

Linearization Tab

The settings in the Linearization Tab are available when Enable Linearization is selected. Linearizing ensures a smooth transition between colors by creating a straight-line relationship between input and output data.

NOTE The Linearization tab is disabled when using HM printers.

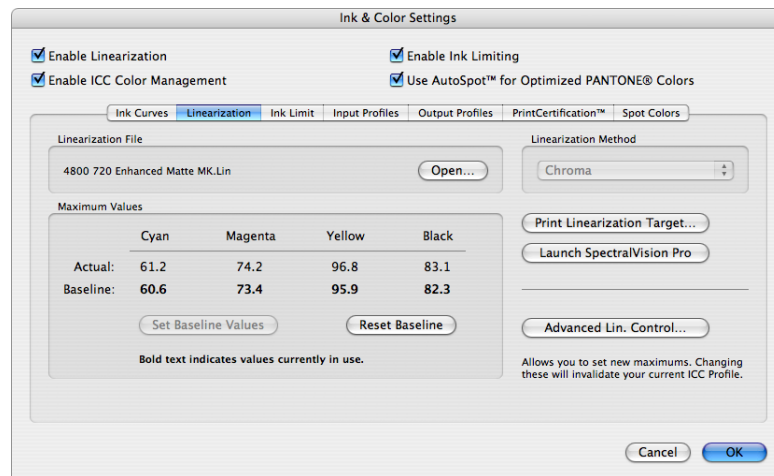


Figure 8.4. The Linearization tab in the Ink & Color Settings window.

Linearization File and Open Button

In order to linearize your input, a LIN file must be specified. A LIN file is created by printing a linearization target, measuring it with a spectrophotometer, and saving it in SpectralVision Pro (see the SpectralVision Pro manual for more information on the Linearization process). The Linearization file currently in use is shown in the window below “Linearization File.” Click the Open button to locate and select a new LIN file.

Maximum Values

When a LIN file is loaded, the Actual values displayed represent the maximum values that were measured for each color in the LIN file. The type of values displayed will depend on the Linearization Method that is currently selected. The Baseline values are displayed below the Actual values. Baseline values are the targeted maximums for that particular environment which were set when the output profile in the environment was created.

The Set Baseline Values button is used to set new Baseline values just below the Actual values of the current LIN file. Set Baseline Values should only be used when creating a new ICC profile. Using Set Baseline Values at any other time will invalidate the current Output Profile.

The Reset Baseline button will erase the Baseline values currently in effect. This button should only be used when creating a new environment with a new ICC profile. For more information on using the Set Baseline Values and Reset Baseline buttons in the process of creating new ICC profiles, please refer to the SpectralVision Pro manual.

Linearization Method

The Linearization Method setting shows whether the current environment uses Chroma, Lab, or Lightness linearization. This setting is dimmed until the Reset Baseline button is clicked (which should only be done when building an ICC profile).

Print Linearization Target

The Print Linearization Target button opens the Linearization Target Options window. There are several linearization targets that can be printed for various spectrophotometers. Select your spectrophotometer from the pop-up menu and click OK. This will place a Linearization target that has been formatted for your device in the Job List.

Linearization targets that are printed using the Print Linearization Target button are sent to the Job List with special instructions to print with Linearization, Ink Limiting, and ICC Color Management disabled. This ensures that the correct settings are used when printing Linearization targets and adds the convenience of not having to manually turn these settings off and on again.

Launch SpectralVision Pro

SpectralVision Pro is provided by ColorBurst to measure and save Linearization targets, and is installed as part of the ColorBurst installation. The Launch SpectralVision Pro button in the Linearization tab of Ink & Color Settings opens the SpectralVision Pro application directly from within ColorBurst. SpectralVision Pro can also be found on your hard drive in your ColorBurst/Utilities folder.

For more information on linearization with SpectralVision Pro, please refer to the SpectralVision Pro manual, found in the ColorBurst/Utilities/SpectralVision Pro folder.

Advanced Lin. Control Button

The Advanced Lin Control window displays a graph of the actual measurements of each color from the currently loaded linearization file. The horizontal axis of the graph corresponds to the percentage patch on the linearization target, and the vertical axis corresponds to the measured value (expressed as either Chroma or Lab, depending on the Linearization Method that is currently selected). Note that the curves represent the raw output of the printer before linearization is applied. Irregular shapes (including “dips”, which illustrate where the light and full-strength inks may come together for a particular color) are normal.

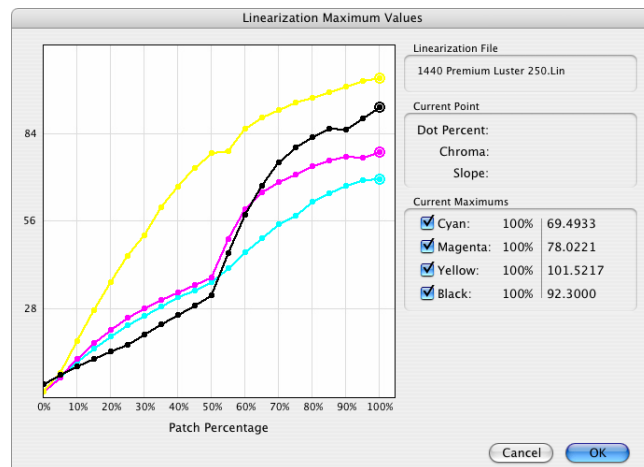


Figure 8.5. The Linearization Maximum Values window, accessed through the Advanced Lin. Control button.

The name of the current Linearization File is listed at the top of the window. When you rollover any point, the Current Point info displays the Dot Percent, Chroma or Lab value, and Slope values for that point. The maximum Chroma or Lab values for each color are listed under Current Maximums along with the corresponding percentage patch. The maximum values for each color are indicated on the graph by the circled anchor point. You may hide any curve by unchecking the checkbox next to the curve’s name. Hiding curves can make it easier to read values on points where curves overlap.

Ink Limit Tab

The Ink Limit Tab is available when the Enable Ink Limiting checkbox is selected. The settings are dimmed when the Enable ICC Color Management checkbox is selected. Ink Limiting should only be changed when creating a new ICC profile.

NOTE The Ink Curves tab is disabled when using HM printers.

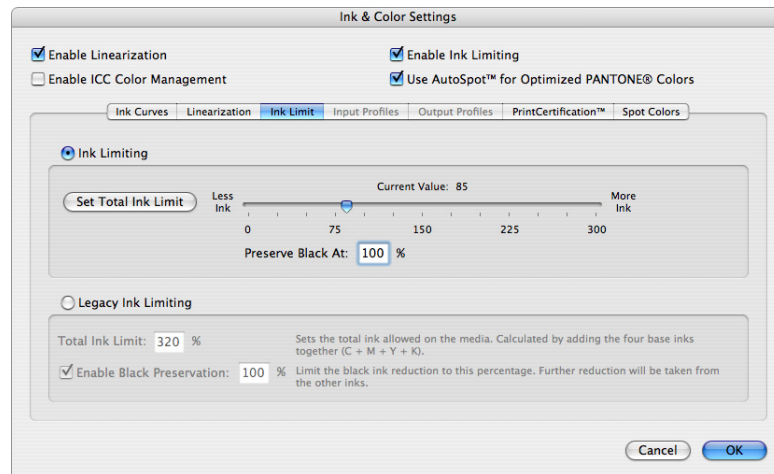


Figure 8.6. The Ink Limit tab in the Ink & Color Settings window.

Ink Limiting

ColorBurst’s new default method of total Ink Limiting simplifies the ink limiting process. The Set Total Ink Limit button calculates the optimal ink limit based on the Channel Ink Reduction values, Light Ink values, and the Linearization data. The ink slider can be used to override the value determined by the Set Total Ink Limit button.

The Preserve Black value is determined by printing a test file included with ColorBurst. Please refer to the SpectralVision Pro documentation for more information on this process.

Legacy Ink Limiting

Legacy Ink Limiting is included to support environments created with older versions of ColorBurst. When creating new ICC profiles, the default Ink Limiting method should be used instead.