



## **Print Options - General tab**

Indicates which device driver is selected. Click the arrow to access a list of other available printer and imagesetter drivers.  
If the driver you need is not listed, install it by using the usual Windows procedure.

Provides the status of the current printing device.

Provides information about the current printing device.

Provides path of the current printing device.

Opens a Windows dialog box which allows you to set printing options not controlled by Corel.

Creates a .PRN file from your print job (instead of actually printing).



Prepares the .PRN file for printing from a Macintosh computer.

Prints all pages in your document.

Displays a list of documents that you can print.

Prints only the page currently displayed.

Prints only the objects that are currently selected.

Specifies the pages, or the range of pages, to print.

A dash (-) between numbers defines a range of sequential pages (e.g., 1-5 will print pages 1 to 5).

A comma (,) between numbers defines a series of non-sequential pages (e.g., 1,5 will print pages 1 and 5 only).

Any combination of dashes and commas is supported (e.g., 1-3, 5, 7, 10-12 will print pages 1, 2, 3, 5, 7, 10, 11 and 12).

Inserting a tilde (~) between two numbers will cause those two pages plus every second page in between to print. For example, 1~6 will print pages 1, 3, 5 and 6. If you enter 2~6, pages 2, 4 and 6 will print.

The option works in conjunction with the Print Odd/Even Pages option.

Allows you to specify whether odd, even, or both odd and even pages will be printed.

Identifies the number of copies that will be printed. When printing to file, request one copy only, with no collation.



Prints one full set of the selected pages before printing the second full set (e.g., a first set of pages 1 to 10 will print, before the second set of pages 1 to 10 will print, and so on).

If you do not enable Collate, the requested number of copies of each selected page will print before the next page will print (e.g., five copies of page 1 will print before five copies of page 2 will print, and so on).

Lets you select a print style (a configuration of print settings).

Saves a print style (a configuration of print settings).

Opens the print preview. You can see how your work will appear when printed and change print options from within the print preview.

## **Print Options - Layout tab**

Resets the position of the printed image.

Automatically scales your artwork so that it fits the printable page. Unless Maintain aspect ratio is enabled, Fit to Page will distort your image.

Places the printed image in the position specified in the list box on the right.



Specifies the position of the printed image when the button on the left is enabled.

Scales the width of your printed artwork (not the original document) by the specified percentage.

Scales the height of your printed artwork (not the original document) by the specified percentage.

Constrains resizing and scaling so that the height and width ratio of the artwork is maintained.

Allows you to print large artwork on multiple sheets, or tiles, that can later be assembled to form the whole picture.

Allows you to set the amount the images on each tile overlap with the images on adjacent tiles.

Allows you to set the amount the images on each tile overlap with the images on adjacent tiles based on a percentage of the page width.

Enables a limit for bleeds. The bleed limit determines how far beyond the crop marks a graphic can extend when printed. The corresponding value identifies how far beyond the crop marks the bleed can extend.



Provides preset page layouts and allows you to store custom styles.

Provides a list of preset or saved signature layouts.

Stores the N-up format.

Provides an approximate preview of the current layout settings.

## **Print Options - Separations tab**

Separates color artwork into its component colors, causing each component color to print out on a single sheet.

If you used a process color model (which uses four colors to simulate any color), you'll get up to four sheets per page.

If you used spot colors, one sheet per color is printed.

Allows you to print the separations in color (i.e., on a color printer). Separations are usually printed in black, with a screen to represent shading. This option allows you to print the separations in color instead.

Specifies Hexachrome process color. Hexachrome color uses 6 inks instead of 4.



Sets Hexachrome color to use high density inks when printing solid colors.

Converts any spot colors present in your artwork to process colors. This does not affect the artwork itself, only the way it is printed.

Prints all plates, including those that contain no image. Printing empty plates wastes film and adds to the cost of your job. Generally, you'll want to leave this option disabled.

Causes any object that contains 95% black or more to overprint underlying objects. This is a useful option for artwork containing a lot of black text, but it should be used with caution on artwork with a high graphics content.

Creates color trapping by assigning an outline to an object that is the same color as the object's fill, and by then having the outline overprint underlying objects.

To be able to apply Auto-spreading to an object, it must

- not already have an outline
- be filled with a uniform fill
- not already be designated to overprint

The maximum trap value defines the amount of spread that autotrapping assigns to an object, along with the object's color. The lighter the color, the greater the percentage of the maximum trap value. The darker the color, the smaller the percentage of the maximum trap value.

The value for Text Above determines the minimum font size to which auto-spreading is applied. Applying auto-spreading to small font sizes can make the text illegible.

Specifies fixed width auto-spreading. When this option is enabled, the auto-spread outline assigned to each object is always the same width.

Allows you to adjust the advanced settings of your color separations, which includes setting halftone screens and creating color trapping. Do not adjust these settings without first talking to your service bureau or printing shop.

Opens the Advanced Separations Setting dialog box that allows you to set advanced screening parameters such as screening technology, screen frequency and angle per color plate, overprinting per plate, halftone dot type, etc.



Specifies which color separation(s) to print.

The list of colors shows all separations used in your artwork. You can choose to print all separations, one separation only, or any combination of separations.

## **Print Options - Advanced dialog**

Identifies the imagesetter and screening technology that will be used to image your job.

Proprietary screening technologies supported by Corel include AGFA Balanced screening, Linotronic RT and, HQS screening.

Identifies the resolution (in dots per inch, or "dpi") at which the job will be printed.

Identifies the basic screen frequency (in lines per inch, or "lpi") at which the job will be printed.

The higher the screen frequency setting, the more intense the colors and the sharper the image. The lower the screen frequency, the lighter the colors and the less sharp the image.

A high frequency gives you fewer levels of gray; a low frequency gives you more levels of gray.

The upper limit of your screen frequency is defined by the type of printing press to be used and the type of paper stock.

Shows all separations used in your artwork. Click each one to change frequency, angle, and to enable overprinting.

Allows you to specify a halftone screen for your drawing if you are printing to a PostScript device. A halftone screen is a pattern of shapes that is used to simulate shades of colors (i.e. darker to lighter) while using the same ink. Dot, line, diamond, elliptical, and Euclidean are only a few of the available halftone types.

## **Print Options - Prepress tab**



Prints a negative image when enabled.

Specifies that the film emulsion faces down when enabled.

Emulsion is the coating of light-sensitive material on a piece of film.

Provide a graphical representation of the selected film options (emulsion up or down and negative or positive).

Prints the filename, current date, and time (and tile number, if applicable) at the bottom of the sheet.

If applicable, color separation information (color, screen frequency and angle, plate number) is printed at the top of the sheet.

To see the file information, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work. If not, you can request that the file information be printed within the page.

Causes the file information to print within the page. If the working page size is identical to the paper or film size, enable File Info Within Page. Make sure the artwork is positioned so that the file information does not overlap it.

Specifies the text that is displayed in the file information.

Places page numbers on the printed sheets. To see the page numbers, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work.

Prints crop marks. These marks are used as alignment aids when trimming the printed output down to its final size.

To see the crop marks, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work.



Prints crop marks only along the outer edge of the sheet. This option is often preferable when you are printing multiple layouts per sheet.

Prints registration marks on each sheet. These marks serve as guides for aligning color separations.

To see the registration marks, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work.

Specifies the appearance of the registration marks.

Prints a bar of the six basic colors (red, green, blue; cyan, magenta, yellow) beside your artwork. These color patches are used to verify the quality of the printed output.

To see the calibration bar, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work.

Prints a Densitometer Scale, a bar of varying shades of gray, on each separation sheet. This is an advanced feature that allows you to check the accuracy, quality, and consistency of the output with an instrument called a densitometer.

To see the densitometer scale, you must define a working page size that is smaller than the dimensions of the actual sheet of paper or film that is used to image the work

Lets you customize the densitometer scale.

## **Print Options - PostScript tab**

Specifies the PostScript level. Only enable PostScript level 2 or PostScript 3 if you are certain you will be printing on a PostScript 2 or PostScript 3 device.



Ensures that the PostScript file conforms to the Document Structuring Convention. Some prepress devices such as color trapping software require that the PostScript file conform to DSC.

Compresses bitmaps using JPEG compression when printing them. Enabling this option can reduce the size of your print job.

Specifies the degree of JPEG compression used when printing bitmaps.

Defines bitmaps in RGB values instead of the usual CMYK values that are found in PostScript files. Use this option when you are outputting to RGB devices (e.g., slidemakers). Also use this option when you are printing to CMY devices. It is easier for these devices to translate from RGB to CMY than from CMYK to CMY.

Tells the service bureau's OPI server to substitute the corresponding high-resolution images for the low-resolution ones in your file. This substitution is done before your print file is rasterized and imaged to film.

Replaces the low-resolution Desktop Color Separation placeholder with high-resolution Desktop Color Separation images in the PostScript file. If this option is not enabled, the service bureau must replace the low-resolution files when the print file is rasterized and imaged to film.

Identifies the basic halftone screen frequency at which your job will print.

Screen frequency is expressed as a number of lines per inch (lpi). This value refers to the number of lines of dots (or other shapes) that make up a halftone screen. A halftone screen is a pattern of shapes of various sizes that is used to simulate a continuous tone image. Check with your service bureau for the optimum setting for your print job.

Downloads Type 1 fonts to the output device. Generally, this option is enabled because it is particularly beneficial when you want to print large tracts of text that use only a few fonts. Printing is faster as each font is first downloaded, and then only referenced by text that uses it.

If you disable this option, fonts are output as graphics (either curves or bitmaps). This may be useful if the file contains a large number of fonts that would take longer to download, or not download at all, because of sheer size.



Converts True Type fonts to Type 1 fonts. If you enabled the Download Type 1 Fonts option, by default the Convert True Type to Type 1 is also enabled. This ensures that True Type fonts are converted to Type 1 fonts so that they can be downloaded. Only disable this option if your output device has difficulty interpreting the Type 1 fonts.

Allows one or more warnings to be issued if objects that are too complex and could cause printing problems are detected.

Warns you of potential banding (the appearance of discrete strips in a fill) which is caused by too few steps in a fountain fill, when it is enabled.

This warning only applies to linear fountain fills.

Warns you if your print job contains too many spot colors. You can change the number of colors that triggers this warning in the Special Settings list box.

Warns you if your print job contains too many fonts. You can change the number of fonts that triggers this warning in the Special Settings list box.

Specifies the maximum allowable number of control points per curve. Reducing this number helps alleviate printing problems caused by objects that are too complex.

Indicates the level of flatness that will be applied to curves when you print. Increasing the flatness reduces printing time and therefore is useful when you need to produce quick proofs. Be careful however as a flatness level set too high will produce distorted curves.

Causes Corel to automatically increase the flatness in increments of 2, as needed. Attempts to print an object will stop when the flatness value exceeds the value set in the Set Flatness To box by 10. At this point, the printer skips the problematic object and goes on to the next object.



Enables an analysis of your file and the various print settings you have specified, and, if necessary, automatically increases the number of steps used to render fountain fills to avoid banding.

This option may increase print time, but it will ensure the best possible rendering of fountain fills.

Enables an analysis of your file and the various print settings you have specified. If the number of steps in a fountain fill is greater than the number that your output device can render, the number of steps used to render the fountain fill is decreased automatically.

## **Print Options - Miscellaneous tab**

Ensures that colors will print as expected.

The printer color profile shown here matches the printer that was chosen in the System Profile (Color Manager).

If you want your print job to be filtered through a different profile, you must go back to the Color Manager, select the appropriate printer, and generate a new System Profile.

The name of the currently selected color profile

This value reflects the number of steps that will be used to render any fountain fills in your artwork. A low value will print faster but the transition between shades may be coarse, which causes what is known as banding. A higher value will result in a smoother blend but longer printing times.

Fountain steps that are set in the Options dialog box only affect the way fountain fills display on your monitor. To control how the fountain fills actually print, you must set the value for fountain steps here or in the Fountain Fill dialog box.

Prints only vector graphics unless combined with Print bitmaps or Print text.

Prints only bitmaps unless combined with Print vectors or Print text.



Prints only text unless combined with Print vectors or Print bitmaps.

Scales everything that will be printed so that it fits within the printable page of the current printer. Use this setting to proof a large layout on your desktop printer.

This option is only intended for proofing, and should be disabled for the final output. If you wish to scale your artwork to fill the printable page, you should use the fit to page option. Position and size measurements reflect the size of the final output, not the size of the proof.

Prints all text in black.

Prints using the full color capabilities of the selected printing device.

Prints all colors in black.

Prints all colors in grayscale.

Prints a job information sheet with your print job. This report contains information about the application that produced the job, the driver that was used, the print settings, the font information, and the file links.

Allows you to choose an option and assign a new setting to it.



Opens the Job Information Sheet dialog box, which allows you to specify which categories of information you want included in the report.

Open a dialog box that lets you select color profiles.

## **Print Options - Info Settings**

Shows the contents of the Print Job Information Sheet.

Allows you to specify what information the Print Job Information Sheet will contain.

Sends the Print Job Information Sheet to a .TXT file.

Allows you to specify the .TXT file the Print Job Information Sheet is sent to.

Sends the Print Job Information Sheet to a printer.



Allows you to specify the printer the Print Job Information Sheet is sent to.

## Standard toolbar

Displays a list of available print styles.

Saves the current print options in a print style with a name that you specify.

Deletes the current print style.

Opens the Print Options dialog box.

Prints the document.

Displays a list of preset zoom settings.



Specifies full screen preview.

Close the print preview.

## Pick Tool and Property Bar

Lets you select, position, and scale images in your document.

Specifies one of several preset positions for the placement of your artwork on the page

Specifies the placement of your artwork on the page. The X value indicates the distance from the left edge of the printable page. The Y value indicates the distance from the top edge of the printable page.

Resizes your printed artwork (not the original document) according to the width and height specified.

Scales your printed artwork (not the original document) by the specified percentage.



Identifies the unit of measurement that is used when you specify the layout of your artwork.

# **Signature Layout tool and Property bar**

Lets you specify and edit signature layouts.

Saves the present layout settings.

Deletes the selected layout.

Switches between a preview of your print job and a preview of the current signature layout or N-up format.

Specifies the number of working pages to position on the printable page.

Allows you to print on both sides of the page. When you enable this option, and you print to a non-double sided printer, Corel automatically runs a wizard that ensures all of the pages are ordered and oriented correctly.



Allows you to specify the distance between each working page that is placed on the printable page.

Arranges the pages appropriately for perfect binding.

Arranges the pages appropriately for saddle stitching.

Arranges the pages appropriately for stacking and collating.

Selects a page to be placed on the layout sheet.

Allows you to specify whether the top of the selected page points up or down.

## **N-up tool and Property bar**

Lets you specify and edit an N-up format.



Provides a list of preset or custom N-up formats.

Saves the present N-up format.

Deletes the selected N-up format.

Specifies the number of frames to be placed on the printable page.

Places the current working page in each frame of the printable page.

Keeps the frame size equal to the working page size.

Allows you to specify the distance between each frame that is placed on the printable page.

Automatically sets the gutters.



Allows you to set the top/left page margins.

Allows you to set the bottom/right page margins.

Makes the right margin equal to the left margin, and the bottom margin equal to the top margin.

Automatically sets the margins.

## Marks Placement tool and property bar

Lets you add, remove, and position printers' marks.

Resets the position of the bounding box.

Sets the position of the bounding box. By repositioning the bounding box, you can change the position of printers' marks.



## **Zoom tool and property bar**

Lets you magnify portions of the document.

Increases the magnification of the document.

Decreases the magnification of the document.

Displays items in drawing at their actual size.

Sets the magnification to display the selected image.

Increase or decreases the magnification to display the entire image as large as possible.

Sets the magnification to display the entire page.



Sets the magnification to display the width of the page.

Sets the magnification to display the height of the page.

Opens the Zoom dialog box

## Status Bar

Displays the name of the currently selected image.

Lets you select a printing device.

Displays the name of the current printing device.

Indicates whether you're printing a composite print job or color separations.



Indicates whether you're printing a negative image and whether you're printing a mirrored image.

Lets you tile large images so that they are printed on several sheets of paper.

Displays information about the current tiling settings. Tiling lets you print large images on several sheets of paper.

Indicates the current mouse position.

Indicates the current range of pages to be printed.

## **File Menu**

Saves the current print options in a print style.

Prints the current page.



**View menu**

Displays the image to be printed. If this option is disabled, the print preview represents the position of the image with a box.

Automatically sets the view options to best simulate the output of your printer.

Displays the image in color. This setting provides an accurate representation of color printer output.

Displays the image in grayscale. This setting provides an accurate representation of non-color printer output.

Displays a composite color image (all colors on one page).

Displays each color separation on a different page.

Displays the print preview's toolbar.



Displays the print preview's status bar.

Displays the print preview's rulers.

Displays a dotted line around the edge of the page that indicates the limit of the printable area.

Displays PostScript fills as they will be printed. When PostScript fills aren't rendered, the fills are replaced with a pattern of "PS"s.

Displays the currently selected tile.

Opens the Go To dialog box. You can use this dialog to navigate your document.

# Settings Menu

Open the Print Options dialog box to the General tab.



Opens the Print Options dialog box to the Layout tab.

Opens the Print Options dialog box to the Separations tab.

Opens the Print Options dialog box to the Prepress tab.

Open the Print Options dialog box to the PostScript tab.

Open the Print Options dialog box to the Miscellaneous tab.

Opens the Print Job Information Sheet dialog box.

Opens the Duplex Printing wizard. This wizard helps you produce double-sided output using a single-sided printer.

Opens the Driver Compatibility dialog box. This dialog box contains options that let you fine-tune printer performance.



## Help menu

Opens the Help.

Open the About dialog box which provides information about the application.

## Zoom dialog

Sets the magnification to 200%.

Sets the magnification to 100%.

Sets the magnification to 75%.

Sets the magnification to 50%.



Sets the magnification to 25%.

Sets the magnification to a percentage that you specify.

Previews the result of the current zoom settings.

**Go To dialog**

Specifies the page number to go to.

Specifies the side of the page to go to.

Specifies the color separation to go to.

Displays a list of pages.



# Driver compatibility

Specifies the printer to which the options in this dialog will apply.

Displays the capabilities of the printer specified in the above list box.

Sends text to the printer as graphics. Doing this can sometimes correct problems with incorrectly printed fonts.

Switches to clipping controlled by the software. Clipping is the process through which portions of a fill that should not be visible are removed. If you encounter a problem printing non-uniform fills, switch to clipping controlled by the software.

Determine whether bitmaps are sent to non-PostScript printers all at once or in smaller blocks (below 64 KB) called chunks. Usually, the driver tells the application which method it can or cannot handle. If you find that bitmaps do not print as expected, try forcing bitmaps to be printed in smaller chunks.

Lets the printing device render bezier curves and paths.

Uses the specified color profile.



Sends the printed page to the driver already split into bands.

Some non-PostScript printers can't hold a full page in memory and must print the page in multiple passes, or "bands." The default setting lets the printer driver split the page into bands before sending it to the printer. If this proves too slow, or you encounter problems, send the page to the driver already split into bands.

Specifies a color profile.

**Save Print style**

Displays the present print style, or a name you have typed for a new style.

Provides a list of the present print options and allows you to change them.

## Warning dialogs

Cancels the print job.

Continues printing. It is possible that part or all of the print job won't appear correctly.



IDisables this warning for the rest of this print job.

Provides information about this warning.

Skips the object that is causing the PostScript error. If you skip an object it won't appear in the final output.



## Color Dialog and Roll-Up

Displays a color viewer that lets you select colors from different visual representations of the visible spectrum. Hold down the button to choose from several different color viewers.

Click this button to display a mixing area which you can use to mix and select colors. Hold down the button to choose from various types of mixing area.

Click this button to use a fixed color palette. Palettes are listed in the Type list box. You may want to use the palettes if you are working with spot or process color systems by DIC, DuPont, FOCOLTONE, PANTONE, TOYO, or TRUMATCH. By using these palettes along with a color reference book, you can be reasonably certain of how the colors will look when printed.



Displays the custom color palettes. Custom palettes are editable and can include any type of color.

The content of this list box changes depending on the color selection button you have enabled at the top of the dialog box. When using the Color Viewer or the Mixing Area, the box lists the color models you can use to select colors. When you enable either of the palettes buttons, the box lists the various palettes that you can display in the dialog box.

Lists the various palettes that you can display.

Displays or hides the right side of this dialog box.

Changes the reference color (the current color in the application) to the currently selected color in this dialog box.

Shows the color of the selected object or the currently selected color in the application. A dot in the corner of the color indicates that the color is a spot color.

Shows how the color of the selected object or the currently selected color in the application will appear when printed. A dot in the corner of the color indicates that the color is a spot color.

Indicates that the color at the top-left of the color preview is not printable.



Indicates that the color at the bottom-left of the color preview is not printable.

Displays the current and new colors.

Shows the color that is currently selected in this dialog box. A dot in the corner of the color indicates that the color is a spot color.

Shows how the color that is currently selected in this dialog box will appear when printed. Click this color to make it the currently selected color. A dot in the corner of the color indicates that the color is a spot color.

Displays options for displaying and working with colors.

Adds the current color to the end of the color palette being displayed in the on-screen color palette.

Displays a color component value for the currently selected color. The letter next to the box identifies the component name, i.e., C for cyan when using the CMYK model, R for red when using the RGB model, and so on. For colors in the custom palette, the components correspond to the color model or color matching palette through which the color was edited.

Displays the name of the current color. You can specify a new name for a custom color here or type the name of an existing color to display that color.



Lets you select a color by clicking. Drag the slider on the right and position the square in the color selection area to select a color.

## Mixers

Click to choose a color to use in the Color Blender. The color you choose here will blend with the three other colors chosen in the blend if you click the Auto-Blend button.

Displays the blended colors. Select colors to blend in the color pickers at each corner of this box.

Lets you mix the current color with colors in the mixing area. You can choose brush attributes such as size and edge type by clicking the options button.

Selects a color from the mixing area.

Specifies the degree of blending between the current color and the colors in the mixing area. A higher percentage makes the current color more transparent.

Lets you mix and select colors.



## Color Harmonies

Lets you select colors that look good together. Color harmonies work by superimposing a shape over a color wheel. As you move one corner of the shape around the wheel the other corners also move. The colors at each corner are always complimentary, contrasting, or harmonious, depending on the shape you select.

Displays a grid of colors derived from the position of the black and white circles on the above color wheel.

Lets you select the shape that is superimposed on the color wheel. Different shapes produce different relationships between the colors that are displayed in the grid below the color wheel.

Changes the appearance of the colors in the color grid below the color wheel.

Changes the number of colors displayed in the color grid below the color wheel.

## Fixed Palettes

Displays the PANTONE® Spot Colors palette. Since spot colors correspond to solid inks and are not CMYK-based, each unique color applied to an object results in an additional color separation plate.



Displays the PANTONE® Hexachrome colors which are based on the CMYK color model but adds two additional inks for a total of six inks and a broader range of colors.

Displays the palette that uses colors available through the PANTONE® Process Color system, which is based on the CMYK color model. The first 2,000 colors are two-color combinations; the remainder are three-color and four-color combinations. Colors are based on CMYK, and therefore do not add additional color separation plates.

Displays an independent palette (not based on a color-matching system or your image) which provides 256 colors uniformly spread between red, green, and blue.

Displays the color palette which originates from the FOLCOLTONE color matching system that provides a range of spot colors built with the process colors, cyan, magenta, yellow, and black (CMYK).

Displays the palette that uses the TRUMATCH® color matching system which is based on the CMYK color model and, therefore, colors do not add additional color separation plates. Colors are organized by hue (red to violet), saturation (deep to pastel), and brightness (adding or removing black). Colors can be displayed by name or swatch using the Show Color Names command found in the flyout menu .

Displays the 8-bit palette of 256 colors used by the web browser, Netscape Navigator(TM). By only using colors found on this palette, you ensure that your image colors will display clearly on systems using this browser.

Displays the 8-bit palette of 256 colors used by the web browser, Microsoft® Internet Explorer. By using only colors on this palette, you ensure that your image colors will display clearly on systems using this browser.

Offers colors that are available through the DuPont® Spectramaster solid color library. This library was developed to provide a paint color selection and matching tool for industrial coatings and colorants. Colors are based on Lab and are converted to RGB for display and CMYK for printing.



Displays the palette of colors that are available through the TOYO COLOR FINDER system. The range of colors offered here includes those created using TOYO process inks and those that are reproduced using TOYO standard inks.

Displays the palette of colors that are available through the DIC Color Guide, DIC Color Guide Part II, and DIC Traditional Colors of Japan. Colors in these palettes are created by mixing DIC brand inks.

Displays a color palette that is based on the Lab color model. Colors defined using this model have three components: lightness ( $L^*$ ), green to red chromaticity ( $a^*$ ), and blue to yellow chromaticity ( $b^*$ ).

## Custom palettes

Displays the contents of the current color palette. You can display or hide the names of the colors by clicking the options button.

Displays the current user-defined inks. User defined inks are spot colors.

Specifies a tint for the currently selected spot color. A tint lets you make a spot color lighter.

## Connection dialog



Specifies the serial port to which the color measurement device is connected.

Open the Calibrate dialog box.

**Color Roll-up**

Lets you select a color from the current image.

Applies the current color as the outline.

Applies the current color as the fill.

Click the color model list box to choose from color models and other color selection methods such as Palette and Color Blender.

## Palette Editor



## Controls

Opens an existing color palette.

Creates a new color palette.

Saves the current color palette.

Saves the current color palette with a name that you specify.

Shows a list of the currently loaded color palettes. Select the palette you want to edit.

Shows the colors in the current custom palette. Use the scroll bar on the right to display the colors of the palette that are not visible. Select colors from this grid to modify them.

Replaces the selected color on the right with the selected color on the left.



Add the selected color or colors on the left to the current palette. Select a color from the current palette to position the new color or colors before that color.

Removes the selected color or colors from the current color palette.

Searches the current color palette for the color that is closest to the selected color on the left.

Lets you sort the colors in the current color palette.

Returns the color palette to its state when you last saved it.

Shows the name and color values of the currently selected color.

Open the Duotone dialog box.

## Color Management



Color corrects the colors on the monitor based on the monitor's color profile.

Color corrects the colors on the monitor so that they accurately reflect printer output.

Selects the printer type to use to simulate color on your monitor.

Highlights colors that can't be printed using the selected warning color.

Specifies the warning color for colors that can't be printed.

Specifies the transparency of the selected warning color. Making the warning color transparent lets you view the image even when the colors are outside of the printer's color gamut.

## General

Produces a separate printing plate for each FOCOLTONE color. When you print your work each FOCOLTONE color will require a separate ink.



Produces a separate printing plate for each TOYO color. When you print your work each TOYO color will require a separate ink.

Produces a separate printing plate for each DIC color. When you print your work each DIC color will require a separate ink.

Determines whether CMYK values range from 0 to 100 (percentages) or 0 to 255. When displaying values as percentages, 100 is equivalent to 255.

Handles spot colors as CMYK colors when printing to a composite printer.

Simulates the output of a separations printer on a composite printer. This is useful for proofing your work.

Automatic color matching uses the most appropriate gamut mapping method for each object.

The Illustration method shifts only those colors which are outside of the printer's gamut. This ensures that colors within the printer's gamut will retain the color characteristics you defined. This method is suited to vector illustrations.

Photographic gamut mapping shifts all colors in the image toward the color space of the active printer. This maintains the relationships between colors, resulting in smooth transitions. For this reason, this method is suited to bitmap photographic images.

## Profiles

Lists all preset monitor profiles.



Lists all preset scanner profiles.

Lists all preset composite printer profiles.

Lists all preset separations printer profiles.

Lists the manufacturers of the device for which you need a color profile.

Lists the model of the device for which you need a color profile.

Opens the Corel Color Profile wizard.

# PostScript Options

Specifies the shape of the dots in the halftone screen.



Specifies the screen frequency of the halftone screen.

Specifies the screen angle of the halftone screen.

## Using PostScript options with spot colors

Commercial printing presses are unable to produce true shading but can create the illusion of shading by printing images made up of tiny dots. The size of the dots determines the different levels of shading (i.e., the bigger the dots, the darker the shade). A halftone screen is necessary to convert images with true shading into images made up of tiny dots.

Originally, a halftone screen was an opaque screen with thousands of tiny holes. An image with shading was photographed through this screen using special photographic paper or film. The resulting image would consist entirely of dots. This image could then be used to create printing plates.

Now, however, you can create halftone images without using screens or cameras. To ensure that your bitmaps print correctly, you must correctly set the halftone screen frequency and bitmap resolution. You can set halftone screen settings for individual spot colors.

### Halftone screen frequency

The halftone screen frequency determines the number of dots used to create the image. The screen frequency is measured in lines per inch (lpi). This measurement refers to the number of rows of dots per inch.

When you choose a screen frequency, remember that the higher the screen frequency, the sharper the image. However, there are limits to screen frequency which are determined by the type of printing press on which you are printing, and the type of paper you are using. In general, a screen frequency of 85 lpi works on newsprint, and a frequency of 100 lpi works on bond and glossy paper. If possible, consult your service bureau or printing shop to find out the screen frequency you should use.

### Screen angle

Because each halftone screen consists of a regular pattern of shapes, it creates a pattern on the printed image. When the separations are combined, the patterns created by each separate halftone screen interact. This interaction can create an undesirable effect, called a moiré pattern.

Moiré patterns are eliminated by changing the screen angle of each color separation. If you were using an actual screen and a camera, you would rotate the screen 15 degrees for each separation by hand. However, since you are using software to create halftone screens, you have to change certain print options to change the screen angle.

When you print color separations, the screen angles are set automatically. If you change these settings incorrectly, your image might not print properly.

### Halftone type

The halftone type refers to the type of dot that is being used to create the halftone. Typically, a halftone screen consists of rows of evenly spaced round, or diamond-shaped dots. However, it is possible to use halftone screens that have dots that are shaped differently. In fact, halftone screens can even use straight lines instead of dots to create an image. You can experiment with different halftone types to create interesting effects.

## Palettes Docker window

The Palettes Docker window lets you browse the palettes on your computer and load them into the on-screen Color Palette.

Displays a list of the palettes stored on your computer.

Opens the Open Palette dialog box, which lets you browse your computer for palettes and open them.

**X-Rite**



Closes the dialog box.

Begins the calibration process.

Shows the progress of the calibration process.

Hold the color measurement device over the target on the reflection standard. When the device has finished taking a reading, this number should match the X value.

Hold the color measurement device over the target on the reflection standard. When the device has finished taking a reading, this number should match the Y value.

Hold the color measurement device over the target on the reflection standard. When the device has finished taking a reading, this number should match the Z value.



# Corel Color Profile wizard



## Corel Color Profile wizard (page 1 of 2)

The Corel Color Profile wizard lets you tune existing color profiles. Color profiles are files that describe the color reproduction capabilities of color devices. Corel applications use color profiles to ensure accurate reproduction of color between scanners, monitors, and printers.

Once the color profiles have been tuned with the Corel Color Profile wizard, Corel applications can perform the following color management functions:

- fine tune scanned input, based on a scanner's characteristics
- ensure that on-screen simulation of printer colors is accurate
- handle color printing and separation
- regulate the conversion of one color model to another

### New in Version 8

You can choose a printer profile and test-print it to view its output quality.

### Color gamut

A color gamut is a range of colors that a device can detect and reproduce. A monitor can display colors that a printer cannot print because a monitor has a broader gamut than a printer. The Color Profile wizard tunes device profiles to enable the mapping of colors from one device's gamut to the gamut of the other.



#### Note

Many of the supplied printer color profiles were created using ColorBlind (R) color management software. For more information regarding ColorBlind (R) and color profiles, contact Color Solutions, Inc. at <http://www.color.com>.



[Click here to see the next page.](#)

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{button ,AL("OVR1 Corel Color Profile wizard";,0,"Defaultoverview",)} [Related Topics](#)

## Corel Color Profile wizard (page 2 of 2)

### Tuning color profiles

A tuned color profile lets applications measure the variance between a device's output and a known standard and make the device's output conform to that standard. This ensures that the device's output is accurate and consistent.

In many cases, a color profile for a specific device already exists. If you don't want to tune the device profile, choose the device by manufacturer and model from the profile list box and click the Finish button. The option None, in the Profile list box, turns off color management for the specified device. If you want to tune an unlisted profile or want more control over the tuning process, you can load additional profiles through the Install Profiles option or the Get Profile From Disk option. You can also contact the device manufacturer to obtain a profile or the characteristics of the device.

### Monitor profiles

As a monitor ages, RGB (red, green and blue) output signals can begin to deviate from the manufacturer's specifications. Therefore, you may need to tune a profile for an older device. If this is the case, you need to compensate for the following:

- changes in ambient lighting conditions throughout the day or evening
- different temperatures for the ambient lighting under which printed proofs are viewed

Before tuning a monitor profile, ensure that the monitor meets the following conditions:

- The monitor should be on for at least an hour before you begin. This warms the electron guns in the monitor to a stable temperature. Color output varies with the temperature of the electron guns.
- If the monitor has manual adjustment controls, ensure that they have been set to the manufacturer's recommended settings. Then adjust the monitor's brightness to match the lighting in the room (ambient lighting). Brighter ambient lighting, reduces the visible range (gamut) of colors.

### Scanner profiles

If you choose to tune a scanner profile, you need both of the following items before you start: scanner targets and reference files.

#### Scanner targets

IT8 scanner targets are images that are carefully manufactured to display a wide range of precise colors and tones. Corel provides such a target, that includes a color chart for basic scanner calibration.

#### Reference files

A reference file is a mathematical representation of a target that the Corel Color Profile wizard compares to the scanner's reproduction of the target. Corel provides a reference file for basic tuning. This reference file is automatically loaded after you either scan the target or indicate where the previously scanned target can be found.

If you are using a grayscale scanner, you will not need to tune a profile.

### Printer profiles

Printer color profiles enable Corel applications to ensure that on-screen colors reflect accurately in their printed output. Before tuning, ensure that the printer driver's color correction is disabled in the Print Setup dialog. Otherwise, it can interfere with the printer profile's tuning process.

The Corel Color Profile wizard allows you to tune two types of printer profiles: one for composite output, and one for color separations.

- Output from a composite printer looks like the image on the monitor. It contains a combination of all the color channels in the image.

Composite printers use either RGB or CMYK color models to process images.

- Output from a separations printer is broken down into component colors. Separations printers process images using the CMYK color model.

The Corel Color Profile wizard uses the separations printer to manage CMYK images in the applications. Since CMYK is a device-dependent color space, any conversions to or from CMYK are based on the devices you choose.

If the printer has a built-in color management circuit, you must disable it before using the Corel Color Profile wizard. Such a printer expects to receive color information as RGB data, which the built-in color management circuit converts to CMY or CMYK (depending on the color model used to map to the printer's color space). The color management circuit sends CMYK data to the printer for calibration. To disable the printer's built-in color management, refer to the printer's documentation or contact the manufacturer.

### Testing Profiles

The Test Profile button lets you test print a printer profile. You can print an image of the scanner target with the effects of the chosen printer profile applied to it.

### Editing the gray component replacement (GCR)

In commercial full-color printing, GCR substitutes black ink (K) for some or all of the gray component of each color. This process reduces total area coverage (TAC) in CMYK output, and replaces expensive colored inks with less expensive black ink. The Edit GCR button lets you adjust values connected to the GCR.

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{button ,AL(^OVR1 Corel Color Profile wizard;"0,"Defaultoverview",)} [Related Topics](#)

## The manufacturer and model of the device

Ensure the profile you choose displays correctly in the Device and Profile list boxes. To avoid making irreversible changes to the original profile, don't edit the set device profile. Instead, alter the name of the manufacturer and of the model slightly in the appropriate list boxes (e.g. type "Viewbox 5000 #2" for "Viewbox 5000").

If you are tuning a monitor profile, you must repeat its tuning process if you move the monitor or adjust its brightness values. When you repeat the tuning process, ensure that you use the original profile of the monitor. You must also alter its manufacturer and model name slightly to keep the original profile intact.

When you repeat a tuning process, you can reuse a profile name. However, you must delete the existing version before retyping this name in the manufacturer and model list boxes. You can delete the existing version by right-clicking the profile in the Profile list box and clicking Delete.

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`{button ,AL('OVR1 Corel Color Profile wizard';0,"Defaultoverview",)}` [Related Topics](#)

## Defining monitor characteristics

Choose whether you want to tune the monitor according to the default settings of another monitor or begin from scratch. Starting from scratch is useful if the monitor is not included in the list of profiles but is similar to another monitor model. It is also useful if you are tuning a second profile for a monitor but would like to begin editing with the default settings for the device.

If you want to skip this option, disable the Copy Another Monitor's Characteristics check box.

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`{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} Related Topics`

## Using a color measurement device to tune a monitor profile

The Calibrate With Device check box enables you to select Colortron II and choose a port. Click the Next button to continue to the next page of this wizard. Follow the instructions and click the Calibrate button to start the calibration process.

Disable the Calibrate With Device check box if you don't want to calibrate the monitor using Colortron II.

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{button ,AL("OVR1 Corel Color Profile wizard";,0,"Defaultoverview",)} [Related Topics](#)

## Adjusting a monitor profile

Adjusting a monitor profile ensures that the monitor's color output is consistent with a known standard. Before you begin, use the Zoom tool for a better view of the images and the changes you make to them. To do this, ensure that the monitor's chromaticity, white point, and gamma are set correctly. You can review the effects of the selections by clicking the Preview button. You can also return all values to the defaults by clicking the Reset button.

### Chromaticity

Chromaticity of a monitor describes the exact color of the monitor's red, green and blue phosphors. Chromaticity values are relatively stable and do not vary greatly between monitors. They usually do not need to be adjusted.

The Monitor Chromaticity button lets you adjust the chromaticity values of the monitor. The Red, Green, and Blue buttons let you set numeric values in the X and Y boxes associated with the chosen color. Contact the monitor's manufacturer for the best values for the monitor. Choose a phosphor setting from the Phosphors list box. You can also choose numeric values by dragging the marker across the adjacent visual selector.

### White Point

White point describes the color of light (some shade of white) produced by the monitor when all electron guns are set to full intensity. It allows you to define the quality of "pure" white for the monitor. This is expressed as a temperature in degrees Kelvin (K). Higher degrees of Kelvin tend towards a bluish white and lower degrees of Kelvin tend towards a yellowish white. A temperature of 6500 degrees Kelvin is the color of bluish, ambient daylight whereas a temperature of 4000 degrees Kelvin is the color of yellowish-white (indoor lighting) that is projected by incandescent bulbs.

The Monitor White Point button lets you adjust the white-point values by either moving the slider or typing a value. Choose an illuminant setting you want to simulate from the list box.

### Gamma

Gamma controls the monitor's brightness. Adjust gamma values using the Gamma box as a reference. The square on the left represents the natural gamma of the monitor, and the square on the right reflects the current gamma settings. Gamma is set correctly when these two squares match each other in brightness. While you are setting these values, it helps to move back from the monitor (approximately four feet) until the horizontal lines on the left side of the Gamma box seem to converge into a solid color.

The channel buttons in the Gamma section let you adjust the gamma individually for red (R), green (G), blue (B), or for all three color channels. Type values in the box associated with the color channel, until the colors of the Gamma box match.

Although the gamma can be adjusted individually for each color channel, you can also achieve satisfactory results by enabling the Identical RGB Value check box. The numerical values specified in one box are automatically reflected in the other two boxes. You can experiment with the various values until the two gray boxes within the Gamma box match.

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{button ,AL('OVR1 Corel Color Profile wizard';,0,"Defaultoverview"),} [Related Topics](#)

## Tuning a scanner profile

You have two options for tuning a scanner profile. You can

- scan a target
- retrieve a target from a file

In either case, you can use the default target provided or a third-party target.

The Scan Target button lets you select the scanner driver of your choice. Ensure that you scan the entire target. If the scanner driver has automatic features, ensure that they are disabled.

Use the default target only for basic tuning. It provides satisfactory results for most users. For more advanced tuning requirements, users can use a third-party IT8 target — such as those available from Kodak and AGFA. Be sure that you obtain both a target and a reference file; some targets may be sold without a corresponding file. To obtain a high-quality target, you can click the URL address button.

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{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)



## Retrieving a scanner target from a file

If you want to retrieve a target from a file, type the path in the Scanner Target File Name box. The Browse button lets you retrieve a target from a file. Ensure that the prescanned image is in 24-bit color.

---

`{button ,AL(^OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)}` [Related Topics](#)

## Specifying the type of scanner target used

The Yes button lets you use the default scanner target. Enable the No button if you are using a third-party scanner target.

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`{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)}` [Related Topics](#)

## Retrieving a third party target

You can type the file path or click the Browse button to retrieve the reference file of the third-party target. In the Type Of Material list box, specify if the target is reflective or transmissive.

### Reflective

Reflective properties are attributed to those objects and printed images, that absorb all light waves except for the ones that bounce or reflect back to your eye. The reflected light waves define the color of the image or object. Therefore, if your target is a photographic print, then it is reflective. The light absorbing inks absorb all light waves except those that reflect back to your eye. These reflected light waves define the colors of the photographic print.

### Transmissive

If your scanner target is transparent, like a piece of film, then it is transmissive. Transmission occurs when light waves pass from a particular light source, through an image to your eye. If you can see light through something then that particular image or object is transmissive. The light source determines the color of the image that you see. Therefore, if the light source is blue, then blue light is shined through the image to your eye and you will perceive the image's color as blue.

---

{button ,AL('OVR1 Corel Color Profile wizard';,0,"Defaultoverview",)} [Related Topics](#)

## Aligning a scanned target

Before the Corel Color Profile wizard can calculate the scanner's characteristics from the scanner target, it has to compare the scanner target with the matching reference file. Aligning the target using fiduciary marks tells the Corel Color Profile wizard where to compare values of the scanned image to the values of the reference file. If you scanned the target improperly, you can use the left and right Rotate tools to reorient the target 90-degrees clockwise or counterclockwise.

Before you begin, ensure that the Zoom tool is enabled. To align the scanned target, click the fiduciary mark in the upper left corner of the target file. Fiduciary marks are L-shaped and are the corner target marks of the target file. This enlarges the area, making it easier to see the fiduciary mark. The cursor changes shape. Align the cursor over the fiduciary mark and click. Repeat the same steps for the top right and bottom right corners. It is not necessary to align the lower left fiduciary mark as it is aligned by default. Clicking the Next button verifies the fiduciary marks.

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{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)

## Choosing tonal characteristics for the scanner profile

Tonal characteristics describe the light, dark, bright, and contrast characteristics of an image. The default option is Normal. If the image lacks a particular tonal characteristic, you can apply this tonal characteristic to the image by choosing an option from a list box of preset tonal settings. The default option is also included in this list box.

The Darken Shadows check box lets you increase the shadows of the image. Therefore to maintain the default settings of the image but increase its shadows, you can enable the Use Preset Settings button to choose the default setting and enable the Darken Shadows check box.

From the Use Preset Settings list box you can

| Choose          | To                                                                                                                |
|-----------------|-------------------------------------------------------------------------------------------------------------------|
| Normal          | Use the current tonal values of the image. The output usually reflects appropriate brightness and contrast tones. |
| Lighten         | Lighten an image if it is too dark                                                                                |
| Darken          | Darken an image if it is too light                                                                                |
| Reduce Contrast | Fade outlines of objects in the image                                                                             |

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{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)

## Previewing tonal settings

The Preview button lets you view the transformed image. If you specify preset tonal settings, you can view the image's transformation and compare it to the default setting. You can perform this comparison in the Preview window by enabling the Default button. If you click the Presets Tonal Defaults button, you can regain settings that you specified in the Use Preset Tonal Settings list box.

If you have another image that you want to preview with the existing scanner profile, click the Open Image button. The original version of the image appears on the left and the same image with the effects of the current scanner profile appears on the right. The options specified in the Use Preset Tonal Settings list box display their effects on this image. The Original Image button lets you go back to the originally scanned image.

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{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)

## Testing a printer profile

The Setup button lets you choose a printer to test print an image using the current printer profile. A separations printer profile prints a separation for each color. A composite printer profile produces composite output.

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`{button ,AL("OVR1 Corel Color Profile wizard";0,"Defaultoverview",)}` [Related Topics](#)

## Tuning a test printer profile

If you want to tune the printer profile after viewing the test image, enable the Yes button. If not, enable the No button. In addition, you need a color-measurement device if you want to continue with the tuning process.

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{button ,AL(^OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)



## Specifying the number of inks used by the printer

The 3 and 4 Inks options can be used for a composite printer profile. For a separation printer profile, the 4 Inks option is automatically enabled.

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`{button ,AL(^OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)}` [Related Topics](#)

## Defining printer characteristics

Choose whether you want to tune the printer according to the default settings of another printer or begin from scratch. Starting from scratch is useful if the printer is not included in the list of profiles but is similar to another printer model. It is also useful if you are tuning a second profile for a printer but would like to begin editing with the default settings for the device.

To retain the current profile, specify the printer type.

---

`{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)}` [Related Topics](#)

## Using test pattern files

When you calibrate the printer using a colorimeter, you need to print a test pattern. The test pattern prints a page of colored squares called patches. These numbered patches are measured using a colorimeter. You then record the measured values in an ASCII file.

The colored patches are evenly distributed across the visible spectrum, showing a range of possible colors. You can print from 40 to 200 color patches. Larger number of patches provide a wide range of samples. These samples are used by the Corel Color Profile wizard to calculate the printer's color characteristics. The default number has been set to 200 for maximum accuracy, but 60 or more samples will provide adequate results.

When you enable the Yes button, a graphic file (.TIF) is created in the Color folder and printed.

If you haven't done so already, ensure that any printer-level color management or color correction is disabled before you print the test pattern file. Click the Properties button in the Print Setup dialog box to search for and disable these printer options.

---

`{button ,AL('OVR1 Corel Color Profile wizard';0,"Defaultoverview"),}` [Related Topics](#)

## Using a measurement file to calibrate the printer

You can perform the measurements required to tune the printer profile and save them to a file, or you can load an existing measurement file using the Browse button. Measurement files use .RMF extensions for RGB printers and .CMF extensions for CMYK printers.

Enable the Measure And Save To File button if this is your first time using the Corel Color Profile wizard for this printer. Choose your color-measurement device and the serial port to which its connected. Follow the instructions in the dialog box that appears and calibrate the color-measurement device to your printer. Some color-measurement devices measure black-and-white values to obtain a standard from which to determine the values of the remaining colors in the spectrum.

---

{button ,AL('OVR1 Corel Color Profile wizard;',0,"Defaultoverview",)} [Related Topics](#)

## Measuring printer colors

The Printer Color Measurement dialog box displays a measurement file of your printer with a flashing square around the patch in the upper left corner. This square is the active patch marker, and it indicates the patch to be measured. As you enter new measurements with your measurement device, the active patch marker automatically moves from left to right, allowing you to move your device from one patch to the next without using your keyboard or mouse. You can, however, click any of the patches to select and enter a measurement for it.

After measuring a patch, the solid square of color on your screen divides into two halves. The color in the upper left corner of the patch represents the "pure" color as it appears in the reference file; the color in the lower right corner represents the color as read by your calibration device from the printer's output. While measuring, keep an eye on both sides of the patch to ensure that you are always measuring the correct patch.

Under the graphic representation of the measurement file is a box where the Lab color model values are entered for each color. This shows you the exact data that are being entered into the measurement file you are creating. The measurement file is saved with an .RMF extension for RGB printer profiles and .CMF for CMYK printers. Each line in the file begins with the index number for the patch, along with one value for L (lightness), a (red-green chromaticity range), and b (blue-yellow chromaticity range), up to 7 decimal places per value.

The measurement file is an ASCII text file and it is structured like the table below. The material above the line is the header for the file. The material below the line is repeated for as many patches as are being measured.

| Number of patches | Version number |          |          |
|-------------------|----------------|----------|----------|
| Index number      | L (0-100)      | a (0-60) | b (0-60) |

---

{button ,AL('OVR1 Corel Color Profile wizard';0,"Defaultoverview"),} [Related Topics](#)

## Adjusting the printer TAC and the K-curve

Total area coverage (TAC) and the K-curve (black curve) values can be used to control both the amount of ink placed on the paper and the quality of the colors produced. While the essentials of the printer profile are derived using the measurement and reference files, TAC and K-curve values are used to fine tune the printer output to produce a desired result.

When setting the TAC and the K-curve values, testing and experience are the best guides. Print a sample that you can evaluate against a standard (a photograph, original drawing, or target sheet), and adjust the values as needed.

### Setting TAC percentage

If you are tuning a printer profile of a separation printer, you can set the TAC to a percentage that is reflected in the printed output. TAC defines the amount of ink placed on the paper. It adjusts the gray component replacement (GCR) for four color profiles. If you have full saturation of cyan, magenta, yellow, and black, you get 400% coverage (100% of each ink). In most cases, this level of coverage is impossible to apply with satisfactory results. Most printers support a maximum coverage of 300%, with an optimal TAC setting from 260% to 280%. The maximum TAC value depends on the speed of the printer and the technology on which the printer is based. Refer to your printer's user manual for the best setting, or contact the printer manufacturer.

The TAC value can be set to between 200% and 400%. Higher TAC values result in steeper curves on the CMYK Plates graph.

### Setting the K-curve

The K-curve represents the amount of gray component replacement (GCR) used at print time and is used for four-ink printers only. A steeper curve means increased GCR in the shadows. The changes generally have the following effects:

- A shallow K-curve results in black that is produced using more cyan, magenta, and yellow ink; therefore, the black has a warm and glossy character.
- A deep K-curve results in a darker, truer black (less warmth and gloss).

GCR is a variation on undercolor removal. In any color, whenever there is a value for cyan, magenta, and yellow, there is a gray component that can be replaced with black. This approach to printing has four advantages:

- The amount of ink placed on the paper is reduced.
- Grays are produced more consistently (since grays are now made up primarily of black ink).
- Variations in color are reduced (if ink coverage varies, colors become lighter or darker instead of changing hue).
- Printing costs are reduced.

The only disadvantage of this approach to printing is that darker colors have reduced color density. Therefore, it is more difficult to adjust inks for color balance.

Choose a preset K-curve from the Black Colorant list box

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{button ,AL('OVR1 Corel Color Profile wizard';0,"Defaultoverview",)} [Related Topics](#)









Lets you mix the current color with colors in the mixing area. You can choose brush attributes such as size and edge type by clicking the options button.



Displays a color viewer that lets you select colors from different visual representations of the visible spectrum. Hold down the button to choose from several different color viewers.



Click this button to display a mixing area which you can use to mix and select colors. Hold down the button to choose from various types of mixing area.



Displays the custom color palettes. Custom palettes are editable and can include any type of color.



Click this button to use a fixed color palette. Palettes are listed in the Type list box. You may want to use the palettes if you are working with spot or process color systems by DIC, DuPont, FOCOLTONE, PANTONE, TOYO, or TRUMATCH. By using these palettes along with a color reference book, you can be reasonably certain of how the colors will look when printed.



Selects a color from the mixing area.

**1st page: choosing device and profile**

Click to start a detailed tuning process of a profile.



Click to finish selecting device profiles.

Select the device whose profile you want to tune.

Lists all preset monitor profiles, and the option for installing profiles from disk.

You can right-click this box to remove a profile from the list, copy it, see its properties, return to the generic profile or launch Help.

The Install Profiles option listed in this box is used only to install Corel-supplied monitor profiles. This option can only access the drive from which you installed Corel Color Profile wizard. All printer profiles have an .ICM file extension.

Lists all preset printer profiles, and the option for installing profiles from disk.

You can right-click this box to remove a profile from the list, copy it, see its properties, return to the generic profile or launch Help.

The Install Profiles option listed in this box is used only to install Corel-supplied composite printer profiles (3-ink or 4-ink printers).

This option can only access the drive from which you installed Corel Color Profile wizard.

Lists all preset printer profiles, and the option for installing profiles from disk.

You can right-click this box to remove a profile from the list, copy it, see its properties, return to the generic profile or launch Help.

The Install Profiles option listed in this box is used only to install Corel-supplied separations printer profiles (4-ink printers). This option can only access the drive from which you installed Corel Color Profile wizard. Printer profiles have an .ICM file extension.

Lists all preset scanner profiles, and the option for installing profiles from disk.

You can right-click this box to remove a profile from the list, copy it, see its properties, return to the generic profile or launch Help.

The Install Profiles option listed in this box is used only to install Corel-supplied scanner profiles. This option can only access the drive from which you installed Corel Color Profile wizard. Printer profiles have an .ICM file extension.

It is used to display a description of the profile or option selected in the list box.

Click to adjust values for the gray component replacement curve (GCR), TAC, and the K-curve.



Lets you test print a printer profile.

**If the Test Profile button is clicked:**

Lets you specify a printer to test print the specified printer profile.

Click to apply the current settings.

[Click to return to the previous dialog box.](#)

Enable this button if you want to tune the test profile.

Enable this button if you are satisfied with the print results, or want to choose another printer profile.

Click to display the next dialog box.



[Click to return to the previous dialog box.](#)

## **Entering Manufacturer and Model information (2nd page)**

## Monitor

Select the name of the manufacturer of the monitor whose profile you are tuning or type a new name if you don't want to overwrite the existing profile.

Select the model name for the monitor, or type a new name.

It is used to display a description of the profile or option selected in the list box.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)



**Scanner**

Select the name of the manufacturer of the scanner whose profile you are tuning or type a new name if you don't want to overwrite the existing profile.

Select the model name for the scanner, or type a new name.

It is used to display a description of the profile or option selected in the list box.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

## **Printer (composite and separation)**

Select the name of the manufacturer of the printer whose profile you are tuning or type a new name if you don't want to overwrite the existing profile.



Select the model name for the printer, or type a new name.

It is used to display a description of the profile or option selected in the list box.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

**Copy to directory**

Type a file path in the list box provided in which to save the selected device characteristics.

Click the Browse button to find a suitable location in which to save the selected device characteristics.

## **Page on copying another monitor's characteristics**



Enable this check box if you want to use the characteristics of another monitor as the basis for your new profile.

Select the manufacturer of the monitor whose profile you want to tune. It is recommended that you select a manufacturer and model that closely resembles the monitor you are tuning. You can also do this to create a second profile for a device using the original profile's characteristics as the starting point for the second profile.

Select the model of the monitor whose profile you want to tune. It is recommended that you select a manufacturer and model that closely resembles the monitor you are tuning. You can also do this to create a second profile for a device using the original profile's characteristics as the starting point for the second profile.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

# Calibrating Colortron II with a Monitor

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)



Enable if you want to use the Colortron II(TM) specialized color measurement device to define exact colors for your monitor. This device is a third-party device and is not provided by Corel Corporation.

When calibrating a monitor, choose Colortron II(TM) in the box to use that device with Corel Color Profile wizard.

Choose the serial port that the color measurement device you are using is plugged into.

# Setting Gamma, Chromaticity, White Point of the Monitor

**Gamma**

Enable to make the gamma values the same for all color channels. When enabled, the gamma preview area changes to grayscale.

Enable the button to adjust the gamma value for the red channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.

Enable the button to adjust the gamma value for the red channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.



Enable the button to adjust the gamma value for the green channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.

Enable the button to adjust the gamma value for the green channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.

Enable the button to adjust the gamma value for the blue channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.

Enable the button to adjust the gamma value for the blue channel. Type the desired gamma value for this channel in the corresponding box. Gamma values range from 0.5 to 4.0.

The Gamma reference used to see the result of changing the gamma settings. Gamma refers to the brightness of your monitor.

The square on the left represents the natural gamma of your monitor, while the square on the right reflects the current gamma settings. Gamma is set correctly when these two squares match each other in brightness. While you are setting these values, it will help to move back from the monitor (approximately four feet) until the horizontal lines in the left side of the gamma box seem to converge into a solid color, or blur your eyes to achieve the same effect.

Click this button to see the effect of the selections you make on the reference photos. This allows you to evaluate whether or not the selections make the device produce colors that match the colors in the corresponding photos you received in your software package, called the scanner target.

Enable this button to make the preview of the reference photos update automatically after every adjustment you make in this dialog box.

When you are tuning a monitor profile, click this button to magnify the preview of the reference photos and verify the result of adjustments you have made.



## Chromaticity Section

This section adjusts the chromaticity and the white point for your monitor. The controls displayed here depend on which one of the two buttons at the top of the dialog box is enabled.

Enable to adjust the chromaticity of your monitor until the reference photos displayed in the Preview area match those you received in your software package. Chromaticity of a monitor describes the exact color of the monitor's red, green and blue phosphors. In most cases, chromaticity values do not need to be modified; they do not vary very much from one monitor to the other. If you choose to edit the chromaticity values, you can set them for each color channel. i.e., Red, Green, and Blue.

Enable to see the controls for adjusting your monitor's white point. The white point value is the measure of the light produced by the monitor when all electron guns are set to full intensity. White point allows you to define the quality of "pure" white for your monitor. This is expressed as a temperature in degrees Kelvin (K).

Choose preset chromaticity settings from the list, or choose Custom to adjust the chromaticity per color channel yourself.

Enable to adjust the chromaticity of the red color channel. You must select Custom in the Phosphors list box in order to adjust the chromaticity of the color channels.

Type the x chromaticity value for the red color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.

Type the y chromaticity value for the red color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.



Enable to adjust the chromaticity of the green color channel. You must select Custom in the Phosphors list box in order to adjust the chromaticity of the color channels.

Type the x chromaticity value for the green color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.

Type the y chromaticity value for the green color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.

Enable to adjust the chromaticity of the blue color channel. You must select Custom in the Phosphors list box in order to adjust the chromaticity of the color channels.

Type the x chromaticity value for the blue color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.

Type the y chromaticity value for the blue color channel. An alternative method for adjusting the chromaticity values is to drag the marker in the visual selector on the right. Contact your monitor manufacturer for the best values for your monitor.

Visual selector which displays all possible chromaticity values for each color channel. Drag the marker inside the visual selector to set the chromaticity values for the selected color channel.

Lets you slide the bar to adjust the white point value of your monitor.



Choose an illuminant you want to simulate. The white point value is updated according to the choice you make. Click the preview button to see the result in the reference image.

Type the temperature of pure white measured by the third-party measurement device in this box. Use the device to measure a patch of pure white in the application — an object or section of an image that is white and for which all RGB values are set to 0. If your measurement device reads x and y values instead of a temperature, choose Custom in the list box on the left and type those values in the dialog box that opens.

Click to return all values and settings to their default values.

[Click to return to the previous dialog box.](#)

Click to display the next dialog box.

Type in values for the x and y coordinates for the monitor white point. These values are given by the monitor manufacturer.

Use the Zoom tool to view effects of the new settings. You can continue to adjust values until you are satisfied with the displayed effects.

**Tuning a scanner profile (page that specifies the type of scanner target used)**



[Click to find out more information about ordering a more precise IT8 target.](#)

Enable to scan a printed target.

Enable when the scan target has already been scanned; you can retrieve the file created from the scanned target.

[Click to return to the previous dialog box.](#)

Click to display the next dialog box.

## **Specifying a scan target file path**

Type the name of the file you want to load whether it is a third-party's scanner target file or the default target file.

[Click to return to the previous dialog box.](#)



Click to display the next dialog box.

Click the Browse button to find it.

[Click to return to the previous dialog box.](#)

Click to display the next dialog box.

## **Specifying a target shipped by Corel**

Enable to confirm that you are using the scan target shipped with your Corel software.

Enable to indicate that you are using an IT8 scanner target you obtained from a third-party vendor.

[Click to return to the previous dialog box.](#)



Click to display the next dialog box.

**If Corel's scan target is being used...**

## Aligning Scanner targets

Enable to magnify the top and bottom-right corners of the scanned target so that you may accurately align the fiduciary marks

For Corel Color Profile wizard to be able to compare the scanner target with the matching reference file, the scan target must be right side up. If the scan target was not properly placed on the scanner bed, click to rotate the scan target 90 degrees in a clockwise direction or in a counter clockwise direction.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

Use this scanned target image to align the fiduciary marks.



Closes this dialog box without saving any changes you have made.

## Using a third-party target

Type the name of the manufacturer's data reference file, if you are using a third-party scanner target to tune a scanner profile.

Click to browse through all drives and folders you have access to find the file you want to load.

Identify the type of material on which the third-party's scan target is printed. Reflective material reflects light whereas Transmissive does not. A photographic scan target you scanned on a flatbed scanner is reflective. A slide or negative is transmissive.

## **Tonal characteristics**

Enable to apply the default tonal characteristics when generating the scanner profile. To use the default characteristics in combination with the Darken Shadows option listed below, enable the Use Preset Tonal Settings and choose Normal in the list; the Darken Shadow check box will be available to you.

Default characteristics will be appropriate in most cases.

Enable to choose a Preset Tonal Setting from the list box. Normal provides the same attributes as the Default button above but allows you to use the Darken Shadows button.



Choose a Preset Tonal Setting from the list box. These preset settings affect the tonal characteristics that will be included in the scanner profile when you click the OK button.

Enable to make shadows in the scanned target image darker and to use this adjustment when generating the scanner profile. This can only be used when you are using a Preset Tonal Setting.

Click this button to see the effect of the selections you make on the reference photos. This allows you to evaluate whether or not the selections make the device produce colors that match the colors in the corresponding photos you received in your software package, called the scanner target.

[Click to return to the previous dialog box.](#)

Click to display the next dialog box.

Closes this dialog box without saving any changes you have made.

## Preview window

Displays the image exactly as it was scanned.



Displays the scanned target using the tonal characteristics you have selected. If you are not pleased with the results, you can change the tonal characteristics from default to the current preset or from the current preset to default by clicking the appropriate buttons at the bottom of this dialog box. Click the Close button to return to the previous dialog box to specify the Preset Tonal Setting.

Click to apply the default tonal characteristics to the scanned image.

Click to apply the currently selected preset tonal characteristic. To change the preset selected, click the Close button to return to the previous screen and choose a new one from the list box.

Click to browse through all drives and folders you have access to find the file you want to load.

Click to display the original scanned target in the Uncalibrated and Calibrated preview areas after viewing a different image.

Click this to display an overview of this dialog box.

# Tuning a printer profile

When you are tuning a printer profile, this option confirms that you want to print the test pattern which is a series of colored patches covering a spectrum of colors. In this situation, you can specify how many patches you want to print.



The test pattern prints a page of colored squares called patches. These patches are evenly distributed across the visible spectrum, showing a range of possible colors. Type the number of patches to be printed, which can be any number between 40 and 200. The larger the number of patches, the wider the range of samples you give Corel Color Profile wizard to calculate your printer's color characteristics.

Enable this check box to print color separations of the test pattern file.

Enable to indicate that you do not want to print the test pattern patches

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

## **Specifying number of printer Inks**

Enable if the printer whose profile you are tuning is a 3-ink printer or if you cannot determine the printer type.

Enable if the printer whose profile you are tuning is a CMYK printer that supports 4 inks. Click this button to access the printer setup dialog box. From there you can change the current printer's properties.



Click this button to access the printer setup dialog box. From there you can change the current printer's properties.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

**Page on specifying printer type and  
copying another printer's  
characteristics**

Enable this button to use your printer's type as the starting point for its profile. When enabled, choose the category that best describes your printer in the list box on the right.

Enable this button to base your new printer profile on a specific printer model.

Select the manufacturer of the printer whose profile you want to tune. It is recommended that you select a manufacturer and model that closely resembles the printer whose profile you want to tune. You can also do this to create a second profile for the printer using the original profile's characteristics as the starting point for the second profile.

Select the model of the profile whose profile you want to tune. It is recommended that you select a manufacturer and model that closely resembles the printer whose profile you want to tune. You can also do this to create a second profile for a device using the original profile's characteristics as the starting point for the second profile.



Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

## **Color measurement file**

Click to load an existing or different color measurement file to tune a printer profile.

Type the name of the color-measurement file you want to load.

Click to browse through drives and folders to find the file you want to load.

Click to perform the measurements required to tune a printer profile and save them to a file.

When tuning a printer profile, choose the device you will be using to perform the color measurements from the listed devices.



Choose the serial port that the color measurement device you are using is plugged into.

Click this button to calibrate the measurement device you are using. Follow the instructions provided by the device manufacturer.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

# Measuring printer colors

Click to load an existing or different color measurement file to use to tune your printer profile.

Click to save the measurements you have made in this dialog box in a measurement file. Measurement files have the .RMF extension for 3-color printer profiles and the .CMF extension for CMYK printers.

Click to return all values and settings to their default values.



The test pattern displays on screen a page of colored squares called patches. These patches are evenly distributed across the visible spectrum, showing a range of possible colors.

Click to delete the measurement for the color patch presently highlighted in the dialog box. You can then take the measurement again should a mistake have occurred during the first attempt.

Click to automatically find and measure the next patch.

Table displaying the results of the measurement of the patches. Each line in the file begins with the index number for the patch along with one value for each  $L^*$  (lightness),  $a^*$  (red-green chromaticity range), and  $b^*$  (blue-yellow chromaticity range) up to 7 decimal places per value. You can use the scroll bars to move up and down the list.

Type a number in this box to automatically set the flashing square on the corresponding color patch.

Click to display the next dialog box.

[Click to return to the previous dialog box.](#)

Choose the number of patches you want displayed during the color patch measurement process.



## Editing GCR

Graphic representing the amount of each CMYK ink used by the printer to produce highlights, midtones, and shadows. The graphic includes one curve for each ink and a K - curve that represents the amount of Gray Component Replacement. You can edit the K -curve to customize the GCR. The K - curve is shown in white and includes nodes that can be dragged. When you rest the mouse over one of the nodes, it becomes a crosshair.

Type the desired Total Area Coverage (TAC) percentage. TAC defines the amount of ink placed on the paper. Most printers support a maximum coverage of 300%, with an optimal TAC setting from 260% to 280%. The maximum TAC depends on the speed of the printer and the technology on which the printer is based. Refer to your printer's technical documentation for the best setting, or contact the printer manufacturer.

Choose a preset K - curve from this list box. The K - curve affects the amount of Gray Component Replacement that the printer will produce. The K -curve in the graphic on the left updates automatically. To adjust the K - curve yourself, choose Custom from the list.

Click to make Corel Color Profile wizard adjust the amount of cyan, yellow, magenta, and black inks the printer will use to produce consistent colors according to the amount of Gray Component Replacement you have chosen, as illustrated by the K - curve.

Click to return all values and settings to their default values.

[Click to return to the previous dialog box.](#)

Click to display the next dialog box.



Click this button to save your current settings.

# Settings

Provides a space for you to type the value you want to type in the current control.

Shows the minimum value you can enter in the Full Value box.

Shows the maximum value you can enter in the Full Value box.

Shows the smallest increment you can enter in the Full Value box.



