

B

Bar Code

Description Use this command to print standard bar codes.

Syntax `Bp1, p2, p3, p4, p5, p6, p7, p8, "DATA"`

Parameters This table identifies the parameters for this format:

Parameters	Details										
p ₁ = Horizontal start position	Horizontal start position (X) in dots.										
p ₂ = Vertical start position	Vertical start position (Y) in dots.										
p ₃ = Rotation	<i>Accepted Values:</i> 0 = normal (no rotation) 1 = 90 degrees 2 = 180 degrees 3 = 270 degrees										
p ₄ = Bar Code selection.	See Table 1, <i>Bar Codes</i> on page 53 for more information.										
p ₅ = Narrow bar width	Narrow bar width in dots. See Table 1, <i>Bar Codes</i> on page 53 for more information.										
p ₆ = Wide bar width	Wide bar width in dots. <i>Accepted Values:</i> 2-30 See Table 1, <i>Bar Codes</i> on page 53 for more information.										
p ₇ = Bar code height	Bar code height in dots.										
p ₈ = Print human readable code	<i>Accepted Values:</i> B = yes N = no										
DATA = Fixed data field	The data in this field must comply with the selected bar code's specified format. The backslash (\) character designates the following character is a literal and will encode into the data field. Refer to the following examples: <table border="1" data-bbox="727 1522 1205 1707"> <thead> <tr> <th>To Print</th> <th>Enter into data field</th> </tr> </thead> <tbody> <tr> <td>"</td> <td>\"</td> </tr> <tr> <td>"Company"</td> <td>\\"Company\"</td> </tr> <tr> <td>\</td> <td>\\</td> </tr> <tr> <td>\code\</td> <td>\\code\\</td> </tr> </tbody> </table>	To Print	Enter into data field	"	\"	"Company"	\\"Company\"	\	\\	\code\	\\code\\
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"	\"										
"Company"	\\"Company\"										
\	\\										
\code\	\\code\\										

Table 1 • Bar Codes

Description	P4 Value	P5 Value	P6 Value
Code 39 std. or extended	3	1-10	Y
Code 39 with check digit	3C	1-10	N
Code 93	9	1-10	N
Code 128 UCC Serial Shipping Container Code	0	1-10	N
Code 128 auto A, B, C modes	1	1-10	N
Code 128 mode A	1A	1-10	N
Code 128 mode B	1B	1-10	N
Code 128 mode C	1C	1-10	N
Code 128 with Deutsche Post check digit	1D	2-10	N
Codabar	K	1-10	Y
EAN8	E80	2-4	N
EAN8 2 digit add-on	E82	2-4	N
EAN8 5 digit add-on	E85	2-4	N
EAN13	E30	2-4	N
EAN13 2 digit add-on	E32	2-4	N
EAN13 5 digit add-on	E35	2-4	N
German Post Code	2G	3-4	N
Interleaved 2 of 5	2	1-10	Y
Interleaved 2 of 5 with mod 10 check digit	2C	1-10	Y
Interleaved 2 of 5 with human readable check digit	2D	1-10	Y
Postnet 5, 9, 11 & 13 digit	P	—	N
Planet 11 & 13 digit	PL	—	N
Japanese Postnet	J	—	—
UCC/EAN 128	1E	1-10	N
UPC A	UA0	2-4	N
UPC A 2 digit add-on	UA2	2-4	N
UPC A 5 digit add-on	UA5	2-4	N
UPC E	UE0	2-4	N
UPC E 2 digit add-on	UE2	2-4	N
UPC E 5 digit add-on	UE5	2-4	N
UPC Interleaved 2 of 5	2U	1-10	Y
Plessey (MSI-1) with mod. 10 check digit	L	—	—
MSI-3 with mod. 10 check digit	M	—	—

Bar Code Table Notes

1. Hyphens maybe used in data as a data separator and will be ignored.
2. Use ASCII 06 to delimit variable length fields.
3. Japanese Postal Code accepts alpha-numeric characters. It truncates the data after 20 characters, and pads up to 20 with a pad character.
4. The data for a Deutsche Post Code 128 barcode consists of 12 characters: BBNNNNNNNDE, where B is any character in the 'B' character set, N is any decimal digit ('0' – '9'), and DE are the literal characters "DE" (Germany). A 1D bar code type creates a standard Code 128 symbol, but the firmware calculates and inserts a check digit between the last N and the DE before rendering the bar code. It will abort and report a syntax error if any of the 8 characters between AA and DE are not digits. It will, however, allow any number of function codes F1 through F3 to be interspersed with the digits.
5. Planet: See USPS Publication 197 for details. Either 11 or 13 digits may be supplied, and the printer calculates and appends a check digit for a total of 12 or 14 digits. As with Postnet, hyphens ('-') may be used as data separators for readability and will be discarded by the printer.



Example 1 •

```
B10,10,0,PL,5,5,5,N,"12-34567-890123"
```



Example 2 •

```
N↵
```

```
B10,10,0,3,3,7,200,B,"998152-001"↵
```

```
P1↵
```

produces this label:



Data with the RTC Time & Date Functions

The “Data” field can be replaced by or combined with the following variables:

- TT = Prints the current time at this position in the predefined format. See the TT command for format selection. This variable is available only if the printer Time & Date option is installed.
- TD = Prints the current date at this position in the predefined format. See the TD command for format selection. This variable is available only if the printer Time & Date option is installed.



Note • Some bar code formats will not support date names or the date or time delimiters used by the printer to separate data parameters.

Code 128 Bar Code Function Characters

The printer supports Code 128 function control characters (FCN#). Multiple FCN#s, TTs, TDs and “DATA” strings can be concatenated, allowing them to be inserted anywhere within the symbol.

FCN2, FCN3 and FCN4 are illegal in Code 128 mode C (p4 = 1C) and will result in a syntax error.

Please refer to the Code 128 standard for a description of function characters FNC1 through FNC3.

“Standard” Code 128 can encode all 128 standard ASCII characters (0 – 127). Function character FCN4 provides a means of also encoding extended ASCII characters (128 – 255). It directs the reader to add 128 to the value of each affected character before transmitting it.

Two consecutive FCN4s toggle between standard and extended ASCII mode for all succeeding data characters (until the end of the symbol, or until another pair of FCN4s is encountered). This is referred to as latching into extended ASCII mode or latching into standard ASCII mode.

A single FCN4 toggles between standard and extended ASCII mode for only a single following data character. This is referred to as shifting into extended ASCII mode or shifting into standard ASCII mode.

Both code sets A and B are needed to represent the entire extended ASCII character set, just as both sets are needed to represent the standard ASCII character set.

FCN4s can be inserted manually, if necessary or desired, by following the syntax described above. The printer will, however, insert them automatically if extended ASCII characters are encountered in the DATA. It will do so in the most efficient manner possible:

- If up to 4 contiguous extended ASCII characters are encountered, it will shift into extended ASCII mode by inserting a single FCN4 before each one;
- If 5 or more contiguous extended ASCII characters are encountered, it will latch into extended ASCII mode by inserting two FCN4s before them.
- While latched into extended ASCII mode, it will apply the same rules if standard ASCII characters are encountered.