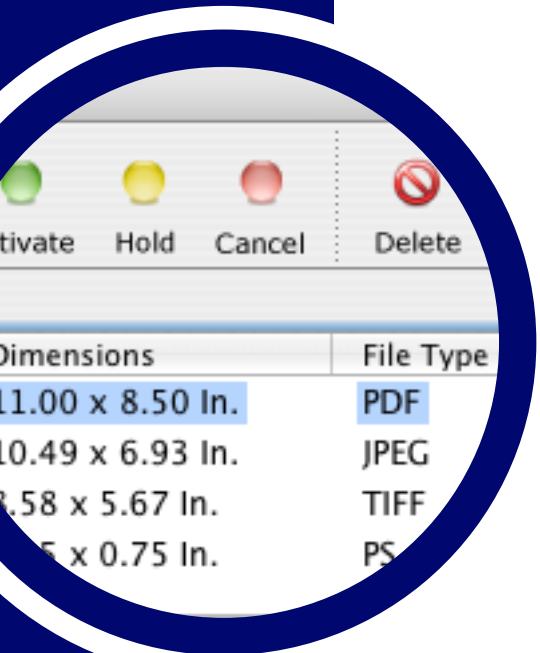
QUEUE SERIES

ColorBurst®



User's Guide
X·Photo and X·Proof

Mac OS X

Mac

PANTONE Digital Color

SWOP CERTIFIED SYSTEM

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GETTING STARTED

ColorBurst™ for Mac OS X® is a PostScript® Language Level 3 compatible Raster Image Processor (RIP) that produces a CMYK color composite for printing to medium and large format inkjet printers. Color correction is performed on-the-fly during output to the printer.

ColorBurst for Mac OS X is available in two versions: ColorBurst X·Photo and ColorBurst X·Proof. Both versions support RGB, CMYK, and Grayscale TIFF and JPEG file formats, as well as PS, EPS, and PDF files. A Hot Folder is included for printing across networks, or ColorBurst can be printed to directly from your favorite applications. ColorBurst X·Proof includes AutoSpot™ for optimized PANTONE® colors (X·Photo does not).

Minimum Requirements

Before installing ColorBurst, please make sure your computer meets the following minimum requirements.

CPU

Requirements vary depending on print resolution and how you send the file to the printer. "RIP and Print On-The-Fly" mode will send files as they are processed; "RIP Then Print" mode will send files after they have been completely processed.

Any Power Macintosh G4 or G5 will support "RIP Then Print" mode at any resolution.

A Power Macintosh G4 1.66 GHz or better is recommended for "RIP and Print On-The-Fly" mode for most printers and resolutions.

A Power Macintosh G5 is required for "RIP and Print On-The-Fly" mode at 2880 resolution on the Epson Stylus Pro 4800, 7800, and 9800.

RAM

1 GB is recommended.

Disk Space

500 Mb hard disk space (local storage) is required. Network storage can be used, but that usually results in slower throughput. If you want to save RTL files created by the RIP for future use, or if your files are very large, up to 40 gigabytes is recommended.

Printer Connection

Ethernet or USB 2.0 connection.

Monitor

A minimum resolution of 1024x768 is required.

Operating System

ColorBurst is Mac OS X native. Mac OS X 10.3 or later is required. Mac OS X Server is now supported.

ColorBurst Installation and Configuration

To install and run ColorBurst, you'll need the installer CD or file, your ColorBurst dongle, and your Mac OS X admin login password.

1. Make sure that Mac OS X 10.3 or later is installed and running on your computer.

2. Plug the supplied ColorBurst dongle into any available USB port or USB hub.

3. Double–click the ColorBurst installer icon on your ColorBurst install CD.

4. When the installation starts, follow the instructions on your screen.

ColorBurst is installed in your Applications folder on your hard drive unless you specify otherwise.

All ColorBurst files, including the ColorBurst preferences, are located inside the ColorBurst folder. The only exception are ICC profiles, which are also installed in the System folder to make them available to other programs such as Adobe Photoshop. You can delete an old version of ColorBurst by simply dragging the old ColorBurst folder to the trash.

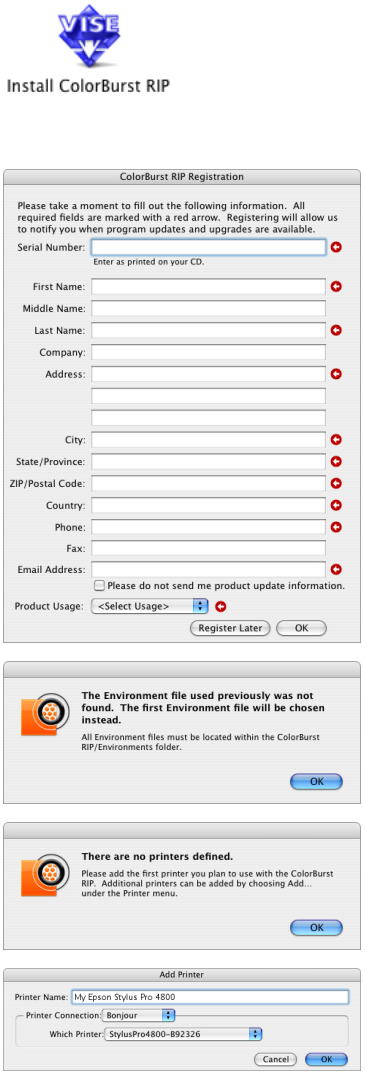
The first time ColorBurst is launched, a series of dialogs will appear to walk you through the initial setup.

1. **Register ColorBurst.** Register your copy of ColorBurst or click Register Later to continue. The registration window will pop up every few hours until registration is completed.

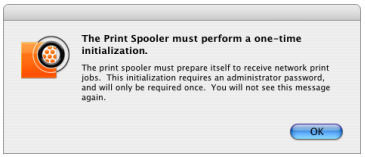
2. **Environment not found.** An environment has not been specified yet, so ColorBurst gives you a warning message and uses the first printer environment it finds in the list by default. You can change this setting later. Click OK to continue.

3. **No printers defined.** A printer has not been defined yet, so ColorBurst gives you a warning message. You can set up a printer in the next dialog. Click OK to continue.

4. **Add a printer.** Type in a name to describe your printer and choose a connection type (Bonjour, USB or Ethernet). If you select USB, ColorBurst will find your printer automatically. If you are using Ethernet,



ColorBurst installer icon and configuration windows: registration window, environment not found, no printers defined, and Add Printer.



The print spooler initialization window is the last step of configuration.

select Bonjour to locate your printer, or select Ethernet to type in a valid IP Address. If you type in an IP Address, use the Test IP Connection button to make sure the IP Address is valid.

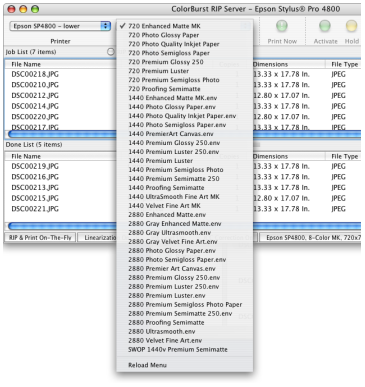
5. **One–time initialization and authentication.** To set up the Print Spooler, you will need to enter the administrator login name and password for your computer. After you successfully login, you will not see this message again.

After initializing the print spooler, the ColorBurst Job Manager window will open. The Job Manager is the main ColorBurst interface where file processing takes place.

Basic Printing from ColorBurst

The following steps will walk you through your first print from ColorBurst.

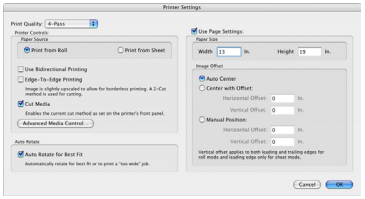
1. **Select an environment for your printer, resolution, media, and ink.** Use the Environment pulldown menu in the Job Manager window to select an evironment. This will load all of the ColorBurst settings for that printer/media combination.



The Environment pulldown menu in the Job Manager window.

2. **Check your page settings.** Click the Printer button in the Job Manager tool bar to open the Printer Settings window. Make sure the correct paper source is selected based on your media (roll or sheet). If you are using sheet paper, make sure to select Use Page Settings and type in your page size. You can center the image or type in an offset.

3. **Open a file and activate it.** Click File menu > Open and select any valid image file (JPG, TIFF, EPS, PDF, PS, etc.). The file is placed in the Job List. If Receive on Hold is selected in the Job Manager (it is on by default) your file will have a status of "Hold". Select your file in the Job List and click the green Activate button in the Job Manager toolbar to change the status to "Ready."



The Printer Settings window.

4. **Click RIP On.** When you click RIP On, ColorBurst will begin to process the file at the top of the Job List. If your printer is connected properly, and your file has a "Ready" status, your file will start to print. After printing, the file will move to the Done List.

ColorBurst Utilities

The following utilities are included on the ColorBurst CD. Most of them are also available on our website, www.colorburstrip.com.

SpecralVision
This program can be used to create Linearization files. For more information on Linearization, see Appendix B: Relinearizing Environments.

Dongle Installer
This program is automatically run during the Installation process to install the ColorBurst dongle.

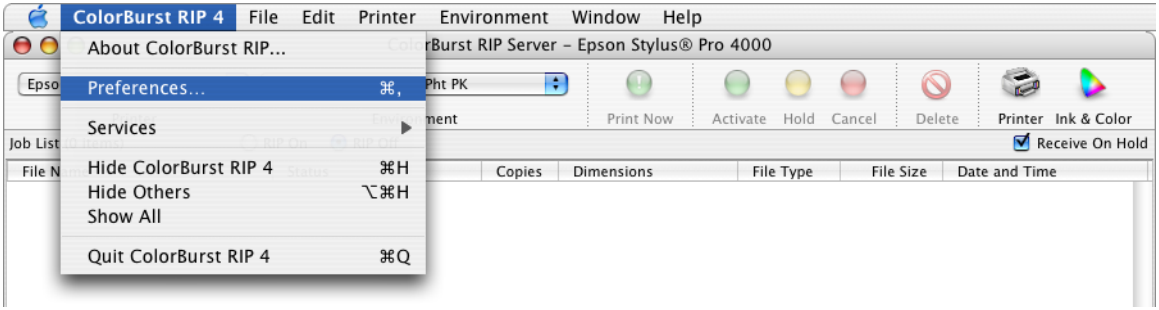
Dongle Updater
This program can be used to update your dongle remotely in the event of an upgrade purchase.

ColorBurst OS X PPD Installer
This program is used to install the ColorBurst PPD file and ICC Profiles in the proper location. It is designed to be used on Mac OS X computers that are not running ColorBurst but will be used to print to ColorBurst over a network. The PPD Installer can be found in the PPD Installer folder in the Application folder and on the ColorBurst CD.

CB Windows Print Driver.zip
This WinZip file contains the print driver files for use on a Windows computer when printing to ColorBurst over a network. See Appendix C for instructions on setting up ColorBurst as a Windows printer.

COLORBURST RIP MENU

The ColorBurst RIP Menu contains two selections that are specific to ColorBurst: About ColorBurst RIP and Preferences. The other options are standard Mac OS X software menu functions.



The ColorBurst RIP menu in the ColorBurst menu bar.

About ColorBurst RIP

The About ColorBurst RIP menu item displays a window with information about the ColorBurst RIP that you are currently running. This information includes the version number and your Dongle ID number.

Preferences

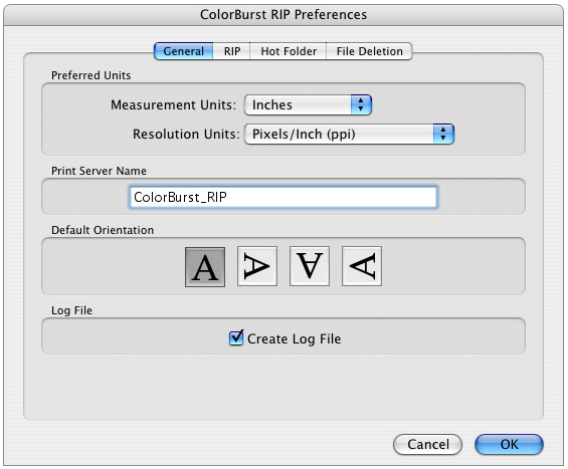
The ColorBurst RIP Preferences window contains main program controls such as the ColorBurst Print Server name, hot folder settings, and log file settings. There are four tabs available in the Preferences window; it opens in the General tab.

Preferences General Tab

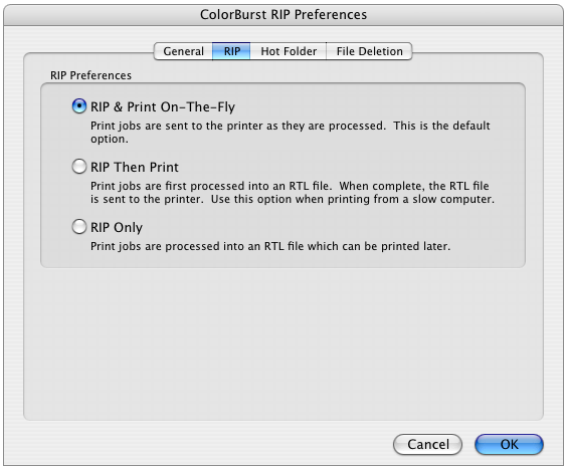
The General tab has settings for ColorBurst's Units of Measure, Print Server Name, Default Orientation, and Log Files.

Preferred Units

The first option is Preferred Units. There are two settings, one for Measurement Units and one for Resolution Units. The Measurement Units may be set to Points, Inches, Feet, Millimeters, Centimeters or Meters. The Resolution Units can be set to either Pixels/Inch (ppi) or Pixels/Centimeter (ppc). These settings are global settings; all units in ColorBurst are set from the selection made here.



The General tab in the ColorBurst RIP Preferences window.



The RIP tab in the ColorBurst RIP Preferences window.

Print Server Name

The Print Server Name field allows you to specify a name for ColorBurst when used as a print server over a network. The default name is ColorBurst_RIP. If you are running more than one copy of ColorBurst, you will need to change the Print Server Name for one copy so that their names do not match.

Default Orientation

The Default Orientation buttons are used to rotate all images as they are placed in the RIP queue. Images can be rotated in 90˚ increments, as illustrated by the 'A' on each button (0˚, 90˚, 180˚, and 270˚). When the left button is selected, images are not rotated.

Log File

The last option in the General tab is to create a Log File. When Create Log File is checked, information about each print job is written to a Log File found in the Log Files folder inside the ColorBurst RIP folder. New files are created on a monthly basis and are named by the month and year. Each individual job is added to the end of the log file for the month. Information in the log file includes the date, time, file name, width, height, number of complete copies printed, and duration of print time. Messages are also added when jobs are cancelled by the user.

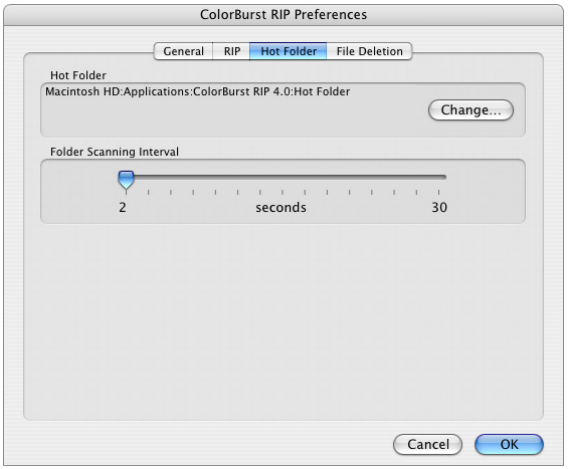
Preferences RIP Tab

The RIP tab determines how the Job List handles files with a "Ready" status when RIP On is selected.

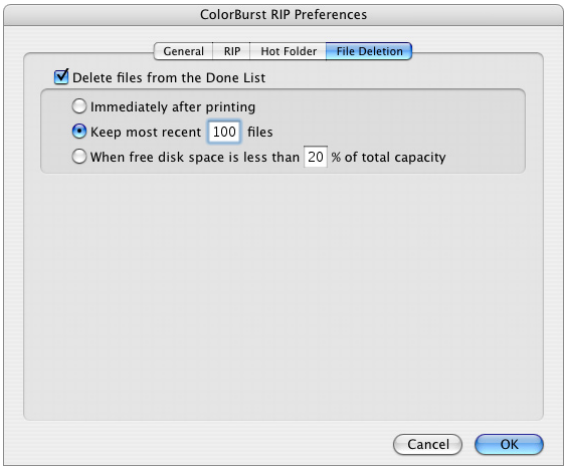
RIP Preferences

The first option, RIP & Print On-The-Fly, is selected as the default setting. This option sends files to the printer as they are being processed, so printing begins shortly after processing begins. This option is recommended when your computer is fast enough to keep up with the printer.

If your computer is not fast enough to keep up with the printer, you should select the next setting, RIP Then Print. This setting creates an RTL file that is sent to the printer after processing is complete. An RTL file



The Hot Folder tab in the ColorBurst RIP Preferences window.



The File Deletion tab in the ColorBurst RIP Preferences window.

is written in an internal format needed by the printer. Because all color correction and screening have already been resolved, printing an RTL file is very fast. An RTL file is printer–specific; an RTL written for an Epson will be different from an Encad or HP printer.

The last RIP preference is RIP Only. If you wish to create RTL files without printing, select this option. This option can be used to RIP many files at once that can be printed later.

Preferences Hot Folder Tab

The ColorBurst Hot Folder can be used as a way to add files to the Job List. The Hot Folder can be modified in the Preferences Hot Folder Tab.

Hot Folder

When image files are placed in the ColorBurst Hot Folder, they will be added to the Job List in the Job Manager for processing. The Hot Folder option shows the full path of the Hot Folder's location. Clicking the Change button will open the Choose a Folder window, allowing you to select any folder to be used as the Hot Folder.

Important: Do not remove files directly from the Hot Folder — the Hot Folder should be used for dropping files into the Job List only. Use the Job Manager interface to delete files by selecting a file and clicking the Delete button. Removing files directly from the Hot Folder can put the RIP in an unstable state, requiring it to be relaunched.

Folder Scanning Interval

The Folder Scanning Interval slider determines how frequently ColorBurst will scan, or check, the Hot Folder for files. Drag the slider along the scale to change the amount of time between scans. The minimum time is 2 seconds and the maximum time is 30 seconds.

Preferences File Deletion Tab

The File Deletion tab gives you control over how files are saved in the Done list.

Delete Files from the Done List

If the Delete Files from the Done List checkbox is not selected, files are never deleted after processing — they are sent to the Done List. If the checkbox is selected, there are three options for deleting files.

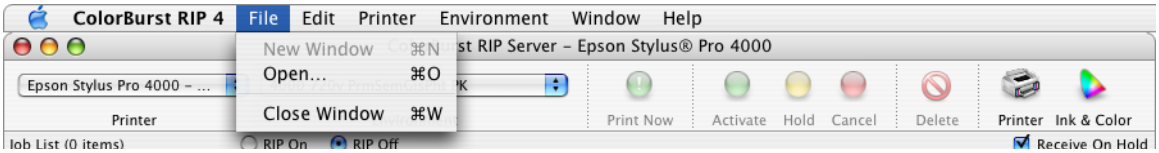
The first option is to delete files immediately after printing. When this option is selected, files are deleted instead of being sent to the Done List.

The second option is to keep a specified number of files. The default setting is to keep the most recent 100 files. After 100 files have accumulated in the Done list, the oldest file will be deleted each time a new file is sent to the Done list. There is no limit to the number of files that can be saved.

The last option is to delete files from the Done List when you are starting to run out of disk space. The default setting is to delete files when there is less than 20% of the disk space free. You may enter any number from 1-99.

FILE MENU

The second menu item in the ColorBurst menu bar is File. This menu is used to open the ColorBurst Job Manager and to open files for processing.



The File menu in the ColorBurst menu bar.

New Window and Close Window

The New Window and Close Window menu options are used to open and close the ColorBurst Job Manager window. When the Job Manager is open, the New Window option is disabled. When the Job Manager window is not open, the Close Window and Open menu options are disabled. Only one Job Manager window may be opened at a time.

When ColorBurst is launched, a Job Manager window is automatically opened and the New Window option in the File menu is disabled.

Open

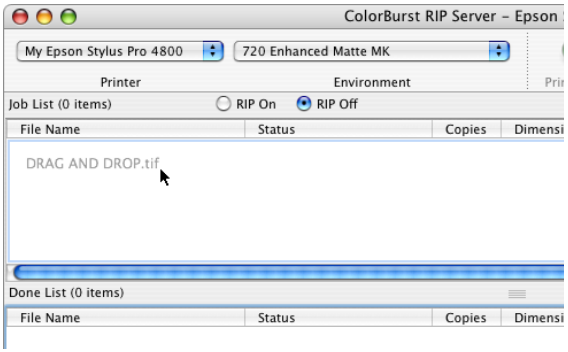
The Open menu item allows you to open image files for processing. It opens a standard Mac OS X Choose window. When you find the file(s) you want to open, click the Open button. (You may open more than one file at a time.) When files are opened they are placed in the Job List to be processed by ColorBurst.

Alternative ways to Open files

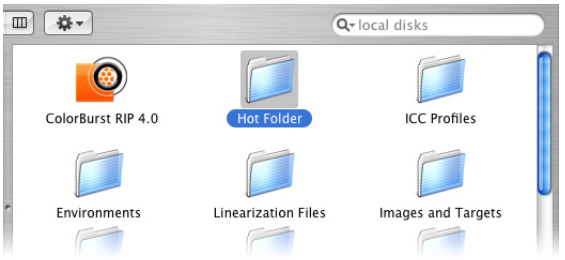
There are several other ways to open files without using the Open menu item.

1. **Drag and Drop**
   An easy way to get files into the Job List is to drag files and/or folders into the Job Manager Job List, or onto the ColorBurst icon in the Mac OS X Dock. You may drag files from any local disk or network.

2. **Use the ColorBurst Hot Folder**
   Another option is to use the ColorBurst Hot Folder to place files in the Job List. ColorBurst scans the Hot Folder for files and places them immediately into the Job List for printing. The Hot Folder is a drop folder only — never remove files directly from the Hot Folder. Use the Job Manager interface to delete files from the Job List.



You can drag files directly into the Job List from any folder on your computer or network.



The ColorBurst Hot Folder is located inside the ColorBurst application folder.

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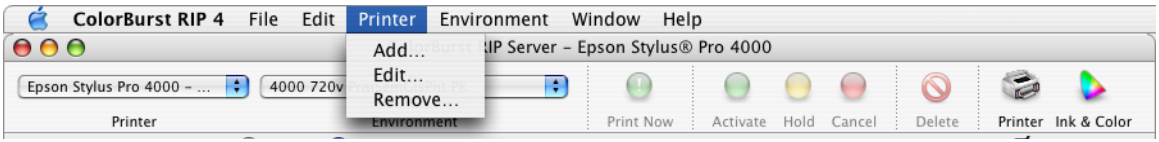
3. Print from applications

Files can also be added to the Job List by printing to ColorBurst from applications. The Print dialog in any application can be used to print to the ColorBurst network printer (see Appedix C: Printing to the ColorBurst RIP for more information). The file will then be sent to the ColorBurst Job List. All files printed to ColorBurst are sent as PostScript files, regardless of the type of file printed (the printing process creates a PostScript file).

PRINTER MENU

The Printer menu has three entries used to define printers. A printer must be defined before you can print a file from the ColorBurst Job List.

The Printer pulldown menu in the Job Manager window shows all of the printers defined using the Printer menu in the ColorBurst menu bar, and is automatically updated when a new printer is defined.



The Printer menu in the ColorBurst menu bar.

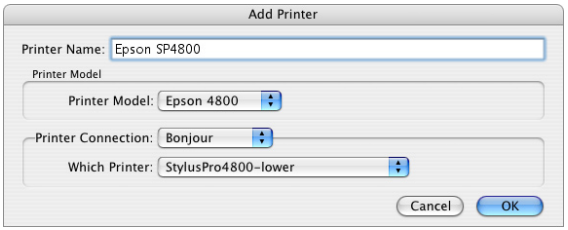
Add

Selecting Add under the Printer menu opens the Add Printer window. To add a printer, first type in a Printer Name. Next select the printer you are connecting to under the Printer Model menu. Printer models are dimmed if they are not supported by the version of ColorBurst you are running (i.e. a 48" ColorBurst will show all 60" printers dimmed).

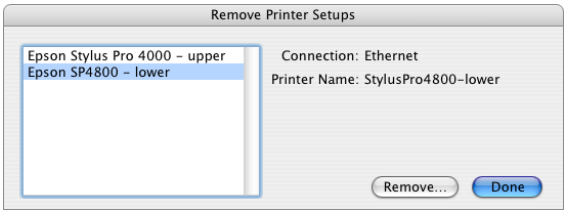
For Printer Connection choose Bonjour, Ethernet, or USB. If your printer is connected via Ethernet and is recognizable by Bonjour, you can use Bonjour to connect without typing in an IP Address. The Which Printer menu will display all of the printers found by Bonjour. Otherwise select Ethernet in the Printer Connection to enter a valid IP Address and Port. If you choose USB, your computer will find any USB printer connections for you and list them in a pulldown menu to choose from. If no USB connections are found, a message will alert you that no USB printers are connected to your computer and that the connection will revert back to Ethernet. Once the printer connection is complete, click OK to add the new printer to your Printer list. The new printer will be selected in the Job Manager automatically.

Edit

If you choose Edit under the Printer menu, the Edit Printer Setups window will appear. All previously added printers are listed on the left. Connection information for the selected printer name is listed on the right. Choose a printer from the list and click the Edit button to change the settings in the Edit Printer window. Once you have made your changes, click



The Add Printer window.



The Remove Printer Setups window.

the OK button to save them and close the Edit Printer window. Click OK in the Edit Printer Setups window to close it and return to the Job Manager.

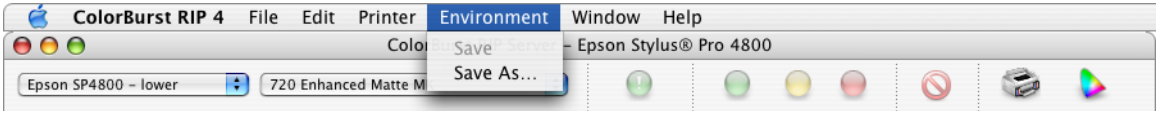
Remove

Select Remove under the Printer menu to delete a printer setup. The Remove Printer Setups window will appear, and is similar to the Edit Printer Setups window. Select a printer name in the list and then click the Remove button to delete it. A warning message will appear to confirm that you want to delete the setup; click OK to remove it. When you are finished removing printer setups, click OK to close the Remove Printer Setups window.

ENVIRONMENT MENU

ColorBurst ships with numerous preconfigured environments that contain settings for different printers and media. These environments are selected in the Job Manager window's Environment menu.

The Environment menu in the ColorBurst menu bar can be used to create your own custom environments.



The Environment menu in the ColorBurst menu bar.

Save and Save As

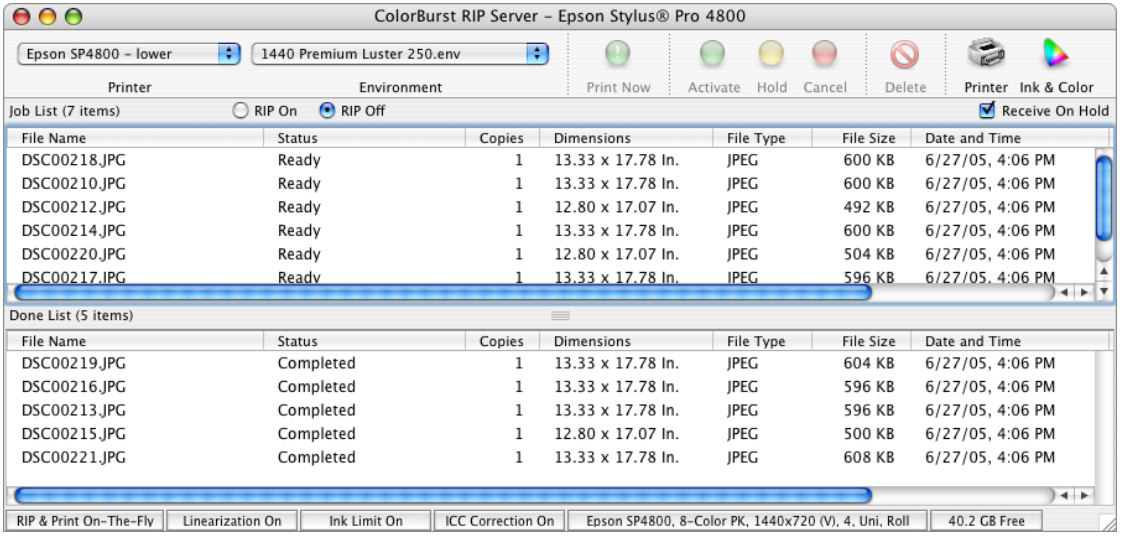
You can use Save or Save As to create a new environment that will appear under the Environment menu in the Job Manager. Load an environment and make any changes neccessary to the settings in the Printer Settings and Ink & Color Settings windows. Choose Save to replace the current environment with the new settings. If the current environment file is locked, you will get a message indicating that the file cannot be overwritten. Use Save As to save the environment settings in a new file. Type in a meaningful file name — include the printer model, resolution, media type, etc. — and choose a folder to save the new environment in. The default location is in the Environments folder within the ColorBurst RIP directory, but you may choose any location. Environments should always be saved with an "env" extension.

JOB MANAGER WINDOW

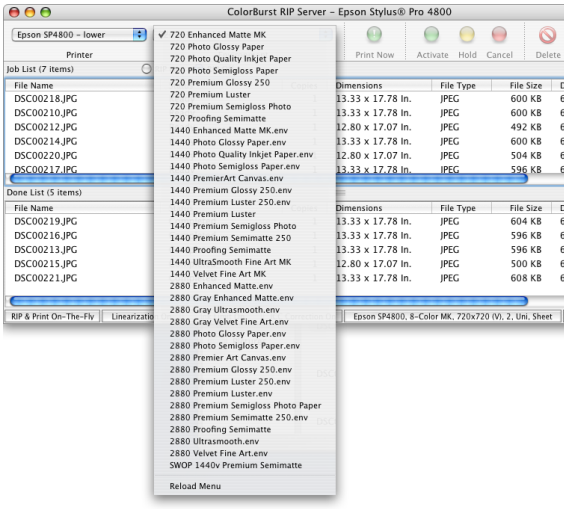
The Job Manager window is where file processing takes place, and shows file information and status. The files in the lists can be dragged within each list to reorder them, or dragged from one list to another. The file at the top of the list is the first to be processed.

Files in the Job List are processed only if the RIP is on and the files have a "Ready" or "Ready - Priority" status. The Job List has a set of buttons labeled RIP On and RIP Off. The RIP On button must be selected to activate the Job List. Files can be set to "Ready" with the green Activate button, or "Ready - Priority" with the green Print Now button.

If the ColorBurst Hot Folder is available, ColorBurst will begin scanning the Hot Folder immediately after it is launched. Any files found will be placed in the Job List. The folder will be monitored based on the time interval set in the Preferences window, under the ColorBurst RIP menu.



The ColorBurst Job Manager window.



The Environment pulldown menu in the Job Manager window.

Printer Pulldown Menu

The Printer pulldown menu shows the currently selected printer. You may choose any printer name that has been previously created in the Add Printer window, under the Printer menu.

Environment Pulldown Menu

The Environment pulldown menu is used to select an environment, or a set of ColorBurst settings for a specific printer (Epson 7600, 9600, etc.), resolution (720 variable dot, etc.), media (Matte, Gloss, etc.), and black ink (PK–photo black, MK–matte black). The Environments available in the menu are based on the printer selected in the Printer pulldown menu. When you select a new environment, the settings stored in the environment file will be loaded and ColorBurst is ready to print using those settings.

When you create a new environment using Save or Save As under the Environment menu, you may need to select Reload Menu (at the bottom of the list) to see your new environment in the list.

Job Manager Toolbar Buttons

The Job Manager toolbar has buttons labeled Print Now, Activate, Hold, Cancel, Delete, Printer, and Ink & Color. The first five buttons act on the files listed in the Job Manager. These buttons are disabled until a file is selected. The last two buttons open the Printer Settings and Ink & Color Settings dialogs.

The Print Now and Activate buttons are used to indicate that a file is ready to be sent to the printer. Print Now sets the file to a status of "Ready - Priority" and sends the file to the top of the Job List to be printed immediately. The Activate button changes any file in the Job List from "Hold" or "Cancelled" to "Ready" so it can be sent to print.

The Hold button can be used to ignore individual files during processing. Select any file with a "Ready," "Ready - Priority" or "Cancelled" status and click Hold. The file's status will change to "Hold" and the file will not be processed.

The Cancel button can be used while a file is being processed. When a file's status is "Processing," "Ripping," or "Printing," click the Cancel button to stop processing. The file's status will change to "Cancelled" and can be activated to reprint.

The Delete button will remove any selected file(s) from the Job List or Done List in the Job Manager. You may also press Command–Delete on the keyboard to delete a selected file from a list.

Job List

When a file is opened, it appears in the Job List. If you double–click a file in the Job List, the File Attributes window will open to allow scaling, rotation, and number of copies to be set.

The ColorBurst Preferences window determines how files in the Job List are processed. When RIP & Print On-The-Fly is selected in the RIP Preferences, files are

sent to the printer while they are processed. If RIP Then Print is selected, files are ripped to an RTL file which is then sent to the printer. (This setting is recommended for slower computers.) If RIP Only is selected in the RIP Preferences, an RTL file is created in the Job List but it is not sent to the printer. Files are sent to the Done List when processing/printing is complete.

Files in the Job List will be processed when two conditions are met:

1. The RIP must be on — RIP On must be selected.
2. The file must have a "Ready" or "Ready - Priority" status to print.

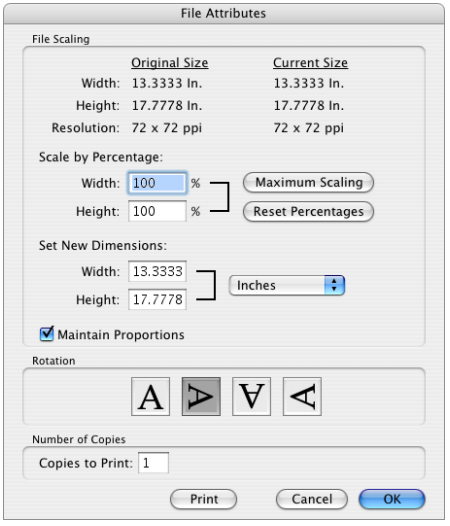
By default, files are received with a status of "Hold" to allow File Attributes to be set. To automatically receive files with a status of "Ready," deselect the Receive on Hold checkbox in the Job Manager window.

Note: If you are creating RTL files, keep in mind that they have already been color corrected and will always print the same way. This means that if you change any ColorBurst color settings and re–print an RTL file, the changes will not have any effect, since the RTL was created with the previous settings. The file must be re–ripped to have the new settings applied.

If you double–click any RTL file in the Job or Done list, the RTL File Attributes window will open, showing the print environment and allowing number of copies to be set.

Done List

The Done List contains the original image files that were processed by the ColorBurst RIP. If you want to re–RIP files with different color settings, you can drag the original files (not RTL files) from the Done List to the Job List to be processed again.



The File Attributes window, accessed by double–clicking an image file in the Job List or Done List.

If you double–click any file in the Done list, the File Attributes window will open to allow scaling, rotation, and number of copies to be set.

Status Bar

The Status Bar appears at the bottom of the Job Manager window. This bar indicates the current RIP mode (as set in the RIP Preferences), whether Linearization, Ink Limiting, and ICC Correction are on or off, and displays the current Printer Settings (including the printer brand, model, ink set, resolution, and number of passes) as well as the available disk space on the volume with the ColorBurst RIP support folder.

File Attributes

When an image file in the Job or Done list is double–clicked, the File Attributes window opens. This window has controls for scaling, rotation, and number of copies.

The Original Size (unscaled) and Current Size of the selected file is shown at the top of the window, includ-

ing the file's Width, Height, and Resolution. Below the sizes are several scaling options: Scale by Percentage, Maximum Scaling, and Set New Dimensions. When entering values for scaling, it is recommended that the file resolution go no lower than 100 ppi — the print quality will suffer if you print below 100 ppi. If values are entered below this point, a warning message will appear when you close the window, allowing you to either compute the maximum size at 100 ppi, print anyway with the resolution you set, or cancel.

Using Scale by Percentage changes the image size to a percentage of the original size. Numbers less than 100 make the image smaller, while numbers greater than 100 enlarge the image. The default is 100%, the original size of the image. When the Maintain Proportions checkbox is checked, the Width and Height percentage values will always match, to maintain the original proportions of the file. When the Maintain Proportions checkbox is not checked, you may enter different values for the Width and Height percentages. The original proportions of the file are not preserved and the image will be distorted.

The Maximum Scaling button will scale the image to 100 ppi, the minimum recommended resolution. This is the maximum size that it is recommended for printing.

The Set New Dimensions option allows you to enter a specific Width and/or Height for your image, using the units selected in the pulldown menus. When the Maintain Proportions checkbox is selected, the Width and Height will maintain the original proportions of the file. When the Maintain Proportions checkbox is not selected, you may enter different values for the Width and Height percentages, distorting the image.

You can use the Reset Percentages button to return to the original file size at any time.

A file may be rotated in 90° increments using the rotation buttons. A letter "A" is shown on each button to indicate the degree of rotation from the file's original orientation — 0°, 90°, 180°, or 270°. When a rotation button is chosen, the file dimensions shown in the File Attributes window will be instantly updated to reflect the rotated dimensions. When the File Attributes window is closed and the rotation settings are applied, the Job Manager will display the new dimensions as well.

The Number of Copies box can be used to print more than one copy of a file at a time. Simply type in the number of copies that you want to print, up to 999. The number of prints entered here will be updated in the Job Manager window and you will see the number decrement as each copy is printed.

To apply changes made in the File Attributes window, click the Print button or the OK button. The Print button will apply changes and change the file status to "Ready - Priority." If the file is in the Done list, clicking Print will also move the file to the Job List. The OK button simply applies changes to the file.

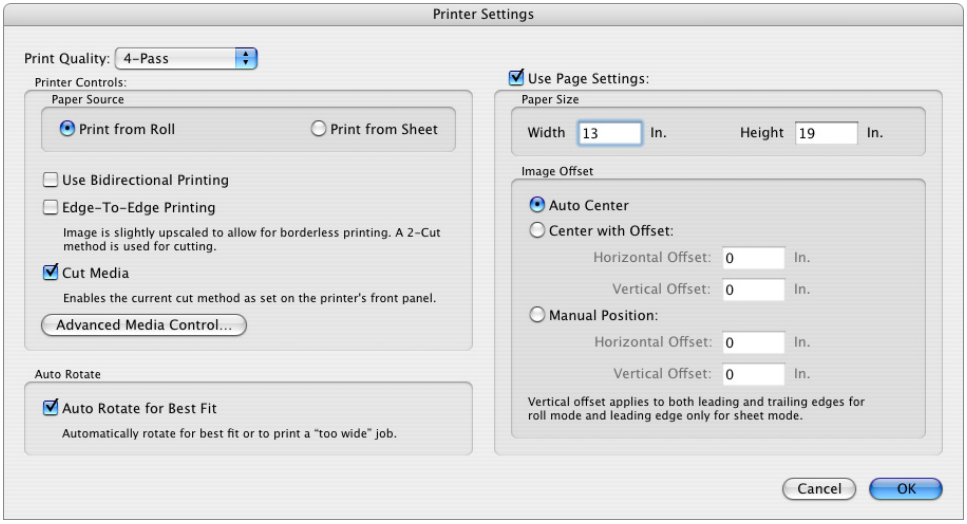
RTL FIle Attributes

When any RTL file in the Job or Done list is double–clicked, the RTL File Attributes window opens.

The RTL File Attributes window displays the printer make and model that was in effect when the RTL was created. The Copies to Print box allows multiple copies of the RTL file to be printed. The default value is 1 (print one copy). You may enter up to 999.

PRINTER SETTINGS

The Printer Settings button in the Job Manager window opens the Printer Settings window. This is where you define the printer settings used by ColorBurst.



The Printer Settings window.

Print Quality

The Print Quality setting determines the number of overlapping print passes made by your printer, and can be used to eliminate banding and other print artifacts. The number of passes available depend on the printer model you have selected. 2–Pass is the fastest setting, with the least amount of overlap, and 8–Pass provides the best quality, with the most overlap. As the pass number increases (2, 4, 8), the overlap increases, the print quality increases, and the print speed decreases.

Paper Source

Paper Source allows you to specify the format of your media. Select Print from Roll when printing on a roll of media. Select Print from Sheet when you are feeding individual sheets of paper into the printer.

Use Bidirectional Printing

The Use Bidirectional Printing checkbox turns bidirectional printing on and off. Normally the printhead prints while moving in one direction, then moves back to the starting point to print the next pass. Bidirectional printing will put ink down while the printhead moves in both directions. Bidirectional printing is faster, but the print quality is not as good as unidirectional printing.

Edge–to–Edge Printing

Select Edge-to-Edge Printing to print an image to the edges of your paper. The 2 cut method will print the beginning of the image, stop printing and cut one edge, and then continue printing the rest of the image. The image must be long enough (approximately 7 inches) for the 2 cut method to work properly.

Cut Media

The Cut Media checkbox tells the printer to cut after printing is completed. This setting overrides any settings on the control panel of the Epson printer.

Advanced Media Control

The Advanced Media Control button opens the Advanced Media Settings window. If you are experiencing print problems with a specific paper (gaps or overlapping in your print), you can use the Fine–Tune Paper Feed Adjustment control to change the paper advance. Print the "media advance.tif" target file, found in the ColorBurst Images and Targets folder. Using this print as a guide, you can then lower the amount of advance (-1 to -70) can correct for gaps in the print or increase the advance amount (1 to 70) to correct for overlap. Continue printing the target and making adjustments until the print is corrected completely.

Note: This control should only be used after the inkjet heads have been cleaned and a jet test has been run — in most cases print problems are caused by clogged jets. For this reason, it is recommended that you clean your inkjet heads daily.

Auto Rotate

Auto Rotate can be used to try to correct two common problems — it can rotate images that come in with an "Image too wide" status, and it can be used to automatically rotate images to save media.

If Use Page Settings is not selected (a Paper Size is not defined) and the image is wider than the printer, normally the image comes into the Job List with a status of "Image too wide." When Auto Rotate is selected the image is automatically rotated in an attempt to make the image fit the media. This only works if the other dimension is less than the width of the printer.

If Use Page Settings is selected with Auto Rotate on, all images are compared to the page width and are rotated to a "Landscape" orientation to conserve media. This is especially helpful when printing on roll media.

Use Page Settings

When you select the Use Page Settings checkbox, the Paper Size and Image Offset settings become available.

The Paper Size boxes allow you to specify the Width and Height of the media you are using. If you are using a roll of paper, you may set a size here and turn on Cut Media to have the printer automatically cut the roll paper to the specified height after printing. The Paper Size setting is required when using Auto Center or other Image Offsets.

The Image Offset group contains three options. The first, Auto Center, will automatically center an image on the media based on the dimensions entered in Paper Size. When selected, this setting will override any settings on the printer's front control panel.

If you are using Auto Center, it is extremely important that you physically measure your media and enter the correct measurements. For example, a paper that is 19 inches wide may actually measure 18.75 inches wide. In this case, entering a width of 19 will print the

image slightly off–center. Auto Center relies on the Paper Size measurements being exactly correct.

The second option is Center with Offset. This option allows a horizontal or vertical offset from the center of the paper. Center with Offset values can be positive (moving the image to the right and lower on the page) or negative (moving the image to the left or higher on the page).

The last option in the Image Offset group is Manual Position. You may enter a Horizontal and/or Vertical Offset. These values are used to offset an image from the top left corner of the *printable* area on your media. For example, if you enter a Horizontal Offset of one inch, your image will start one inch from the printer's left margin. However, if Edge–To–Edge printing is selected, the offset starts at the edge of the paper giving you a true one–inch margin.

The Vertical Offset value is added to both the top and bottom of the image. When Roll format and Cut Media are selected, the Vertical Offset is added below the image and then the media is cut, giving you a cut print with equal space above and below the image.

INK AND COLOR SETTINGS

All of ColorBurst's color management settings are located in the Ink & Color Settings window. The tabs are presented in the order in which they are used when building a profile. This window is opened by clicking the Ink & Color Settings button in the Job Manager.

Enable Linearization Checkbox

Select the Enable Linearization checkbox to linearize your input data using a specified .LIN file. This box should always be selected unless you are creating a LIN file. If this box is not checked, the Linearization Tab will be disabled and the input data will not be linearized. The status of this checkbox is displayed in the Status Bar at the bottom of the Job Manager Window.

Enable ICC Color Management Checkbox

This checkbox turns ICC Color Management on and off. When you turn off ICC Color Management, the Input Profiles Tab and the Output Profiles Tab are disabled and ICC profiles will not be used. The status of this checkbox is displayed in the Status Bar at the bottom of the Job Manager Window.

Enable Ink Limiting Checkbox

The Enable Ink Limiting checkbox turns ink limiting on and off. When this box is not selected, the Ink Limiting Tab is disabled and Ink Limit settings are not used. The status of this checkbox is displayed in the Status Bar at the bottom of the Job Manager Window.

Autospot for Optimized PANTONE Colors

The AutoSpot option is only available in X·Proof (it is not available in X·Photo). When this checkbox is selected, ColorBurst will automatically find any PANTONE colors during file processing. AutoSpot's color optimization allows for greater accuracy of PANTONE colors.

Ink Curves Tab

Ink Curves is the only tab in the Ink & Color Settings window that is always available and is not disabled by a checkbox.

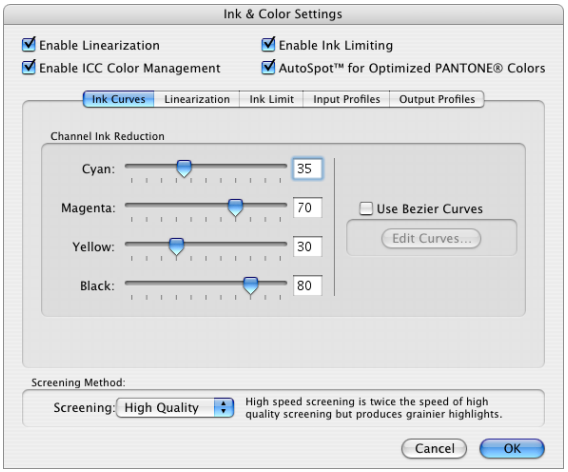
Channel Ink Reduction

The Channel Ink Reduction allows you to reduce the maximum amount of a specific ink that is used. For example, if Cyan is reduced to 60, a pure cyan would print at 60% of Cyan instead of 100%.

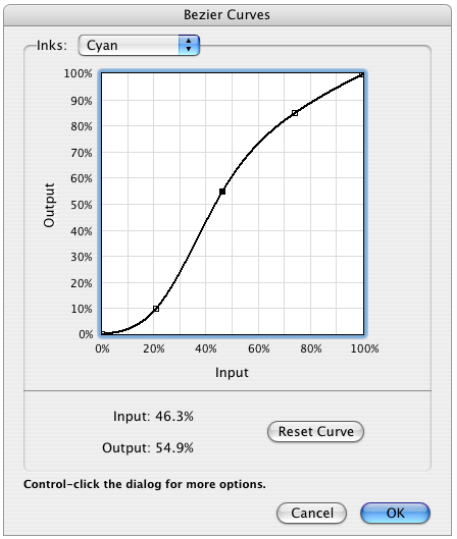
The Channel Ink Reduction may be used when Enable Ink Limiting in not selected. The maximum printed ink can be independently controlled for each color. For example, let's assume you enter a value of 50% for the Cyan value. This means that when a 100% cyan dot is to be printed, only a 50% dot is actually printed. All other dot values are adjusted accordingly. When a 50% dot is specified, only a 25% dot is printed, etc.

Use Bezier Curves and Edit Curves Button

Each color channel can be controlled with Bezier Curves. When the Use Bezier Curves checkbox is



The Ink Curves tab in the Ink & Color Settings window.



The Bezier Curves window, accessed through the Edit Curves button.

selected, the Edit Curves button is available. This button opens the Bezier Curves window. When the Use Bezier Curves checkbox is not selected, any Bezier Curve settings are ignored.

Bezier Curves Window

The Bezier Curves window contains an individual editable curve for each ink color. To adjust each ink's curve, select the ink name in the Inks pulldown menu. Click anywhere on the curve line to add a point. Clicking on an existing point will select the point. You may drag points with the mouse or use the arrow keys on the keyboard to adust them. The arrow keys will move a selected point by 0.4%; Option-Arrow will move a selected point by 0.1%. To delete a point from the curve, select the point and hit the Delete key on the keyboard. You may copy a curve to all other Inks by holding down the Control key and clicking on the curve, and then selecting Copy Curve To Other Inks from the menu that pops up. The Reset Curve button will revert the curve for the current ink to a straight line. Click the OK button to save the Bezier Curves.

Linearization Tab

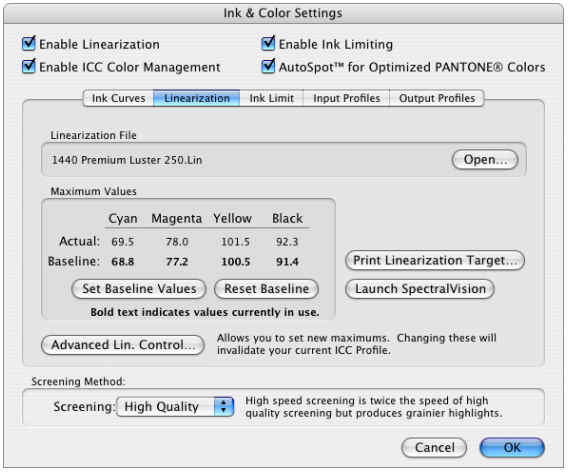
The settings in the Linearization Tab are available when Enable Linearization is selected. Linearizing ensures a smooth transition between colors by creating a straight–line relationship between input and output data.

Linearization File and Open Button

In order to linearize your input, a LIN file must be specified. The Linearization file chosen is shown in the window below "Linearization File." Click the Open button to open a standard Mac OS X window to locate and select a Linearization file. Linearization files are shipped with ColorBurst in the Linearization Files folder and have a LIN extension.

Maximum Values, Set Baseline Values Button

When a LIN file is loaded, the maximum chroma values in the LIN file will be displayed as Actual values. These values are peak chroma values for each color. Chroma is roughly analogous to color saturation; a chroma of zero (0) would indicate a neutral gray.



The Linearization tab in the Ink & Color Settings window.

The Set Baseline Values button can be used to set Baseline values just below the peak chroma values of the current LIN file. These values should only be set once, when a new environment is loaded. When Set Baseline values is used, the reduced Baseline values are used instead of the values in the LIN file.

Using Set Baseline Values can help you match output for multiple printers of the same type (using the same ink and media) and ensure consistent output on the same printer from day to day. It provides built–in headroom from the possible maximum value (from the LIN file) to the working maximum value (the Desired densities). This becomes very useful if an inkjet is clogged or misfires, or if you have any other printing situation that would cause a variation in chroma. In these situations, the maximum value reading may not be as high in your LIN file as it is in the Baseline values. Using Set Baseline values will make the lower reading acceptable.

Once the Baseline values are set, the Set Baseline Values button becomes disabled.

The Reset Baseline button will erase the Baseline values currently in effect, making the current ICC Profile invalid. This button should only be used when creating a new environment with a new 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, depending on your spectrophotometer. When you select a target and click OK, the appropriate target file will be placed in the Job List.

Printing the Linearization Target through this window gives the added benefit of automatically printing without Linearization and ICC Color Management. This ensures that these settings are turned off while printing the target without having to manually turn them off and back on again when the print is done.

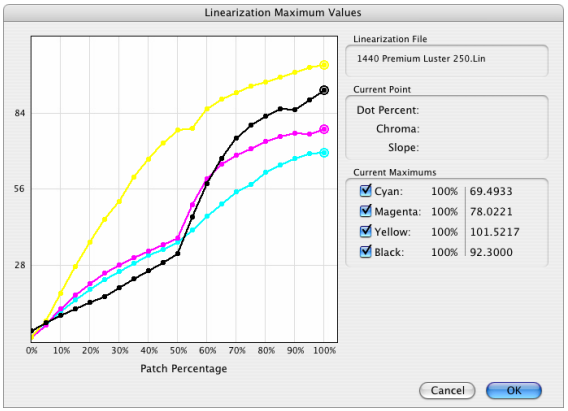
Launch SpectralVision

SpectralVision is provided by ColorBurst to linearize ColorBurst environments, and is installed as part of the ColorBurst installation. The Launch SpectralVision button opens the SpectralVision application directly from within ColorBurst. The SpectralVision program can also be found on your hard drive in your ColorBurst RIP folder > Utilities folder.

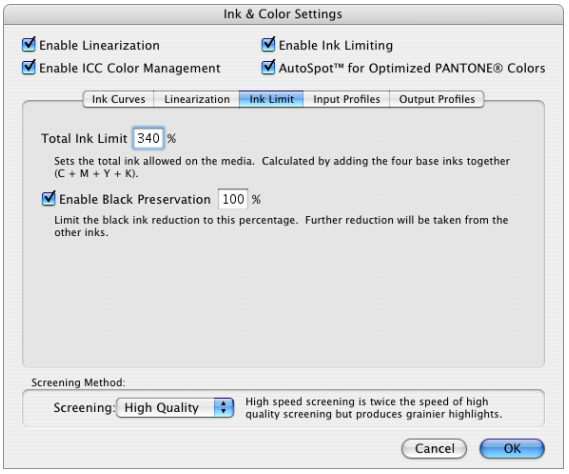
For more information on linearization with SpectralVision, please see Appendix B: Relinearizing Environments, or refer to the SpectralVision documentation (found in the ColorBurst RIP folder > Utilities folder > SpectralVision folder).

Advanced Lin. Control Button

It is strongly recommended that you use the Set Baseline values button to determine the working peak chroma values. However, if you wish to edit the



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



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

Actual values yourself, you may use the Advanced Lin. Control button to open the Linearization Maximum Values window. This window shows a graph of each color's chroma values from 0% to 100% ink. These curves can not be changed — you may simply select any point on the curve as the maximum chroma value.

The current Linearization File is listed at the top of the window. When you rollover any point, the Current Point group lists the Dot Percent, Chroma, and Slope values for that point. The currently selected maximum points, listed under Current Maximums, are indicated by an outlined circle. You may hide any curve by clicking the checkbox next to the curve's name (e.g. hide the Cyan curve by clicking the checkbox next to Cyan). Hiding curves can help access points where curves overlap.

When a point is selected, the chroma value for that point is used as the current maximum. Clicking OK will put that new maximum value into effect as the Actual value (not the Baseline value).

Ink Limit Tab

The Ink Limit Tab is available when the Enable Ink Limiting checkbox is selected.

Total Ink Limit

The Total Ink Limit value can be determined by the Ink Limit test file ("Media Ink Limit Test.tif", located in the Images and Targets folder). The number entered here can control the maximum amount of ink printed and avoid prints that are too wet. To determine the ink limit, print "Media Ink Limit Test.tif" and look for the last dry patch for all colors. On glossy media, the wet patches may show ink running, while on matte media the paper may buckle. Another sign that the patch is too wet is rounded edges; on an acceptable patch the corners will be sharply defined. The number above the last dry patch (percentage of ink) is the number that is entered in the Total Ink Limit box. When the Total Ink Limit value is less than 400%, the total amount of ink printed will be reduced to the percentage entered. If you are using the High Quality screening method, leave the Total Ink Limit at 400%.

Enable Black Preservation

The Enable Black Preservation option works with Total Ink Limit to maintain a rich black. Selecting this box will keep black at the percentage entered when ink is limited using Total Ink Limit. For example, when Ink Limiting is not used or it is set to 400%, each ink is allowed to print at 100%. If Ink Limiting is set to 200%, each ink is limited to 50%. When each color is limited to 50%, it is difficult to get a rich black. If Enable Black Preservation is set to 80%, the other inks will be held back to 40% and black will print at 80%, producing a deeper black. The default (and minimum recommended) setting is 80%; a setting of 100% can create banding problems when printed.

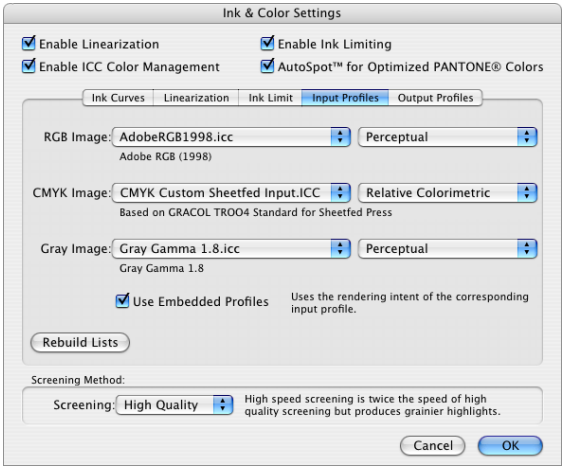
Input Profiles Tab

The Input Profiles Tab is available when the Enable ICC Color Management checkbox is selected. You may specify any or all of the Input Profiles in this tab — ColorBurst will use only the ones needed for each print job. ***ICC Profiles must be placed in the ICC Profiles folder in the ColorBurst RIP folder to appear in the pulldown menus.***

RGB Image Pulldown Menus

The first RGB Image pulldown (on the left) contains available RGB ICC Profiles, located in the ColorBurst ICC Profiles folder. When a profile is selected, the profile information is listed below the pulldown menu. If you select None from the pulldown menu, an ICC profile will not be used for RGB images.

The second RGB Image pulldown (on the right) contains the rendering intent for the RGB ICC Profile. The rendering intent is used to define how the profile will remap the input colorspace to the output colorspace. Perceptual rendering will remap the input data evenly in the output data space. Colorimetric rendering will remap all out–of–gamut data to the closest possible value in the output colorspace, and all other data will remain the same. Absolute Colorimetric rendering is based on the white point of the media while Relative



The Input Profiles tab in the Ink & Color Settings window.

Colorimetric rendering uses a specific white point as a reference. Saturation rendering tries to retain the same level of saturation as the original data, but at the expense of color hue. In general, use Perceptual rendering for photographic images and Colorimetric for vector graphics.

CMYK Image Pulldown Menus

The CMYK Image pulldown menus work the same way the RGB Image pulldown menus work, except they are applied to CMYK images.

Gray Image Pulldown Menus

The Gray Image pulldown menu selections are applied to grayscale images. If None is selected, any grayscale image will be converted to equal parts RGB. If a profile is selected, it will be used to process the grayscale image. If a profile is embedded and the Use Embedded Profiles checkbox is selected, it will take precedence over any profile selected here.

Use Embedded Profiles

The Use Embedded Profiles checkbox is available for users that embed profiles in images using programs such as Photoshop. When this box is checked and a file contains a profile, the input profiles in ColorBurst are ignored and the embedded profile is used as an input profile instead. If this checkbox is not selected, any embedded profiles are ignored.

Rebuild Lists Button

The Rebuild Lists button is used to refresh the ICC Profile lists in the pulldown menus for RGB, CMYK, and Gray images. If you add new ICC files to the ColorBurst ICC Profiles folder, click the Rebuild Lists button to make sure they show up in the pulldown menus. ***ColorBurst will only use ICC Profiles from the ColorBurst ICC Profiles folder.***

Output Profiles Tab

The Output Profiles Tab is available if the Enable ICC Color Management checkbox is selected.

CMYK Pulldown Menu

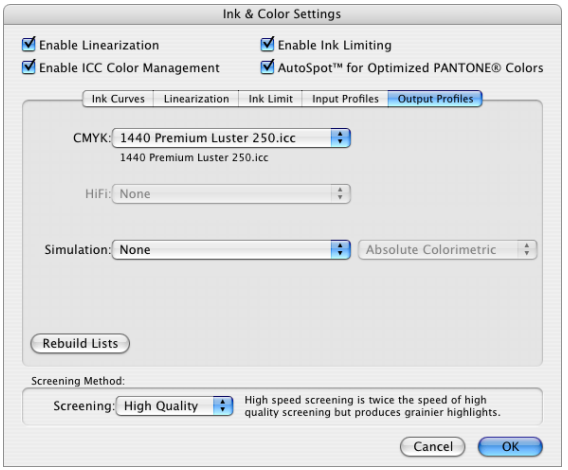
The CMYK pulldown menu contains all CMYK ICC profiles available in the ColorBurst ICC Profiles folder. A description of the selected profile appears below the pulldown menu.

HiFi Pulldown Menu

This menu is available when HiFi ICC Profiles are available in the ICC Profile folder. A HiFi profile contains more than 4 colors, such as Hexachrome or 5, 6, 7 or 8 color profiles.

Simulation Pulldown Menus

The Simulation pulldown menu allows you to select an output ICC Profile to use as proofer. This allows you to simulate the output of another printer on your own printer. For example, if you are printing to an Epson 7600, you can select a SWOP ICC profile to simulate a printing press. The color gamut of the Epson will be restricted by the SWOP profile to simulate the press.



The Output Profiles tab in the Ink & Color Settings window.

If you do not want to simulate another printer, select None in this pulldown menu.

Rebuild Lists Button

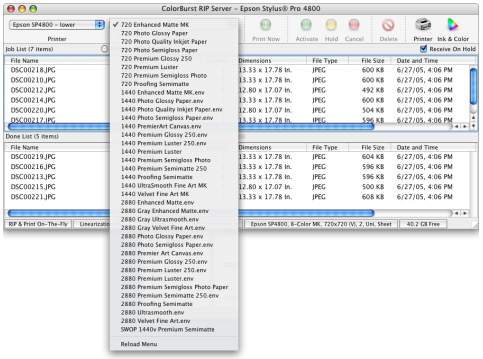
The Rebuild Lists button is used to refresh the ICC Profile lists in the pulldown menus for CMYK, HiFi, and Simulation. If you add new ICC files to the ICC Profiles folder, click the Rebuild Lists button to make sure they show up in the pulldown menus.

Screening Method

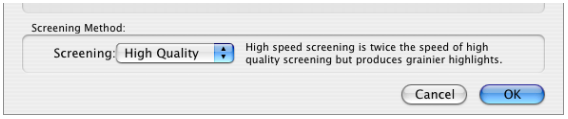
At the bottom of the Ink & Color Settings window is a pulldown menu to select a screening method. There are two choices for Screening Method: High Quality and High Speed. It is strongly recommended that High Quality is used; this setting will give the best print results. The High Speed screening method is twice as fast but results in grainier highlight areas.

APPENDIX A:
CUSTOM ENVIRONMENTS

Users who wish to have the ultimate in control and already own their own profiling software may want to create their own custom settings. It is only recommended that you create your own environments if you own a spectrophotometer, profiling software, and have an intimate knowledge of color theory and ICC profile creation. That being said, here is a blueprint of how it can be done. You will need to create a custom linearization file, ink limit, and ICC profile. All these settings will become part of the new Environment.



The Environment pulldown menu in the Job Manager window.

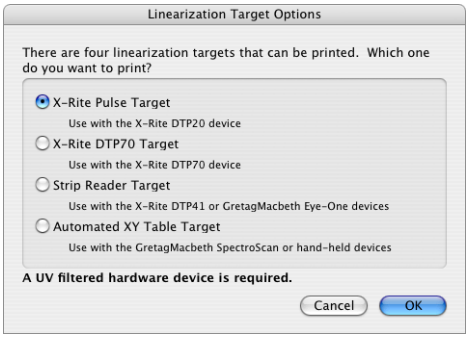


The Screening Method option at the bottom of the Ink & Color Settings window.

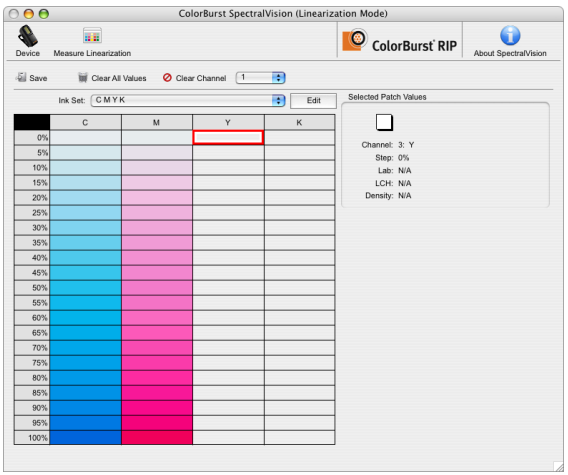
1. **Select a starting Printer Environment.** Use the Environment pulldown menu in the Job Manager window to choose an environment for your printer resolution, dot size, media, and inkset.

2. **Select a Screening Pattern.** ColorBurst offers two different screening (dither) patterns in the Ink & Color Settings window. Choose one according to your needs. The screening pattern will affect color so environments made with High Quality screening are very different from environments made with High Speed Screening. The .LIN files and ICC profiles are also not interchangeable.
   High Quality: This pattern should be used for fine art and photography. It is as close to continuous tone as possible but is much slower than high speed.
   High Speed: This pattern is very fast but does not produce as fine of a print. It should be used for proofing or for signage.

3. **Print a Linearization Target.** In the Job Manager window toolbar, click Ink & Color button to open the Ink & Color Settings window. Click the Linearization tab and then click the Print Linearization Target button. Choose the target that corresponds to the spectrophotometer you will be measuring it



The Linearization Target Options window.



The SpectralVision Measure Linearization window.

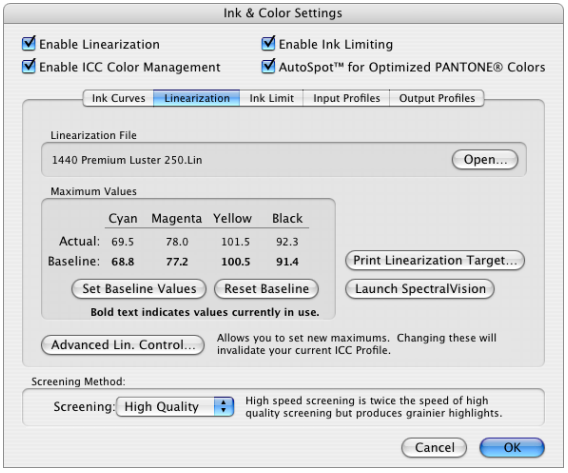
with. Click OK to send the target file to the Job List. Make sure the file has a Ready status and turn the RIP on to print.

Note: All color management is temporarily turned off when you send the target file to the Job List through the Linearization Target Options window. You do not need to manually change the color settings.

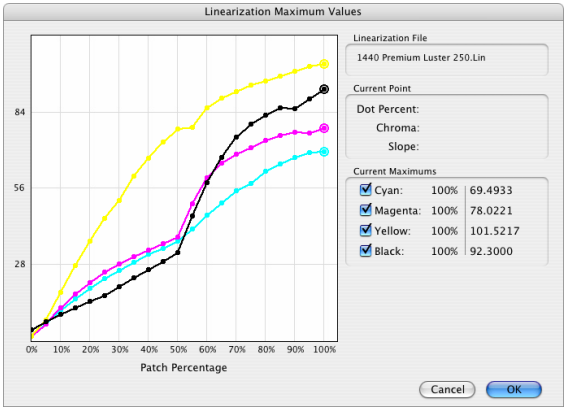
4. **Connect your measurement device in SpectralVision.** After you have printed your linearization target, open the ColorBurst SpectralVision application. You can click the Launch SpectralVision button in the Ink & Color Settings Linearization tab, or open it from the Utilities folder inside the ColorBurst folder on your hard drive. Select the type of spectrophotometer you are using, then select the port it is connected to. Select D50/2 for Default Device ill/obs. Click the Connect button.

   Note: If you are using a DTP22, an Eye-One, or a Pulse device, use the buttons at the bottom of the window to calibrate your device before reading any patches. If you are using a SpectroScan, you can calibrate your device in the next screen, Measure Linearization.

5. **Measure the Target and Save the file.** In SpectralVision, click the Measure Linearization button at the top of the window. Make sure that C 0% is highlighted in the patch chart. Using your measurement device, begin reading the patches from lightest to darkest, starting with Cyan. The data should appear in the SpectralVision chart when it has been correctly read. After all columns have been read and recorded, click the Save button (above the patch chart) to save the data as a LIN file. The .lin extension will be added automatically.



The Linearization tab in the Ink & Color Settings window.



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

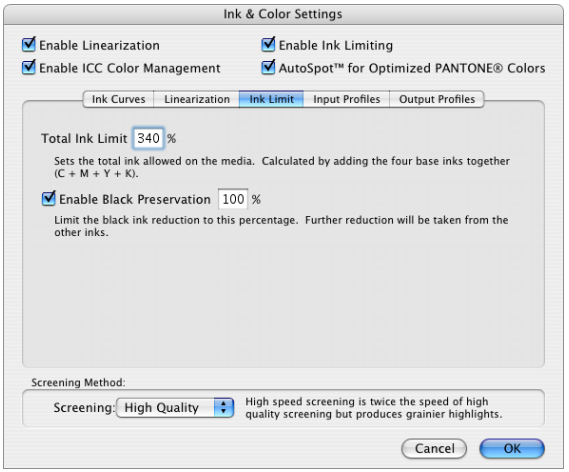
6. **Apply your new linearization file.** Go back to the Ink & Color Settings Linearization tab and click Open to select your new linearization file.

7. **Set the Baseline Values.** Once the new lin file is loaded, click the Set Baseline Values button. This is strongly recommended so that you can always reach the desired densities when relinearizing. Not selecting the Set Baseline Values button will give you a slightly larger gamut but you will be unable to relinearize. If your printer drifts you will have to redo both your linearization file and your ICC profile.

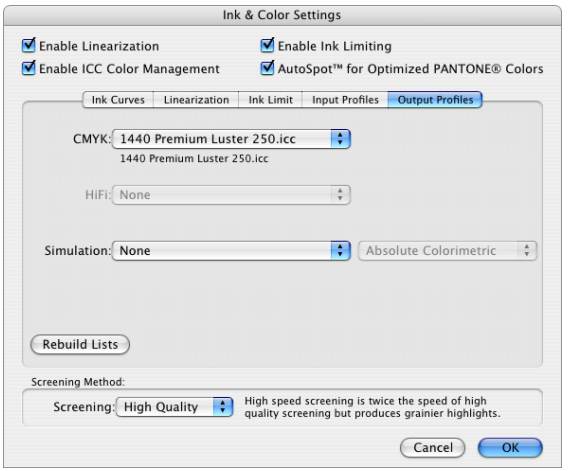
   Advanced Lin Control: This feature is normally only used in proofing situations where a user wishes to match the chroma of the target press to the chroma of the proofing device. It is not recommended that any fine art or photographic users ever touch this feature. It is meant to produce less color and produce a smaller gamut. This window does however show how ColorBurst's linearization algorithm works. ColorBurst automatically finds the maximum point in chroma and sets that as the peak. Then a curve is built to make all points in between the maximum chroma and the minimum chroma linear.

8. **Set your Ink limit.** All default environments have Ink Limiting set to 400% in the Ink & Color Settings Ink Limit tab. It is recommended that a 400% ink limit be maintained. Only reduce the ink limit if your profiling patches come out wet and bleeding. Most ICC profilers are going to make an ink limit determination for themselves so when possible it is best not to ink limit. With some thinner papers however, it is a requirement.

9. **Build and apply your profile.** You are now ready to build your CMYK profile. You should only create CMYK profiles — to make RGB profiles you would have to make a profile on top of a profile



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

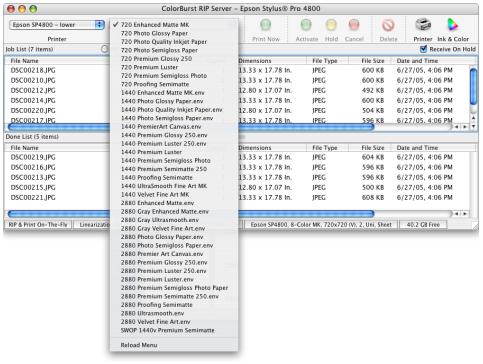


The Output Profiles tab in the Ink & Color Settings window.

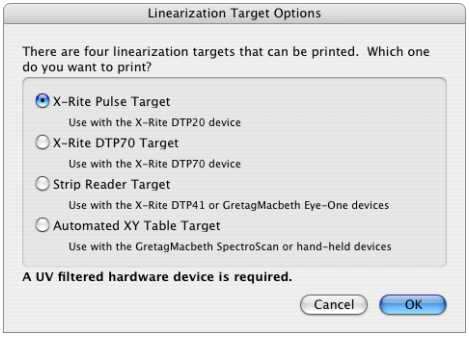
which would result in a reduced gamut. ColorBurst will recognize any ICC profile from all major profile creation applications (Monaco, ColorVision, Gretag, Basic Color, Print Open, Praxisoft, etc.). After building your profile, place it in the ColorBurst Profiles folder. In ColorBurst, open the Ink & Color Settings Output Profiles tab and select your new ICC Profile. Save your environment and you are ready to print.

APPENDIX B: RELINEARIZING ENVIRONMENTS

Linearization is an integral part of using ColorBurst environments. A linearization file is used to correct for differences in chroma (a derivative of L*ab) at different percentages. Over time (and on every different media) a printer will drift from its original state. By relinearizing you are putting the printer back into its original state and you are reproducing all the conditions under which the Ink Limit and ICC Profile was made. When you relinearize, you have made your ICC profile as accurate as the day it was made.



The Environment pulldown menu in the Job Manager window.



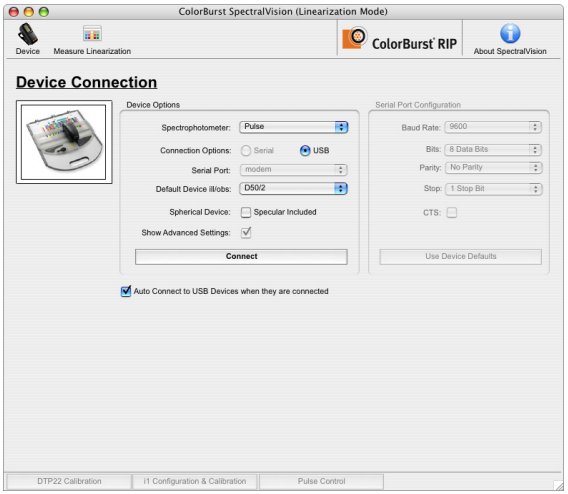
The Linearization Target Options window.

1. **Select your Printer Environment.** Use the Environment pulldown menu in the Job Manager window to choose the Environment you would like to relinearize.

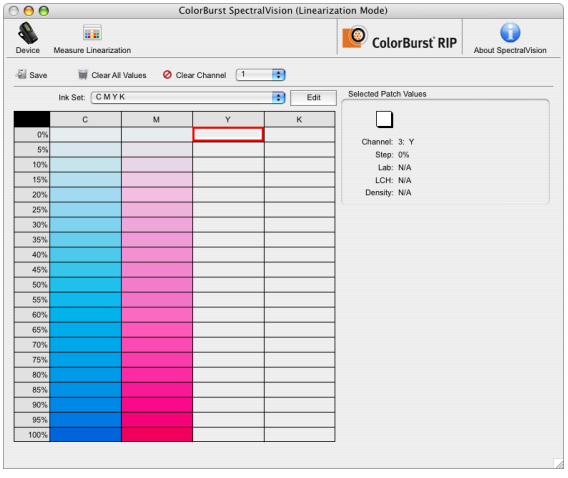
2. **Print a Linearization Target.** In the Job Manager window toolbar, click Ink & Color button to open the Ink & Color Settings window. Click the Linearization tab and then click the Print Linearization Target button. Choose the target that corresponds to the spectrophotometer you will be measuring it with. Click OK to send the target file to the Job List. Make sure the file has a Ready status and turn the RIP on to print.

   Note: All color management is temporarily turned off when you send the target file to the Job List through the Linearization Target Options window. You do not need to manually change the color settings.

3. **Connect your measurement device in SpectralVision.** After you have printed your linearization target, open the ColorBurst SpectralVision application. You can click the Launch SpectralVision button in the Ink & Color Settings Linearize-



The SpectralVision Device Connection window.



The SpectralVision Measure Linearization window.

tion tab, or open it from the Utilities folder inside the ColorBurst folder on your hard drive. Select the type of spectrophotometer you are using, then select the port it is connected to. Select D50/2 for Default Device ill/obs. Click the Connect button.

Note: If you are using a DTP22, an Eye-One, or a Pulse device, use the buttons at the bottom of the window to calibrate your device before reading any patches. If you are using a SpectroScan, you can calibrate your device in the next screen, Measure Linearization.

4. **Measure the Target and Save the file.** In SpectralVision, click the Measure Linearization button at the top of the window. Make sure that C 0% is highlighted in the patch chart. Using your measurement device, begin reading the patches from lightest to darkest, starting with Cyan. The data should appear in the SpectralVision chart when it has been correctly read. After all columns have been read and recorded, click the Save button (above the patch chart) to save the data as a LIN file. The .lin extension will be added automatically.

5. **Apply your new linearization file.** Go back to the Ink & Color Settings Linearization tab and click Open to select your new linearization file.

   Important: Do not select the Set Baseline Values button — this will remove the Baseline values. If you erase these values, you will have nothing to compare the new LIN file to — the baseline values are what you are relinearizing to. The Set Baseline Values button is only used when creating a new environment, linearization, and ICC Profile.

   You are now relinearized. Save your environment and you are ready to print.

APPENDIX C: PRINTING TO COLORBURST

ColorBurst can be used as a print server to print directly from applications. Your files will print from the application to a ColorBurst printer, which sends the file to the ColorBurst RIP Job List as a PostScript file. ColorBurst can be set up as a Bonjour printer under Mac OS X and as a Bonjour or LPR printer under Windows.

Important Notes

Before you get started there are a few things you should know about printing directly from applications to the ColorBurst RIP.

1. **ColorBurst must be installed and running.** If ColorBurst is not running when you print your file, the Mac OS X Printer Setup Utility will not be able to send your file to ColorBurst. The file will remain in the printer until ColorBurst is launched. If you print when ColorBurst is not running, you may need to stop and restart the Printer Setup Utility after ColorBurst is launched to send the file.

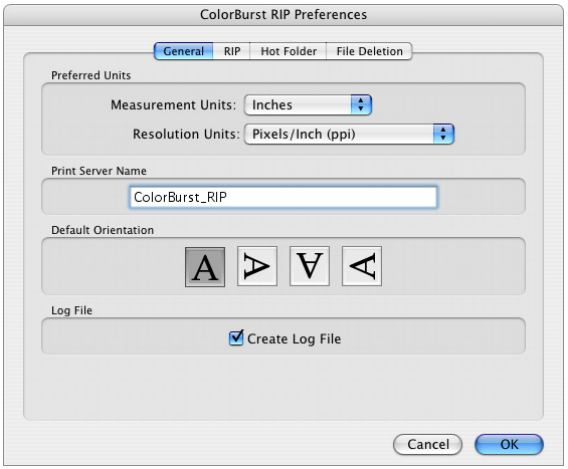
2. **The ColorBurst PPD must be installed on every workstation that wants to print to ColorBurst.** ColorBurst can be used as a network printer and will publish on the network as a Bonjour printer (IP Protocol) or LPR printer. PPD installers for Mac OS X and Windows are included on the ColorBurst installation CD. The PPD installers can also be found in the ColorBurst RIP > Utilities folder.

3. **If you are printing from Panther, version 10.3.4 or greater is absolutely required.** If you have OS X 10.3 then the update is free, available at Apple's web site, www.apple.com.

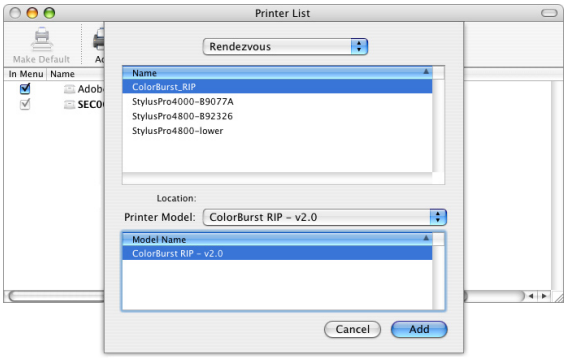
4. **If the page size is not set up correctly in the application, your files will not print correctly.** Page parameters (bounding box) are assigned through the Page Setup in many applications. Some applications will let you do a page size internally (such as Quark or InDesign). Other applications will require you to set a page size in the Print window (such as Photoshop). If you do print from Photoshop make sure you have the correct page size set in your application.

5. **Data from Photoshop must be sent in Binary form.** This can be set in the Print with Preview window. You must select Output and then set the encoding to Binary.

6. **It is not necessary to print directly from applications.** Files can be dragged into the ColorBurst Job List, or saved or copied to the ColorBurst Hot Folder for printing.



The Print Server Name can be changed in the General tab of the ColorBurst RIP Preferences window.



Select ColorBurst RIP - v2.0 as the Printer Model when adding a ColorBurst printer in the Mac OS X Printer Setup Utility.

Printing from applications on the ColorBurst RIP Mac OS X workstation

1. **Install and run ColorBurst.** When ColorBurst is launched, the ColorBurst PPD is automatically installed in the correct location. ColorBurst is also automatically set up as a Bonjour printer in the Printer Setup Utility. You do not need to do any additional setup.

Note: If you are running more than one copy of ColorBurst, you will need to assign each copy a unique ColorBurst printer name in the ColorBurst Preferences window. The default server name is ColorBurst_RIP.

Printing from a networked Mac OS X computer

1. **Install the ColorBurst PPD on the networked Mac OS X computer (not the RIP station).** A ColorBurst OS X PPD installer is included on the ColorBurst installation CD. The OS X PPD Installer can also be found in the ColorBurst RIP > Utilities folder. Copy the ColorBurst OS X PPD Installer to the Mac OS X computer you want to print from. Double–click the installer to run it. The PPD file will be installed in the correct location.

2. **Check the ColorBurst RIP workstation to make sure ColorBurst is running.** ColorBurst must be running to create a printer in the Mac OS X Printer Setup Utility.

3. **Create the ColorBurst printer in the Printer Setup Utility on the networked computer.** Open the Mac OS X Printer Setup Utility. Click the Add button to add a printer. Select Bonjour (or Rendezvous) from the pulldown menu. Select ColorBurst_RIP from the list of Bonjour printers. Select ColorBurst RIP - v2.0 as the Printer Model. Click the Add button to close the window and add the printer to the Printer Setup Utility. Close the Printer Setup Utility. You are now ready to print from applications.

Printing from a networked Windows computer

Before you start you will need to know the IP address of the computer on which ColorBurst is running. This can be found in the Network settings in the OS X System Preferences. You will also need to copy the CB Windows Print Driver folder to the Windows computer. The Windows Print Driver can be found in the ColorBurst RIP folder > Utilities folder or on the Installation CD > Utilities folder as CB Windows Print Driver.zip. Copy this file to your Windows computer and unzip the Print Driver folder before starting.

Important: This process is only supported on Windows XP, Windows 2000, and Windows 2003. Windows 98, ME and NT4 are not supported.

1. **Open the Add Printer Wizard.** In the Control Panel, select Printers (2000) or Printers and Faxes (XP). Select Add a Printer to open the Add Printer Wizard. Click the Next button to continue.

2. **Select Local Printer.** Select the "Local Printer Attached to this Computer" option. Although the printer itself is attached to another computer running ColorBurst, "Local Printer" is still selected. We will be printing to ColorBurst which then prints to the actual printer. Click Next to continue.

3. **Create a New Port.** Choose "Create a new port." For the Port Type Select Standard TCP/IP Port from the pulldown menu. Click Next to continue.

4. **Configure IP Address.** Type in the IP address of the computer that is running ColorBurst (the host computer). Then give the port a name (it can be named anything). Click Next to continue.

   Important: The IP address on the Host computer must be static. If a new address is assigned when the computer is rebooted this process will cease to work.

5. **Customize Port.** In the Device Type group, select "Custom" and then click the Settings button. This will open the Port Settings window.

6. **Set Port Settings.** Check to make sure your IP Address and Port Name are correct. In the Protocol group, select LPR. In the LPR Settings, type in the ColorBurst Print Server Name in the Queue Name field. The default name is ColorBurst_RIP. If you have changed the default name (in the ColorBurst RIP Preferences) use the new name here.

   Make sure the LPR Byte Counting Enabled checkbox is turned off. Click OK to close the Port Settings window. Click Next in the Add a Printer Wizard to continue.

7. **Install Printer Driver.** Click the "Have Disk" button and navigate to the CB Windows Print Driver folder (this should have been copied and unzipped from the ColorBurst Utilities folder). Select the ColorBurst.INF file and click Open.

8. **Confirm the ColorBurst driver.** ColorBurst should now be selected as the driver. Click the Next button to continue.

9. **Use Existing Driver.** If you have previously installed a ColorBurst printer, the Add Printer Wizard will ask you to keep or replace the existing driver. Select "Replace existing driver" and click Next to continue. (This will not appear the first time you install a ColorBurst printer.)

10. **Name your Printer.** Give the printer a name and click Next. The ColorBurst printer will be created and you will now be able to print from any of your Windows applications to the ColorBurst RIP.

Printing from applications

General Page Setup

1. **Print settings.** When you are ready to print, open the Print window in your application. There are four things to check when printing:

   a. Make sure "ColorBurst_RIP" is selected in your Printer pulldown menu.
   b. Make sure the PPD is "ColorBurst RIP Server – v2.0".
   c. Make sure your Media Size matches the physical size of the paper in your printer tray.
   d. If you have the ability to set Color Management settings, make sure Color Management is set to "Same As Source" (this option is not available in all applications).

   There may be additional setup required, based on the application you are printing from (please see Application–Specific Notes below). You can also make any other changes necessary, such as positioning the image on the paper, adding crop/registration marks, etc.

   Important: If your Page Setup is not set properly you will get undesirable results.

2. **Click the Print button.** The file will print to the ColorBurst RIP printer in the Mac OS X Printer Setup Utility. It will then be sent to the RIP list in ColorBurst.

3. **Check the ColorBurst Job List.** If the Receive On Hold checkbox is selected, the file will not print right away. The RIP list must be active and the file must have a status of Ready to print. To change a file status of Hold to Ready, select the file in the list and click the Activate button.

Application–specific notes

PhotoShop

In the Print with Preview window there is a setting for Output Type. A choice between Binary and ASCII is available. Choose Binary — ASCII will be slower.

QuarkXPress

Quark contains a PPD manager. To print properly from Quark you must select ColorBurst.ppd as your PPD in the PPD Manager. Other PPDs may contain language that is specific to a certain printing protocol. Do not use a manufacturers' PPD (Epson, HP, etc) to print to ColorBurst.

InDesign

InDesign finds the PPDs it uses in the Page Setup window. Make sure that ColorBurst is your printer in the Page Setup window. If it is, InDesign will automatically find the ColorBurst PPD and assign it.