TYPEHAUS

Extending the Resources and Abilities of Your Printer

UPC-A (Regular, +2 & +5)
Printing Guide

The Universal Product Code (UPC) was the first bar code symbology widely adopted. Its birth is usually set at April 3, 1973, when the grocery industry formally established UPC as the standard bar code symbology for product marking. Many national retail chains, as well as most grocery stores, require all products they sell to have a bar code that is unique for the specific product.

Example

54321

A ^{E}c(s3p005h74v8,16,24,32b8,16,24,32s

① ② ③ ④ ⑤ ⑥

B 24600T / 24601T / 24602T

C 1246801357954321

1 24680 13579 8

Numbers in ● indicate required information, and in ○ indicate optional information, when printing an industry standard UPC-A full size bar code. The optional information is shown for discussion purposes to facilitate alternative formatting when desired. Example shows default values for optional information.

^{E}c ASCII Escape (ESC) code. Decimal 27. Hex 1B. Marks the start of a command sequence to distinguished it from printable text.

A Bar code formatting parameters.

① Start of bar code commands. Required. Must be an ESC code followed by the 2 characters exactly as shown.

② Human readable text positioning. Required as shown for standard UPC-A bar code. 0 or 1 numeric digit value followed by "p". "p" may be omitted if no value specified when default values are to be used. The following values are valid.

0 Same as 1 (default)	2 Embedded	4 Under bar code
1 No human readable	3 Half-embedded	5 Above bar code

③ Human readable font selection. "5h" required as shown for industry standard UPC-A bar code. Leading zeroes are optional. Parameter consists of 0-3 numeric digit value followed by "h". "h" may be omitted if no value specified when default values are to be used.

First digit specifies font style as follows. For non-zero value, second and third digits discussed below must also be specified.

0 Bold (default)	2 Italic	4 Bold italic
1 Regular	3 Bold	

Second digit reserved for future expansion. It must be zero. It must be present if font style digit is specified.

Third digit specifies font typeface as follows. Digit must be present if first and second digits discussed above are specified.

0 Courier (default)	2 Univers	4 CG Times
1 Letter Gothic	3 Univers Condensed	5 OCR-B

④ Bar heights in points (1/72"). Optional. Default value produces standard UPC-A full height (1.02") bar code.

⑤ Bar widths in 1/600". Optional. Default values produce standard UPC-A full width (1.469") bar code. Values must be separated by commas as shown. UPC-A uses four different bar widths. First value specifies width of single-wide (narrowest) bar, second value specifies width of double-wide bar, third value specifies width of triple-wide bar, and fourth value specifies width of quadruple-wide (widest) bar. Second, third and fourth values are normally multiples of first value as shown. "b" may be omitted if no values specified when default values to be used.

⑥ Space widths in 1/600". Optional. Default values produce standard UPC-A full width (1.469") bar code. Same requirements and value sequence as for bar widths. "s" may be omitted if no values specified when default values to be used.

B UPC-A bar code symbology selection options. Required. Follows immediately after bar code formatting parameters without spaces, line feeds, carriage returns, or any other data. Choose 1 of the 3 options shown. 6 characters must be sent exactly as shown. Use 24600 for UPC-A, 24601 for UPC-A+2 and 24602 for UPC-A+5.

C UPC-A bar code data. Follows immediately after bar code symbology selection without spaces, line feeds, carriage returns, or any other data. 11 numeric digits for standard UPC-A. 13 numeric digits for UPC-A+2. 16 numeric digits for UPC-A+5. Does not include the bar code's checksum digit. The BarCodeJet automatically calculates the checksum digit.

Standard PCL5 typeface selection, symbol set selection, and positioning commands must follow the bar code data in order to indicate the end of the data and to resume normal text printing. Refer to the introductory sections of the BarCodeJet Printing Guide for more information and instructions common to all bar codes.

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