to histograms have strong results. Move the sliders in small increments to avoid distorting your range values excessively. Remember to update the image regularly to view your changes.**

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