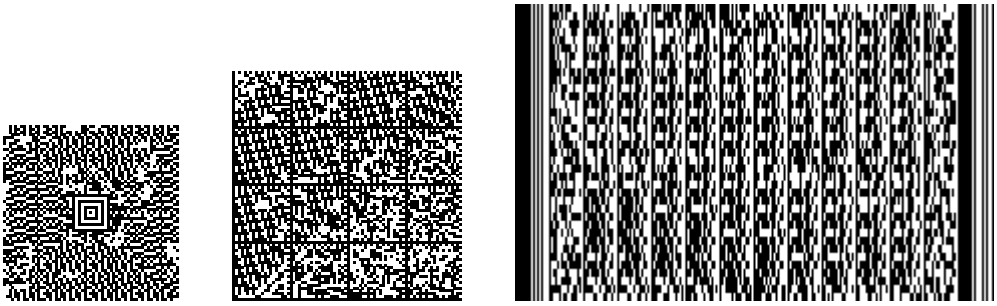
Aztec – 2D barcode

Aztec barcodes are very efficient two-dimensional matrix symbology made up of square modules arranged around a bulls-eye pattern at the center. The unique finder pattern in the middle of the symbol helps the barcode scanner to determine cell locations to decode the symbol.

It is able to encode both ASCII and Extended ASCII characters. The smallest Aztec Code symbol encodes 13 numeric or 12 alphabetic characters, while the largest Aztec Code symbol encodes 3832 numeric or 3067 alphabetic characters or 1914 bytes of data. Aztec barcodes are typically much smaller in size than a PDF417 or Datamatrix with the same data. The sample below contains 559 characters.

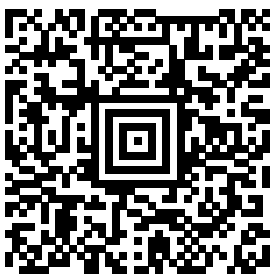


No quiet zone is required outside the bounds of the symbol . However, some barcode imagers may have difficulty decoding unless a 1-module quiet zone is present which should be the same color as the background.

It is not recommended to use error correction over 23 with large amounts of data, because this may overload the symbol capacity.

Sample Encoding

☻☻☻ID♥
First Name♥♥Last Name♥
Title♥
Company♥
Address 1♥
Address 2♥
City♥♥ST♥♥Zip♥
Country♥
Phone♥
Fax♥
Email♥
→



Sending to a Zebra Printer using ZPL

Note: The Aztec bar code works with firmware v60.13.0.11A and higher

Format: ^**BO**a,b,c,d,e,f,g

Parameters	Acceptable Values	Recommended
a = orientation	N = normal R = rotated I = inverted	N
b = magnification factor	Accepted values = 1 - 10 1 on 150 dpi printer 2 on 200 dpi printer 3 on 300 dpi printer 6 on 600 dpi printer	4 to 5 on laser printers 5 on 300 dpi printers
c = extended channel interpretation code indicator	Y = if data contains ECICs N = if data does not contain ECICs	Use default: N
d = error control and symbol size/type indicator	0 = default error correction level 01-99 = error correction percentage (minimum) 101 to 104 = 1 to 4-layer compact symbol 201 to 232 1 to 32-layer full-range symbol 300 = a simple Aztec "Rune"	minimum 20
e = menu symbol indicator	Y = if this symbol is to be a mneu (bar code reader initialization) symbol N = if it is not a menu symbol	Use default: N
f = number of symbols for structured append	1 through 26	Use default: 1
g = optional ID field for structured append	The ID field is a text string with 24-character maximum	Use default: No ID

Sample Code:

```
^XA
^LL1200
^PW900
^FT600,100^FB1000,1,,C^A0R,108^FH^FDPrint Test Settings^FS
^FT480,100^FB1000,1,,C^A0R,90^FH^FDBOR,5,N,0,N,1,0^FS
^FT150,550
^B0N,5,N,0,N,1,
^FH|^FD|02|02|02ID|03FirstName|03|03LastName|03Title|03Company|03Address1|03A
ddress2|03City|03|03State|03|03Zip|03Country|03Phone|03FaX|03Email|03|1A^FS
^FT20,100^FB1000,1,,C^A0R,86,91^FR^FH^FDEB09 100 chars^FS
^XZ
```

DLSoft/Visual Basic Example

Parameter	Description	Recommended
Xunit	defines the size of the narrowest element (mil).	9 to 10
Mode	0 = Normal 1 = Compact 2 = Full range 3 = Rune	0
FixSize	TRUE = allows the size of the control to change to reflect the size calculated from a specified Xunit value FALSE = the control size remains fixed, and the barcode image expands or contracts to fill the control.	False
LineReduce	The thickness of each line drawn on the barcode image is reduced by this percentage amount. This property may be used to compensate for ink spreading during wet-ink printing. Allowed values: 0 - 50 (%)	0
SecurityLevel	Specifies the amount barcode area devoted to error correction characters.	20 to 23

Sample Code:

```
AdBarcode1.CodeType = 3
AdBarcode1.Xunit = 9
AdBarcode1.Mode = 0
AdBarcode1.FixSize = False
AdBarcode1.LineReduce = 0
AdBarcode1.SecurityLevel = 20
AdBarcode1.Caption = “Some data”
```