Welcome to CorelSCAN

Welcome to CorelSCAN (page 1 of 2)

CorelSCAN guides you through the process of creating quality scanned images.

CorelSCAN allows you to complete all of the tasks required to produce a high-quality image, without having to use a photo-editing program:

- Run a compatibility test for your TWAIN driver to determine the level of automation that CorelSCAN can use to optimize the image resulting from the scanning process.
- Ensure reliable and consistent color reproduction by the scanner using the Corel Color Management system.
- Choose an output option for the scanned image, its resolution and color depth.
- Scan the image.
- Correct your image by blurring scratches or rips in an image, removing red eye, removing patterns, and performing tonal correction.
- Save both the original scanned image (unprocessed, also called the RAW image) and the processed image, which has been improved using CorelSCAN's processing options.

CorelSCAN can be launched as a standalone application or from within other Corel applications such as CorelDRAW, Corel PHOTO-PAINT, and Corel OCR-TRACE. When used as a standalone application, you can choose to output the scanned image to a printer, or save both its original and processed versions to disk. When you launch CorelSCAN from another Corel application, the image is scanned using CorelSCAN and is acquired by the other application. File management commands such as Save or Print are performed by the other application instead of CorelSCAN.

Before you begin

For best results, make sure you are using the latest Windows 95 compliant driver for your SCSI adapter card.

Parameters and options

There are two categories of options you choose when scanning images. First, you must choose the scanning parameters; they include the section of the printed image you want to scan, its input resolution, and identifying the original image's type. Second, you must choose the processing options; they include the final image's destination or purpose, its color depth, the use of color calibration, and the image correction features to apply to the image.

The scanning parameters and processing options you select using CorelSCAN can be saved as settings that you can use later when scanning other images.

The saved settings and the default settings are listed at the bottom of CorelSCAN's introductory screen.

The introductory screen is used to choose the method you want to use to obtain a good quality scan. It offers three mutually exclusive methods and the option to acquire an image already in digital format instead of digitizing one using the scanner. All three methods use the settings you select from the list as the starting point for the new scan you are about to perform.

{button ,Next()} Click here to see the next page.

{button ,AL(`OVR1 Welcome to CorelSCAN;',0,"Defaultoverview",)} Related Topics

Welcome to CorelSCAN (page 2 of 2)

Scan

The next screen you see when you choose this option lists the specific options saved in the selected settings. You can click the options listed to enable or disable them, and change the image type, its final destination and color depth. However, you cannot adjust the controls of the image correction features listed when you use the Scan method.

If you are acquiring an image from disk, a dialog box opens before you see the list of options. Use the dialog box to choose the file(s) you want to process.

Set processing options and scan

This method allows you to adjust all the options saved in the selected settings including the controls for the image correction features. If you are acquiring the image from a scanner, you will be able to change the scanning parameters and the processing options. If you are acquiring an existing file, i.e., an image that has already been scanned, you can choose the processing options you want to use to improve the image.

Setup scanner and processing options, then scan

Enabled by default when you first use CorelSCAN, this option takes the longest to perform but you only need to do it once for each TWAIN driver you use. This option runs the compatibility test which determines the level of automation CorelSCAN can use to control the scanning parameters for the image. The test fails if the TWAIN driver does not allow CorelSCAN to be used to choose the scanning parameters. If this is the case, CorelSCAN relinquishes control of the scanning parameters to the TWAIN driver's built-in interface. If the test is successful, you can use CorelSCAN's interface or the third-party built-in interface to set the scanning parameters.

If you choose to use the third-party's interface, it appears from within CorelSCAN. Once the scan is complete, CorelSCAN takes over so that you may use its processing options which include the final resolution and color depth for the processed image, and image correction features used to correct flaws in the image.

Acquire the image from an existing file

Acquiring from a file means that you are using CorelSCAN with an image that is already in digital format, i.e., that has been saved to disk. The benefit is that you can use CorelSCAN's processing options such as final resolution and color depth selection, color correction, and image correction features to improve the image before you edit it in a bitmap-editing application, or use it in an illustration or desktop publishing application.

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{button ,AL(`OVR1 Welcome to CorelSCAN;',0,"Defaultoverview",)} <u>Related Topics</u>

Introduction to scanning (page 1 of 2)

Color perception

Any object you look at, whether it is a three-dimensional object, or printed text or artwork, has a discernible color because of the light it reflects. A yellow flower for example, absorbs all colors except yellow which is the color we perceive. Color on a computer screen, however, is produced differently; it transmits the color from a light source instead of absorbing some colors and reflecting others.

What is scanning?

Scanning is the process of converting an image that is on paper, film, or slide, to a digital format that computers can understand. Digital cameras allow you to take a picture of three-dimensional objects and create a digital image from that picture. Scanning takes the colors we perceive on printed artwork, produced by reflected light, and reproduces them on the computer screen by converting the image into a digital format.

The scanning process includes two main components. The scanner is the hardware component. Many scanners look very much like photocopiers. The software used to control the process is the other component; it is the software that enables you to obtain the best scan possible for the task you want to perform.

Scanners have devices that measure the light reflected from the printed image and convert it into a digital format. These devices are one of two types: charged-coupled devices (CCDs) or photo-multiplier tubes (PMT). Most scanners, however, use a CCD device which consists of many photosensitive elements located on a single line that pass over the image placed on the scanner. The number of photosensitive elements in the CCD device varies from one scanner to another. Each element in a CCD device reads the area of the image that is above it, and sends an impulse which is processed by the computer to produce the digital equivalent of the color in that area. The number of elements in the CCD device determines the maximum number of pixels that will be included in the digital image: this number is the optical resolution of the scanner. Pixels — short for Picture Element, are often called dots. Resolution is often expressed in dpi, i.e., Dots Per Inch.

Some scanners and scanning software applications artificially increase the maximum possible resolution of a scanner by a process called interpolation which relies on approximations. The quality produced by interpolation is not as good as the quality produced by another scanner which has a higher true optical resolution. A scanner with a 300 dpi optical resolution doubled to 600 dpi through interpolation does not produce the same quality image as a scanner that has an optical resolution of 600 dpi.

Computers and various types of software are used to improve the digital image produced by the scanner, correct its flaws, insert it in a document, and prepare it for the printing process. There are many other possible uses for digital images such as creating documents for the World Wide Web, multimedia presentations, Optical Character Recognition in the case of scanned text, and much more.

{button ,Next()} <u>Click here to see the next page.</u>

{button ,AL(`OVR1 Welcome to CorelSCAN;',0,"Defaultoverview",)} <u>**Related Topics**</u>

Introduction to scanning (page 2 of 2)

Types of scanners

There are several types of scanners on the market. Each offers its own distinct advantages. High-end scanners are very expensive and are usually found only in service bureaus; they produce images with the highest resolution. Other scanners are designed to scan 35 mm slides, negatives, or transparencies. The following is a brief description of the most common scanner types:

- **Flatbed and Sheet Feeder scanners**: these are the most common scanners. A flatbed scanner looks like a small photocopier. The image is placed face down on the glass plate, the cover is closed, and the image is digitized by a moving CCD array. A flatbed scanner can scan irregular shaped or sized originals. A sheet feeder scanner includes a document feeder to scan several separate images in one operation.

- **Digital cameras:** as the name indicates a digital camera looks and works very much like a regular camera. It includes a CCD device. You take a picture of the item you want represented digitally. It allows you to scan three-dimensional objects in addition to images on paper. Resolution of digital cameras is expressed in the total amount of horizontal and vertical pixels, 680 by 480, for example.

- **Hand scanners:** Hand scanners were an affordable alternative when flatbed scanners were still high-priced. These small scanner are manually passed over the image to scan. Hand movements can affect the quality of the scan.

- **Slide and/or Negative scanners:** these are specialized scanners that digitize images on 35 mm slides and/or 35 mm negatives. In the case of a negative, the scanner converts the negative into a positive. They offer optical resolutions superior to their flatbed, sheet-fed, and hand-held counterparts.

- **Drum scanners:** Drum scanners are high-end scanners which have rotating transparent drums on which images are attached. Drum scanners can scan images on paper or transparency material. They typically offer the highest optical resolution. They produce very high quality scans used in top-quality prepress output, and are significantly more expensive than their flatbed counterparts. Drum scanners are sold with an entire system which includes software and typically do not require CorelSCAN.

{button ,AL(`OVR1 Welcome to CorelSCAN;',0,"Defaultoverview",)} <u>Related Topics</u>

Setting up a scanner

Setting up a scanner

To set up a scanner, you must choose a TWAIN compatible scanner driver from the list box. The driver name usually includes the manufacturer's name.

You can also use the scanner manufacturer's software to choose scanning parameters for the image acquisition; this is recommended when you are using a scanner that has hardware features unsupported by TWAIN drivers supplied by Corel. The options offered by the manufacturer differ significantly from one vendor to the next, but most of them provide a preview area and controls for selecting the area of the image that is to be scanned. If you decide to use the CorelSCAN interface to choose the scanning parameters, a compatibility test begins automatically when you click the Next button at the bottom of the screen.

Scanner compatibility test

CorelSCAN's compatibility test verifies that your scanner and TWAIN compatible driver will work efficiently with CorelSCAN to optimize your scan results.

If your scanner has special features unsupported by the drivers provided by Corel, CorelSCAN's compatibility test recommends that you use the TWAIN driver's built-in interface to perform the scan. This interface appears while CorelSCAN waits in the background. After you have selected the scanning parameters in the interface and have scanned the image, CorelSCAN becomes active again so that you may use its processing options to optimize the quality of the final processed image.

A compatibility test is automatically performed the first time you use the scanner with CorelSCAN. Once it has been performed, there is no need to do it again unless you want to use a different scanner or driver. In this situation, CorelSCAN automatically runs the test.

You can always force the compatibility test to occur, in any circumstance, by enabling the Force Compatibility Test check box. You might want to force the test if a problem occurred in your computer when the first test was performed, or to update the results of the test because you have added a new hardware component to your scanner, such as an Automatic Document Feeder.

Color calibration

Color calibration is the process of adjusting all the devices on your system — scanners, monitor, and printers — to produce reliable, consistent colors. You calibrate your system by using the Corel Color Manager.

If you have not yet calibrated your system, it is strongly recommended that you do so before you scan. This will save you time and prevent unpleasant surprises in the final output.

CorelSCAN provides a color calibration check box so that you can use the current device profile. This ensures the colors produced by your scanner closely match the colors found in the original artwork. You can have several scanners or printers on your system and generate a profile for each one. If you enable the calibration check box, a dialog box opens as soon as you click the Next button. The dialog box shows you the device profile used for the scanner and a button allowing you to access the Corel Color Manager. Click the Color Manager button to change the current device profile or create one for the scanner. A complete online Help file is also provided in Color Manager in case you need more information.

Forcing a compatibility test

A compatibility test is automatically performed in CorelSCAN when you use a scanner for the first time with CorelSCAN's interface. You force the compatibility test when you have added hardware features to your scanner, or if a glitch occurred during the first test.
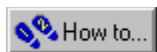
To force a compatibility test

1. In the Welcome to CorelSCAN screen, enable the Setup Scanner And Processing Options Then Scan button.
2. Make sure that the Acquire The Image From An Existing File check box is disabled. Click the Next button.

   A new screen opens.
3. Select the TWAIN driver for the scanner in the list box at the top of the screen.
4. Enable the Force Compatibility Test check box. Click Next.

   When a message box appears, click OK.
5. In the CorelSCAN Compatibility Test dialog box, click the button associated with the type of scanner you are testing and click OK.

   A preliminary resolution test begins. A message box displays the progress of the task.
6. When the resolution test is complete, a dialog box opens asking if you want to proceed with the compatibility test. Click Yes.

   The test begins. Again, the progress of the test is displayed in a message box. One of two things can happen:

   - A Compatibility Test Summary appears, listing the hardware characteristics of the scanner. This means the test was successful and you can continue the scanning process. Click OK to proceed with it. Any characteristic shown in black can be changed if it is incorrect.

   - A message appears stating that the test failed. This means that the TWAIN driver does not allow you to use CorelSCAN to choose the scanning parameters. Click OK to return to CorelSCAN. You will notice that CorelSCAN automatically chooses the option to use the manufacturer's software; click Next to begin the scanning process. Once you have defined the scanning parameters in the TWAIN driver's built-in interface, CorelSCAN becomes active again so that you can use its processing features such as the image correction features.

   - With certain TWAIN drivers, an IPF error may occur. In this situation, reset your system and/or your scanner. Restart CorelSCAN and make sure that you use the third-party's interface.

To change the scanner's characteristics

1. Identify the characteristic in the Summary list that needs to be corrected.

   Only characteristics shown in black can be changed.
2. Right-click the value associated with the characteristic to change, and choose another value from the list that appears. If no list appears, use the next step to change the value.
3. Click the value associated with the characteristic until it is highlighted. A blinking cursor appears at the end of the value. Press BACKSPACE to erase the value, then type the correct value.

Acquiring from an existing file

Acquiring from an existing file

Acquiring an image that has already been digitized using CorelSCAN allows you to apply changes to the image before using it for its intended purpose. In fact, all of CorelSCAN's processing options can be used to enhance the saved image. You can even acquire several digital images in a single CorelSCAN session.

When acquiring more than one image from files, CorelSCAN processes the first selected image file once you have selected all the processing options. When finished, it asks you if you want to use the same settings for the next image; click yes to process immediately or no to choose different processing options.

Acquiring existing file(s)

To acquire an existing file

1. In the Welcome to CorelSCAN screen, enable the Acquire The Image From An Existing File check box.
2. Enable one of the following options:
   - Set Processing Options And Scan, to choose the scanning parameters and post processing options.
   - Scan, to use the processing options saved in settings listed in the list box at the bottom of the screen. If you use saved settings, you still have the opportunity to choose which of the options saved you will use for the image you want to process.
3. Click Next.

   A new screen appears.
4. Choose the drive and folder where the file is located, and click the filename.

   If you are not sure of the image's filename, click the filename you think is the correct one and enable the Preview check box to see the file in the preview area of the screen.
5. Click the Add button.

   The filename appears in the box located on the right-hand side of the screen.
6. Repeat steps 4 and 5 to add other images to process in the current CorelSCAN session.
7. Enable the Color Calibration check box if you want to use device profiles to ensure accurate color reproduction.
8. Click Next.

   If you enabled Color Calibration, a dialog box appears. It lists the current device profiles. To change the profiles, click the Color Manager button to launch the Corel Color Manager.
9. Continue following the instructions on each subsequent CorelSCAN screen.

   You will have options to select the final destination, or purpose of the image, its color depth, its processed resolution, image correction features appropriate for the image type, and more.

 Note

- When acquiring more than one image from an existing file, CorelSCAN will process the first one selected once you have selected all the processing options. When finished, it will ask you if you want to use the same settings for the next image; click yes to process immediately, no to choose different processing options.

Choosing the Image Area to scan

Choosing the Image Area to scan

The Prescan feature is a low resolution scan performed to display a preview of the image on screen. This takes less time than a high resolution scan. Use the resulting preview to choose the section of the image you want to scan. Horizontal and vertical rulers are displayed around the preview area.

The section of the image you choose to scan is called the Image Area. It is represented in the preview area as a dotted rectangle that surrounds the image. When the Crop tool is enabled, you can use the controls to precisely place and size the Image Area, or you can adjust it manually in the preview area.

Artwork you want to scan may not be perfectly aligned on the page, or the page itself may not be perfectly square. This produces a slanted image in the preview area. The Deskew tool and Auto-deskew button allow you to straighten the image so that it is not slanted when it is scanned.

Previewing an image

Previewing an image allows you to crop it, straighten it, and limit the scan to a specific area. The image's preview is produced by a low resolution scan. Using a low resolution reduces processing time and does not take anything away from the final scan, which is a separate operation to be performed later. This procedure explains how to preview the image when using CorelSCAN to perform the scan. If you are using the TWAIN driver's built-in interface, refer to the documentation provided with the scanner.

For this procedure to be used, you must have previously set up your scanner and opted to use CorelSCAN's interface to set the scanning parameters.

To preview an image

1. Place the image on the scanner's glass plate face down.

   If you are not using a flatbed scanner, follow the scanner instructions to place the image properly.

2. Close the scanner lid.

3. In CorelSCAN, click the <u>Prescan</u> button.

   CorelSCAN automatically detects the image placed on the scanner and offers a preview of it. The image is enclosed by a dotted rectangular outline; this outline encloses the Image Area that will be scanned. You can move and resize the Image Area before proceeding.

To zoom in and out on the preview

1. Place the cursor inside the <u>Image Area</u>.

2. Click the left mouse button to zoom in on the image to a One to One magnification level, i.e., real-world dimensions.

3. Click the right mouse button to return to the previous level which is To Fit, i.e., fits the entire Image Area in the preview area.

 Tip

- When you are zoomed in, you can pan, i.e., drag the image inside the preview area to see a different section of the image. To pan, you can click outside the Image Area or hold the H key on your keyboard and click and drag inside the Image Area. If you click and drag inside the Image Area without holding H, you are moving the Image Area outline instead of panning the image.

{button ,AL(`PRC Choosing the Image Area to scan;',0,"Defaultoverview",)} <u>Related Topics</u>

Placing and sizing the Image Area

Often, you only need to scan a section of an image. The Image Area is the section of the image placed on the scanner flatbed that will be digitized. Define the Image Area with numeric precision when you need specific dimensions. Define it manually when you need to make sure certain graphical or text elements are included in the final scan.

To place and size the Image Area numerically

1. Click the Prescan button.

   A low resolution scan of the image placed on the scanner's flatbed appears in the preview area. The Image Area is identified by the dotted rectangle.

   The Crop tool is automatically enabled.

2. In the Image Area section of the screen, choose the units of measurement you want to use.

   The rulers change accordingly.

3. In the Top box, type the vertical coordinate where you want the top of the Image Area to be located.

   The top of the Image Area's dotted outline moves to the location specified. The dotted outline is also updated for all values typed in the next three steps.

4. In the Left box, type the horizontal coordinate where you want the left of the Image Area to be located.

5. In the Width box, type the width needed.

6. In the Height box, type the height needed.

7. Adjust any value as needed, or make changes using the method described below.

To place and size the Image Area manually

1. Enable the Crop tool.

2. On the Image Area's dotted outline, do one or more of the following:
   - Drag a corner handle to size both the height and width of the area simultaneously and maintain its current aspect ratio.
   - Drag a center handle to size stretch or compress only the height or the width.

3. Repeat if necessary.

4. Click inside the Image Area and drag to move it without changing its size.
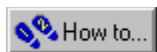
5. Repeat if necessary.

Tip

- When making any Image Area adjustments, click the preview area to zoom in to the 1:1 magnification level. To see a different section of the image when you are zoomed in, click outside the Image Area and drag the image in the preview area or hold down the H key on your keyboard and click inside the Image Area and drag.

{button ,AL(`PRC Choosing the Image Area to scan;',0,"Defaultoverview",)} Related Topics

Straightening the image to scan

The Deskew tool and Auto-deskew feature are used to make the final processed image perfectly straight when the printed artwork you are using to create the image is not. Auto-deskew looks for obvious edges around the image and automatically straightens the image, if possible. The Deskew tool is used to manually place the Deskew Axes that identify the horizontal and vertical edges that are to become the processed image's boundaries.

To automatically straighten the image

1. Click the Deskew tool.

2. Click the Auto-deskew button.

   The Deskew Axes show the detected 90-degree corner in the Image Area. This is how the image will be straightened. The corresponding angle value appears in the Angle box.

To manually straighten the image

1. Click the Deskew tool.

   The Deskew Axes appear in the preview area.

2. Drag the intersection of the Deskew Axes to the corner of the image.

3. Do one or both of the following:

   • Place the cursor near the end of one of the axes and drag it toward the image's edge.

   • Type the angle in the Angle box; the Deskew Axes rotate in a counter-clockwise direction as you change the angle.

4. Repeat step 3 if necessary until the angle marker is placed properly.

Tip

• When making any Image Area adjustments, click the preview area to zoom in to the 1:1 magnification level. To see a different section of the image when you are zoomed in, click outside the Image Area and drag the image in the preview area or hold down the H key on your keyboard and click inside the Image Area and drag.

{button ,AL(`PRC Choosing the Image Area to scan;',0,"Defaultoverview",)} Related Topics

Identifying the original image type

How to...

Identifying the original image type

After you have selected the Image Area to scan, CorelSCAN needs to know the type of image you are scanning. The image type

is essentially the same thing as its source, i.e., where you obtained the image **How to...** a newspaper, a magazine, a color
photograph, etc.

Choosing the image type allows CorelSCAN to determine which image correction features are required, i.e., which features you will
see in subsequent screens. The image type is also used by CorelSCAN to suggest a resolution and to make a list of possible
destinations, i.e., how the image will ultimately be used, as well as a list of color-depth options for the processed image.

For a description of all options, see Image Type list.
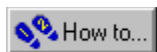
Selecting an image type

After you have defined the Image Area to scan in CorelSCAN or in the scanner manufacturer's interface, CorelSCAN lists several image types and asks you to identify the category that best describes the image you are scanning. The choice you make here determines which image correction features will be available to improve the image later on in the process. It also influences the resolution and color depth choices CorelSCAN will recommend for the final, processed image.

To select an image type

1. In the list, click the image type that best describes the image you are scanning.

   If you are unsure of the correct choice, click each type of image and look at the preview area which shows you examples for each category.

2. Click Next to continue.

Tip

- For a description of all options, see Image Type list.

Processed image destination and color depth

Processed image destination and color depth

CorelSCAN needs information to optimize the scanned image. You must specify the image's final destination, i.e., how you want to use the image, and its color depth, i.e., the number of colors you want to reproduce the image in digital format. Keep in mind that the more colors you use, the larger the file size. The image's final destination changes the color-depth options available on the right side of the screen.

The information you provide is used by CorelSCAN to make a recommendation on the final image resolution. For example, if you are scanning the image to convert it to a vector-based graphic using Corel OCR-TRACE, a low resolution is adequate. If you want to print the image, CorelSCAN recommends you use a final resolution corresponding to 1.5 times the current printer's line screen frequency. Consult your printer's documentation to find it's line screen frequency,

Some image destinations are not available when you use CorelSCAN from within another application such as Corel PHOTO-PAINT. The reason is quite simple; the image is scanned and corrected in CorelSCAN then sent to Corel PHOTO-PAINT, CorelDRAW or Corel OCR-TRACE. If you only want to print the file, you can easily use the other application's commands to do so.

For a description of all options, see Image Destination list.

Color depth

Color depth determines the range of colors and tones that are available in an image, and is usually measured by the number of colors displayed, e.g., 256 colors, or 16 million colors. The color depth you select for your image will affect the file size as well as the quality of the final product.

CorelSCAN provides the following color depth options: CMYK, RGB, Paletted, grayscale, and black and white. Color depths displayed in gray are not available. The available choices depend on the original image type which you specified earlier in the process and the image destination you choose in this screen. For example, if you identified the original artwork as color line art and its destination as a monitor, the black and white and CMYK options are not available. If you identified the image as color line art and its destination as a black and white printer, only the grayscale option is available.

Selecting a final destination for the processed image

CorelSCAN takes much of the guesswork out of displaying quality colors in your image by limiting the possible color variables available. Once you choose what kind of image you're producing, CorelSCAN determines what the best color options are for the output. For example, if you are scanning an image to print on a black and white printer, then you don't need advanced color options.

To choose the final destination

1. Choose an option in the list box that corresponds to the image's final destination, i.e., its purpose.

2. If you don't know what the final use of the image will be, or you think that you'll use the graphic for many different purposes, choose the most flexible destination option that meets all of your needs.

 Tip
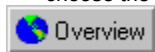
- For a description of all options, see Image Destination list.

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{button ,AL(`PRC Processed image destination and color depth;',0,"Defaultoverview",)} Related Topics

Choosing a color depth

Color Depth determines the range of colors and tones that are available in an image. It is usually measured by the number of colors displayed (e.g.,   256 colors, or 16 million). Each color depth has advantages and limitations.

To choose a color depth

Your choice of color depth may be limited by the final destination of the image that you selected in the first list box in the screen.

- Click the button associated with the color depth that you want for the processed image.

   As you decrease the color depth, details may be lost. You may want to use a higher color depth for detailed images even if it has a small color range. Scanning at a higher color depth may also save you the trouble of having to do extensive color correction in a bitmap-editing package.

If scanning	Use this color depth
line art	black and white
duotones	grayscale
to print to a black and white printer	grayscale
high quality color photos	RGB or CMYK
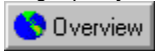
 Tip

- Keep in mind that the image will only appear as good as your output sources will allow. It may be a waste of disk space to scan an image at a high color depth if the monitor or printer you're using is not capable of producing such a wide range of color.
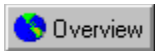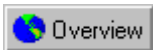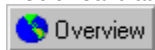
 Note

- If you choose the Paletted (8 bit) color depth option, a new screen appears when you click the Next button. This screen is used to choose the palette and dithering process to use to display the image using only the 256 colors allowed by this color depth. You can also type a number of colors inferior to 256 if you want to reduce the file size even more.

{button ,AL(`PRC Processed image destination and color depth;',0,"Defaultoverview",)} Related Topics

Using color calibration

Color Calibration is the process of adjusting all devices on your system scanners, monitor, and printers to produce reliable, consistent colors. Color calibration in Corel applications is done using the Corel Color Manager. Color calibration is only available when you are scanning images using the RGB color depth. Grayscale, Paletted, CMYK, and black and white images do not require color calibration.
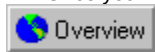
To use color calibration

1. Enable the Use Color Calibration check box, choose the other options in the screen and click the Next button.

   Another dialog box opens.

2. Verify that all of the devices you want calibrated are listed in the dialog box, and that the appropriate profile is associated to each device.

To change the color calibration

Follow this procedure if you have not calibrated your system, or if you want to change the color calibration one or all of the devices.

1. Ensure that the Use Color Calibration check box is enabled. Click Next.

   Another dialog box opens.

2. Click the Color Manager button.

   Corel Color Manager opens.

3. Follow the onscreen instructions in Color Manager. Refer to the Color Manager online documentation if you need more information.

   Once you have finished the system calibration, you return to CorelSCAN.

 Note

- Refer to the Corel Color Manager online help to obtain information about the relationship between scanning and color calibration.

{button ,AL(`PRC Processed image destination and color depth;',0,"Defaultoverview",)} <u>Related Topics</u>
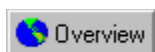
Setting the resolution

Image resolution

Resolution refers to the amount of detail and information an image file contains, as well as the level of detail an input, output, or display device is capable of producing. When you work with bitmaps, resolution affects both the quality of your final output and the file size.

The resolution you choose for your image will usually move with your file that is, whether you print a bitmap file to a 300 dpi laser printer or to a 1270 dpi imagesetter, it will always print at the resolution you set when you create the image. Choosing the resolution of the digital image produced by your scanner is a crucial step to ensure you get the result you want in the processed image. CorelSCAN uses the information you provided earlier in the process to make an estimate as to the resolution you should be using. It bases its recommendation on the original image type, the way the image will be ultimately used, and the capabilities of the final output device (whether it be a black and white or color printer, an imagesetter, or a computer monitor). You can also set a custom resolution or choose the scanner's optical resolution.

Setting the final image's resolution

CorelSCAN gives you information that helps you to make a decision about resolution. It gives you the image's uncompressed file size if you choose the recommended resolution and updates that information if you decide to use a resolution other than the one suggested. It also gives you the physical dimensions of the image. Finally, it shows the image's dimensions in pixels; the dimensions in pixels change when you change the resolution because resolution is expressed in Dots Per Inch (dpi), where one dot equals one pixel. Increasing the resolution results in more dots per inch; therefore, more pixels in the height and width of the image, as well as a bigger image file size.

To set the final image's resolution

- Do one of the following:
  - Enable the first button in the Resolution box to use the resolution recommended by CorelSCAN.

  CorelSCAN used the information you provided earlier in the process to estimate the resolution you should be using.

  - Enable the third button in the Resolution box to use the scanner's optical resolution, or to use a file's resolution whne acquiring the image from an existing file.
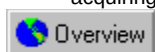
 Note

- If the recommended resolution is an unacceptable value, use the Custom option to set the desired resolution. See the procedure below for step-by-step instructions.
- If you choose to use the scanner's optical resolution but the resolution stated in CorelSCAN does not match the scanner's true resolution, use the Custom option and type the correct resolution.
- A scanner's optical resolution is its true resolution and is based on the number of photosensitive elements your scanner includes. Some scanners artificially increase their resolution using a process called interpolation; the interpolated resolution uses approximations and is not the same thing as the optical resolution.

To set a custom resolution

1. Enable the second button in the Resolution box.
2. Type the resolution in the corresponding box.

The following guidelines may help you determine the best scanning resolution for your image:

When scanning for	Use
halftone print images	1.5 to 2 times the printer screen frequency. Refer to the printer manufacturer's documentation to find the printer's screen frequency
continuous tone print images	the printer resolution; refer to the printer manufacturer's documentation to find the printer's line screen frequency
black and white images	the printer resolution; refer to the printer manufacturer's documentation to find the printer's line screen frequency
display onscreen/Internet	72 or 96 dots per inch
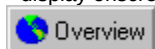
 Tip

- The most important thing to remember when choosing a resolution is that you want to get the highest possible image quality while taking the output device's capabilities into consideration.

Correcting flaws in the image

Correcting flaws in the image

CorelSCAN includes image correction features that can compensate for certain imperfections in images. You can use these tools to improve image quality with as much control and precision as you require.

CorelSCAN's image correction features include:

- removing moire patterns
- replacing red-eye with another color in a photograph
- removing the background pattern
- removing noise patterns
- blurring dust and scratches
- applying image enhancement corrections that adjust contrast, brightness, saturation, sharpness, and despeckle. Despeckle refers to noise removal.

Selection of correction features

Not all correction features are available when choosing the processing options for a scanned image. CorelSCAN chooses the specific correction features that are needed for the image based on the final color depth you selected for the processed image. The color depth choices that were available to you were chosen based on the type of image you were scanning and the final destination of the image.

If the image correction features offered are not the ones you wanted to use, you can return to an earlier CorelSCAN screen to change the variables that affect the final color depth. To return to an earlier screen, click the Back button until you reach the screen where you identify the original artwork's type.

Previewing the result of correction features

All image correction features provide before and after preview areas that you can use to compare the original scanned image with the result of the correction feature on the image.

Clicking ![icon] activates the preview. You can preview in one of two ways:

- Preview the entire Image Area at a low resolution.

  Accessed by clicking ![icon], this preview mode shows the correction feature applied to the entire Image Area at a low resolution. Because it is displayed in low resolution, the preview is not 100% accurate and may not be detailed enough; however, it is the fastest way to preview the effect.

- Preview a section of the Image Area at a high resolution

  Accessed by clicking ![icon], this preview mode allows you to preview the effect on only a section of the Image Area, but at a high resolution. This preview option displays the most accurate representation of the result of the correction feature.
When you select this mode, a new screen appears and displays the entire Image Area. The high resolution preview area is represented by a blinking rectangle automatically sized to include image information that does not exceed 1 megabyte in file size.

  You can move this high resolution preview area anywhere in the Image Area. You can also scale it down by placing the mouse cursor over one of its corners until it becomes a two-way arrow and dragging.

  After you have selected the area you want to preview at high resolution, click OK at the bottom of the screen to return to the correction feature screen. The selected high resolution preview area is now used to represent all the applied correction

  features unless you decide to return to the low resolution mode by clicking ![icon] again.

Removing a Moire pattern

Moire patterns are undesirable wave patterns in an image created by conflicting dot patterns. These occur when halftone screens of two different frequencies are superimposed in the same image. For example, if you scan a halftone image, you will likely see moire patterns on your monitor screen because the dpi frequency of the original halftone screen will differ from that of the scanned image.

You can use CorelSCAN to automatically remove any moire patterning from your scanned image, or you can set the removal level yourself.

To remove the moire pattern automatically

1. Enable the Apply This Process check box.

2. Enable the Automatic check box.

3. To see the results of the effect, click , then click one of the following:

 to select and preview part of the image at the same resolution as the processed image; the section of the image you preview cannot exceed 1 Megabyte in size

 to view the entire image at a low resolution
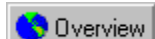
 to reset the After preview window

To remove the moire pattern manually

1. Enable the Apply This Process check box.

2. Disable the Automatic check box.

3. Move the Level slider to the left for a lower removal, or to the right for a higher removal.

4. To see the results of the effect, click , then click one of the following:
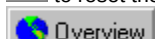
 to select and preview part of the image at the same resolution as the processed image

 to view the entire image at a low resolution

 to reset the After preview window

 Tip

- For best results when removing moire patterns, use CorelSCAN's interface to perform the scan or, if you prefer to use the TWAIN driver's interface, set the scan resolution to 300 dpi.

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} **Related Topics**

Removing red eye from a photo

There's nothing quite like taking a great photo and then discovering that the subject of the photo has got a demon "red eye" look. CorelSCAN allows you to automatically replace the red eyes with a natural-looking color.

To replace the red in the eye(s) with another color

1. Click anywhere in the Before preview window, and drag the Image Area until the eye (or both eyes) are visible.

2. Enable the Apply This Process check box.

3. Click the button, then click and drag around the eye to select the area.

4.   Adjust the area defined in the previous step by doing one or both of the following:

   - drag the handles to resize the area
   - click inside the area and drag to change its location

5. Choose a color from the color picker.

6. Repeat steps 3 to 5 to color the second eye, if applicable.

To delete a selection

- Right-click inside the selection area, and click Delete Red Eye Zone.

To delete all selections

- Right-click inside the selection area, and click Delete All Red Eye Zones.

_____

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} <u>Related Topics</u>

Overview

Removing background patterns

Background removal is only available when you choose one of the following image type: B/W line art, Color line art, Business card, Text for Recognition (OCR), or Low quality text for recognition (OCR). Background removal detects patterns in the image background and removes them so that the background is completely white.
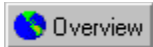
To remove a background pattern

1. Enable the Apply This Process check box.

2. Enable the Automatic check box.

3. To see the results of the effect, click **Overview**, then click one of the following:
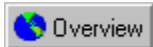
Overview to select and preview part of the image at the same resolution as the processed image

Overview to view the entire image at a low resolution
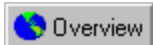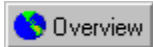
to reset the After preview window

To remove a background pattern manually

1. Enable the Apply This Process check box.

2. Disable the Automatic check box.

3. Click the button associated with the threshold method you want to use:

   - Adaptive: the more selective method for background removal.

   - Uniform: treats all of the background in the same way; appropriate method to use when scanning line art or text.

4. Move the Level slider to the left for a lower removal, or to the right for a higher removal.

5. To see the results of the effect, click **Overview**, then click one of the following:

Overview to select and preview part of the image at the same resolution as the processed image

Overview to view the entire image at a low resolution

to reset the After preview window

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} Related Topics
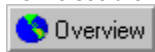
Removing a noise pattern

Noise refers to random pixels on the surface of a bitmap resembling static on a television screen. Noise often looks like stray pixels that have nothing to do with the image. The Remove Noise image correction feature allows you to get rid of these unwanted pixels.

To remove a noise pattern

1. Enable the Apply This Process check box.

2. Enable the Automatic check box.

3. To see the results of the effect, click , then click one of the following:

 to select and preview part of the image at the same resolution as the processed image

 to view the entire image at a low resolution

 to reset the After preview window

To remove a noise pattern manually

1. Enable the Apply This Process check box.

2. Disable the Automatic check box.

3. Move the Noise Intensity slider. A low setting removes only dark noise pixels whereas a high setting removes lighter colored noise pixels.

4. Move the Level slider; a level set to zero does not remove any noise in the image; a level of 100 removes the maximum amount of noise as possible.

5. To see the results of the effect, click , then click one of the following:

 to select and preview part of the image at the same resolution as the processed image
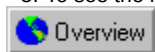
 to view the entire image at a low resolution

 to reset the After preview window

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} <u>Related Topics</u>

Removing dust and scratches

The Dust and Scratch effect reduces image noise in photographs by blurring the pixels in the image. This works something like adding water to a dry watercolor painting; adjacent colors "bleed" into each other. The effect is applied to the entire <u>Image Area</u>.

To remove dust and scratches

1. Enable the Apply This Process check box.

2. Enable the Automatic check box.

3. To see the results of the effect, click , then click one of the following:

 to select and preview part of the image at the same resolution as the processed image
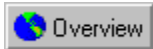
 to view the entire image at a low resolution
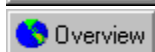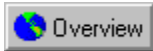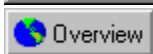
 to reset the After preview window

To remove dust and scratches manually

1. Enable the Apply This Process check box.

2. Disable the Automatic check box.

3. Move the Radius slider to set the size of the sample analyzed by the Dust and Scratch feature. The entire Image Area will be analyzed by the effect. The sample size only changes the number of pixels that will be analyzed at a time.

4. Move the Level slider to the left for a lower removal, or to the right for a higher removal.

5. To see the results of the effect, click and click one of the following:

 to select and preview part of the image at the same resolution as the processed image

 to view the entire image at a low resolution

 to reset the After preview window

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} <u>Related Topics</u>

Applying Image Enhancement

Image Enhancement is an automatic image correction feature that analyzes the image and applies several corrections to it. It performs different types of corrections such as contrast, saturation, sharpness, brightness, and despeckle (noise removal) corrections. Each correction is applied at a specific level which optimizes the quality of the processed image.

You can use the automatic Image Enhancement or choose from five presets in the list box. Each preset performs all of the different types of corrections, but to different degrees. A preset's name tells you the overall result of the adjustments it applies; for example, the Darken preset affects the contrast, saturation of colors,   sharpness, and brightness to make the image darker.

The list of presets varies according to the color depth of the image. For example, if you are working with a black and white photo, the Saturate preset is not available because there are no colors in the image except for levels of gray.

To apply Image Enhancement

1. Enable the Apply This Process check box.

2. Do one of the following:

- Enable the Automatic check box to have Image Enhancement make all the decisions for you.

- Disable the Automatic check box and choose a preset from the list box.

3. To see the results of the effect, click , then click one of the following:

 to select and preview part of the image at the same resolution as the processed image
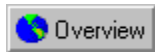
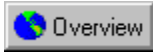 to view the entire image at a low resolution
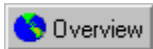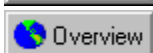
 to reset the After preview window

{button ,AL(`PRC Correcting flaws in the image;',0,"Defaultoverview",)} <u>Related Topics</u>

Saving the scanned and processed images

Saving the scanned and processed images

The file saving feature in CorelSCAN is only available when using CorelSCAN as a standalone application. If you launched CorelSCAN from another Corel application, use that application's Save or Save As command to save the digitized image to disk.

When you have selected all processing options, CorelSCAN displays a screen used to choose a location, filename, and type, for the saved the digital image file. Many bitmap file formats can be used to save the image. You can save both the processed file (the image to which all parameters and options have been applied), and the original file, (the image first scanned to which the only the scanning parameters have been applied).

The original file is saved using the same filename as the processed file, but the word «RAW» is appended to the filename to make it easily recognizable. Saving the RAW, or unprocessed, image can save you from having to scan it again in the future, You can also apply other processing options to a RAW image file by choosing the Acquire The Image From An Existing File option when you launch CorelSCAN again.

Saving the scanned and processed images to disk

The CorelSCAN screen allowing you to save the digital image appears only when you have selected all the processing options for the image you are about to scan.

To save the scanned and processed images

1. Type a filename in the top box.

2. Choose a file format from the File of Type list box.

3. Choose the appropriate drive and folder.

4. Enable the Save Unprocessed Scanner Data check box to save the original scanned image, i.e., the image to which none of CorelSCAN's processing options have been applied.

   The unprocessed file will have the same name as the processed image file (specified in step 1), but the word «RAW» will be appended to the name.

5. Click Next to move on to the next screen, used to start the final scanning process.

Processing the image

Processing the image

This screen lists all the selections made during the process such as the image type, final destination of the image, where it will be saved, the color depth, final resolution, color calibration, and selected processing options. Verify that the correct settings have been selected and revise them if needed. The Back button moves back one screen at a time so that you can change the settings. If the settings are correct, you are ready to perform the final processing.

If you are correcting a digital image, using the Acquire Image From Existing File option, or if you are scanning an image using the third party's interface, the Process button is displayed at the bottom of the screen. If you are creating the digital image by scanning the artwork with CorelSCAN, the Scan button appears. Click the Process or Scan button to produce the final processed image.

Once the image is processed, CorelSCAN provides you with another opportunity to crop the processed image and then asks you if you want to continue processing files. You can choose to continue with the current settings, continue with new settings, restart CorelSCAN, or exit.

Cropping the processed image
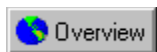
Cropping the processed image

After the image has been scanned and processed using the scanning parameters and processing options you have selected, CorelSCAN provides you with another opportunity to crop the processed image before you use it for its final purpose. You can refine the edges of the final output image in case the crop performed earlier when you defined the Image Area is not entirely satisfactory.

The Image Area appears in this screen and it is enclosed by a rectangular frame with handles along its border. The rectangular frame is used to define the crop area for the final image.

This is the last step in the CorelSCAN process. The Finish button at the bottom of the screen is used to crop the processed image. When finished, another screen appears asking if you want to continue scanning with the same settings, continue scanning with new settings, exit CorelSCAN, or restart it.

Cropping the final image

To crop the final image

1. In the preview area, do one or more of the following:
   - Drag a corner handle to size the crop area.
   - Click inside the crop area and drag to move its boundary to another location of the Image Area.
2. Click the Crop button to update the preview to show only the area that will be in the final image, i.e., the crop area.
3. Click Finish to crop the final image and complete the scanning and enhancing process.
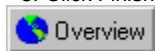
 Tip

- When making adjustments to the crop area, click the preview area with the left mouse button to zoom in to the 1:1 magnification level. To see a different section of the image when you are zoomed in, click outside the Image Area and drag the image in the preview area or hold down the H key on your keyboard and click inside the Image Area and drag.

Tools

Zoom tool

Allows you to zoom in and out on the preview of the image when identifying the Image Area to scan.

Crop tool

Allows you to limit the area of the image that will be scanned. When enabled, you can adjust the position and size of the Image Area by typing precise coordinates by be clicking and dragging the handles displayed along the Image Area's dotted outline.

Deskew tool

Allows you to straighten the Image Area that will be scanned. Use it when the artwork you are scanning is not perfectly straight on the printed material or on the scanner bed.

Prescan button

 Click to perform a low resolution scan of the printed artwork placed on the scanner. This low resolution scan is fast and it allows you to preview the image and choose the section of it you want to scan at a high resolution and to which you want to apply processing options.

Crop button

Appears in the final crop screen of CorelSCAN. Click the button to update the preview to show only the area that will be in the final image, i.e. the crop area.

Definitions

Image Area

The section of the original artwork you have chosen to scan. The Image Area is defined using the CorelSCAN interface or a third-party interface provided by the scanner manufacturer.

Scanning parameters

General term used to describe all the options you select to perform the initial scan of the artwork. These options are: the Image Area you want to scan, the original image's type, and the input resolution. The scanning parameters can be selected using CorelSCAN's interface or the interface provided by the scanner manufacturer.

Once you have chosen the scanning parameters and performed the scan, you can apply processing options to the scanned image. An image that has been scanned using the parameters is called the RAW or unprocessed image.

Scanning parameter, when selected in CorelSCAN, and the processing options can be saved to be used on other images.

Processing options

General term used to describe all the options you apply to the RAW or unprocessed image. These options are: the image's final destination or purpose, its final color depth, the use of calibration, and all image correction features. Processing options are selected and applied using CorelSCAN. They are used to enhance the original scan. The original scan is performed by CorelSCAN or the scanner manufacturer's interface and produces the RAW or unprocessed image.

Image type list

There are 15 image types to choose from when identifying the characteristic of the image you are scanning and/or processing using CorelSCAN.

B/W line art

- An image or document that includes non-photographic black and white graphical elements such as a sketch.

Color line art

- An image or document that includes non-photographic color graphical elements such as a child's drawing.

Business card

- Very similar to black and white or color line art but generally includes text as well as graphical elements.

Text for recognition (OCR)

- A good quality document including text you want to convert to editable text characters using an Optical Character Recognition application such as Corel OCR-TRACE.

Low quality text for (OCR)

- This image type is essentially the same as the previous one but makes certain adjustments when working with a poor quality original.

Fax

- A document produced by a fax machine, it is black and white, with text and possibly graphics, and has an original resolution of 200dpi.

B/W photograph

- A continuous tone image that contains many shades of gray.

Color photograph

- A continuous tone image that contains an infinite number of shades of color.

Low quality magazine image

- Image originating from a publication using low quality halftone printing.

Normal quality magazine image

- Image originating from a publication using average quality halftone printing.

High quality magazine image

- Image originating from a publication using high quality halftone printing.

B/W newspaper image

- Image including text and/or graphics originating from black and white newsprint.

Color newspaper image

- Image including text and/or graphics originating from color newsprint.

B/W photocopied image

- Black and white image produced by a photocopier.

Color photocopied image

- Color image produced by a color photocopier.

Image destination list

The following describes all the image destinations, or purpose of the image, that are available in CorelSCAN. Keep in mind that the image type you selected earlier in the process influences the list of possible destinations that are displayed. For example, if you identified the original image as text for character recognition, the destinations that are color-based or graphic-oriented are not available.

Direct to printer

- Choose when you want to print the final image using a black and white printer directly from CorelSCAN. CorelSCAN's Print dialog box will appear when you click the Next button.

Direct to color printer

- Choose when you want to print the final image using an color printer directly from CorelSCAN. CorelSCAN's Print dialog box will appear when you click the Next button.

Display on monitor

- Choose when you want to use the final image on a monitor for a presentation or a slide show for example. CorelSCAN will recommend a final resolution ranging from 72 dpi to 120 dpi depending on the monitor you use. Monitor resolution is lower than the resolution required for printed documents.

Graphic for Web

- Choose when the final image will be used on an Internet Web site. The color depth options available and recommended resolution will be affected by this selection. The recommended resolution will be 72dpi.

Graphic for electronic document

- Choose this when the image will be used in a document that will not be printed such as an electronic newsletter.

Graphic for printed document

- Choose this when the image will be used for desktop publishing or in other printed documents.

High quality art

- A general option for which a 300 dpi resolution will be recommended.

Good quality art

- A general option for which a 200 dpi resolution will be recommended.

Low quality art

- A general option for which a 100 dpi resolution will be recommended.

Tracing (bitmap to vector conversion)

- Use when scanning or processing an image that includes graphical element that you will eventually convert to a vector file format using bitmap to vector conversion applications like Corel OCR-TRACE. Files that will be traced to become vector-based do not require a very high resolution. If there is also text in the image that you wish to recognize (OCR), choose High or Good Quality Art as the destination.

Text recognition (OCR)

- Use when scanning or processing an image that includes text that you want to convert to text characters using an Optical Character Recognition application like Corel OCR-TRACE.

Welcome screen

Enable to perform a scan using the options saved in the settings you choose from the list box at the bottom of this screen. You will be able to enable or disable some of the options saved, but you will not be able to change parameters of the options. To have control over all parameters and options, choose the Set Processing Options And Scan option.

Enable to choose all scanning parameters and processing options. The settings you choose in the list box below are used as the starting point for the current scan; however, you will be able to change all options saved in the settings.

Enable to setup a new scanner or new TWAIN compatible driver to work with CorelSCAN. This option performs a compatibility test to determine whether the scanner's TWAIN driver allows CorelSCAN to control the scanning parameters. Whatever the outcome of the test, you will be able to use CorelSCAN's processing options to optimize the resulting scanned image.

Enable to use CorelSCAN to process an image that is already in digital format. CorelSCAN's processing options can be used to correct flaws in the image; change the image dimensions, resolution, and color depth; and more.

Choose the settings you want to use as the starting point for your scan. If you choose the Scan option above, you can enable or disable some of the options saved in the settings. If you choose either of the other two options, you will be able to change all options saved in the settings, including the image correction features' parameters.

Background Removal screen

Enable to make the controls for this image correction feature available.

Enable to make CorelSCAN apply default Background Removal attributes that typically produce good results for the type of image you are working with. The Automatic feature considers the image type you specified earlier, and analyzes each pixel's value to determine what pixels are part of the background.

You can always disable this option and adjust the Background Removal controls manually. You can evaluate the results in the Preview Area.

Adjust the Level slider to a low or high position; a low level does not remove as much background information as a high level.

Enable to make the Background Removal more selective, i.e., make it analyze the pixel value in the image and adapt to changes in the image when removing a background pattern.

Enable to make the Background Removal treat the entire image background the same way. This is faster than the Adaptive method and is most appropriate when working with a document consisting of a background and text.

Image Enhancement screen

IDH_CHK_USE_EFFECT_BCI aliased to IDH_CHK_USE_EFFECT

Enable to make CorelSCAN analyze each pixel in the image and choose the degree to which each type of Image Enhancement correction will be applied. The Image Enhancement feature performs contrast, saturation, sharpness, brightness, and despeckle corrections.

You can always disable this option and choose an Image Enhancement preset. You can evaluate the results in the Preview Area.

Choose an Image Enhancement preset from the list when the Automatic option is disabled. Each preset performs all types of Image Enhancement corrections contrast, saturation, sharpness, brightness, and despeckle but performs them to different degrees.
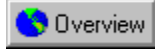
The list of presets varies according to the color depth of the image. For example, if you are working with a black and white photo, the Saturate preset is not available because there are no colors in the image except for levels of gray.

Destination and Color Depth screen

IDH_BMP_DEST_PAGE aliased to the screen overview (it is the static bitmap found in the screen)

Choose the final destination, or purpose, for the image you are scanning and/or processing. The image's destination influences the color depth choices available below.

Click to make the final image a black and white image (1-bit).

Click to make the final image a grayscale image, which can display up to 256 levels of gray (8-bit).

Click to make the final image a paletted image, which can display up to 256 colors and use dithering. Dithering is used to simulate more colors than are available. When you select this option and click the Next button, another dialog box appears so that you can choose the color palette to use to display the colors in the image as well as a preferred dithering process.

Click to make the final image a 24-bit RGB image in which any of over 16 million colors can be reproduced.

Click to make the final image a 24-bit image that uses the Lab color model.

Click to make the final image a 32-bit CMYK image.

Current profile screen (with access to Color Manager)

Device profiles dialog box

This dialog box shows you the device profiles currently being used to make the color reproduction consistent across all of your devices. If you have not calibrated your devices yet, we strongly recommend that you do so before you begin scanning and processing images using CorelSCAN.

The Color Manager button at the bottom of the dialog box is used to launch the Corel Color Manager. Use it to change or create device profiles. Corel Color Manager provides on-screen instructions and a detailed help file to guide you through the process of calibrating your system.

Shows the monitor profile being used to calibrate color reproduction. To change the profile or create one, click the Color Manager button.

Shows the scanner profile being used to calibrate color reproduction. To change the profile or create one, click the Color Manager button.

Shows the composite printer profile being used to calibrate color reproduction. To change the profile or create one, click the Color Manager button.

Shows the separations printer profile being used to calibrate color reproduction. To change the profile or create one, click the Color Manager button.

Click to launch Corel Color Manager, which allows you to change or create profiles for one or all of your devices.

Image Area screen

Preview Area that displays the printed artwork placed on the scanner after you click the Prescan button. It is used to define the Image Area that you want to process. Rulers are displayed to help you set the location and size of the Image Area. The dashed rectangle represents the Image Area and you can drag any handles along its edges to size it; you can also click inside the rectangle and drag it to another location in the preview. This click and drag method is an alternative to using the Top, Left, Width, and Height boxes on the right of the screen.

Type the vertical ruler coordinate where you want the top of the Image Area to be located. The Image Area is the section of the image that you want to scan and process.

Type the horizontal ruler coordinate where you want the left side of the Image Area located. The Image Area is the section of the image that you want to scan and process.

Type the desired width for the Image Area. The Image Area is the section of the image that you want to scan and process. The width you type will begin at the location you selected in the Left box.

Type the desired height for the Image Area. The Image Area is the section of the image that you want to scan and process. The height you type will begin at the location you selected in the Top box.

An alternative to choosing the coordinates and dimensions of the Image Area. Choose a paper size that you want to use for the Image Area. The Image Area is the section of the image that you want to scan and process. The Top, Left, Width, and Height values automatically match the paper size you select. The dashed rectangle that represents the Image Area in the Preview Area is also updated according to the paper size you choose.

Choose the units you want to use for the Image Area's coordinates and dimensions. The current coordinates and dimensions displayed in the Top, Left, Width, and Height boxes are converted to the units you choose.

This option is available when the Deskew tool located below the Angle box is enabled. Use it when the Image Area is not perfectly straight on the scanner's bed. Enabling the Deskew tool displays Deskew Axes in the Preview area. You can manually rotate the axes to define the 90-degree angle to use to straighten the Image Area, or type the angle in this box. The angle is used to rotate the Deskew Axes in a counter-clockwise direction.

This option is available when the Deskew tool located below the Angle box is enabled. Use it when the Image Area that you want to scan and process is not perfectly straight on the scanner's bed. Click to make the Deskew tool detect 90-degree edges in the preview area and place the Deskew Axes along that angle automatically.

From left to right these buttons are the Prescan, Crop, and Deskew tools. They are used as follows:

- **Prescan:** performs a low resolution scan of the image placed on the scanner, and displays it in the Preview Area on the left of the screen. The Preview Area is used to select the section of the image you want to process. The section you choose is called the Image Area and is represented by a dashed rectangle.
- **Crop**: click this tool to resize the Image Area rectangle manually in the Preview Area, or precisely using the Top, Left, Width, and Height boxes.
- **Deskew:** click this tool when the artwork you are scanning is not perfectly straight on the scanner bed, or when it does not have a perfect 90-degree angle. The Deskew button allows you to place Deskew Axes anywhere in the image where you want the 90-degree angle for the Image Area to be placed.

Dust and Scratch screen

IDH_CHK_USE_EFFECT_DUST aliased to IDH_CHK_USE_EFFECT

Enable to make CorelSCAN apply default Dust and Scratch attributes that typically produce good results for the type of image you are working with. The Automatic feature considers the image type you specified earlier, and analyzes each pixel's value to determine what pixels are dust and scratches.

You can always disable this option and adjust the Dust and Scratch controls manually. You can evaluate the results in the Preview Area.

Adjust the slider to set the size of the radius for the sample area to use when using Dust And Scratch correction. The sample area determines how many pixels are analyzed at one time. If the Radius is smaller than some of the scratches in the image, these scratches may not be detected.

Adjust the Level slider to a low or high position; a low level does not blur as many dust and scratch pixels as a high level.

Acquire From File screen

Shows the current folder name. Click the list box to change folders or drives when locating files to be processed using CorelSCAN's features.

Lists the contents of the folder whose name appears in the list box above. If you want to enhance a file listed here using CorelSCAN, click the file's name and click the Add button.

Click to add the file(s) you selected in the list on the left side of the screen to the list of files to process using CorelSCAN.

Click to remove the file selected in the list on the right side of the screen.

When the Preview button is enabled, the file whose name is currently selected in either list in this screen is displayed here.

Enable to see a preview of the file selected in either list in this screen.

Enable to use color calibration when acquiring the image. Color calibration ensures consistent color reproduction between all devices included with your system, such as scanners, monitors, and printers. The calibration process requires that you select or build a profile for each of your devices. This is done using the Corel Color Manager. When you enable this option, and click the Next button, a dialog box appears showing the current device profiles being used; if the profiles are accurate, you can proceed with the scan. If the profiles are incorrect or non-existent, you can launch the Corel Color Manager from this dialog box and calibrate your system using the on-screen instructions.

Lists all the file names of the images you have selected to be processed using CorelSCAN's features.

Original Image Type screen

Lists image types. You must click an item in the list to tell CorelSCAN what kind of image you are scanning and/or processing. If you are not sure what type corresponds to your image, click the types in the list one after the other; an example of the image type appears in the preview area on the right of the screen.

For more information, click the Help button at the bottom of this screen.

IDH_BMP_EFFECT_PAGE aliased to IDH_IMAGE_LIST

Paletted palette and dithering options screen (need overview for this)

Image palette and dithering type

When you choose Paletted as the color depth for your image, you can specify which color palette and dithering type will be used to convert the scanned image to the paletted color depth. The palette an include a maximum of 256 colors.

The palette can be the standard Uniform palette, an Adaptive palette which includes the first 256 colors encountered in the image, or the Optimized palette which is based on the image's spectrum of colors.

Dithering is a process used to simulate more colors than are available. It is often used when working with 256 color images.

Uses the Uniform color palette that provides a complete 256 color spectrum (equal quantities of Red, Green, and Blue) whether they are used by the image or not.

Samples the image and uses the first 256 colors found in it to create a palette.

Uses an Optimized color palette. This is a palette that contains colors centered around the image's spectrum of colors. It samples the image and uses the most commonly used colors to create a palette. While this option produces the best color reproduction in the paletted mode, it is slower than Uniform.

Type the number of colors that you want in the color palette used to display the image. The maximum number is 256. Using a lower number of colors reduces the file size.

Provides no dithering when converting the image to the 256-color Paletted color depth. Dithering is used to simulate more colors than are included in the palette.

Provides the fastest dithering rate possible by approximating colors using fixed dot patterns. Dithering is used to simulate more colors than are included in the palette.

Provides the best dithering results by spreading color approximation over several pixels. Dithering is used to simulate more colors than are included in the palette.

Moire Removal screen

IDH_CHK_USE_EFFECT_MOIRE aliased to IDH_CHK_USE_EFFECT

Enable to make CorelSCAN apply default Moire Removal attributes that typically produce good results for the type of image you are working with. The Automatic feature considers the image type you specified earlier, and analyzes each pixel's value to determine what pixels are part of a moire pattern.

You can always disable this option and adjust the Moire Removal controls manually. You can evaluate the results in the Preview Area.

Adjust the Level slider to a low or high position; a low level does not remove as much as a high level.

Noise Removal screen

IDH_CHK_USE_EFFECT_NOISE aliased to IDH_CHK_USE_EFFECT

Enable to make CorelSCAN apply default Noise Removal attributes that typically produce good results for the type of image you are working with. The Automatic feature considers the image type you specified earlier, and analyzes each pixel's value to determine what pixels are part of a noise pattern.

You can always disable this option and adjust the Noise Removal controls manually. You can evaluate the results in the Preview Area.

Adjust the slider. A low setting removes only dark noise pixels whereas a high setting removes lighter colored noise pixels.

Adjust the slider. A level set to zero does not remove any noise in the image; a level of 100 removes the maximum amount of noise pixel as possible.

Print page???

Print Image dialog box

This dialog box appears when you are using CorelSCAN as a standalone application and when you have chosen Direct To Color Printer or Direct To Printer as the final destination, or purpose, of the image. Use the dialog box to choose a printer, change the printer properties, and choose the number of copies of the image or document that you want printed.

When you launch CorelSCAN from within another Corel application, the image or document you are scanning is acquired and displayed in the other Corel application. Use the application's Print command in the File menu to print the image.

IDH_BMP_PRINT_PAGE aliased to above overview

Choose the printer you want to use from the list of available printers.

Displays the current status of the printer, i.e., whether it is ready to print or not.

Displays a description of the printer you selected in the list above, i.e., the brand and model name, the name of the driver, and so on.

Shows the port used to send information to the selected printer.

Shows any comments associated with the selected printer.

Type the number of copies of the image that you want to print.

Click to change the properties of the selected printer. Properties vary with each printer but typically include: paper size, paper source, printing resolution, the location and type of fonts to use, PostScript settings, and more.

Process screen (summary of options plus Save Settings button)

IDH_BMP_PROCESS_PAGE aliases to IDH_SUMMARY_HELPER (two topics down)

Click to save the options listed below as settings you can reuse any time in the future. The saved settings are listed in CorelSCAN's introductory screen and can be used as the starting point for any scan or image processing operation.

Displays a list of all options you selected in CorelSCAN's various screens. Verify that the information is correct. If you wish to change some of the options, click the Back button until you reach the screen where the options were selected.

You can also save the options listed as settings that you can use any time in the future when you scan other images.

Continue dialog box

Continue dialog box

CorelSCAN has finished scanning and enhancing the image. Choose an option in this dialog box to continue using CorelSCAN, or to exit.

Enable to continue scanning and processing images using the options you have just used.

Enable to continue scanning and processing images and be able to change any of the options selected. Choosing this option allows you to change the original image's type, destination, color depth, and final resolution, as well as the image correction features you want to apply to the image.

Enable to restart CorelSCAN to continue scanning and processing files. Restarting CorelSCAN allows you to change the TWAIN driver you are using, choose a different start-up option, and choose different settings to use as the starting point.

Enable to exit and close CorelSCAN.

Click to activate the option selected in this dialog box.

Continue dialog box when initial SCAN option is used

IDH_QUESTION_CONTINUE_QUICK aliased to IDH_QUESTION_CONTINUE_DLG

IDH_RAD_CONTINUE aliased to IDH_RAD_CONTINUE_SAME

IDH_RAD_CONTINUE_QUICK aliased to IDH_RAD_CONTINUE_CORELSCAN

IDH_RAD_EXIT_QUICK aliased to IDH_RAD_EXIT

IDH_OK_QUICK aliased to IDH_OK

Settings listed when choosing the SCAN option in Welcome screen

Preview Area used to display a low resolution scan of the artwork placed on the scanner, and to crop and straighten it. These tasks are performed using the Prescan, Crop, and Deskew tools found on the right of this screen.

Displays a preview of the image you are about to scan and/or process using CorelSCAN. Click to zoom into the image; right-click to zoom out.

Choose previously saved settings to apply to the image. The details for the selected settings appear in the list below.

Lists the options included in the settings selected in the list box above. The option values written in black can be changed in either of two ways:

- right-click a value to choose a different one from a menu
- in the case of numerical values such as image resolution, click the value displayed until it becomes highlighted and the blinking cursor appears at the end of the value, then change the value.

Note

- If the Image Destination is something other than Direct To Printer or Direct To Color Printer, click Destination and the Rename command that appears to change the image's file name, type, and/or location.

Three buttons appear in this section of the screen when you have decided to use CorelSCAN's interface to control the scanning parameters and when you are acquiring an image from a scanner. From left to right they are the Prescan, Crop, and Deskew tools. They are used as follows:

- **Prescan**: performs a low resolution of the image placed on the scanner and displays it in the Preview Area on the left of the screen. The Preview Area is used to select the section of the image that you want to process. The section you choose is called the Image Area, and is represented in the Preview Area by a dashed rectangle.

- **Crop**: click this tool to resize the Image Area rectangle in the Preview Area.

- **Deskew**: click this tool when the artwork you are scanning is not perfectly straight on the scanner bed, or when it does not have a perfect 90-degree angle. The Deskew button allows you to place Deskew Axes anywhere in the image where you want the 90-degree angle for the Image Area to be placed.

Rename dlg

Displays the current folder. Click the arrow button pointing down on the right of the list box to choose another folder.

Click repeatedly to move up one level from the current folder with every click.

Displays the content of the current folder.

Type a filename for the image.

Choose a file type for the image. Some file types provide compression options in the list box below.

Displays the compression options for the file type selected in the list box above this one. Click to choose the compression option from the list.

Red-eye Removal screen

IDH_CHK_USE_EFFECT_EYE aliased to IDH_CHK_USE_EFFECT

Click to choose the color to use to replace red eye in a photograph. Click the Others button to see more colors or to create your own.

Resolution and dimensions screen (Resample_

Enable to use the image resolution recommended by CorelSCAN. This recommendation is based on the original image type, final destination, and color depth options that you selected in previous screens.

Enable to choose a custom resolution, different from CorelSCAN's recommended resolution, for the final image.

When you have enabled the Use Custom Resolution button, type the resolution that you want for the final image. The resolution is expressed in dots per inch (DPI).

This option's name changes; it can be Use Scanner's Optical Resolution Of or Use File's Resolution Of. The first name appears when you are scanning an image; the second, when you are acquiring an image from an existing digital file.

Enable the option to make the final image's resolution the same as either your scanner's optical resolution when you are scanning the image (also called true resolution), or the original file's resolution when you are acquiring the image from a file.

Shows the image's width using the units of measurement displayed in the list box on the right. The image's width is the same as the width of the saved image when you are acquiring it from a file, and the width you set for the Image Area in an earlier screen when you are scanning a printed image. If you change the units used, the dimensions are updated.

Shows the image's height using the units of measurement displayed in the list box on the right. The image's height is the same as the height of the saved image when you are acquiring it from a file, and the height you set for the Image Area in an earlier screen when you are scanning a printed image. If you change the units used, the dimensions are updated.

Choose measurement units from the list box. These units are used to show you the image's height and width. Both dimensions are converted automatically to the units you choose.

Displays the image's file size in Kilobytes. The file size is influenced by the dimensions of the image, its resolution, and its color depth.

Shows the image's dimensions in pixels. If you are acquiring an image from a file, the dimensions are those of the saved image. If you are scanning a printed page, the dimensions are the ones you selected in an earlier CorelSCAN screen. CorelSCAN provides you with anther opportunity to crop the processed image before the end of the process.

Save RAW and processed image screen

Type the filename to use when saving the processed image.

Choose the type of file to use when saving the image. The file type you choose depends on how you intend to use the file.

Enable when processing several images or files using CorelSCAN. This option automatically numbers each saved image or file sequentially, and uses the filename you type in the File Name box for each one, e.g., MAGAZINE1.CPT, MAGAZINE2.CPT, MAGAZINE3.CPT.

Displays the file compression option available for the file type you select. If the list box is gray, only the compression option shown is available. If the list box is white, more than one compression option is available, and you must click the arrow on the right of the list box to choose one.

Displays the current folder. To save to a different drive or folder, click the Up arrow button on the right of this list box, or scroll through the list box to find the drive and/or folder that you want to use.

Shows you the content of the folder listed above.

Enable to save both the original, unprocessed scanned image and the processed image The original image is the one to which no CorelSCAN processing options have been applied. It has the name you type in the File Name box above, with the word "RAW" appended to it.

Save Settings dialog box (does this have a Help button??)

Save Settings dialog box

Use this dialog box to save the options you chose and that were listed in the previous CorelSCAN screen as settings. Once they are saved, you can reuse the options at any time by choosing the settings file in the list box in the CorelSCAN introductory screen.

Type a name for the settings you are saving. When saved, the new settings will be listed in the Settings list in CorelSCAN's introductory screen.

Setting Up a scanner screen (with Force compatibility option)

Select the TWAIN compatible scanner driver you are using with your scanner.

Enable to use the TWAIN driver's built-in software interface to choose the scanning parameters and scan the image. When enabled, CorelSCAN remains idle in the background as you are choosing the options and performing the scan. When this is complete, CorelSCAN becomes active again so that you can use its processing options to optimize the quality of the scanned image.

Enable to use CorelSCAN's interface to choose the scanning parameters and perform the scan. In order for CorelSCAN to be used, a compatibility test must have been performed at least once to determine whether the TWAIN driver you are using allows CorelSCAN to control the scanning parameters. If such a test has never been performed on the TWAIN driver, one will begin automatically; if a test was already performed, CorelSCAN's interface for choosing the scanning parameters will appear automatically when you click the Next button.

Enable to make a compatibility test begin for the TWAIN driver you selected above. This test determines if the TWAIN driver allows CorelSCAN to control the scanning parameters and the scanning operation. The test is performed automatically every time you use a new TWAIN driver. If you've added new hardware features to a scanner, such as an Automatic Document Feeder, or if problems occurred during the firs test of the scanner, then you might want to force another test on the already-tested scanner.

IDH_CHK_USE_CALIB_SCAN aliased to IDH_CHK_USE_CALIBRATION

Scanner type dialog box??

Scanner Type dialog box

You must identify the type of scanner you want to use with CorelSCAN before the compatibility test can begin. The most common types of scanners are listed in this dialog box. Click the button associated with the scanner type that best describes your scanner.

Enable if you are using a standard Flatbed scanner or a scanner with an Automatic Document Feeder which is used to scan multi-page documents.

Enable if the scanner you are using is a digital camera.

Enable if you are using a scanner designed to scan 35 mm slides or negatives.

Enable if you are using a hand-held scanner that you drag manually over the image to scan.

Unidentified dialog box

IDH_SETTING_PROPERTIES   37150

IDH_SETTING   IDH_SETTING_PROPERTIES   +   1

Status dialog (Does this have a help button??)

IDH_STATUS_DIALOG   37200

The animated icons are displayed when CorelSCAN is busy scanning or processing an image.

Tells you how much of the task has been completed.

IDH_STATUS_REPORT

Click to cancel the task being performed.

Compatibility Test result dialog box

Compatibility test summary

This dialog box appears when the compatibility test has been performed on the TWAIN driver you selected. It lists the attributes that the test has detected for your scanner. You can change the attributes shown in black. To change an attribute, right-click it and choose a different value from the menu displayed. Or, to change attributes such as dimensions, resolution, and other numeric values, you must click the listed value until it becomes highlighted and has a blinking cursor at the end of it, then type the correct value.

Lists the attributes that the test has detected for your scanner. You can change the attributes shown in black. To change an attribute, right-click it and choose a different value from the menu displayed. Or, to change attributes such as dimensions, resolution, and other numeric values, you must click the listed value until it becomes highlighted and has a blinking cursor at the end of it, then type the correct value.

Crop the final image page (last)

Type the vertical ruler coordinate where you want the top of the cropped image located. Only the cropped section of the image will be saved or displayed in the application from which you launched CorelSCAN; the sections of the image that fall outside the crop area you define here are not saved or displayed.

Type the horizontal ruler coordinate where you want the left side of the cropped image located. Only the cropped section of the image will be saved or displayed in the application from which you launched CorelSCAN; the sections of the image that fall outside the crop area you define here are not saved or displayed.

Type the width you want for the cropped image. The width you type will begin at the location you selected in the Left box.

Type the height you want for the cropped image. The height you type will begin at the location you selected in the Top box.

Choose the units you want used to crop the processed image. The current coordinates and dimensions, displayed in the Top, Left, Width ,and Height boxes, are converted to the units you choose.

When scanning or acquiring several files, enable this option to have the same crop area applied to all images.

Displays the Image Area so that you can crop it manually by dragging the handles found along the dashed rectangle used to represent the crop area. The crop rectangle initially encloses the entire Image Area; if you cannot see it because of the current magnification level, right-click in the preview to zoom out.