

The Beta Utility v2.15 27 June 1992

Copyright © Andrew Fountain 1991, 1992

Beta is a utility for easing the task of entering accented characters in Greek, Hebrew and also modern languages. The utility needs to be loaded once at the beginning of each Windows session. It hooks into the Windows keyboard driver and intercepts accent keys, combining them with vowels to produce accented characters. To get an accented character, simply type the vowel followed by the accent, and Beta will combine them.

Start Beta simply by running the program beta.exe. This can be done by double clicking on it in the file manager, by running it from the program manager, or (best) by including it in your startup group so that it is always running.

Four Modes

Of course, Beta needs to know what language is in use in order to generate the correct characters. When running, Beta shows as an icon at the bottom of the screen. This icon shows which language Beta thinks is in use and can have one of four values:

Letter B	English/European accents
Greek Beta	Greek
Hebrew Beth	Hebrew
Crossed-out Beta	accenting is disabled

It is possible to switch between these four modes by holding down the Control and Shift keys and pressing one of four keys: E, G, H or X (Try it and watch Beta's Icon change.)

Switching Beta's modes like this will not change the font that you are typing. To do that you have to use the appropriate command to your word processor. If, for example, you are using Write, then to change to Greek you will have to select the Greek font from the character menu, (assuming it is installed), and also press Ctrl-Shift-G to tell Beta to expect Greek accents.

Easier with Word

If you are using Word for Windows, then you are in a much better position. A set of macros have been written which combine these two operations of switching fonts and switching Beta. To use the macros your document has to be attached to the template which contains them. First make sure that this template, beta.dot, is copied into your winword directory. Then go to the **file** menu and select **templates...** One of the templates on the list should now be beta, and should be selected.

The easiest way is to attach the beta template to your document right from the beginning. When you start a new document that is to contain Hebrew or Greek, select **new** from the **file** menu and you are given the option of what template the document is to have. Choose beta and the macros will be available.

When the beta template is attached, you can use the following function keys:

F10	switch to English/European
F11	switch to Greek
F12	switch to Hebrew

Pause intelligent backspace in all languages

F7 combines points and consonants in Hebrew

These are explained further in the file betamacr.doc

Using Beta in English/European mode

Accented characters can be produced simply by typing the vowel, followed by one of the following keys:

/ on numeric pad	acute
\ on numeric pad	grave
- on numeric pad	circumflex
+ on numeric pad	diaeresis

The right ` and left ' quote characters on the keyboard will produce the proper quote characters ‘ ’, and two - characters will generate a long dash. The complete list of accents is as follows:

[] means that the key is on the numeric keypad. e.g. [/] means the / on the numeric keypad

<u>Diacritic</u>	<u>Key</u>	<u>Also available on keys:</u>
open quote		`
close quote		'
acute	[/]	
grave	[*]	
circumflex [-]		^
dieresis [+]		
tilde	~	
other		
guillemot L		<
guillemot R		>

The *other* accent will produce å ç æ ø ß when used with a c e o s respectively.

Two quotation marks will combine to produce a single double-quote.

Two hyphens will combine to produce an em-dash (0151)

Two < or > symbols will produce guillemots « and »

Using Beta in Greek mode

The letters in the Greek alphabet can be found on the roughly equivalent key:

a b g d e z h q i k l m n x o p r s t u f c y w

Accented characters can be produced in the same way as above. Use ` and ' to produce breathings. They can be typed before or after the accent. The following characters are directly on keys:

final sigma	j
alpha + iota	v
eta + iota	V
omega + iota	J

Here is the full list of accents:

<u>Diacritic</u>	<u>Key</u>	<u>Also available on keys:</u>
rough		`
smooth		'
acute	[/]	/
grave	[*]	\
circumflex [-]		= ^ ~
dieresis [+]		@

[] means that the key is on the numeric keypad. e.g. [/] means the / on the numeric keypad

Some diacritics are available on more than one key for speed and convenience.

Note that the main key for each accent is the same for Greek and ANSI.

Using Beta in Hebrew mode

In Hebrew mode, Beta causes the keyboard to type from right to left. Make sure that you have left Hebrew mode before trying to type elsewhere. The letters in the Hebrew alphabet can be found on the roughly equivalent key:

a b g d h v z x t y k l m n c i p j q r s w t
 final forms on: ; ,] [/

To obtain letters with a dagesh, use the shifted (uppercase) version of the key.

Diacritics can be found as follows:

<u>vowel</u>	<u>short</u>	<u>long</u>	<u>hist. long</u>		
a:	-	f		Shewa	:
				Maqqeph	=
				Soph Pasuq	.
e:	e	"		Metheg	
				Silluq	
i:	I			Atnah	~
				Ole	<
o:	f	o	0 (zero)		
u:	\		V		

Historical vowels missing from the chart above are made by sequences of vowels. To place points under the consonant, you need to use an overstrike macro in Word. This is available on the F7 key when the beta template is active (see above). Type the consonant, followed by any diacritics, and then press F7 to have them placed under the consonant. For example, if you type: *t a* (they will appear from right to left) and then press F7, the *a* will be combined with the *t*. Longer sequences such as *t : -* or *t - |* will combine correctly. If the character is a final kaf then the points will be moved up into it by the F7 key. (See hebkybd.doc for Keyboard Assignments in Hebrew; note options for hireq and shewa caused by problems of spacing).

If you make any mistakes in Hebrew, *use the Pause key as an intelligent backspace*. When you press F10 to leave Hebrew mode, the macro will try to make an intelligent decision about where you want the cursor.

Note that almost all problems in using the Hebrew characters come down to not having synchronization between the current font, and what Beta thinks the language is. (It would slow the system down too much to make Beta constantly test the current language.) For example, if you type some Hebrew, and then move to another part of the document with the cursor keys, Word changes the current font, but Beta is still in Hebrew, and will produce right-to-left typing. Pressing F10 will instantly cure this, or better, press shift-pause which causes Beta to read the current font and synchronize itself.

Command Line Options:

The options /e /g /h or /x force Beta to start up in English, Greek, Hebrew or disabled.

BetaTest:

BetaTest.exe is a Visual Basic program used to test and demonstrate Beta. You will need VBRUN100.DLL to use it.

Accessing Beta from WordBasic in Word for Windows

See *Betamacr.doc* for full information.

Beta.dot contains some useful macros:

<u>Macro name</u>		<u>Key</u>	<u>Description</u>
BetaEnglish		F10	switches back to default font/size
BetaGreek	F11		switches to Greek
BetaHebrew		F12	switches to Hebrew
Overstrike	F7		overstrikes Hebrew vowels and consonants to right of cursor.
BetaBackSpace	Pause	see below	
BetaMagic	shift-Pause		see below
BetaReverse			reverses characters in selection
BetaToGreek			converts English characters + accents to Greek
BetaFromGreek			reverse of above

Magic Macro

Supposing you notice that you have missed an accent in a Greek word higher up the page. Normally you would have to switch to the Greek mode, move up and delete the vowel, and then re-enter the vowel with accent. The macro below is a 'magic macro' which can be put on a convenient key. The macro first reads the current font and informs Beta of it. Then it reads the last character and also informs beta of it. The operation of inserting a missed accent is now much simpler. Just move the cursor immediately after the vowel, press the magic key (the Beta icon will switch to the correct font) and press the required accent. Of course it will work equally well for missed ANSI accents.

Intelligent Backspace Macro:

The macro will perform an intelligent backspace. That is, if the previous character is accented, pressing the backspace key will remove the accent. The macro is similar to the magic macro above in that it reads the previous character and informs Beta of the character and font, so it will work even when the cursor is placed anywhere in the document. Diacritics are removed from Greek vowels one at a time, accents before breathings. If the previous character is not a vowel, then the macro works just like a standard backspace.

Revision History

- 1.00 14 May 1991
Greek only version.
DLL Version
- 1.01 24 May 1991
Crude English and Hebrew added
DLL SwitchTo added
- 1.02 29 May 1991
Command line options /x /e /g /h
SwitchTo automatically loads Beta if not loaded
SwitchTo(-2) for help
Hebrew Icon improved
- 1.03 11 June 1991
Total overhaul of accent handling.
Greek accents moved to new locations.
ANSI accents added.
DLL SetLast function added.
- 1.04 12 June 1991
Dieresis accent moved to @ key
DLL Combine function added.
- 1.05 18 June 1991
Ctrl-Shift E,G,H,X are now swallowed by Beta.
Small improvement in Hebrew cursor left operation.
- 1.06 26 June 1991
ANSI combinations « and » added
DLL UnAccent added to allow intelligent backspace macro.
- 1.10 17 July 1991
Numerous small bug fixes for obscure problems.
Improved handling of Hebrew right-to-left.
DLL UnVowel, Acc2Key and Key2Acc added.
Major improvements to WfW macro library.
- 2.00 29 July 1991
Identical to 1.10 except uses Greek v3 accent positions.
- 2.01 9 August 1991
Fixed problem with shifted characters in Hebrew.
- 2.12 23 October 1991
Major Enjancement.
Numerous bug fixes, particularly in right to left typing.
DLL ChClass and Glob added to support enhanced wfw macros.
Help dialog included.
Modification to BetaHebrew and BetaEnglish macros for more intelligent cursor positioning when leaving Hebrew.
New Overstrike macro for pointing in Hebrew.

- 2.13 21 January 1992
em dash changed to 0151 for WinWord 2.0
- 2.14 9 March 1992
Default language changed from Greek to English
- 2.15 27 June 1992
Default language changed to 'Disabled'

Known Bugs:

Fast typing can cause problems.

Future Enhancements:

Improved on-line help.
'Active Accent' macros.

Thanks to Ian Heath of 'BackMenu' fame for allowing me to use his registration code.