Southern Software, Inc. Foreign Font Information
for SoftKey's KEY Fonts Pro 3,003

Script	Language	Font Map	Default Keyboard	Font Families
AmerIndian	Symbols			Peace Pipe SSK
American Sign Language			United States	ASL SSK
Arabic		Arabian	Arabic	ArabicKufi SSK
		Arabian	Arabic	Arabic7Kufi SSK
		Arabian	Arabic	Arabic7Modern SSK
		Arabian	Arabic	Arabic7Typewriter SSK
		Arabian	Arabic	ArabicNaskh SSK
		Arabian	Arabic	ArabicRiyadh SSK
		Arabian	Arabic	ArabicZiba SSK
		Arabian	Arabic	Deseret SSK
		Arabian	Arabic	Fez SSK
		Arabian	Arabic	Inshallah SSK
		Arabian	Arabic	KasmirSSK
Aramaic	Aramaic	Aramaic	Aramaic (United States)	Aramaic SSK
	Moabite	Aramaic	Aramaic (United States)	Moabite SSK
	Nabataean	Aramaic	Aramaic (United States)	Nabataean SSK
	Phoenician	Aramaic	Aramaic (United States)	Phoenician SSK
Armenian				ArmenianArti SSK
				ArmenianMaral SSK
Baltic	East European			BalticSans SSK
	East European			BalticTimes SSK
Chinese	Simplified Chinese			Paper Tiger SSK
Cyrillic	(See Note 3)		Cyrillic	CyrillicTimes SSK
	(See Note 3)		Cyrillic	Cyrillic7 SSK
	(See Note 3)		Cyrillic	CyrillicChurchSlavonicTimes SSK
	(See Note 3)		Cyrillic	Pravda Display SSK
	(See Note 3)		Cyrillic	Ruska SSK
	(See Note 3)		Cyrillic	Anastasia SSK
	(See Note 3)		Cyrillic	Cyrillo SSK
	(See Note 3)		Cyrillic	Kapital SSK
	(See Note 3)		Cyrillic	Slavonic SSK
	(See Note 3)		Cyrillic	Svetlana SSK
	Cyrillic/French	Extended Cyrillic	French (See note 9)	Cyrillic-FrenchTimes SSK
	Cyrillic/German	Extended Cyrillic	German (See note 9)	Cyrillic-GermanTimes SSK

	Cyrillic/English	Extended Cyrillic	United States (See note 9)	Cyrillic-EnglishSans SSK
	Cyrillic/English	Extended Cyrillic	United States (See note 9)	Cyrillic-EnglishTimes SSK
Eskimo	Inuit	Extended Inuit	United States (See note 9)	Inuktitut SSK
	Inuit	Extended Inuit	United States (See note 9)	InuktitutLight SSK
Ethiopia	(See Note 7)	Ethiopian	Ethiopian (United States)	Geez Times SSK
	(See Note 7)	Ethiopian	Ethiopian (United States)	EthiopicTimes SSK
Greek	Coptic, Yiddish	Coptic	Greek [Coptic]	Coptic SSK
	Coptic	Coptic	Greek [Coptic]	Fayium SSK
	Greek	Greek	Greek	Greek7 SSK
	Koine Greek	Greek	Greek	GreekSans Ancient SSK
	Koine Greek	Greek	Greek	GreekTimes Ancient
	Greek	Greek	Greek	GreekSans SSK
	Greek	Greek	Greek	GreekTimes SSK
	Greek	Greek	Greek	Eisago SSK
	Greek	Greek	Greek	Codex SSK
	Greek	Greek	Greek	Macedon SSK
Hebrew	Hebrew	Hebrew	Hebrew	BC SSK
	Hebrew	Hebrew	Hebrew	Bethel SSK
	Hebrew	Hebrew	Hebrew	Exodus Script SSK
	Hebrew	Hebrew	Hebrew	Exodus Simplified SSK
	Hebrew	Hebrew	Hebrew	Exodus SSK
	Hebrew	Hebrew	Hebrew	Galil SSK
	Hebrew	Hebrew	Hebrew	Massorete SSK
	Hebrew	Hebrew	Hebrew	Sabra SSK
	Hebrew	Hebrew	Hebrew	Tovah SSK
	Hebrew	Hebrew	Hebrew	Zayin SSK
	Hebrew	Hebrew	Hebrew	Hebrew7 SSK
	Hebrew	Hebrew	Hebrew	Aaron SSK
	Hebrew	Hebrew	Hebrew	David SSK
	Hebrew	Hebrew	Hebrew	Joshua SSK
	Hebrew	Hebrew	Hebrew	Purim SSK
Hieroglyphics	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 1 SSK
	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 2 SSK
	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 3 SSK
	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 4 SSK
	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 5 SSK
	Hieroglyphics	Hieroglyphics	United States (See Note 1)	Cartouche 6 SSK
Indian	(See Note 4)			BengaliDhaka SSK

	Devanagari			DevanagariDelhi SSK
	(See Note 4)			GujaratiRajkot SSK
Japanese	Japanese			Misuki SSK
				Fujiama SSK
Korean	Korean		United States (See Note 2)	KoreanModern SSK
	Korean		United States (See Note 2)	KoreanCollege SSK
	Korean		United States (See Note 2)	KoreanDblOutline SSK
	Korean		United States (See Note 2)	KoreanGradiant SSK
	Korean		United States (See Note 2)	KoreanSans SSK
	Korean		United States (See Note 2)	KoreanShadow SSK
	Korean		United States (See Note 2)	KoreanTimes SSK
Latin	Western Langs.	(See Note 5)	United States	Most SSK fonts
		(See Note 5)	United States	Latin 7 One SSK
		(See Note 5)	United States	Latin 7 Two SSK
		(See Note 5)	United States	LatinALA-LC1Times SSK
		(See Note 5)	United States	LatinALA-LC2Times SSK
		(See Note 5)	United States	LatinAllln1Cour SSKr
		(See Note 5)	United States	LatinAllln1Goth SSK
	Extended Latin	(See Note 5)	United States	LatinExt1Times SSK
	Extended Latin	(See Note 5)	United States	LatinExt2Times SSK
	Extended Latin	(See Note 5)	United States	LatinExt3Times SSK
	Extended Latin	(See Note 5)	United States	LatinExt4Times SSK
	IPA		United States	LatinIPATimes SSK
	Cent. European	(See Note 6)	United States	CE Sans SSK
	Cent. European	(See Note 6)	United States	CE Times SSK
	West European	(See Note 5)	United States	WestSans SSK
	West European	(See Note 5)	United States	WestTimes SSK
Music	Musical Symbols		United States	Concerto SSK
	Guitar Symbols		United States	Lyric SSK
	Musical Symbols		United States	Trio SSK
	Musical Symbols		United States	Recital SSK
	Musical Symbols		United States	Sax n' Violins SSK
	Musical Symbols		United States	Scala SSK
Persian	Persian	Persian	Arabic	Persian 7Modern SSK
	Persian	Persian	Arabic	Persian 7Typewriter SSK
	Kufi, Pashto	Persian	Arabic	PersianKufi SSK
	Kufi	Persian	Arabic	PersianKufi Outline SSK
	Kufi	Persian	Arabic	Persian 7Kufi SSK

	Lotos	Persian	Arabic	PersianLotos SSK
	Naskh	Persian	Arabic	PersianNaskh SSK
	Ziba	Persian	Arabic	PersianZiba SSK
Phoenician				Levant SSK
				Tyre SSK
	Ancient			Phoenician SSK
Punjabi				PunjabiAmritsart SSK
Sanskrit				SanskritDelhi SSK
South Arabian	(See note 8)	South Arabian	South Arabic	SouthArabian SSK
Syriac	Syriac	Syriac	Syriac (United States)	SyriacEstrangello SSK
				SyriacEast SSK
Thai				ThaiBangkok SSK
				Thai 7Bangkok SSK
Turkish				TurkishSans SSK
				TurkishTimes SSK
Ugaritic	Ugaritic	Ugaritic	Ugaratic (United States)	Ugaritic SSK
Urdu	Kufi			Urdu 7Kufi SSK
	Kufi			UrduKufi SSK
	Kufi			UrduKufi Outline SSK
	Urdu			Urdu 7Modern SSK
	Urdu			Urdu 7Typewriter SSK
	Naskh			UrduNaskh SSK
Vietnamese			United States	VietnameseTimes SSK
			United States	Vietnamese 7Times SSK

Note 1: The Hieroglyphics language uses the Gardiner's Hieroglyphics input method which converts from English Gardiner's alphabet codes to Hieroglyphics characters. Therefore this language uses the United States keyboard. The hieroglyphics are grouped into 6 logical sets.

Note 2: These Korean fonts are set up to accept English (A-Z) characters as input and converts them to Hangul Syllable characters. They use common English transliterations from English to Jamo. When each Hangul syllable is being composed, the characters will overwrite each other, because they have no length. A space character will cause the character being composed by the input of it's various parts to be finished. The space character will cause the cursor to move to the next character position.

Note 3: Russian, Bulgarian, Ukranian, Macedonian, Serbian, Byelorussian, Georgian

Note 4: Bengali Gujarati, Hindi, Kannada, Marathi, Malayalam, Nepali, Punjabi, Sanskrit, Sinhalese, Telugu, Tibetan

Note 5: Danish, Dutch, English (US, British), Finnish, French, German, Italian, Icelandic, Norwegian, Portugese, Spanish, Swedish

Note 6: Albanian, Croatian, Czech, Estonian, Hungarian, Latvian, Lithuanian, Polish, Romanian, Slovak, Slovenian, Turkish

Note 7: Amharic, Ge'ez, Oromo, Tigre, Tigrinya

Note 8: South Arabian, Lihyanite, Safitic, Thamudic

Note 9: SSi's Extended font mapping combines 2 languages in one font so multilingual documents can be made without changing fonts. The European languages are in the bottom 127 characters of the font and the Cyrillic or Eskimo are in the top 127 characters.

Macintosh WorldScript

With the advent of Apple's System 7.1 with WorldScript, fonts can be assigned to a particular script system. We simply use an ID # in the range for the Arabic or Hebrew systems, and your font will type right to left! For more information on this, please refer to Inside Macintosh, Volume VI, pages 13-6 through 13-9.

Script System	Font ID range
Japanese	16384 - 16895
Traditional Chinese	16896 - 17407
Korean	17408 - 17919
Arabic	17920 - 18431
Hebrew	18432 - 18943
Greek	18944 - 19455
Cyrillic	19456 - 19967
Simplified Chinese	28672 - 29183
Vietnamese	31232 - 31743

Unicode and Microsoft Code Pages

Southern Software Foreign language fonts internally use a special character set called Unicode for handling non-latin based languages. From the end user's point of view, this produces standard Microsoft Windows compatible text. The Unicode standard was developed by a consortium of companies including Apple, Microsoft, HP, IBM, Xerox, leading European Consortium Members and others. Full Unicode and ISO compliance assures that your documents will be able to use the same fonts and look across various operating system platforms and applications.

Please note that Postscript only allows 256 positions for characters, while Unicode potentially allows thousands of characters (as in Japanese Kanji). In all fonts, the Postscript version will access the first 256 characters only.

While no Microsoft standard exists for a particular language, all the fonts are compatible among all Windows supported applications; keyboards, spell checkers, dictionaries, etc. - as well as being capable of functioning in any version of Windows.

West European, East and Central European, Greek, Cyrillic, and Turkish fonts are compatible with all 3rd party applications that support the standard Microsoft Windows code pages for these languages.

Arabic and Hebrew fonts are encoded similar to Microsoft Arabic and Hebrew Windows code pages. SSi Arabic fonts have been modified so that they can be used either outside of Arabic Windows or from within Arabic Windows. Our Hebrew fonts are enhanced over the Hebrew Windows fonts to support correct placement of vowels with respect to wide as well as narrow characters so as to provide printing suitable for camera ready output of Biblical Hebrew.

Wordwrap - Left to Right

In Arabic Windows and Macintosh System 7.x, right-to-left languages wordwrap properly. Right-to-left languages supported in Arabic Windows are Urdu, Persian, Hebrew, etc. These can all be mixed with Arabic as well as with left-to-right languages such as Eastern European, Turkish, Russian, etc.

Pre-Composed Accent Character Combinations And Floating Overstrikes

All the European National keyboards all have pre-composed accent character combinations on the top levels of their keyboards to make typing faster. But to type these characters from the US keyboard, or to type Spanish from a German layout, you would need to type them from accent character combinations from the **SHIFT+CTRL+ALT** keyboard. By

typing these letters as combinations there is room to type all Western European languages from any Western European or US keyboard. Cyrillic keyboards work similarly.

A floating overstrike mark is a vowel, diacritic, accent, breathing or tone mark that is separately typed from the base character and placed above, below, inside, or beside the character.

For many common character and diacritic combinations, you have your choice of typing the composed character + diacritic (for example *e')* as a single glyph (as long as it exists as a single glyph on the keyboard), or as two separate keystrokes. Numerous extended characters plus accents can be typed from the **CTRL+ALT** (**AltGr** on European keyboards) and **SHIFT+CTRL+ALT** (**Shift+AltGr** on European keyboards) levels and are not found as precomposed glyphs.

Important: For Latin, Greek, and Cyrillic languages, not all diacritics may be used with all characters. The diacritics plus the character must exist as a pre-composed glyph in the font (although it may not exist on the active keyboard layout as pre-composed.)   For Latin, Greek, and Cyrillic languages Microsoft has defined the set of pre-composed glyphs in the font and these cannot be altered.

Southern Software follows the Unicode standard for typing ligatures and conjuncts. Languages such as Arabic and Persian use many ligatures while Indic languages use many conjuncts.

Hindi has vowels that are typed after characters but are displayed before the character.

Thai has vowels whose position depends on the nature of the preceding or following character.

Foreign Language PostScript Kerning Pairs

PostScript kerning pairs are not so important for many languages such as Arabic scripts, Indic languages, and many other non-Latin scripts. Kerning, for the most part, is used for Latin, Greek, and Cyrillic based scripts.

What is Kashida?

Kashida is an Arabic typesetting term that refers to the stretching of connecting lines between characters when the text is justified. Without the kashida, languages with connecting characters could only be justified by adding extra space between the words.

The Kashida is not only used in Arabic, it is also used in all languages based upon the Arabic alphabet, including Persian, Urdu, Pashto and Jawi. Many Indic languages also have connecting characters, and therefore make use of kashida. These include Hindi, Sanskrit, Bengali, Nepali and others.

Kashida can be added directly from within your target application. It is the character at location 254 in your font. To add this character, from within your application type **Alt 0254** from the numeric keypad with **Num Lock** on.

Choices of Keyboards

Some languages have characters that take different forms depending upon whether they appear in the beginning, middle, or end of a word, or stand by themselves. In Arabic and Persian, for example, nearly all of the characters have four separate forms. Hebrew has five characters that use a different form at the end of words. Greek has one such character. These are logically better suited to different keyboard layouts than our English\US keyboard layout.

Many non-Latin based languages even offer a choice of keyboards between several national standard (typewriter) keyboards and phonetic keyboards.

For example, there are several national standard typewriter and several phonetic layouts for Arabic. Russian has a number of national typewriter layouts as well as several phonetic layouts. And for Latin languages, you might choose to type in German or French using a US keyboard layout if you are familiar with the US keyboard or choose the German or French keyboards if you are familiar with those. Select the layout you prefer for each language.

You can type all Western European languages from any Western European keyboard. Likewise for Eastern European and Cyrillic keyboards, you can type any language within that grouping.

What are 7 Bit Fonts?

Some applications do not support the complete Windows font code page having 256 characters and require reduced 128 character set fonts. Most data base programs reserve some of the upper 128 ASCII characters for special purposes and so are not compatible with many extended character set fonts including standard Arabic, Hebrew, Greek, Eastern European, Cyrillic, etc. Some 7-bit electronic mail and fax applications also have this limitation. These 7-bit fonts allow you to print a foreign language fax or send mail directly from your word processor.

For these applications Southern Software includes special 7-bit (128 character) fonts. These fonts have "7" in their names. "7" fonts will always work with data base applications. Special 7-bit fonts for European, Greek, Cyrillic, Arabic, Hebrew, etc. are not compatible with Microsoft's 8-bit (256 character) fonts for these languages.

There are several limitations using Southern Software 7-bit fonts:

We have not made as wide a variety of 7-bit fonts yet as we have made for US Windows applications.

The Latin, Greek, Hebrew, and Cyrillic 7-bit (128 character) fonts are mono-spaced.

For complex languages such as Persian and Urdu we have needed to leave out most of the ligatures resulting in a font that is perfectly readable but not quite as elegant as what is available in our 8 bit fonts.

Why must Arabic Windows use 128 character (7-bit) English fonts? The reason is whenever Arabic Windows sees characters 128 or above in a font, it thinks the text is Arabic and tries to apply the Arabic contextual analysis rules to it. If we limit the English fonts to not having any upper ASCII codes (above character 127), then all our languages will work fine in any Arabic Windows application.

Ventura Publisher and Foreign Language Fonts

You should upgrade to version 5.0 or later. Earlier versions use certain upper ASCII character codes for internal functions, causing characters with these codes to display and print incorrectly. Versions before 5.0 are not true Windows code page compatible applications. The character codes affected in earlier versions are:

127, 131, 136, 141, 144, 149, 151, 157, 158, 168, 172, 175, 177, 181, 183, 185, 166, 190, 208, 215, 221, 222, 240, 247, 253, 254.