

# Chapter 6

## Options Reference

### Check Digits

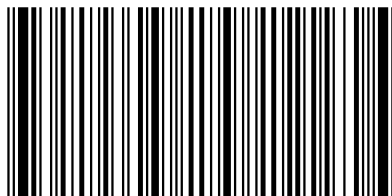
#### **includecheck**

Generate check digit(s) for symbologies where the use of check digits is optional.

#### **Example**

Calculate the optional check characters of this Code 93 symbol:

```
Data:    CHECK ME OUT
Options: includecheck
Encoder: code93
```



#### **includecheckintext**

Show the calculated check digit in the human readable text.

#### **Notes**

- For barcode symbologies where the check digit is not mandatory, this option must be used in combination with **includecheck**.
- If any part of the checksum does not have a printable representation then that part is not displayed.

#### **Example**

Display the check digit of this Royal Mail barcode:

```
Data:    LE28HS9Z
Options: includetext includecheckintext
Encoder: royalmail
```



## Input Processing

### parse

In supporting barcode symbologies, when the *parse* option is specified, any instances of  $\backslash$ NNN in the data field are replaced with their equivalent ASCII value, useful for specifying unprintable characters.

#### Example

Equivalent symbols:

Data: This is Data Matrix

Options:

Encoder: datamatrix

Data: This is  $\backslash$ 068ata Matrix

Options: parse

Encoder: datamatrix



### parsefnc

In supporting barcode symbologies, when the **parsefnc** option is specified, non-data function characters can be specified by escaped combinations such as  $\backslash$ FNC1,  $\backslash$ FNC4,  $\backslash$ SFT/ and  $\backslash$ ECI000003.

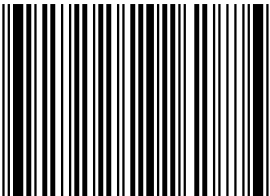
#### Example

Code 93 including a special shift combination ( $\backslash$ )A representing !:

Data: TERRY $\backslash$ SFT/A

Options: parsefnc includecheck

Encoder: code93



## Symbol Dimensions

### height

Height of longest bar, in inches.

#### Example

A 1/2 inch tall EAN-13:

Data: 977147396801

Options: includetext height=0.5

Encoder: ean13



### width

Stretch the symbol to precisely this width, in inches.

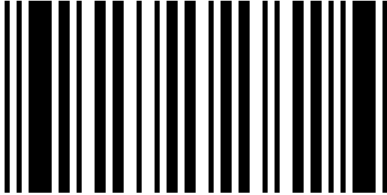
**Notes**

- This parameter literally stretches the symbol and text to the desired width which will may distort the human readable text.
- For information about resizing symbols read the article on resizing symbols.

**Example**

A 2 inch wide Code 93 symbol:

```
Data:    TERRY
Options: width=2
Encoder: code93
```

**Bar Properties**

These are options that allow you to compensate for print gain or print loss resulting from the properties of the printing process or substrate.

**inkspread**

For linear barcodes, the amount by which to reduce the bar widths to compensate for inkspread, in points.

For matrix barcodes, the amount by which the reduce the width and height of dark modules to compensate for inkspread, in points.

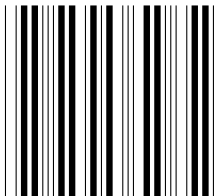
**Notes**

- Negative values will increase the bar width.

**Example**

Code 39 for a printer with very runny ink:

```
Data:    TEZ
Options: inkspread=0.6
Encoder: code39
```

**inkspreadh**

For matrix barcodes, the amount by which the reduce the width of dark modules to compensate for inkspread, in points.

Note: inkspreadh is most useful for stacked-linear type barcodes such as PDF417 and Codablock F.

**inkspreadv**

For matrix barcodes, the amount by which the reduce the height of dark modules to compensate for inkspread, in points.

## dotty

For matrix barcodes, render the modules as dots rather than squares. The dot radius can be adjusted using the `inkspread` option.

## Text Properties

### includetext

Show human readable text for data in symbol.

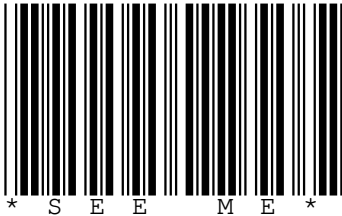
#### Notes

- If a character in the data does not have a printable representation then it is not displayed

#### Example

Display the text encoded in this Code 39 symbol:

```
Data:    SEE ME
Options: includetext
Encoder: code39
```



### textfont

The PostScript font name for text.

#### Notes

- The font name must be the literal name of a PostScript font that is available to the system.
- This option should be used in combination with the `includetext` option.
- The PostScript font name for a font file can be determined with the following command from the fontconfig library:
 

```
- fc-scan --format "%{postscriptname}\n" /usr/share/fonts/truetype/somefont.ttf
```

#### Example

Customise the human readable text of this USPS POSTNET symbol

```
Data:    64501
Options: includetext textfont=Times-Roman textsize=9
Encoder: postnet
```



### textsize

The font size of the text in points.

#### Note

- This option should be used in combination with the `includetext` option.

**Example**

Customise the human readable text of this USPS POSTNET symbol

```
Data:      64501
Options:  includetext textfont=Times-Roman textsize=9
Encoder:  postnet
```


**textgaps**

The inter-character spacing of the text.

**Note**

- This option should be used in combination with the **textxalign** option.

**alttext**

Specify text to display other than what is provided in the data field.

**Note**

- This option should be used in combination with the **includetext** option.

**Text Positioning****textxalign**

The **textxalign** option is used to specify where to horizontally position the text.

- **textxalign=offleft**
- **textxalign=left**
- **textxalign=center**
- **textxalign=right**
- **textxalign=offright**
- **textxalign=justify**

**Notes**

- By default (in the absence of **textxalign** or **textyalign**), each character of text is placed immediately below the corresponding modules where this is possible.
- Where there isn't such a direct relationship then the default is to position the text centrally beneath the symbol.

**textyalign**

The **textyalign** option is used to specify where to vertically position the text.

- **textyalign=below**
- **textyalign=center**
- **textyalign=above**

**Notes**

- By default (in the absence of **textxalign** or **textyalign**), each character of text is placed immediately below the corresponding modules where this is possible.
- Where there isn't such a direct relationship then the default is to position the text centrally beneath the symbol.

**textxoffset**

The horizontal position of the text in points relative to the default position.

**textyoffset**

The vertical position of the text in points relative to the default position.

**Border Properties****showborder**

Display a border around the symbol.

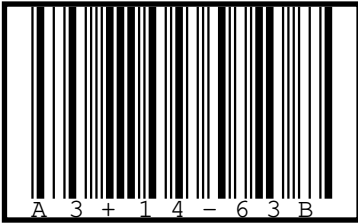
**Example**

Display a customised border around this Codabar symbol:

Data: A3+14-63B

Options: includetext showborder borderwidth=2 borderbottom=8

Encoder: rationalizedCodabar

**borderwidth**

Width of the border, in points.

**borderleft**

Gap between the left edge of the border and the symbol, in points.

**borderright**

Gap between the right edge of the border and the symbol, in points.

**bordertop**

Gap between the top edge of the border and the symbol, in points.

**borderbottom**

Gap between the bottom edge of the border and the symbol, in points.

**Symbol Colors****barcolor**

Color of the bars or dark modules, either as a hex `RRGGBB` value or a hex `CCMMYYKK` value.

**backgroundcolor**

Color of the light background or light modules, either as a hex `RRGGBB` value or a hex `CCMMYYKK` value.

**bordercolor**

Color of the border, either as a hex `RRGGBB` value or a hex `CCMMYYKK` value.

**textcolor**

Color of the respective component, either as a hex `RRGGBB` value or a hex `CCMMYYKK` value.

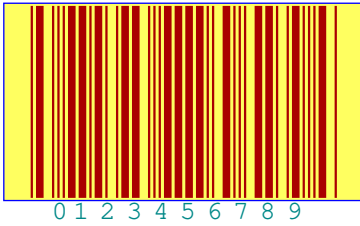
## Examples

Colorized Code 11 symbol using the RGB colour space:

Data: 0123456789

Options: includetext barcolor=AA0000 textcolor=008888 backgroundcolor=FFFF60 showborder bordercolor=000000

Encoder: code11

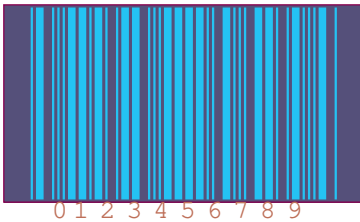


Colorized Code 11 symbol using the CMYK colour space:

Data: 0123456789

Options: includetext barcolor=AA000000 textcolor=00888844 backgroundcolor=CCCC6000 showborder bordercolor=000000

Encoder: code11



## EAN-UPC Add Ons

### addontextfont

The font name of the add on text.

### Notes

- The font name must be the literal name of a PostScript available font.
- These options must be used in combination with the **includetext** option.

### addontextsize

The size of the add on text, in points

### Notes

- These options must be used in combination with the **includetext** option.

### Example

Customise the human readable text of this USPS POSTNET symbol

Data: 64501

Options: includetext textfont=Times-Roman textsize=9

Encoder: postnet



### addontextoffset

Overrides the default horizontal positioning of the add on text.