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Corel CAPTURETM

orel CAPTURE™ lets you capture images of your computer screen or record your on-screen actions as animation files. You can capture images of the entire screen, individual windows, toolbars, flyouts, menu lists, or any rectangular, elliptical or freehand area you define. These images can be used in technical documentation, course materials, presentations, or wherever you require a "snapshot" of your screen.

The application is a standalone toolbar and lets you view your screen without obstruction. You can move the Corel CAPTURE toolbar to any side of the Application Window.

Capturing an image to a destination

You can send your captured image to the Clipboard, a file, and a printer. The captured image can also be opened in an application, such as Corel DRAW or Corel PHOTO-PAINT, through an Object Linking and Embedding (OLE) process.

Capturing images in succession

You can capture a series of images in a successive process to a file through an auto-naming and auto-numbering process. For example, if you assign the filename "arrow" to the entire series and set an initial value as one, your first capture is saved as "arrow1," your second capture is saved as "arrow2," and so on.

Color Depth

Color depth determines the range and tone of color in your image. The choice of color depths for your output image ranges from black-and-white to 16.7 million colors (24-bit color). However, keep in mind that not all color depths are supported by every file format.

Sizing your image

You can choose specific dimensions for the size and scale of your image. Your choice of a high or low resolution depends on where you want to use your captured image. For example, if you are going to display your captured image on the World Wide Web, you don't need a high resolution. In this case, you can choose a monitor resolution of 96 dots per inch (dpi).



The definition of "window" depends on the application you are running. In some cases, only the Application Window itself is considered a window. However, in other applications, flyouts, rulers, toolbars, and other screen elements may be considered windows. In those instances, to capture the application's parent window, enable the Current Object or Object With Border and place your cursor on an area specific to the parent window, such as the Title Bar.

Capturing an image

When capturing an image, you need to press a key or a combination of keys to initiate the capture process. These keys are called Hotkeys. You can choose a preset Hotkey, or you can choose one from the user defined set. Elements such as menu lists and flyouts disappear when you press the Hotkey. Therefore, to capture these elements, you can set a delay period between the time you click the Hotkey and the time the capture is completed. The delay period gives you the time to set up any elements that have disappeared from your screen. If you want to include your cursor in your capture, choose your current cursor or one from a predefined set.

To capture an image

- 1. Choose a source type (other than Animation Window) from the Source list box.
- 2. Choose a Hotkey from the Hotkey list box.
 - If you choose User Defined, a dialog box opens from which you can define your own Hotkey.
- 3. Click the Capture button.
- 4. Set up the image, and click the Hotkey button.
- Right-click the green capture icon on the Windows taskbar, and click Restore to reopen the application.

This capture icon is red during the capture process.

To set a delay period



- 1. Click the Options button.
- 2. Enable the Initial Delay Before First Capture check box.
- 3. Type a value in the Initial Delay Before First Capture box.

To capture the current cursor

- 1. Click the Options button.
- 2. Enable the Capture Cursor check box.
- 3. Enable the Current Cursor button.

To capture a predefined cursor

- 1. Follow steps 1 and 2 from the previous procedure.
- 2. Enable the Use Custom Cursor button.
- 3. Choose a cursor from the Cursor Style list.



Hiding the capture icon is useful if you are capturing the entire screen but
don't want to capture the icon. If you enable this option, the icon disappears
briefly during capture and returns when the capture is complete.

Capturing a series of images

If you need to capture a series of images in succession, you can use the automatic naming and numbering features to speed this process. You can capture a series of images to a file by specifying a filename for the entire series. Set an initial numeric value to launch the automatic numbering system that assigns a value to each captured image. Only the File option can be used for this capture process.

To capture a series of images

- 1. Choose a source type (other than Animation Window) from the Source list box.
- Choose a Hotkey from the Hotkey list box.

If you choose User Defined, a dialog box opens from which you can define your own Hotkey.

3. Choose Options from the File list box.

Choose a folder and a filename to send your captured set to.

4. Enable the Use Automatic Naming check box.

The specified filename applies to all the images in the series.

5. Type a value in the Start Naming At box.

Your first captured image is given the filename you type in the File Name box and the value you type in the Start Naming At box.

- 6. Click the Capture button.
- 7. Set up the image and click a Hotkey button.



 When the capture process is complete, a message notifies you of the end of the capture process. If you don't want this message to appear after every capture, disable the Notify End Of Capture check box.

Specifying the item to capture

Specifying Current Window, Client Window, or Full Screen as the item to capture, enables automatic capture after you press the Hotkey. The Client Window is the same as the Current Window, without the Title Bar, Status Bar or window borders. The Full Screen option captures the entire area of your desktop. Corel CAPTURE lets you capture specific elements, such as Roll-Ups, menu lists, flyouts, etc. using the Current Object option. However, if you want to capture these images with a border around them, choose the Object With Border option.

To specify an item for capture

- Choose one of the following from the Source list box:
 - · Current Window
 - Client Window
 - Full Screen
 - · Current Object
 - Object With Border



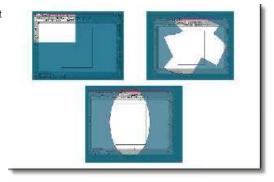
• When capturing a specific element using the Current Object or the Object With Border option, type a value in the Initial Delay Before First Capture box. Highlight or open the menu or control item you want to capture during this delay period.

Specifying a user-defined capture area

To specify the shape of the image you want to capture, choose one of the Area options. You can create an elliptical or rectangular marquee around your image. If you want to create other shapes or need only specific parts of an image, choose the Freehand Area option. This option lets you use a maximum of 50 corners to define the area you want to capture.

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The image on the left is an elliptical capture area.



To specify a user-defined capture area

- 1. Choose one of the following from the Source list box:
 - Elliptical Area
 - · Rectangular Area
 - · Freehand Area
- 2. Click the Capture button.
- 3. Set up the image, and click a Hotkey button.
- 4. Position the tip of your cursor where you want to anchor the user-defined area.
- Drag to create a marquee around the area you want to capture.The capture is completed as soon as you release the mouse button.



Click Options, and enable the Use Zoom In Tool check box, if you want to see the area of the image you are specifying in detail.

Recording Animations

You can use the Animation Window option to record a sequence of tasks in video form. For example, you can record the process of opening a file. You can choose the duration of the animation file and the number of frames per second. When you record an animation, only the activity in the Client area of the active window will be captured.

❖ To record an animation

- 1. Choose Animation Window from the Source list box.
- 2. Choose a Hotkey from the Hotkey list box.

If you choose User Defined, a dialog box opens from which you can define your own Hotkey.

- 3. Choose Options from the File list box.
- 4. Type a filename in the File Name box.
- 5. Choose a file format from the Save As Type list box.
- 6. Type values in the Duration and Frame Rate boxes.
- 7. Click the Capture button.
- Set up the activity you want to capture, and click a Hotkey button.
 The screen is captured at the interval specified in the Frame Rate box.



- When recording an animation, you cannot send the capture to the Clipboard
 or to a printer, or use Object Linking and Embedding (OLE). This type of
 capture can only be sent to a file.
- If you enable the Notify End Of Capture check box, the message "The Capture Has Been Completed" is displayed after the time specified in the Duration box has elapsed.

Specifying the destination for an image

In Corel CAPTURE, you can send your captured image to the Clipboard, a file, and a printer. The captured images can also be opened in an application, such as Corel DRAW or Corel PHOTO-PAINT, through Object Linking and Embedding (OLE).

You can capture your image to these destinations simultaneously, unless you are capturing an animated process. For more information about capturing an animated process, see "Recording Animations" on page 5.

To capture an image to the Clipboard



• Enable the Clipboard button.

To capture an image to a File

- 1. Choose Options from the File list box.
- 2. Specify a folder and filename.
- 3. Choose a file format from the Save As Type list box.

- To capture an image to an application through OLE automation
 - 1. Enable the OLE button.
 - Choose an application from the OLE list box.The captured image is sent to the OLE application selected.

To capture an image to a Printer



- 1. Enable the *Print button*.
- 2. Do one of the following:
 - Choose a Printer type from the Printer list box.
 - Choose Options from the Printer list box.



- If you don't specify a destination, you send the captured image to the file path specified in a previous capture.
- To save your image in compressed form, choose a file format from the Compression Type list box.

Choosing a color depth for your image

You can choose a color depth to determine the range and tone of color in your image. Whatever file format you choose depends on the choice of color depth. If a file format can't support a particular color depth, the file automatically takes on a format that does. Click on any color depth and view the File window to see this effect. Therefore, to retain the file format you want choose a color depth that supports it.

To choose a color depth for your image



• Click the *Color Depth button* and choose a color depth.



If choosing a color depth is more important than choosing a file format, choose your color depth first and click the File list box to preview the file formats available for that color depth.

Specifying an image's size, scale, and resolution

Corel CAPTURE lets you specify the size, scale, and resolution of the image you want to capture.

❖ To speafy an image size



- 1. Click the Resample button.
- 2. Click the Specific Size button.
- 3. Type dimension values in the Width and Height boxes.
- 4. Choose a measurement type from the list box.

❖ To scale the image

- 1. Click the Resample button.
- 2. Click the Scale button.
- 3. Type a percentage value in the Width and Height boxes.

To specify an image resolution

- 1. Click the Resample button.
- 2. Type a value in the Resolution box.



- Enable the Maintain Aspect Ratio check box to maintain the height-to-width ratio of the image as it appears on the screen. When resizing the image, the width is the governing dimension. The height is calculated at the time of the capture.
- The Scale option scales the image relative to the original screen item's dimensions and expresses the values as a percentage.
- Resolution is expressed in terms of dots per inch (dpi). A high resolution increases the file size.



CorelSCANTM

orelSCANTM 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. 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(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" on page 11

Introduction to scanning concepts

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.

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.

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.

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.



 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

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.

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 seled a preset scanning profile

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

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.

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.



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.

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.



• 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.

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.

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.

Ifscanning	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)



- 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.

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.

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

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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.



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

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.



• 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.

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

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

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



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

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.

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.

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.

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.

The Advanced Interface

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.



- 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.



Corel Barcode Wizard

Bar coding is an automatic identification technology that allows data to be collected rapidly and with extreme accuracy. The Barcode Wizard steps you through the process of creating your own bar codes for a wide range of industry standard formats.

The Barcode Wizard supports 18 industry standard formats or symbologies:

CodaBar

CodaBar is commonly used in libraries, blood banks, and the air parcel business. It is a variable length format that allows encoding of the following 20 characters: 0123456789-\$:/.+ABCD. The first and last digits of a CodaBar message must be A B C or D and the body of the message should not contain these characters.

Code 25

Code 25, also know as Code 2 of 5, is a discrete, variable length code format. It refers to the fact that there are two thick bars in a total of five bars for each encoded character. It is used primarily for inventory handling, identification of photo-finishing envelopes, airline ticketing, and bagage and cargo handling.

Code 39

Code 39 is the most popular format used in the non-retail world. It is used extensively in manufacturing, military, and health applications. This variable length format will accept the following 44 characters:

0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ-.*\$/+%. The Asterisk is used as the start/stop character and may not be used in the body of the message.

A check digit may also be added to provide an extra measure of security. Code 39 supports Modulo 43 and xxx-nnnnnn-c check digit formats.

Code 128

Code 128 is a varialbe length, high density, alphanumeric format. It has 106 different bar and space patterns and each pattern can have one of three different meanings, depending on which of the three different character sets is employed. One character set encodes all upper case and ASCII control characters, another encodes all upper and lower case characters and the third set encodes numeric

digit pairs 00 through 99. The character set that is employed is determined by the start character.

Code 128 also allows encoding of four function codes: FNC1, FNC2, FNC3 and FNC4. FNC1 is reserved for use in European Article Numbering (EAN). FNC2 is used to instruct a bar code reader to concatenate the message in a bar code symbol with the message in the text symbol. FNC3 is used to instruct a bar code reader to perform a reset. FNC4 is used in closed system applications.

A variation of Code 128 format is EAN 128. EAN 128 uses the same code set as Code 128 except that it does not allow function codes FNC2 - FNC4 to be used in a symbol and FNC1 is used as part of the start code in the symbol. An advanced option of Code 128 in the Bar Code Wizard, permits you to enable or disable EAN 128 format.

EAN-8

The European Article Numbering (EAN) system is a European version of the Universal Product Code (UPC).

EAN 8 encodes eight numeric digits consisting of two country code digits, five data digits and one check digit. In the Bar Code Wizard you must enter no less and no more than seven digits, the eighth digit or the check digit will be automatically generated.

A supplemental two or five code digit number may be appended to the main bar code symbol. This is designed for use on publications and periodicals. These digits will appear as an additional bar code on the right side of the main bar code.

EAN-13

EAN-13 is the European version of UPC-A. The difference between EAN-13 and UPC-A is that EAN-13 encodes a 13th digit into the parity pattern of the left six digits of a UPC-A symbol. This 13th digit, combined with the 12th digit usually represent a country code.

A supplemental two or five code digit number may be appended to the main bar code symbol. This is designed for use on publications and periodicals. These digits will appear as an additional bar code on the right side of the main bar code.

FIM

Facing Identification Mark (FIM) patterns are another type of postal bar code used in automated mail processing by the U.S. Postal Service. FIM patterns are used for automatic facing and canceling of mail that does not contain a stamp or meter imprint such as business reply mail, penalty mail, etc.

There are four FIM patterns currently in use. FIM A is used on courtesy reply mail that has been preprinted with Postnet bar codes. FIM-B is used on business reply, penalty and franked (government) mail that is not preprinted with Postnet

bar codes. FIM-C is used on business reply, penalty and franked mail that has been preprinted with Postnet bar codes. FIM-D indicates that postage is required. FIM patterns are placed in the upper right corner along the top edge and two inches in from the right edge of letters and cards.

ISBN

ISBN numbers are unique numbers that are printed on books. It is not a separate bar code type. ISBN numbers have a specific structure and are encoded using EAN-13 bar codes. The message if formed by a fixed three digit country code of 978, followed by the 10 digit ISBN number. The tenth digit or the check digit is dicarded.

ISSN

ISSN numbers are unique numbers that are printed on magazines and newspapers. It is not a separate bar code type. ISSN is an EAN-13 with a 977 country code and a 2-digit supplemental code. The 2-digit supplemental code contains the issue number i.e., January=01, February=02 etc.

ITF

ITF is a high density variable length numeric only format. The bars and spaces are interleaved: the odd position digits are encoded in the bars and the even position digits are encoded in the spaces. ITF is one of the most popular formats used by the shipping and warehouse industries.

The Barcode Wizard allows up to 40 numeric digits to be entered.

ITF 14

ITF-14 is similar to the ITF format with the exception that exactly 13 numeric digits must be entered in the Barcode Wizard. An optional five digits may be entered for the Add On bar code.

JAN-8

JAN-8 is the Japanese equivalent to EAN-8.

JAN-13

JAN-13 is the Japanese equivalent to EAN-13.

MSI Plessey

The MSI Plessey bar code is a variant of the Plessey bar code. It is a pulse-width modulated non-self checking code, and is used primarily in store shelf labeling. It

is a variable length format that allows encoding of the following 10 characters: 0123456789. Each character consists of eight elements, four bars and four spaces.

Pharmacode

The Pharmacode is used for Online Security Control of the pharmaceutical packaging process. Large printing tolerances do not affect the readability of the code.

POSTNET

POSTNET bar codes are the symbols used to encode ZIP codes on US mail. The Postal Service mail handling process is designed to be fully automated and POSTNET bar codes provide the symbols that feed the automated equipment.

POSTNET symbols differ from other formats in that the individual bar height alternates as opposed to the individual bar width. Each number is represented by a pattern of five bars. A single tall bar is used for the start and stop bars. POSTNET can be used for 5-digit, 9-digit and 11-digit Delivery Point Barcode. These codes are often used in conjunction with FIM bars which are found on the upper right corner of a mail piece such as Business Reply Mail.

UPC(A)

Uniform Product Code (UPC) symbols are used in retail applications. UPC(A) is a 12-digit, numeric format. The symbol consists of 11 data digits and one check digit. The first digit is a number system digit that usually represents the type of product being identified. The following five digits are a manufacturers code and the next five digits are used to identify a specific product.

UPC(E)

Like UPC(A), UPC(E) is used in retail applications, however since the bar code is physically smaller, it is more suited to smaller items. UPC(E) is also called "zero-suppressed" because UPC(E) compresses a normal 12-digit UPC(A) code into a six digit code. It suppresses the number system digit, trailing digits in the manufacturers code and leading zeros in the product identification part of the code.

Adjusting industry standard properties

Barcode Wizard uses whole printer pixels as a unit of measure, it will find the closest values to these numbers when computing bar width. Adjusting the pixels may not change the bar width significantly on high resolution printers but it will make a difference on low resolution printers.

For example: A 300 dpi printer cannot print a line 0.013 inches wide. The narrowest line possible on a 300 dpi printer is 0.133333 inches wide. Barcode Wizard allows you to adjust the bar width by reducing the number of pixels.

Guidelines for bar codes are provided by the IBCA (Industry Bar Code Alliance) at http://mgfx.com/organs/ibca/guide.

Setting advanced options

Most of the advanced options in Barcode Wizard involve disabling check digits or enabling them in various formats. A check digit is used to check that the data is read correctly. Different formats apply different formulas to the encoded number to yield a single digit. That check digit is usually added to the end of the already encoded numbers.

The computer checks that the numbers were read correctly by comparing the check digit it calculates against the check digit it read.

Other advanced options dictate the appearance of the symbol i.e., attach a numeric prefix to the bar code, ignore spaces in the symbol, ignore brackets in the symbol, add bearer bars to the symbol and so on.

Adjusting text properties

The number of text properties than can be adjusted for any one bar code is dependent on the format that is chosen, i.e. some options may be greyed-out. Most of the options are self-explanatory, however, some of the terms may require further mention.

A quiet zone is the clear area (free from marks) before and after the bars and spaces. Reading the color and reflectance of the quiet zone establishes how the spaces will read and determines the difference between the spaces and the bars.

The human-readable is the data represented by the bars and spaces printed as text for people to read.

The start code is a unique character indicating the start of the symbol, and the stop code is a unique character which indicates the end of a symbol.

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