

Keying in Hebrew

How to type in Hebrew with the Ezra SIL fonts

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Before Unicode, users could type Hebrew characters simply by changing the font and typing. With Unicode, this is no longer possible. For general use, **a Hebrew keyboard** (i.e., a keyboarding program) **must be installed** and activated in order to type Unicode Hebrew characters. Three keyboards are made available with this release, but a user may choose any standard Hebrew Unicode keyboard preferred. Follow the *Installation Guide* instructions to install.

This font was designed for use with Office 2003. Results in Word 2000 and Word 2002 (XP) may not be adequate, and users may find it too frustrating to produce useable documents. Part of the code for handling biblical Hebrew correctly is in Office 2003. Word 2000 and 2002 tend to not render accents properly, unless the selection is cut and pasted as unformatted text, and then the file closed and re-opened. These problems may not occur if cantillation marks and complex combinations are avoided.

We will be adding a Frequently-Asked Questions (FAQ) webpage to the <http://scripts.sil.org> site soon. Check this for possible solutions to problems with Word 2000 and 2002.

New Users of Hebrew fonts and Unicode

If you do not need to type Hebrew with cantillation marks, simply type:

Consonant - Dagesh - Vowel

With the correct settings, Microsoft Word 2003 or any OpenType application will automatically display right-to-left.

Do not mix two Hebrew fonts in the same word. It is unlikely the word will display correctly.

Users of SIL Ezra fonts moving to Ezra SIL Unicode

You do not need to uninstall the SIL Ezra fonts, keyboards, or macros to use the new fonts.

If you are used to using the SIL Ezra Keyman keyboard, the new Unicode version is nearly identical.

It is no longer necessary to type in the FRED window and then cut and paste into Word 2003.

It is no longer necessary to use the *Reverse* macro. Word 2003 will automatically display the text right-to-left.

If you do not need to type complex Hebrew with cantillation marks, simply type:

Consonant - Dagesh - Vowel

If you need to type cantillation, see the chart and information at the end of this document.

Users of Ezra SIL Unicode fonts moving to version 2 of Ezra SIL Unicode

The Private Use Area (PUA) characters have been removed from the font. In their place, there are sequences that can be used to get the same result. See the chart below or page 3 of the *Ezra SIL Keyboard Chart22.pdf*. Also see the next section for the newly required input order.

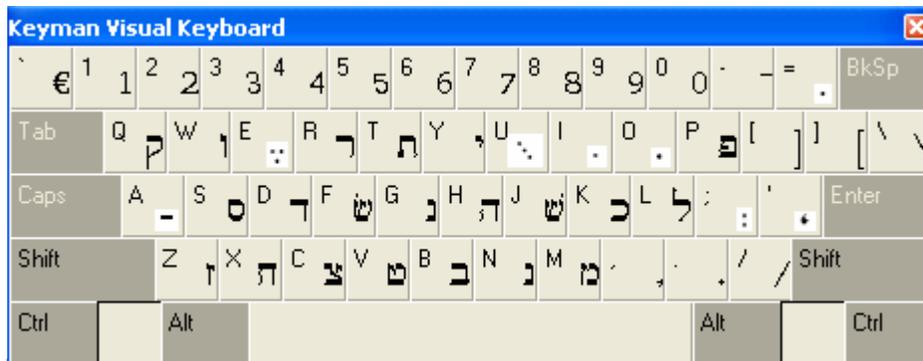
Ezra SIL v.1	Ezra SIL v.2
U+F300 HEBREW REVERSED NUN	nun+CGJ+combining dot above (U+05E0 U+034F U+0307)
U+F301 HEBREW MARK LOWER DOT	combining dot below (U+0323)
U+F302 HEBREW ACCENT RIGHT METEG	meteg+CGJ or ZWNJ+vowel
U+F303 HEBREW ACCENT LEFT METEG	hataf vowel+CGJ or ZWNJ +meteg (hataf U+034F or U+200C U+05BD).

Using a Keyman Visual Keyboard

A visual keyboard (an on-screen picture of the keyboard) is available only in the Keyman package *ezrauni22.kmp*. If you used this installer to install the fonts and keyboard, the visual keyboard will be available. Right-click the Keyman icon in the System Tray and select Visual Keyboard. If you are using English as your primary language, a standard English keyboard should appear.

To access the Hebrew keyboard, open an application where you can type Unicode Hebrew, such as WordPad or Word. Switch to the *Ezra SIL* or other Hebrew Unicode font. Change the language to “HE” using the System Tray. If necessary, select the *Ezra SIL Unicode22* keyboard, if it is not the default. The visual keyboard should switch to Hebrew. Ignore the graying out which occurs when switching back and forth between application and keyboard.

There appears to be a bug which prevents the Hebrew layout from displaying immediately. It may initially display as the normal language layout. It seems to help to close the current application and re-open it. This is what the keyboard should look like when it first displays:



Click the **Shift, Alt**, or **Alt-Shift** combination to see other Hebrew characters. Click on a key to insert it into your document or type the combination from the keyboard. **Note** that there is a bug which may not allow you to point and click to insert a character from the visual keyboard for the **Alt** and **Alt-Shift** sections of the layout. You will have to type these directly from the keyboard.

Right-click on the visual keyboard for more options, if desired.

To remove the keyboard from the screen, click the 'x' in the upper right corner of the keyboard layout.

Typing Hebrew Cantillation Marks

After long discussions in Spring 2003, a group of font designers decided on the following order of data for display with our fonts. The Unicode canonical order was discussed at length and deemed un-programmable with current hardware and software. The next table describes a compromise on the Unicode order which was agreed upon by SIL for *Ezra SIL* fonts, Ralph Hancock for the *Vusillus* font, Tiro Typeworks and Society of Biblical Literature for the *SBL Hebrew* font, and Microsoft for future Microsoft Hebrew fonts (2005). Data stored in the order shown should display correctly and be interchangeable with any of these fonts.

Data must be typed in the following order:

Consonant - Dagesh - Vowel - Low Marks - Pre-positive Marks - High Marks - Post-Positive Marks

Class	Example with Sin	Unicode	Unicode Name	Comments
All Consonants		05D0-05EA	HEBREW LETTER ...	
Shin/Sin Dots		05C1	HEBREW POINT SHIN DOT	
		05C2	HEBREW POINT SIN DOT	
Dagesh/Rafe		05BC	HEBREW POINT DAGESH OR MAPIQ	
		05BF	HEBREW POINT RAFE	
Holam		05B9	HEBREW POINT HOLAM	
Right Meteg		05BD	HEBREW POINT METEG	Use 05BD+034F (CGJ) or 200C (ZWNJ)
All Low Vowels		05B0-05B8, 05BB	HEBREW POINT...	
Low Cantillation Marks		0591	HEBREW ACCENT ETNAHTA	
		0596	HEBREW ACCENT TIPEHA	
		059B	HEBREW ACCENT TEVIR	
		05A3	HEBREW ACCENT MUNAH	

	שְׁ	05A4	HEBREW ACCENT MAHAPAKH	
	שְׁ	05A5	HEBREW ACCENT MERKHA	
	שְׁ	05A6	HEBREW ACCENT MERKHA KEFULA	
	שְׁ	05A7	HEBREW ACCENT DARGA	
	שְׁ	05AA	HEBREW ACCENT YERAH BEN YOMO	
	שְׁ	05BD	HEBREW POINT METEG	
	שְׁ	0323	COMBINING DOT BELOW	low punctum extraordinarium
Low Second Vowels	לִּם	05B4	HEBREW POINT HIRIQ	
Pre-Positive Marks:				
Low Pre-positive Marks	שְׁ	059A	HEBREW ACCENT YETIV	
	שְׁ	05AD	HEBREW ACCENT DEHI	
High Pre-positive Marks	שְׁ	059D	HEBREW ACCENT GERESH MUQDAM	
	שְׁ	05A0	HEBREW ACCENT TELISHA GEDOLA	
High Cantillation Marks and Dots	שְׁ	0593	HEBREW ACCENT SHALSHELET	
	שְׁ	0594	HEBREW ACCENT ZAQEF QATAN	

		0595	HEBREW ACCENT ZAQEF GADOL	
		0597	HEBREW ACCENT REVIA	
		0598	HEBREW ACCENT ZARQA	
		059C	HEBREW ACCENT GERESH	
		059E	HEBREW ACCENT GERSHAYIM	
		059F	HEBREW ACCENT QARNEY PARA	
		05A1	HEBREW ACCENT PAZER	
		05A8	HEBREW ACCENT QADMA	
		05A9	HEBREW ACCENT TELISHA QETANA	
		05AB	HEBREW ACCENT OLE	
		05AC	HEBREW ACCENT ILUY	
		05AF	HEBREW MARK MASORA CIRCLE	You will get better results with a good typesetting program if you wish to use this mark for margin notes.
		05C4	HEBREW MARK UPPER DOT	Upper punctum extraordinarium. Often occurs with 0323-combining dot below and other marks
		0307	COMBINING DOT ABOVE	Use for Qetiv/Kere or Hundreds, occurs alone

		0308	COMBINING DIARESIS	Use for Thousands, occurs alone
High Post- positive Marks		0592	HEBREW ACCENT SEGOL	Some texts place this mark medially rather than post-positive, in which case it should go with High Cantillation Marks above.
		0599	HEBREW ACCENT PASHTA	
		05A9	HEBREW ACCENT TELISHA QETANA	
		05AE	HEBREW ACCENT ZINOR	
Left Meteg on Hataf		05BD	HEBREW ACCENT METEG	For Ezra SIL fonts, precede with ZWNJ or CGJ.
Other out of order or duplicate Marks, such as masora circle on the left.		05AF	HEBREW MARK MASORA CIRCLE	Precede with ZWNJ or thinspace
Punctuation		05F3	HEBREW PUNCTUATION GERESH	occurs alone
		05F4	HEBREW PUNCTUATION GERESHAYIM	occurs alone
		05C0	HEBEW PUNCTUATION PASEQ	Precede with NBSP if desired
		05C3	HEBREW PUNCTUATION SOF PASUQ	
Other Punctuation: Period, Comma, Semi- colon, Question Mark, Quotes, Slash, etc.				Use Roman equivalents

Other Shapes

Note that the FB section of Unicode cannot accept OpenType commands, and thus no diacritics. We don't recommend using *any* FB codepoints.

Alef-Lamed Ligature		FB4F	HEBREW LIGATURE ALEF LAMED	Rather than using FB4F, an option is 05D0+ZWJ+05DC (alef+ZWJ+lamed)
Alternate Shapes		FB20	HEBREW LETTER ALTERNATIVE AYIN	There are no alternative glyph in the fonts, since there is no way to access them. Use 05E2-ayin.
Wide Letters		FB21-FB28	WIDE letters	These are not included. Use a good typesetting program.
Numbers & Currency				Use Roman equivalents
Mirroring Pairs: Brackets, Braces, Parentheses, etc.				Use Roman equivalents. If you don't get the shape you want, try the other of the pair. This varies by application.
Setuma & Petuha				Use small sizes of samekh and pe. No separate Unicode codepoint is currently assigned.
Reverse Nun		05E0+034F		Use nun+CGJ
Reverse Nun with Dot		05D0+034F+0307		Use nun+CGJ+Hundreds Dot
Isolate Holam-Vav		034F+05B9+05D5		Use CGJ+holam+vav. Line-initial and word-medial holam-vav do not require CGJ.