IPA Unicode 5.1 InKey™ Keyboard Layout

Version 1.04   1 March 2009

This InKey™ keyboard layout has been designed to closely mimic version 1.2 of SIL's IPA Unicode 5.1 Keyman™ layout, adding some extra features. Thus, pages 2–4 of this document and the bottom paragraph on this page are extracted "as is" from SIL's Keyman IPA document, which can be downloaded in full here.

Differences from the Keyman™ Layout:

Finding Keys

IPA layouts are notoriously difficult to remember. For example, which modifier key (`>` `<` `=` `|`) do you press after **y** to get ɥ? This InKey™ keyboard solves that problem by allowing you to cycle through various alternate forms of a letter when you press the EQUALS `=` key.

- Note that some characters may show up in more than one cycle. For example, you can find ɥ by cycling either through **h**-like characters, or through **y**-like characters.
- Included in these cycles are the more-easily-remembered sequences oe⇒œ, OE⇒Œ, ae⇒æ⇒ɐ and lz⇒ɮ.

Getting an IPA-function key's own character

You can now type an underscore `_` character (as in m → n / _ k) or a plus `+` character (as in [**+** voiced]) without these keystrokes producing diacritics. This will happen automatically when you type them after any lower-ANSI, non-letter character, such as the common symbols. The same is also true for these diacritic keys: `*` `%` `$` `{` . Alternatively, you can obtain any diacritic key's own character by following it with `=` . In addition, both for diacritic keys and for letter-replacing keys (such as `>` or `=`), you can always get the key's own character by preceding it with a backslash `\` .

Additional Characters

Some additional phonetic-related characters have been added. For example, if you need an uppercase Ŋ, you'll find it intuitively at `N` `=` `=` . Note that you can also toggle back and forth between a two-code-point pair (e.g. lʒ) and a joined single-code-point character (e.g. ɮ) by pressing the ampersand `&` key after it.[1]

Keyboard Layout

The keyboard layout is described in terms of an IPA chart rather than a keyboard. This is because many base characters are typed as a sequence of a letter followed by one of <, >, = or | which are characters used to change a base character to another base character. Diacritics are typed as sequences of an appropriate key. Blue denotes non-IPA sanctioned phonetic symbols (they may be used by other traditions such as Americanist, Chinese or Russian). Red denotes characters which are not in Unicode (they are in SIL's corporate PUA and will not likely be found in any other font).

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[1] This works for ʣ, ʥ, ʤ, ʦ, ʧ, ʨ, fŋ, ls, lz, and ɮ.

Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p `p` / b `b`			t `t` / d `d`		ʈ `t<` / ɖ `d<`	c `c` / ɟ `j=`	k `k` / g `g<`	q `q` / ɢ `G=`		ʔ `?=`
Nasal	m `m`	ɱ `m>`		n `n`		ɳ `n<`	ɲ `n=`	ŋ `n>`	ɴ `N=`		
Trill	ʙ `B=`			r `r`					ʀ `R=`		
Tap or Flap		ⱱ `v<`		ɾ `r>`		ɽ `r<`					
Fricative	ɸ `f=` / β `b=`	f `f` / v `v`	θ `t=` / ð `d=`	s `s` / z `z`	ʃ `s=` / ʒ `z=`	ʂ `s<` / ʐ `z<`	ç `c=` / ʝ `j<`	x `x` / ɣ `g=`	χ `x=` / ʁ `R>`	ħ `h>` / ʕ `?<`	h `h` / ɦ `h<`
Lateral Fricative				ɬ `l=` / ɮ `l>`							
Approximant		ʋ `v=`		ɹ `r=`		ɻ `R<`	j `j`	ɰ `w>`			
Lateral Approximant				l `l`		ɭ `l<`	ʎ `L<`	ʟ `L=`			

Where symbols appear in pairs, the bottom one represents a voiced consonant. Shaded areas denote articulations judged impossible.

Other Consonants

Clicks		Voiced implosives	
ʘ `p=`	Bilabial	ɓ `b>`	Bilabial
ǀ `!<`	Dental	ɗ `d>`	Dental/alveolar
ǃ `!`	(Post)alveolar	ʄ `j>`	Palatal
ǂ `!=`	Palatoalveolar	ɠ `g>`	Velar
ǁ `!>`	Alveolar lateral	ʛ `G>`	Uvular

Other Symbols

ʍ	`w=`	Vl labial-velar fricative	ɕ	`c<`	vd alveolo-palatal fricative
w	`w`	Vd labial-velar approximant	ʑ	`z>`	Vd alveolo-palatal fricative
ɥ	`y<` or `h=`	Vd labial-palatal approximant	ɺ	`L>`	Vd alveolar lateral flap
ʜ	`H=`	Vl epiglottal fricative	ɧ	`H>`	Simultaneous ʃ and x
ʢ	`Q<`	Vd epiglottal fricative			
ʡ	`Q=`	Vd epiglottal plosive			

Vowels

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

Suprasegmentals

ˈ	`}`	Primary stress
ˌ	`}}`	Secondary stress
eː	`:`	Long
eˑ	`::`	Half long
e꞉꞉	`:::`	Extra long
ĕ	`***`	Extra short
ǀ	`.<`	Minor (foot) group
‖	`.=`	Major (intonation) group
.	`.`	Syllable break
‿	`#=`	Linking (absence of a break)

Other (non-IPA) Vowels

æ	A>		α	a|	open central unrounded vowel	
ι	i|	near-close near-front unrounded	A	A|	open central unrounded	
ɪ	I>		ɹ	z|	unrounded alveolar apical	
ɨ	I<	lower-high central unrounded or high back unrounded	ɻ	Z|	unrounded retroflex apical	
ʊ	U>	high front rounded	ɥ	y|	rounded alveolar apical	
ω	u|	near-close back rounded	ɥ	Y|	rounded retroflex apical	
E	E|	mid front unrounded				
ɵ	e|	open-mid front rounded				

Tone and Word accents

Level[1]					Contour[2]				
˥	#4	ő	@4	Extra high	˪	#04	ě	@13	Rising
˦	#3	é	@3	High	˥˩	#40	ê	@31	Falling
˧	#2	ē	@2	Mid	˧	#24	ě	@23	High rising
˨	#1	è	@1	Low	˩	#12	ȅ	@12	Low rising
˩	#0	ȅ	@0	Extra low	˥˦˥	#141	ẽ	@131	Rising-falling
							ȇ	@21	Low falling
							ȇ	@32	High falling
							ẽ	@313	Falling-rising
		↓	#<	Downstep			↗	#>>	Global rise
		↑	#>	Upstep			↘	#<<	Global fall

Tone numbers and pitch contours (non-IPA)

_ _ ‾ _ _ ‾ _ ‾ _	##1 ##2 ##3 ##4 ##5 ##6 ##7 ##8 ##9	Level pitch contours from 1 to 9[3]
3	3^ (0-9)	superscript number
-	_^	superscript hyphen

Other (non-IPA) Symbols

ƈ	c>	vl palatal implosive
ȡ	d|	alveolo-palatal vd plosive
ħ	h|	vd pharyngeal nasal
ƙ	k>	vl velar implosive
ȴ	l|	front-palatal vd lateral approximate
ȵ	n|	front-palatal vd nasal
ɓ̥	p>	vl bilabial implosive
ƒ	q>	vl uvular implosive
ʃ	S=	vl retroflex postalveolar fricative
ƭ	t>	vl dental or alveolar implosive
ȶ	t|	front-palatal vl plosive
ǀ	T|	dental click
ʍ	w<	bilabial flap
ʒ	Z=	vd retroflex postalveolar fricative
+	+=	

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[1] Use "&" for Left-stem level tones, e.g. "&0" becomes A712 (˩).

[2] Glides to and from any level (e.g. "#32" becomes ˥˩) and any sequence of any two glides (e.g. "#314" becomes ˥˩).

[3] These require the use of Charis SIL (http://scripts.sil.org/CharisSILfont) or Doulos SIL (http://scripts.sil.org/DoulosSILfont) version 4.1 or greater. They will turn into contours if used in Graphite applications.

Diacritics & Suprasegmentals

kʰ	h^	Aspirated
tʷ	w^	Labialised
tʲ	j^	Palatalised
lˠ	g=^	Velarised
tˤ	?<^	Pharyngealised
ⁿk	n^	Pre/post nasalised
tˡ	l^	Lateral release
ⁿɟ	symbol followed by ^ e.g. n=^	Other superscripts are available[4]
kʻ	[[	Light aspiration
e˞	[[[	Rhoticity
tʼ	]]	Ejective
t̚	]]]	No audible release
bʻ	]]]]	Weak aspiration
l̩	$	Syllabic
a̯	$ $	Non-syllabic
a̰	$ $ $	Creaky voiced
a̢	symbol followed by $$$$ e.g. a$$$$	Retroflex hooks[5]
n̥	%	Voiceless
s̬	% %	Voiced
s̤	% % %	Breathy voiced
ɓ	symbol followed by %%%% e.g. b%%%%	Palatal hooks[6]
ŋ̊	@	Voiceless (diacritics are sometimes placed above a symbol with a descender)

t̪	{	Dental
t̺	{ {	Apical
t̻	{ { {	Laminal
t̼	{ { { {	Linguolabial
ṭ	{ { { { {	Closer variety / Fricative
ẽ	~	Nasalised
ɫ	l~~	Velarized or pharyngealized[7]
ë	*	Centralised
ě	* *	Mid centralised
ĕ	* * *	Extra short
ė	* * * *	Palatalization/Centralization
m̬	* * * * *	
k͡p	# &	Double articulation / affricate[8]
t͡s	@ &	Double articulation / affricate[9]
u̟	+	Advanced
i̠	_	Retracted
e̝	++	Raised
e̞	_ _	Lowered
e̘	+++	+ATR
e̙	_ _ _	-ATR
e̹	++++	More rounded
e̜	_ _ _ _	Less rounded
o̞	_ _ _ _ _	open vowel
p̎	} } }	Fortis
p̰	} } } }	Lenis
→	=>	Becomes, is realized as
σ	s>	Syllable
◌	=<	Combining Grapheme Joiner

[4] The following characters can be superscripted: 0123456789 + - = ( ) ʕ ʔ b β c ç d ð ɸ f g ɡ ɣ h ɦ ħ j ɟ ʝ k l ɭ ʎ ʟ m ɱ n ɲ ŋ ɳ ɴ p r ɹ ɻ ʁ s ʂ ʃ t θ v ʋ w ɰ x ɥ z ʐ ʑ ʒ a ɐ æ ɑ e ə ɜ ɛ ø œ ɶ ɘ i ɨ ɪ o ɒ ɔ ɵ ɤ ʊ ɯ ɞ ʉ y ʏ

[5] Retroflex hooks may be added to: a ɑ d e ɛ ɜ ə i ɔ ʃ u z (a̢ ɑ̢ ɖ e̢ ɛ̢ ɜ̢ ə̢ i̢ ɔ̢ ʃ̢ u̢ ʐ)

[6] Palatal hooks may be added to: b d f g k l m n p r s ʃ v x z (ɓ ɗ f̡ ɠ k̡ l̡ m̡ n̡ p̡ r̡ s̡ ʃ̡ v̡ x̡ z̡)

[7] Available for ɓ, ɗ, f, ɫ, ɱ, n̴, p, ɼ, ɾ, s, t and z.

[8] Typed between the characters. Thus k#&p.

[9] Typed between the characters. Thus t@&s.