



Advanced Options dialog box

Displays the check digit options.

Enable to disable the check digit. The check digit is used to ensure that the data is read correctly.

Lets you choose a start character.

Lets you choose a stop character.

Enable to use this variation of the check digit, which is one of three check digit formats commonly used by libraries.

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Lets you choose a start character. The start character indicates the beginning of the symbol.

Lets you choose a stop character. The stop character indicates the end of the symbol.

Enable to choose the EAN-128 option, which is a powerful variation of Code 128.

Enable to ignore the brackets in the bar code.

Enable to ignore the spaces in the bar code.

Enable to use this format option required by U.S. Customs. XXX is alphanumeric, NNNNNNN is numeric, and C is the check digit.

Enable to use Mod 43 check digits, a format used by U.S. Customs for all Import and Export shipping.



Enable when you do not want to use the 978 or 979 prefix with the bar code.

Enable to add the 978 prefix to the bar code. This generates an EAN-13 code from the ISBN number.

Enable to add the 979 prefix to your bar code. This generates an EAN-13 code from the ISBN number.

Enable when you do not want to use the 977 prefix with the bar code.

Enable to add the 977 prefix to your bar code. This generates an EAN-13 code from the ISSN number.

Enable when you do not want to display the bearer bars in the bar code. The bearer bars are thick lines that surround the bar code.

Enable to display bearer bars on the top and bottom of the bar code. The bearer bars are thick lines that surround the bar code.

Enable to frame the bar code with bearer bars. The bearer bars are thick lines that surround the bar code.



Enable to use this variation of automatically calculating the check digit.

Enable to display an "N" to the left of the bars when the system character "3" is used. The system character "3" is assigned to the NDC (National Drug Code) and HRI (National Health Related Items Code).

[Generate custom bar codes page](#)

Lets you choose industry-standard formats that are available for bar codes.

Lets you specify the number assigned to the bar code.

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Lets you specify the number assigned to the bar code.

Displays a sample of the industry-standard format you chose.

Lets you specify the Federation of Automated Coding Technologies (FACT) data identifier.

Displays the check digit that is automatically generated. The check digit is used to ensure that the data is read correctly.

Lets you specify an additional two or five digits to be used for the add-on bar code.

Lets you choose a Face Identification Marking (FIM) type.

Enable to choose Face Identification Marking (FIM) type A. FIM type A indicates that postage is required, prebarcoded.

Enable to choose Face Identification Marking (FIM) type B. FIM type B indicates that postage is prepaid, and no bar code exists.



Enable to choose Face Identification Marking (FIM) type C. FIM type C indicates that postage is prepaid, prebarcoded.

Enable to choose Face Identification Marking (FIM) type D. FIM type D indicates that postage is required, and no bar code exits.

Advanced button on the Adjust industry standard properties page

Opens the Advanced Options dialog box, which lets you choose advanced options associated with the industry standard format for the bar code that you chose.

Adjust industry standard properties page

Lets you specify the height of the bars. The height is measured from the bottom of the text to the top of the bars.

Lets you specify the bar width reduction in pixels. The bar width reduction is subtracted from the bar width. Reducing the bar width lets you compensate for print gain.

Lets you specify the magnification to be applied to the entire image. Choosing 200% prints the image at twice its size.



Lets you specify the printer resolution in dots per inch (dpi).

Displays the width of the symbol from the left edge of the left-most bar to the right edge of the right-most bar. It does not include quiet zones. The value cannot be edited.

Lets you choose the unit of measurement.

Lets you choose the unit of measurement.

Lets you specify the proportion between wide bars and spaces and narrow bars and spaces. The wider, or larger, the ratio, the wider the bar code symbol is.

Adjust text properties in your bar code page

Lets you choose the alignment of the text that is below the bar code.

Enable to vertically center the system and check digits on the bar code symbol. The system digit appears before the bar code symbol and the check digit appears after the bar code symbol.



Lets you choose a font.

Lets you specify the size of the font.

Lets you choose a font weight.

Enable to print text with the bar code symbol.

Enable to print the text associated with the add-on bar code. Add-on bar codes do not apply to all bar code formats.

Enable to print asterisks before and after the bar code text. Asterisks do not apply to all bar code formats.

Enable to print Federation of Automated Coding Technologies (FACT) data.

Enable to print the quiet zone marks. The quiet zone is the clear area (free from marks) before and after the bars and spaces.



Enable to print the start and stop characters. The start character indicates the beginning of the symbol. The stop character indicates the end of the symbol.

Enable to print the human-readable text above the bar code symbol.

Enable to print the add-on text at the bottom of the add-on bar code. The text is printed on top of the bar code by default.

## Using Barcode wizard

Bar coding is an identification method that lets you collect data. Barcode wizard lets you generate bar codes in a wide range of industry-standard formats. You can change the industry-standard properties, set advanced bar code options, and change text and bar code options. Changing the text and bar code options changes the overall appearance of the symbol.

## Creating bar codes

When you create a bar code, you need to choose an industry-standard format, and specify the digits that Barcode wizard encodes.

### Changing industry-standard properties

You can change many of the industry-standard properties to generate the bar code that you want. Changing these properties affects how easily a scanner can read a symbol. You want to ensure that the bar code is readable the first time it is passed under a scanner.

The look of your bar code is affected by six settings: printer resolution, units of measure, bar width reduction, magnification, bar height, and the wide-to-narrow ratio.

Printing distortions that affect the bar code measurements may occur. You can set the bar width reduction — the number of pixels subtracted from the original bar width

— to prevent any distortions. Magnification increases the size of the entire image, while bar height changes only the height of the bars. Wide-to-narrow ratio refers to the distance between wide bars and spaces and the narrow bars. A high ratio makes the bar code wider and easier to scan.

You can change the font, weight, alignment, and size text options.

You can change the appearance of a bar code by changing the bar code options. For example, you can place add-on text at the bottom or at the top of a bar code, center check digits, and show start and stop characters.

`{button ,AL('ACreating bar codes;',0,"Defaultoverview",)} How to`

## To create a bar code

1. Choose a bar code format from the **Industry standard formats** list box.
2. Type the characters you want to encode in the text box.
3. Click **Next**.
4. Apply changes to industry standard properties, if necessary.
5. Click **Next**.
6. Adjust text options, if necessary
- 7 Click **Finish**.

### Notes

- The completed bar code is copied to the Clipboard. You must paste it into a graphics or business application to print the bar code.
- Wide bar codes are more accurately read than narrow bar codes.



### Tip

- Click **Edit ► Insert Bar Code** in CorelDRAW to start the Bar Code wizard

{button ,AL('ACreating bar codes;',0,"Defaultoverview",)} [Related topics](#)

## Setting advanced bar code options

You can enable advanced bar code options, such as setting check digits or changing the look of the bar code. A check digit determines if the data is read correctly. A formula is applied to the encoded numbers to yield one digit. That check digit is usually placed at the end of the bar code. The computer checks that the numbers were read correctly by comparing the calculated check digit with the read check digit.

Other advanced options change the appearance of the symbol. For example, the advanced options allow you to attach a numeric prefix to the bar code, and ignore spaces and brackets in the symbol.

{button ,AL('ASetting advanced bar code options;',0,"Defaultoverview",,)} How to

## To specify advanced options

1. Click the **Advanced** button in the **Industry standard properties** page.

2. Specify the options that you want to apply.



### Note

- You can add or remove check digits, brackets, spaces and prefixes from the following bar codes only: Codabar, Code 39, Code 128, ISBN, ISSN, ITF-14, MSI Plessey, and UPC(A).

{button ,AL('ASetting advanced bar code options;',0,"Defaultoverview"),} [Related topics](#)



## Bar code formats

Barcode wizard lets you choose from the following 18 industry-standard formats:

### Codabar

Codabar format is commonly used in libraries, blood banks, and the air parcel business. The variable-length format allows encoding of the following 20 characters: **0123456789-\$/+ABCD**. The start and stop characters of a Codabar message must be A, B, C, or D.

### Code 25

Code 25, also known as "Code 2 of 5," is a discrete, variable-length numeric code format. Code 25 format consists of 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 baggage and cargo handling.

### Code 39

Code 39, also known as "Code 3 of 9," is the most popular format used in the nonretail market for inventory and tracking. The format consists of three thick elements — bars or spaces — in a total of nine elements for each encoded character. This bar code is used extensively in manufacturing, military, and health applications. The discrete, variable-length format will accept the following 43 characters:

**0123456789ABCDEFGHIJKLMNPOQRSTUVWXYZ-.\*\$/+%**

The asterisk (\*) is used as the start/stop character and cannot be used in the body of the bar code.

You can also add a check digit that helps to ensure the security of the bar code. Code 39 supports Modulo 43 and xxx-nnnnnnn-c check digit formats used by US Customs for import/export shipping.

### Code 128

Code 128 is a variable-length, high-density, alphanumeric format that is used in the shipping and labeling industry. This code has 106 bar and space patterns. Each pattern can have one of three meanings, depending on which of the three character sets is employed. One character set encodes all uppercase and ASCII control characters; another encodes all uppercase and lowercase characters; and the third set encodes the numeric digit pairs 00 through 99. The character set used is determined by the start character.

Code 128 also lets you encode the following four function codes:

- FNC1 — reserved for use in European Article Numbering (EAN)
- FNC2 — used to instruct a bar code reader to link together the message in a bar code symbol with the message in the text symbol
- FNC3 — used to instruct a bar code reader to perform a reset
- FNC4 — used in closed system applications

A variation of Code 128 format is EAN-128. This symbol uses the same code set as Code 128; however the function codes FNC2 to FNC4 cannot be used, and FNC1 is used as part of the start code. An advanced option of Code 128 in Barcode wizard lets you enable or disable the EAN-128 format. Code 128 is fully supported in ASCII text.

### EAN-8

The European Article Numbering (EAN) system is the European version of the Universal Product Code (UPC). This code is now called the International Article Number; however, the EAN abbreviation remains. EAN codes are found on European retail items.

EAN-8 encodes eight numbers, consisting of two country-code digits, five data digits, and one check digit. In Barcode wizard, you must enter seven digits, and the eighth digit — or the check digit — is automatically generated.

An optional two- or five-digit number can be added to the main bar code. This number is designed for use on publications and periodicals, and appears as an additional bar code to the right of the main bar code.

### EAN-13

EAN-13 is the European version of the Universal Product Code (UPC (A)). The difference between EAN-13 and UPC (A) is that EAN-13 encodes a 13th number into the left six number of a UPC (A) symbol. The 13th number, combined with the 12th number, represents a country code.

An optional two- or five-digit number may be added to the main bar code. This number is designed for use on publications and periodicals and appears as an additional bar code to the right of the main bar code.

### FIM

Facing Identification Mark (FIM) patterns are used by the US Postal Service in automated mail processing. FIM patterns are used for automatic facing and canceling of mail that does not have a stamp or meter imprint, such as business reply mail, penalty mail, etc.

The following four FIM patterns are currently in use:

- FIM-A — used on courtesy reply mail preprinted with POSTNET bar codes
- FIM-B — used on business reply, penalty, and government (franked) mail that is not preprinted with POSTNET bar codes
- FIM-C — used on business reply, penalty, and government mail 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, indented two inches from the right edge.

## ISBN

ISBN (International Standard Book Number) codes are printed on books. This format is not a separate bar code type. ISBN codes have a specific structure and are encoded using EAN-13 bar codes. The bar code is formed by a fixed three-digit country code of 978, followed by the 10-digit ISBN number. The 10th digit — or the check digit — is discarded. Enter the digits using the x-xxxx-xxxx format. ISBN codes must be numeric.

## ISSN

ISSN (International Standard Serial Number) codes are printed on magazines, newspapers, and other serial publications. This format is not a separate bar code type. ISSN is an EAN-13 bar code with a 977 country code and a two-digit supplemental code. The two-digit supplemental code contains the issue number. For example, January=01, and February=02. Enter the digits using the xxxx-xxxx format. ISSN codes must be numeric.

## ITF

ITF (Interleaved 2 of 5) was designed based on Code 25. Each format uses the same encoding techniques, except that both bars and spaces carry data in the ITF format: the odd-position digits are encoded in the bars, and the even-position digits are encoded in the spaces. ITF is a high-density, variable-length, number-only format. This bar code is one of the most popular formats used by the shipping and warehouse industries. Barcode wizard lets you enter up to 40 digits. ITF codes must be numeric.

## ITF-14

ITF-14 is similar to the ITF format, except that exactly 13 digits must be entered in Barcode wizard. An optional five digits may be entered for the add-on bar code. ITF-14 codes must be numeric.

## JAN-8

JAN-8 is the Japanese equivalent to EAN-8. Jan-8 codes must be numeric.

## JAN-13

JAN-13 is the Japanese equivalent to EAN-13. Jan-13 codes must be numeric.

## MSI Plessey

The MSI Plessey bar code is used primarily in libraries and store shelf labeling. MSI Plessey is a variable-length format that lets you encode the following 10 characters: **0123456789**. Each character consists of eight elements: four bars and four spaces.

## Pharmacode

Pharmacode is used for Online Security Control of the pharmaceutical packaging process. Only the bars carry data, not the spaces. The high printing tolerance and the option of printing the bar code in multiple colors makes Pharmacode a practical format. Pharmacode codes must be numeric.

## POSTNET

POSTNET (Postal Numeric Encoding Technique) bar codes are used to encode ZIP codes on US mail. The Postal Service mail-handling process is designed to be fully automated, and POSTNET bar codes feed the automated equipment.

POSTNET differs from other formats in that the bar heights alternate, as opposed to the bar widths. 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 five-digit, nine-digit, and 11-digit delivery point bar code. These codes are often used in conjunction with FIM bars, which are found in the upper right corner of a mail piece, such as Business Reply Mail. Postnet codes must be numeric.

## UPC(A)

UPC (Universal Product Code) symbols are used for retail applications in the United States and Canada. UPC(A) is a 12-digit format. The symbol consists of 11 digits of data and one check digit. The first digit usually represents the type of product being identified. The following five digits are a manufacturer's code, and the next five digits are used to identify a specific product. UPC(A) codes must be numeric.

## UPC(E)

Like UPC(A), UPC(E) is used for retail applications; however, since the bar code is smaller, it is better suited to smaller items. This format is also called "zero-suppressed," because UPC(E) compresses a 12-digit UPC(A) code into a six-digit code. UPC(E) suppresses the number-system digit, trailing digits in the manufacturer's code, and leading zeros in the product identification part of the code.

An optional two or five-digit number may be added to the main UPC(A) or UPC(E) bar code. This number is designed for use on publications and periodicals, and appears as an additional bar code to the right of the main bar code. UPC(E) codes must be numeric.

