UKEYS FOR WORD. v 1.4. A customizable Unicode keyboard facility for classical Greek and other languages in Microsoft Word97 or later (on Windows 95 / 98 / NT4). Ukeys and ukeys4wd are trademarks owned by Manuel A. Lopez, and other product and company names mentioned may be the trademarks of their respective owners.

For the latest version of this program, see my website:
http://members.aol.com/AtticGreek/
(Note: with some combinations of Word and Internet Explorer, clicking on hyperlinks from within a Word document may make the document "disappear." If pressing the "Back" button on your browser does not eventually return you to this document, you can always reload "readme.doc" again.)

Ukeys customizes your keyboard so that you can use the new standard Unicode 64 K character set to type and edit ancient Greek easily. If you pay the small registration fee ($25), you will be able to customize the keyboard *any* way you wish, to type in *any* language (including mathematical or scientific notations), or multiple languages simultaneously. One of the main advantages of Unicode is the ability to exchange documents with others without their needing special proprietary translating software, something that was not possible for classical Greek before: all that's needed is a standard Unicode program, such as Word 97 or later. Any required fonts can be embedded with the document (Tools, Options, Save, Embed TrueType fonts). Unlike the old ANSI schemes for classical Greek and other non-Latin alphabets, the user can change the font without losing the underlying data. If you don't know what or for what Unicode is, see some of the websites below, and the Unicode site:
http://www.unicode.org/
The best introduction on the usefulness of Unicode for users of classical Greek is this review by Prof. Rusten:
http://www.arts.cornell.edu/classics/Faculty/Rusten/unicode/review.htm
Monotype has some technical information about Unicode, beginning with this overview:
http://www.monotype.com/html/oem/uni_intro.html
For the Unicode charts, showing each character and its Unicode hex value, see:
http://charts.unicode.org/Unicode.charts/normal/Unicode.html

INSTRUCTIONS
(It's a good idea to print this out for easy reference.)

This program relies partly on macros, but it does not make any changes to your normal template (your standard Word settings template), other than to copy two small and easily deleted macros to it. Everything else is in a template file (ukeys1.dot) that is loaded only when you're typing in Greek. Of course, you should always make frequent backups.

First, you must get a *Unicode* TrueType font that contains all the characters you wish to use (English is optional, since you can continue to use whatever fonts you want for the normal Latin characters). This is the hardest part, since most fonts carry only an ANSI set (256 characters), or a limited Unicode set (e.g., the WGL4 set of Windows95/NT4 does not have the full Greek or polytonic character set). I have not legally been able to include such a font, but you may be able to get one from these locations:

(1) For ancient Greek (polytonic), try the Athena Roman UNICODE font:
http://www.nyu.edu/classes/latin2/athena.zip

Note that there are *two* Athena Roman fonts out there, both by Rusten, and only one of them is Unicode: the correct one is a font file larger than 100 KB (actually about 250 KB when uncompressed, and 100 KB as a compressed ZIP file). If you downloaded a file that is smaller than 100 K, you downloaded the wrong file (a non-Unicode file). For example, last time I checked (August 1998) this site had the NON-Unicode version only:
http://www.arts.cornell.edu/classics/Faculty/Rusten/download.html

(2) For ancient Greek plus many other languages (Hebrew, Russian, Arabic): A German web site is developing a special Unicode font. The details but NOT the font (so far) are at:
http://titus.uni-frankfurt.de/unicode/unitest.htm

It may be possible to get a beta copy of the font from them by e-mail. I quote their web site language from August 1998:

"In cooperation with BITSTREAM, the TITUS project is preparing a Unicode Font to match the requirements of linguists and philologists working on several languages (ancient and modern). This font will be made available for non-commercial users soon. For the time being, interested people can obtain a test copy of the font in Windows-TrueType format by sending an e-mail to Jost Gippert in which they state that they will be using the font for non-commercial purposes only and that they will not give it to any third parties." I've tried this font and it prints very well (but screen appearance still needs work).

(3) I don't recommend using the following free font, Bitstream Cyberbit, because it is so large--thirteen (13) MB uncompressed--and you must install Far East support before using it (it also does not have all the polytonic Greek characters), but here is the link:
http://www.bitstream.com/products/world/cyberbits/ftpcyber.html

(4) Microsoft is due to support a wider Unicode with the release of Palatino Unicode, probably with NT 5, but perhaps earlier (or later). You might want to check
http://www.microsoft.com/typography

to see if it's been released. For details about it, see:
http://www.arts.cornell.edu/classics/Faculty/Rusten/unicode/review.htm

Second, you must copy the Unicode font to your Windows font directory, usually c:\Windows\ Fonts. If you are successful, the font name will appear in font dialog boxes.

Third, the files "ukeys1.dot" and "ukeys1.bin" will be copied to your Word program folder or directory. To have this done, double-click below. (The macro will prompt you for permission. If you disabled macros when opening this document, you should close the document, then re-open it and enable them for this document.) If you're bad at double-clicking, just press Alt+F8 and run the macro named "ukeyCopyFilesToWordDir."

Double-click

Fourth, two macros in this document, "ukeyToggle1" and "ukeyReset," will be copied to your normal template so that they are always available. Also, the toggle function (the "ukeyToggle1" macro), to switch back and forth between your normal keyboard and the custom keyboard, will be assigned to CTRL+SPACEBAR. Double-click below to do this. Or you can run the macro manually (Alt+F8). It's called "ukeyCopyMacrosToNormal."

Double-click

If you wish, you can re-assign the toggle function to any key you want. *After* double-clicking above and *only when this readme document is closed*: Go to Tools, Customize, Keyboard, then select Macros from the left hand side ("Categories") and assign the macro "ukeyToggle1" to the keystroke of your choice, saving your changes in NORMAL.DOT. (Technical note: This document has to be closed because, as the source of the macros, its duplicates of the same name will shadow the copies just created in normal.dot.)

Fifth, you will be asked to select the Unicode font you wish to use for your custom keyboard (the "ukeys1.dot" file), and the keyboard will be prepared. This step makes *no* changes to your normal template. Double-click below to perform this step. (Or press Alt+F8 and run either of the macros called "ukeyReset." The duplicate macros you see will disappear when you exit this readme.doc.) This step takes a minute or two.

Double-click

ukeys1 uses the numeric keypad for speedy entry of accented characters (details below). If you prefer to use the numbers above the alphabetic keys instead (handy with laptops), registration of this program will give you a file that will do just that.

If you want to switch the default Unicode font you use for your custom keys (or, after registration, if you wish to change your custom keys), re-run the "ukeyReset" macro.

That's it! You can exit this readme.doc file, after printing it out for future reference. *To switch back and forth between keyboards, use the toggle key (whatever key the macro "ukeyToggle1" is assigned to); the default assignment is Control+Spacebar.* If you find the software useful, you are encouraged to register it by sending $25 (see the registration form at the end). Send your e-mail address with payment, and by return e-mail you get an easy way to customize your Word97 or higher keyboard to enter *any* Unicode chacter with *any* key combination you want, and also a prepared file to use the numeric keys above the keyboard for the accents (useful for laptops) rather than the numeric keypad.

If you see boxes instead of Greek characters when typing with the Greek keyboard toggled in, first make sure that you are in Page Layout mode (View, Page Layout). If you still see boxes, then your video driver may be defective: try safe booting Windows and running Word in safe boot mode. If that solves the problem, get an updated video driver. If that does not solve the problem, then probably the Unicode font you chose in step 5 above does not support the full range of accented Greek characters (does not support the characters for which you see boxes instead). Obtain another font, then re-run the macro "ukeyReset" (step 5).

Uninstalling ukeys: To uninstall, just double-click below (or press Alt+F8 and run the macro "ukeyUNinstall").

Double-click

The most important key is the toggle key to switch between keyboards. By default, that is Control+Spacebar. As explained in step 4 above, once you exit this document, you can reassign the toggle function (a macro called "ukeyToggle1" stored in Normal.dot) to any key you like.

Key assignments:
The alphabetic keys are what you would expect (a=alpha, g=gamma, etc.). Here are the ones you might not expect:

h   eta (historical reasons)
q   theta
j   xi
x   chi
c   psi
w   omega
u *or* y upsilon
n *or* v nu
alt-s   final sigma
?   Greek question mark (;): different Unicode hex than the English semi-colon.
: or ;   Greek colon / semi-colon (the raised period)

Accent marks. Use the numeric keypad, with num lock on. Press the key, then the character:

	smooth (left and out)	no breathing	rough (right and out)
acute (upwards)	7: smooth & acute	8: acute alone	9: rough and acute
circumflex	4: smooth & circumflex	5: circumflex alone	6: rough and circumflex
grave (downwards)	1: smooth & grave	2: grave alone	3: rough and grave
no accent	0: smooth breathing		.: rough breathing

For example, for capital alpha smooth with circumflex, press 4 (and release), then press shift-A.

For iota subscript (a, h, w) or diaresis (i, u, y), press Alt and the letter character simultaneously. For iota subscript or diaresis with accents or breathings, press Alt and the numeric keypad key together (and release); then press the letter character. Obviously there are no capital letters with these. Examples: For alpha iota subscript, press alt+a. For alpha iota subscript smooth and grave, press alt+1 (and release), then a.

Some combinations don't produce anything because they are impossible (when you stop to think about it), such as capital alpha circumflex without a breathing mark. Some characters appear in Unicode that have never been seen before (e.g., capital letters with iota subscripts), but that seems to be because something was lost in the translation from modern Greek to computer geek English (e.g., prosgegremmani versus ypogegremmani). The error is harmless, since those characters are just not used, and Unicode, unlike ANSI, has a lot of free space.

REGISTRATION FORM:

How much?
For non-commercial users, you receive a license that allows you to use the software on one computer at a time for $25. (Prices for quantity purchase available on request).

What's in it for me?
- Instructions and software to easily customize your keyboard any way you want!
- An alternate pre-made keyboard that enters accents through the numbers above the keys!
- The ability to shift in and out of multiple keyboards, not just one!
- The complex and mixed pleasure of helping a talented but impoverished graduate student!

Name: _____

Address: _____

City, State, ZIP: _____

E-mail address: _____

Your additional software will be sent to the e-mail address given above.
Please make a check or money order payable to Manuel A. Lopez. Mail to:
      Manuel A. Lopez
      67 Emerald St # 603
      Keene NH 03431
      U.S.A.

Thank you for trying UKEYS FOR WORD.