

KeyMan IPA Keyboard, FindPhone Keying

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Introduction

The Tavultesoft Keyboard Manager IPA Keyboard enables you to access the characters in the SIL Encore IPA fonts under Microsoft Windows using the popular “FindPhone” keying system. The keyboard automatically selects the correct variant of a diacritic (e.g. “o-width” or “i-width”, etc.) for a particular base character so that you don’t have to worry about choosing the right one.

Pressing a valid key always produces a character on the screen. Pressing an invalid key causes your computer to beep.

Accessing Base Characters

In the FindPhone keying system, the basic IPA characters are entered by typing a letter, a ? or a ! possibly followed by one of <, =, or >. Characters whose appearance is similar to a particular letter of the alphabet have a key sequence beginning with that letter. This makes the key sequences easier to remember. Here is a sample:

KEYS:	<i>n</i>	<i>n</i> <	<i>n</i> =	<i>n</i> >	<i>N</i> or <i>N</i> =
CHARACTER:	n	ɳ	ɲ	ŋ	ɴ

There is some consistency in the assignment of key sequences to characters. For example, all the retroflex consonants have a key sequence with <, and all the implosive consonants have a key sequence with >.

For specific characters, please refer to the IPA Charts or the Keying Charts.

Using Diacritics

Diacritics that are represented by a superscripted character are entered by typing a ^ after entering the character. For example, to enter the diacritic for palatalization (^j), you type j^.

Most other diacritics are entered by typing a punctuation key one or more times. For example, to enter the diacritic for nasalization (~), you type ~, and to enter the ejective diacritic (’), you type ||.

The keyboard requires that if you want a subscript diacritic and a superscript diacritic on the same character, then you must enter the subscript diacritic first.

The keyboard prevents you from entering more than one subscript diacritic or more than superscript diacritic on the same base character since they would overlap and not be readable. If you do want two diacritics in the same place, move the cursor (e.g. press LEFT then RIGHT) before entering the second one.

When you enter a diacritic, the keyboard automatically chooses either the “o-width” or the “i-width” character, depending on the width of the base character. In the case of the “advanced” diacritic, it also chooses the lowered version if the base character descends below the base line.

If you enter a superscript diacritic above a base character with a dot, the dot is removed. If you delete the diacritic by pressing BKSP the dot is reinstated.

If you enter the “velarized or pharyngealized” diacritic after an “ell”, then the two will be combined into the “dark ell” character (201). If you enter the diacritic for rhoticity after a “schwa”, then the two will be combined into the “rhotacized schwa” character (212).

Using Diacritical Tone Marks and Tone Letters

Superscript diacritical tone marks are entered by typing @ followed by one or two digits. Tone letters are entered by typing # followed by one or two digits.

The keyboard requires that you enter a diacritical tone mark on a character only after you have entered any subscript or superscript diacritics.

When you enter a diacritical tone mark, the keyboard automatically chooses one of the four versions (“o-width” or “i-width”, “normal” or “raised”), depending on the width and height of the base character and whether any superscript diacritics are present.

Keying Order

As mentioned above, elements of a phone must be keyed in the following order:

BASE CHARACTER	SUBSCRIPT DIACRITIC	SUPERSCRIP T DIACRITIC	DIACRITICAL TONE MARK	FOLLOWING DIACRITICS
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The IPA Charts and Keying Charts

The IPA Charts show the key sequences to the right of the character displayed in standard IPA charts. These should be useful to linguists. The Keying Charts show the characters arranged according to their key sequences. These should be more suitable to non-linguists.

Differences from FindPhone

Due to differences between the characters available in the SIL Encore IPA fonts and those in the fonts distributed with FindPhone, the IPA keyboard does not behave identically to FindPhone.

CHANGES

The diacritic for rhoticity has the key sequence **[**, not **[[**.

The preferred key sequence for the tie bar is **#&**, not **@&**. In some circumstances **@&** does not work correctly.

Only the standard subscript versions of the advanced, retracted, raised, lowered, +ATR and –ATR diacritics are available. They are keyed using the PLUS and MINUS keys without the ALT key as are the more rounded and less rounded diacritics.

The additional key sequences for the raised versions of the diacritical tone marks are no longer necessary, although they can be used if required.

Since uppercase letters are not available, pressing an uppercase key immediately displays one of the possible IPA characters. It is then not necessary to type the **<**, **=** or **>**.

ADDITIONS

The non-IPA “angstrom” diacritic is available with key sequence **@** or **''''**.

The Encore IPA tiny space character (202) is available with key sequence **#**.

Tone letters are available with key sequences consisting of a **#** followed by one or two digits.

DELETIONS

The non-IPA symbol for a bilabial approximant (“cursive w”) is not available.

The non-IPA diacritics for voiced aspiration (“superscript hooktop h”) and light aspiration (“reversed apostrophe”) are not available.

Superscript vowels and nasals (except n) are not available.

The raised version of the nasal diacritic is not available.

Not all the diacritical tone marks are available.

Superscript pitch numbers and pitch contours are not available.

Uppercase letters and other non-IPA ASCII characters (except comma, **[**, **** and **]**) are not available.

Special FindPhone search symbols are not available.

IPA Charts

Consonants

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p p b b			t t d d		ʈ ʈ< ɖ ɖ<	c c ɟ ɟ=	k k g g	q q ɢ ɢ=		ʔ ʔ=
Nasal	m m	ɱ m>		n n		ɳ n<	ɲ n=	ŋ n>	ɴ ɴ=		
Trill	ʙ ʙ=			r r					ʀ ʀ=		
Flap				ɾ ɾ>		ɽ ɽ<					
Fricative	ɸ f=	f f β b=	θ t=	s s z z	ʃ s=	ʂ s< ʐ z<	ç c=	x x ɣ g=	χ x=	ħ h>	h h ɦ h<
Lateral fricative				ɬ l=							
Approximant		ʋ v=		ɹ r=		ɻ R<	j j	ɰ w>			
Lateral approximant				l l		ɭ l<	ʎ L<	ʟ L=			
Implosive	ɓ p>			ɗ t> ¹ ɗ d>			ɟ c>	ɠ k>	ɢ q>		

Other Symbols

ʌ w=	Voiceless labial-velar approximant	⦿ p=	Bilabial click
w w	Voiced labial-velar approximant	ǀ !<	Dental click
ɥ h=	Voiced labial-palatal approximant	ǃ !	(Post-)alveolar click
ç c<	Voiceless alveolopalatal fricative	ǂ !=	Palatoalveolar click
ʐ z>	Voiced alveolopalatal fricative	ǁ !>	Alveolar lateral click
ɥ H>	Simultaneous ʃ and x	ʔ Q=	Voiced epiglottal plosive
ʝ L>	Voiced alveolar lateral flap	ʜ H=	Voiceless epiglottal fricative
		ʕ Q<	Voiced epiglottal fricative

Vowels

	Front		Central		Back	
	Unrounded	Rounded	Unrounded	Rounded	Unrounded	Rounded
Close	i i	y y	ɨ ɨ=	ʉ ʉ=	ɯ ɯ=	u u
Near-close	ɪ ɪ=	ʏ ʏ=				ʊ ʊ<
Close-mid	e e	ø ø>			ɤ ɤ>	o o
Mid			ə e=	ɵ ɵ=		
			ɜ e>			
Open-mid	ɛ e<	œ œ<			ʌ u>	ɔ o<
Near-open	æ a<		ɐ a>			
Open	a a	ɑ ɑ>			ɑ a=	ɒ o=

¹ This does not work correctly with Microsoft Word for Windows. You can enter this character by using the Insert Symbol command.

Diacritics

k ^h	h [^]	Aspirated
t ^w	w [^]	Labialized
t ^j	j [^]	Palatalized
l ^v	g ^{=^}	Velarized
t ^ɣ	?< [^]	Pharyngealized
k ⁿ	n [^]	Nasal release or Prenasalized
t ^l	l [^]	Lateral release
ẽ	~	Nasalized
ɫ	~~	Velarized or Pharyngealized
e [◌]	[[Rhoticity ¹
t [◌]]]	Ejective
t [◌]]]]	No audible release
ŋ	\$	Syllabic
ᵛ	\$\$	Non-syllabic
ᶤ	\$\$\$	Creaky voiced
̥	%	Voiceless
̚	%%	Voiced
̤	%%%	Breathy voiced

t̪	{	Dental
ɖ	{{	Apical
ɬ	{{{{	Laminal
ɖ̪	{{{{{	Linguo-labial
ẽ	"	Centralized
ẽ	" "	Mid-centralized
u̟	+	Advanced ¹
i̠	–	Retracted ¹
e̝	++	Raised ¹
e̞	--	Lowered ¹
e̟	+++	+ATR ¹
e̠	---	-ATR ¹
e̠̞	++++	More rounded ¹
e̠̝	----	Less rounded ¹
k̟p	#&, @&	Double articulation or Affricate ¹

Suprasegmentals

ˈ	}	Primary stress
ˌ	}}	Secondary stress
eː	:	Long
eˑ	::	Half-long
eːː	:::	Extra-long
ẽ	"" "	Extra-short
˙	˙	Syllable break
	.<	Minor (foot) group
	.=	Major (intonation) group
˘	#==	Linking (absence of a break)
↓	#<	Downstep
↑	#>	Upstep
↘	#<<	Falling intonation
↗	#>>	Rising intonation

Non-IPA Characters

,	,	Comma
[[Left bracket
\	\	Backslash
]]	Right bracket
TINY SPACE	#	Tiny space ²
ë	@, " " " "	Angstrom ²

Diacritical Tone Marks

ẽ	@0	Extra-low tone
è	@1	Low tone
ē	@2	Mid tone
é	@3	High tone
ě	@4	Extra-high tone
ě	@13	Rising tone
ê	@31	Falling tone

Tone Letters

ɿ	#0	Extra low tone ²
ɿ	#1	Low tone ²
ɿ	#2	Mid tone ²
ɿ	#3	High tone ²
ɿ	#4	Extra high tone ²
ɿ	#04	Rising tone ²
ɿ	#40	Falling tone ²
ɿ	#02	Low rising tone ²
ɿ	#20	Low falling tone ²
ɿ	#42	High falling tone ²
ɿ	#24	High rising tone ²

¹ The keying here differs from FindPhone.

² FindPhone does not support this character.

Keying Charts

Basic Key Sequences with $<$, $=$, $>$ and \wedge .

KEY	FOLLOWED BY				
	UNMODIFIED	<	=	>	^
<i>a</i>	a	æ	ɑ	ɐ	
<i>b</i>	b		β	ḃ	
<i>c</i>	c	ç	ç̣	ċ	
<i>d</i>	d	ḏ	ḏ̣	ḏ̇	
<i>e</i>	e	ε	ə	ɜ	
<i>f</i>	f		ϕ		
<i>g</i>	g		ɣ	ɡ̣	
<i>h</i>	h	ħ	ȟ	ħ̣	ḥ
<i>i</i>	i		ɪ		
<i>j</i>	j	ȝ	ȝ̣	ȝ̇	j̣
<i>k</i>	k			ķ	
<i>l</i>	l	ł	ł̣	ł̇	ḷ
<i>m</i>	m			ṃ	
<i>n</i>	n	ɳ	ɳ̣	ɳ̇	ṇ
<i>o</i>	o	ɔ̥	ɔ̥̣	ø	
<i>p</i>	p		ᵹ	ḑ	
<i>q</i>	q			q̣	
<i>r</i>	r	ɽ	ɽ̣	ɽ̇	
<i>s</i>	s	ʂ	ʂ̣		
<i>t</i>	t	ʈ	θ	ʈ̣	
<i>u</i>	u	ʊ	ʊ̣	ʌ	
<i>v</i>	v		ʋ		
<i>w</i>	w		ʍ	ʍ̣	ẉ
<i>x</i>	x		χ		
<i>y</i>	y		ʏ		
<i>z</i>	z	ʐ	ʐ̣	ʐ̇	
<i>!</i>	!	!	‡		
#	TINY SPACE	↓	˘	↑	

KEY	FOLLOWED BY			
	UNMODIFIED	<	=	>
<i>A</i>				
<i>B</i>	B		B	
<i>C</i>				
<i>D</i>				
<i>E</i>	Æ	Ǽ		Ǽ
<i>F</i>				
<i>G</i>	G		G	Ɔ
<i>H</i>	H		H	ɦ
<i>I</i>	İ		ı	
<i>J</i>				
<i>K</i>				
<i>L</i>	L	Ł	L	ł
<i>M</i>				
<i>N</i>	N		N	
<i>O</i>	Ø		ø	Ɔ
<i>P</i>				
<i>Q</i>	Ŧ	Ƨ	ʈ	
<i>R</i>	R	Ṛ	R	Ṛ
<i>S</i>				
<i>T</i>				
<i>U</i>	Ƨ		ʈ	
<i>V</i>				
<i>W</i>				
<i>X</i>				
<i>Y</i>				
<i>Z</i>				
?	?	Ɔ	?	
.	.			

Diacritical Tone Marks and Tone Letters

KEY(S)	FOLLOWED BY				
	0	1	2	3	4
@	ˆ	˘	ˉ	˙	˚
@0	ˆ				˘
@1		˘		˙	
@2			ˉ		
@3		˘		˙	
@4	ˆ				˚
#	ˆ	˘	ˉ	˙	˚
#0			ˉ		˙
#2	˘				˙
#4	˘		˙		

Other Diacritics

KEY	REPEATED			
	ONCE	TWICE	THREE TIMES	FOUR TIMES
"	ˆ	˘	˙	˚
\$	˙	˘	˙	
%	˙	˘	˙	
+	˙	˘	˙	˚
-	˙	˘	˙	˚
:	˙	˘	˙	˚
@	˙			
[[˘		
]]	˘	˙	
{	˙	˘	˙	˚
}	˙	˙		
~	˙	˙		

Additional Key Sequences

KEYS	CHARACTER
g=^	˙
?<^	˙

KEYS	CHARACTER
#<<	˙
#==	˙
#>>	˙

KEYS	CHARACTER
#&	˙
@&	˙

KEY	CHARACTER
,	,
[[
\	\
]]