Welcome to CorelSCAN

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CorelSCAN 8 guides you through the process of creating quality scanned images. From scanning the initial image to viewing the final output, CorelSCAN 8 is a step by step guide that takes you through the entire process.

CorelSCAN allows you to complete the tasks required to produce a high-quality image. Using CorelSCAN you can

- ensure reliable and consistent color reproduction by selecting the appropriate color profile in configuration settings
- choose an output option for the scanned image, a resolution, and a color depth
- correct your image by removing dust and scratches, red-eye, and Moire patterns
- save both the original unprocessed scanned image and the processed final image, that has been improved using CorelSCAN's effects options

By using CorelSCAN you can customize the scanning options and image effects yourself. CorelSCAN prompts you to make changes along the way by asking questions about the scanning process. For example, once you have configured your scanner for use with CorelSCAN and chosen a scanning preset to use, you will be asked what type of image you are scanning and what type of output you want. CorelSCAN will choose settings based on the options you select and continue with the scan. You can change any of the default values along the way to suit your purposes.

CorelSCAN also offers you the option to use either the scanner driver's user interface or the CorelSCAN basic interface (flatbed scanners only). The standard user interface varies depending on the make and model of your scanner. It will usually contain a preview window and various customizable scan settings such as image type, path and scan area. The CorelSCAN user interface automatically scans and previews the image allowing you to adjust the image area and to set the paper size and unit of measurement.

For users who are already familiar with CorelSCAN 8, the Advanced Interface is a quick way to customize the scanning settings. By using the Advanced Interface you can view and edit all image effects found on the same page in the regular interface. Once you have customized the effects, simply click the Scan button and the image will be saved with the filename that you specify.

CorelSCAN can be launched as a standalone application or from other Corel applications, including CorelDRAW, Corel PHOTO-PAINT, and Corel OCR-TRACE. When you use CorelSCAN as a standalone application, you can choose to output the scanned image to a printer or to 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.

Before you begin

For best results, make sure you are using the latest Windows 95 or Win NT 4.0 compliant driver for your SCSI adapter card.

Getting started

When you first launch CorelScan, select and configure your scanner so that CorelScan can identify which features your scanner can support. CorelSCAN will automatically identify your scanner driver and display the default settings.

For more information about configuring a scanner, see "Configuring a Scanner"

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

Introduction to scanning concepts (page 1 of 2)

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 to 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 scanning process is the other component; it enables you to obtain the best scan possible for the task you want to perform.

Some scanners and scanning software applications artificially increase the maximum possible resolution of a scanner by a process called interpolation. This process relies on approximations. The quality produced by interpolation is not as good as the quality produced by another scanner that 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.

 Click here to see the next page.

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

Introduction to scanning concepts (page 2 of 2)

Types of scanners

There are several types of scanners available on the market. Each offers 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 irregularly shaped or sized originals. A sheet feeder scanner includes a document feeder to scan several separate images in one operation.

- **Digital cameras:** these look and work very much like a regular camera, however, they include a CCD device. To scan, you take a picture of the item you want represented digitally, whether Its three-dimensional objects or an image on paper. The resolution of digital cameras is expressed in the total amount of horizontal and vertical pixels, for example, 680 by 480.

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

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{button ,AL(`OVR Welcome to CorelSCAN;',0,"Defaultoverview",)} **More Detailed Information**
{button ,AL(`OVR1 Welcome to CorelSCAN;',0,"Defaultoverview",)} **Related Topics**

Configuring a Scanner

Configuring a scanner

To set up a scanner in CorelSCAN, you must choose a scanner driver. The driver name usually includes the manufacturer's name and the version number of the driver.

CorelSCAN automatically detects all installed scanner drivers and displays the default settings in the Driver Information list boxes. The options offered by the driver interface 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.

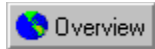### Selecting the CorelSCAN user interface.

CorelSCAN allows you to further customize the scanner settings and configuration. From the Scanner Configuration page you can edit scanner settings such as bed height, bed width, optical resolution, and cover color. The CorelSCAN user interface also automatically scans and previews your image before any image effects are applied.

From the Scanner Configuration page, you can test the scanner to determine its capabilities, including whether you need to use the driver's user interface. If you do not need to use the driver's user interface, you may choose to use the CorelSCAN basic interface. To do this, disable the Use Driver's UI checkbox.

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

Testing your scanner's compatibility with CorelSCAN

Before you can begin scanning using the CorelSCAN user interface, you must test to make sure that your scanner is compatible with CorelSCAN. Make sure you save all work before you test your scanner.

To test your scanner

1. Save all work before performing the compatibility test on your scanner.

2. In the Configure Scanner dialog box, click the Test Scanner Driver button.

3. Do one of the following:
   - Choose a configuration from the Configuration Name window, change any configuration settings if the test passes and click Finish.
   - Change any configuration settings if the test fails and click Finish.

 Note

- With some drivers, exact values for optical resolution, width, height, and cover data may not be obtainable. If they are incorrect, you may correct them in the Configure Scanner dialog box.

Scanning using a preset scanning profile
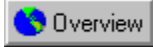
Scanning using a preset scanning profile

The scanning options and image effects you select using CorelSCAN can be saved as a preset that you can use again when scanning other images. The presets are especially useful when scanning similar images with similar outputs.

Presets appear in the Preset listbox in the Welcome screen.

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

Using a preset scanning profile

Once a scanner has been selected and configured a preset scanning profile can be selected from the introductory window. A preset is a template that sets image values such as resolution, color depth, destination, effects and output file format. Although you choose a preset, you have the option of changing several settings including the input resolution after the preview scan is complete.
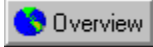
To select a preset scanning profile

1. Choose a preset from the Preset list box.
2. Click Next to begin scanning.

{button ,AL(`PRC Scanning using a preset scanning profile;',0,"Defaultoverview",)} <u>Related Topics</u>

Saving a preset

You can save a preset scanning profile for use at a later date. This is effective if you are scanning multiple images of the same format. Simply select the preset to the next time you scan an image.

To save a preset

1. Click the Save Settings button, on the final page of CorelSCAN.
2. Type a name for the new preset and click OK.

   The preset name will now appear in the list of presets in the introductory window.

{button ,AL(`PRC Scanning using a preset scanning profile;',0,"Defaultoverview",)} <u>Related Topics</u>

Using CorelSCAN

Using CorelSCAN

The CorelSCAN welcome screen gives you the option to configure a scanner, to choose a preset scanning profile and to use the Advanced User Interface.

Tip

- If you've used the CorelSCAN wizard or are familiar with scanning techniques, enable the Advanced User Interface checkbox to view all effects, except Red-Eye Removal, and options in one dialog box.

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

Defining the image area to scan for a Flatbed scanner

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 covers part of the scan area. Horizontal and vertical rulers are displayed around the preview area. You can adjust the size manually in the preview area or you can modify the settings, using the Image Area dialogue box. The Image Area dialog box allows you to size the image area using precise values.

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

![] **Tip**

- You can click the Prescan button to preview the image or to rescan the image and view any modifications that have been made to the image area.

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

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－a newspaper, a magazine, a color photograph, etc.

With the image type specified CorelSCAN can determine which image correction features are required, i.e., which effects you will see in subsequent screens. The image type is also used by CorelSCAN to suggest a resolution as well as a list of color-depth options for the processed image.

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

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.

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 the current printer's line screen frequency.

Some image destinations are not available when you use CorelSCAN from 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.

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, LAB, Paletted (8-bit), Grayscale, and Black-and-White. Color depths displayed in gray are not available. The available choices depend on the original image type you specify earlier in the process and the image destination you choose. For example, if you identify the original artwork as color line art and specify its destination as a monitor, the Black-and-White and CMYK options are not available. If you identify the image as color line art and specify its destination as a black-and-white printer, only the Grayscale option is available.

Choosing a color depth

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

- Enable the button associated with the color depth that you want for your final 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 the image 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
Graphics for the World Wide Web	Paletted (8-bit)

🦖 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.
- 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.

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

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 provide to estimate 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.

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

Correcting flaws in the image

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

The CorelSCAN image correction features include

- applying Image Enhancement effects that adjust brightness, contrast, intensity, sharpness
- removing Moiré patterns usually found in magazine images
- correcting red-eye
- removing the background pattern
- blurring dust and scratches

Selecting correction features

CorelSCAN chooses the specific correction features that are needed for the image based on the final color depth you select for your image. The color depth choices available to you are based on the type of image you are scanning and the final destination of the image.

If the effects offered are not the ones you want to use, you can change the variables that affect the final color depth.

Viewing the Image

You can view both the before and after preview of the image simultaneously as you enhance and modify the image properties. The original image is displayed, while the processed image is displayed on the right.

Click the Navigator button to view a small version of the entire image. Position the image area box on the image to preview an area.

Click the Preview button to view the image after the modifications have been completed.

Click the Reset button to restore the image to its original format. You can also restore the image to its original format by clicking Back.

Click the preview image to zoom in, or right-click to zoom out.

Note

- The Navigator button will appear pressed if all of your image can be viewed in the preview window.

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

Removing a moiré pattern

Moire patterns are undesirable wave patterns in an image, created by conflicting dot patterns. They 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 moiré 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 moiré patterns from your scanned image, or you can set the removal level yourself.

Tip

- For best results when removing moiré patterns, don't use the driver's user 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(`OVR Welcome to CorelSCAN;',0,"Defaultoverview",)} **Related Topics**

Removing red eyes 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.

Click the Select <u>Red Eye</u> button, and position the cursor on the "red-eye" that you want to modify. CorelSCAN will automatically select the entire eye.

Click the <u>Add to Red-Eye Area</u> button, and position the cursor on the selected eye to increase the area to be adjusted.

Click the <u>Subtract from Red-Eye area</u> button, and position the cursor on the selected eye to decrease the area to be adjusted.

Note

- Because of the manual nature of the "red-eye" removal process, it is not available in the Advanced User Interface.

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

Removing background patterns

Background removal is only available when you choose one of the following image types: 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.

Removing dust and scratches

The Dust And Scratch effect reduces image noise in photographs by blurring the pixels and then sharpening 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 image area.

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

Applying image enhancement

Image Enhancement is an image correction feature that analyzes the image and applies several corrections to it automatically or according to your specifications. You can use automatic image enhancement or customize the values in any or all of the settings.

Automatic enhancement performs corrections to the brightness, contrast, intensity, and sharpness at specific levels to optimize the quality of the processed image.

For more control over individual settings, disable the automatic check box and vary the image enhancement values individually.

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

Printing the image

The printing option in CorelSCAN is only available when you choose the direct to color or direct to grayscale printer options on the image destination page. Instead of saving the file in electronic format and viewing it on screen, CorelSCAN sends the scanned image to a printer where it is printed using the settings you specified.

Choose the printer you want to use from the Printer Name list box. Core SCAN automatically chooses the windows default printer.

Type in the number of copies you want to make in the number of copies box. To edit the printer settings, click the properties button to display the printer properties dialog box. .

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

Saving the scanned and processed images

You can save files in CorelSCAN only when you use CorelSCAN as a standalone application. If you launch CorelSCAN from another Corel application, use that application's Save or Save As command to save the digitized image to disk.

When you have applied all effects, you can save the digital image file as a bitmap. Many bitmap file formats can be used to save the image. You can save both the processed file and the original file.

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 effects to a RAW image file by choosing the Acquire Image From File command in Corel PHOTO-PAINT.

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

Applying effects

The Effects screen lists all the settings you specified such as the image type, final destination of the image, destination, the color depth, final resolution, color calibration, and processing options. Verify that the correct settings are in use 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 scan and bring the image to its destination.

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.

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

The Advanced Interface

Creating images using Quick Scan

Using the Advanced User Interface allows you to quicken the scanning process by viewing all image modification options on a single page. You can select and edit each option, including effects, path and colour depth, by choosing the option and modifying it.

Click the Prescan button to quickly scan the image and view it in the Preview window. Select any modifications that you want to make to the image and edit their settings in the Property. The options that are available depend on the type of image that you are scanning and the type of image that you are creating.

Saving the Preset

After you enhance the image, you can save the settings and create a preset. Click the Save Settings button and type a filename to save the preset.

After you complete any modifications to the image, click the Scan button to scan the image.

Note

- Because of the manual nature of the "red-eye" removal process, it is not available in the ADvanced User Interface.
- The Deskew tool and the Auto Deskew tool are also not available in the Advanced User Interface.

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

Config Screen

Before you can begin scanning your image, you must first set up your scanner. This page allows you to edit various details of your scanner's configuration.

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. 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.

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

Select the protocol type you wish to use.

Select the name of the scanner driver you want to use from the list box. If your scanner driver is compatible with CorelSCAN (Flat Bed) you can choose to use this driver instead of the Manufacturers driver.

Select the type of scanner you are using. The scanner type can be a flat bed, a hand scanner, a slide and negative scanner or a digital camera.

Select the Configuration attributes for the scanner.

Enable to use the Driver's user interface.

Enable to use the scanner's automatic document feeder

Edit the optical resolution of your scanner. The resolution is measured in dots per inch (dpi).

Edit the Bed height of your flat bed scanner. The height of the bed is measured in inches.

Edit the Bed width of your flat bed scanner. The width of the bed is measured in inches.

Edit the cover color of the scanner. The cover color is the color of the underside of the scanner's cover. The cover provides a background for the scanner.

Choose the color profile of your scanner from the Device Color Profile list box.

Save the configuration settings.

Save all the configuration settings.

Copy the configuration settings from one scanner driver to another.

Rename the scanner driver.

Remove a scanner driver from the list.

Reset a scanner driver's configuration settings.

Finish configuring a scanner driver and scan an image.

Cancel the settings and return to CorelSCAN.

Current profile screen (with access to Color Manager)

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.

Rename dlg

Type a name for the new driver.

Displays the name of the original driver, from where the settings are being renamed.

Copy

Type a name for the new driver to be copied to.

Displays the name of the original driver, from where the settings are being copied.

Lets you choose red-eye area that you want to correct.

Lets you add to the red-eye area that you want to correct.

Lets you subtract from the red-eye area that you want to correct.