

^BD – UPS MaxiCode Bar Code

Description The ^BD command creates a two-dimensional, optically read (not scanned) code. This symbology was developed by UPS (United Parcel Service).

Notice that there are no additional parameters for this code and it does not generate an interpretation line. The ^BY command has no effect on the UPS MaxiCode bar code. However, the ^CV command can be activated.

Format ^BDm,n,t

Parameters	Details
m = mode	<p><i>Accepted Values:</i></p> <ul style="list-style-type: none"> 2 = structured carrier message: numeric postal code (U.S.) 3 = structured carrier message: alphanumeric postal code (non-U.S.) 4 = standard symbol, secretary 5 = full EEC 6 = reader program, secretary <p><i>Default Value:</i> 2</p>
n = symbol number	<p><i>Accepted Values:</i> 1 to 8 can be added in a structured document</p> <p><i>Default Value:</i> 1</p>
t = total number of symbols	<p><i>Accepted Values:</i> 1 to 8, representing the total number of symbols in this sequence</p> <p><i>Default Value:</i> 1</p>



Example • This is an example of UPS MAXICODE - MODE 2 bar code:

ZPL II CODE	UPS MAXICODE - MODE 2
<pre> ^XA ^FO50,50 ^CVY ^BD^FH^FD001840152382802 []>_1E01_1D961Z00004951_1DUPSN_ 1D_06X610_1D159_1D1234567_1D1/1_ 1D_1DY_1D634 ALPHA DR_ 1DPITTSBURGH_1DPA_1E_04^FS ^FO30,300^A0,30,30^FMode2^FS ^XZ </pre>	

Special Considerations for ^FD when Using ^BD

The ^FD statement is divided into two parts: a high priority message (**hpm**) and a low priority message (**lpm**). There are two types of high priority messages. One is for a U.S. Style Postal Code; the other is for a non-U.S. Style Postal Code. The syntax for either of these high priority messages must be exactly as shown or an error message is generated.

Format ^FD <hpm><lpm>

This table identifies the parameters for this format:

Parameters	Details
<hpm> = high priority message (applicable only in Modes 2 and 3)	<p><i>Accepted Values: 0 to 9, except where noted</i></p> <p>U.S. Style Postal Code (Mode 2)</p> <p><hpm> = aaabbbcccccddd aaa = three-digit class of service bbb = three-digit country zip code ccccc = five-digit zip code dddd = four-digit zip code extension (if none exists, four zeros (0000) must be entered)</p> <p>non-U.S. Style Postal Code (Mode 3)</p> <p><hpm> = aaabbbcccccc aaa = three-digit class of service bbb = three-digit country zip code cccccc = six-digit zip code (A through Z or 0 to 9)</p>
<lpm> = low priority message (only applicable in Modes 2 and 3)	<p>GS is used to separate fields in a message (0x1D). RS is used to separate format types (0x1E). EOT is the end of transmission characters.</p> <p>Message Header []>RS</p> <p>Transportation Data</p> <p>Format Header01GS96</p> <p>Tracking Number*<tracking number></p> <p>SCAC*GS<SCAC></p> <p>UPS Shipper NumberGS<shipper number></p> <p>Julian Day of PickupGS<day of pickup></p> <p>Shipment ID NumberGS<shipment ID number></p> <p>Package n/xGS<n/x></p> <p>Package WeightGS<weight></p> <p>Address ValidationGS<validation></p> <p>Ship to Street AddressGS<street address></p> <p>Ship to CityGS<city></p> <p>Ship to StateGS<state></p> <p>RSRS</p> <p>End of MessageEOT</p> <p>(* Mandatory Data for UPS)</p>

Comments

- The formatting of **<hpm>** and **<lpm>** apply only when using Modes 2 and 3. Mode 4, for example, takes whatever data is defined in the **^FD** command and places it in the symbol.
- UPS requires that certain data be present in a defined manner. When formatting MaxiCode data for UPS, always use uppercase characters. When filling in the *fields* in the **<lpm>** for UPS, follow the data size and types specified in *Guide to Bar Coding with UPS*.
- If you do not choose a mode, the default is Mode 2. If you use non-U.S. Postal Codes, you probably get an error message (invalid character or message too short). When using non-U.S. codes, use Mode 3.
- ZPL II doesn't automatically change your mode based on the zip code format.
- When using special characters, such as GS, RS, or EOT, use the **^FH** command to tell ZPL II to use the hexadecimal value following the underscore character (_).