

Introductory Materials

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Technical Support

If you have problems using the IPA Unicode 6.2 (ver. 1.4) MSK keyboard, please contact: User Support, SIL Non-Roman Script Initiative, 7500 W. Camp Wisdom Rd., Dallas, TX 75236, USA E-mail: [mailto: nrsi@sil.org](mailto:nrsi@sil.org)

Installing the Keyboard

If you have an older version of the IPA keyboard installed on your computer, you must uninstall that keyboard first. Reboot before continuing with this installation.

The keyboard driver can only be installed on Windows 2000, XP, Vista, Win7 or Win8. This IPA keyboard is a Unicode keyboard and will only work with Unicode applications.

The keyboard is packaged with a setup file as well as several .msi files. In order to someday uninstall your keyboard (and if you ever want to upgrade to a newer version you will want to!) you must keep all of the files on your computer.

To install the MSKLC keyboard:

- Download the zip file from http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=uniipakeyboard&_sc=1#2d08bc68 and extract the files to a folder of your choosing.
- In Windows Explorer, double-click the IPA folder to view the contents.
- Double-click setup.exe.
- When **User Account Control** window appears, click **Allow** (Vista and Win7 only).
- When the window showing "IPA Unicode 6.2 (ver. 1.4) MSK has been successfully installed" appears, click **Close**.
- You may need to reboot before you are able to select the keyboard.

Associating the Keyboard with a Different Language

This keyboard is automatically associated with the Icelandic language. If you wish to associate it with a different language, follow these instructions:

For Windows XP:

- Go to **Start / (Setting) / Control Panel / Regional and Language Options / Languages** tab
- Click on the **Details...** button.
- Click on **Add**.
- Where it says **Input Language**, choose **Icelandic**(or you can choose another language to associate it with).
- Choose **IPA Unicode 6.2 (ver. 1.4) MSK** for **Keyboard Layout/IME**.
- Click **OK**.
- Click on **Language Bar** button. Make sure **Show the Language bar on the desktop** is selected.
- If you wish to assign a "hotkey" in order to switch to this keyboard, you may do so by clicking on **Key Settings...**, select **Switch to Icelandic...** and select **Change Key Sequence...** Select **Enable Key Sequence** and choose the keystrokes you wish to assign to this keyboard (for the purposes of these instructions- Left-Alt+Shift+9)
- Click on **OK, OK** and **OK**.

- You may need to reboot before you are able to select the keyboard.

For Windows Vista and Windows 7:

- Go to **Start / Control Panel / Regional and Language Options / Keyboards and Languages** tab
- Click on the **Change Keyboards...** button.
- Click on **Add**.
- Where it says **Input Language**, choose **Icelandic**(or you can choose another language to associate it with).
 - Click on the "+" to expand your selection
 - Click on **Show more...** and select **IPA Unicode 6.2 (ver. 1.4) MSK**
 - Click **OK**.
- Click on **Language Bar** tab. For the **Language bar**, select either **Floating on Desktop** or **Docked in the taskbar**.
- If you wish to assign a "hotkey" in order to switch to this keyboard, you may do so by clicking on **Advanced Key Settings**, select your keyboard and select **Change Key Sequence...** Select **Enable Key Sequence** and choose the keystrokes you wish to assign to this keyboard (for the purposes of these instructions- Left-Alt+Shift+9)
- Click on **OK**, **OK** and **OK**.
- You may need to reboot before you are able to select the keyboard.

Uninstalling the Keyboard

When you are ready to uninstall your keyboard:

- Right-click on the keyboard icon and select **Settings...**
- In **Text Services and Input Languages / Settings** tab, select "IPA Unicode 6.2 (ver. 1.4) MSK" and click **Remove**, then click **OK**.
- Find the IPA folder where you originally installed the keyboard.
- Double-click **setup.exe**.
- Click **Remove the keyboard layout**, if it is not already selected.
- Click **Finish**.
- When the **User Account Control** dialog box appears, click **Allow** (Vista and Win7 only).
- When the **Installation Complete** dialog box appears indicating the keyboard has been removed, click **Close**.
- You may need to reboot before the keyboard is completely removed from the system.

The keyboard has been uninstalled. You may also wish to delete the IPA folder to remove the files and install program.

Selecting the Keyboard

The **IPA Unicode 6.2 (ver. 1.4) MSK** keyboard has been automatically associated with the **Icelandic** language¹. To use the keyboard, open the application you wish to type in.

To select the keyboard:

- Change to **Icelandic**, by clicking the language ID in the system tray. For example, this will be "IS" if Icelandic.
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- Another way to change to **Icelandic**, is to type Left-Alt+Shift+9 (whatever keystrokes you chose to associate with this keyboard).

If you have associated two keyboards with one language, the process is somewhat different:

- Change to **Icelandic**, by clicking the language ID in the system tray. For example, this will be "IS" if

Icelandic. Select **Icelandic**.

- Right-click a blank area on the taskbar and if necessary, unlock the taskbar, by clicking “**Lock the taskbar**” to remove the checkmark by it.
- Drag the dotted divider on the taskbar so that you can see both “EN” and a small keyboard icon. This icon is used to change between various keyboards.
- Click the keyboard icon and select **IPA Unicode 6.2 (ver. 1.4) MSK**.

Your new keyboard should be active and ready to use.

Note that if you hover over the keyboard icon, it will tell you the name of the current keyboard (if you hover over the Language ID it will tell you your language is Icelandic).

To turn off the **IPA Unicode 6.2 (ver. 1.4) MSK** keyboard:

- Click the keyboard icon on the system tray and select the language you are switching to.

Note that if only one keyboard is assigned to a language, the keyboard icon will not appear, since there is no other keyboard to choose.

Fonts

The newest versions of Doulos SIL (<http://software.sil.org/doulos/download/>) and Charis SIL (<http://software.sil.org/charis/download/>) contain all of the characters used in this keyboard. Older versions may not have all of the characters. The pitch contours (found on the number keys with the = deadkey) are in SIL’s corporate PUA and will not likely be found in any other font (there are also superscript characters which are in SIL’s corporate PUA and will not likely be found in any other font). Ligation for the pitch contours will only work in applications which support Graphite. A description of the pitch contours can be found here: http://scripts.sil.org/DoulosSIL_download#pitch.

IPA Keyboard Layout

This keyboard makes extensive use of “dead keys.” A “dead key” is a key that does not generate a character, but rather changes the character generated by a following keystroke. For example, in this keyboard, to get the “ŋ”, you would type the dead key “>” followed by the “n” (>n).

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.

¹ Unfortunately, Windows does not have an "IPA" language. After installing, if you wish, you can associate it with any other language (see separate section which discusses how to do that).

Consonants

| | Bilabial | Labio-dental | Dental | Alveolar | Post-alveolar | Retroflex | Palatal | Velar | Uvular | Pharyngeal | Glottal |
|---------------------|----------|--------------|--------|----------|---------------|-----------|---------|-------|--------|------------|---------|
| Plosive | p p | | | t t | | ʈ <t | c c | k k | q q | | ? =? |
| | b b | | | d d | | ɖ <d | ɟ =j | g <g | ɢ =G | | |
| 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 | f f | θ =t | s s | ʃ =s | ʂ <s | ç =c | x x | χ =x | ħ >h | h h |
| | β =b | v v | ð =d | z z | ʒ =z | ʐ <z | ɟ <j | ɣ =g | ʁ >R | ʕ <? | ɦ <h |
| Lateral Fricative | | | | ɬ =l | | | | | | | |
| | | | | ɮ >l | | | | | | | |
| Approximant | | ʋ =v | | ɹ =r | | ɻ <R | j j | ɰ >w | | | |
| Lateral Approximant | | | | ɭ l | | ɻ <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 | | |
|--------|------------------|--|-------------------|-----------------|--|
| ⦿ =p | Bilabial | | ɓ >b | Bilabial | |
| ǀ <! | Dental | | ɗ >d | Dental/alveolar | |
| ǃ ! | (Post)alveolar | | ɟ >j | Palatal | |
| ǃ̣ >! | Palatoalveolar | | ɠ >g | Velar | |
| ǁ =! | Alveolar lateral | | ɢ >G | Uvular | |

Other Symbols

| | | | | | |
|-----|-------------|-------------------------------|----|----|------------------------------|
| ʍ | =w | Vl labial-velar fricative | ç | <c | Vd alveolo-palatal fricative |
| ʋ | w | Vd labial-velar approximant | ç̥ | >z | Vd alveolo-palatal fricative |
| ɥ | <y or =h | Vd labial-palatal approximant | ɺ | >l | Vd alveolar lateral flap |
| ħ | =h | Vl epiglottal fricative | ħ̥ | >H | Simultaneous ʃ and x |
| ç̥ | <q | Vd epiglottal fricative | | | |
| ç̥̥ | =q | Vd epiglottal plosive | | | |

Vowels

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

Suprasegmentals

| | | |
|-----|----------|------------------------------|
| ' | > | Primary stress |
| ˊ | < | Secondary stress |
| e: | = : | Long |
| eˑ | < : | Half long |
| e:: | = :: = : | Extra long |
| ě | @ * | Extra short |
| | < . | Minor (foot) group |
| | = . | Major (intonation) group |
| . | . | Syllable break |
| ˘ | = # | Linking (absence of a break) |


Tone and Word accents

| Level ² | | | | Contour ³ | | | | | |
|--------------------|----|---|-----|-------------------------------|---|--------|---|-----|----------------|
| ˩ | #4 | ě | @4 | Extra high | / | #0#4 | ě | @5 | Rising |
| ˨ | #3 | é | @3 | High | \ | #4#0 | ê | @^ | Falling |
| ˧ | #2 | ē | @2 | Mid | ↑ | #2#4 | ě | @6 | High rising |
| ˦ | #1 | è | @1 | Low | ↓ | #1#2 | ě | @7 | Low rising |
| ˥ | #0 | è | @0 | Extra low | ∧ | #1#4#1 | ě | @ [| Rising-falling |
| | | ↓ | # [| Downstep | | | ê | @8 | Low falling |
| | | ↑ | #] | Upstep | | | ê | @9 | High falling |
| | | ! | ^! | Africanist Upstep | | | ě | @] | Falling-rising |
| | | i | # ! | Africanist downstep (raised) | | | ↗ | # } | Global rise |
| | | i | @ ! | Africanist downstep (lowered) | | | ↘ | # { | Global fall |

Other (non-IPA) Vowels

| | | | | | |
|---|----|---|---|---|------------------------------|
| æ | >A | | ɑ | a | open central unrounded vowel |
| ɪ | i | near-close near-front unrounded | ʌ | ʌ | open central unrounded |
| ɚ | >I | | ɹ | z | unrounded alveolar apical |
| ɚ | <I | lower-high central unrounded or high back unrounded | ɻ | z | unrounded retroflex apical |
| ɘ | >U | high front rounded | ɻ | y | rounded alveolar apical |
| ɘ | u | near-close back rounded | ɻ | Y | rounded retroflex apical |
| ɛ | E | mid front unrounded | | | |
| ɞ | e | open-mid front rounded | | | |

Tone numbers and pitch contours (non-IPA)

| | | |
|---|----------------------------|---|
|  | =1 =2 =3 =4 =5 =6 =7 =8 =9 | Level pitch contours from 1 to 9 ⁴ |
| 3 | ^3 (0-9) | superscript number |
| - | ^_ | superscript hyphen |

Other (non-IPA) Symbols

| | | |
|----|----|--------------------------------------|
| ɕ | >c | vl palatal implosive |
| ɖ | d | alveolo-palatal vd plosive |
| ɥ | h | vd pharyngeal nasal |
| ɟ | >k | vl velar implosive |
| ɮ | ɭ | front-palatal vd lateral approximant |
| ɹ̃ | n | front-palatal vd nasal |
| ɸ | >p | vl bilabial implosive |
| ɣ | >q | vl uvular implosive |
| ʂ | =S | vl retroflex postalveolar fricative |
| ɸ | >t | vl dental or alveolar implosive |
| ɟ̟ | t | front-palatal vl plosive |
| ɠ | T | dental click |
| w̥ | <w | bilabial flap |
| ʂ̣ | =Z | vd retroflex postalveolar fricative |
| + | + | |
| ∅ | =0 | Empty set |
| ◌̯ | >0 | Diacritic "holder" |

Diacritics & Suprasegmentals

| | | |
|----------------|-----|---|
| k ^h | ^h | Aspirated |
| t ^w | ^w | Labialised |
| t ^j | ^j | Palatalised |
| l ^v | #g | Velarised |
| t ^ʕ | #ʔ | Pharyngealised |
| ⁿ k | ^n | Pre/post nasalised |
| t ^l | ^l | Lateral release |
| k ^ʰ | =ʰ | Light aspiration |
| ɞ | [| Rhoticity |
| t ^ʼ | >ʼ | Ejective |
| t ^ʳ |] | No audible release |
| b ^ʰ | <ʰ | Weak aspiration |
| l̩ | & | Syllabic |
| ḷ | & * | Non-syllabic |
| Ḃ | & ~ | Creaky voiced |
| ᵰ | & ʘ | Voiceless |
| ᵻ | & 5 | Voiced |
| ᵿ | & ʰ | Breathy voiced |
| ᵻ̥ | @ ʘ | Voiceless (diacritics are sometimes placed above a symbol with a descender) |
| ᵻ̩ | @ | Syllabic (diacritics are sometimes placed above a symbol with a descender) |
| ᵿ̪ | & [| Dental |
| ᵿ̪ | &] | Apical |
| ᵿ̪ | & { | Laminal |
| ᵿ̪ | & } | Linguolabial |
| ᵿ̪ | & . | Closer variety / Fricative |
| ẽ | @ ~ | Nasalised |
| ë | @ ʰ | Centralised |
| ẽ | @ + | Mid centralised |
| ě | @ * | Extra short |
| è | @ . | Palatalization/Centralization |

| | | |
|--------|-----|--|
| ḿ | @ : | |
| k̟p | &# | Double articulation / affricate ⁵ |
| ts̟ | &@ | Double articulation / affricate ⁶ |
| ɥ | &+ | Advanced |
| ɨ | &_ | Retracted |
| ɛ̥ | &6 | Raised |
| ɛ̜ | &7 | Lowered |
| ɛ̜̄ | &8 | +ATR |
| ɛ̜̄̄ | &9 | -ATR |
| ɛ̜̄̄̄ | &) | More rounded |
| ɛ̜̄̄̄̄ | &(| Less rounded |
| ɔ̜ | &, | open vowel |
| p̣ | &! | Fortis |
| p̤ | &\$ | Lenis |
| → | => | Becomes, is realized as |
| σ | >@ | Syllable |
| ⊘ | =< | Combining Grapheme Joiner |

Superscripts

| | |
|---|----------|
| ³ | ^3 (0-9) |
| (| ^(|
|) | ^) |
| - | ^- |
| + | ^+ |
| = | ^= |
| a | ^a |
| A | ^A |
| a | #a |
| A | #A |
| b | #b |
| B | #B |
| b | ^b |
| B | ^B |
| c | ^c |
| C | ^C |
| d | ^d |
| D | ^D |
| e | ^e |
| E | ^E |
| e | #e |
| E | #E |
| c | #c |
| f | ^f |
| F | ^F |
| g | ^g |
| G | ^G |
| g | #g |
| h | ^h |
| H | ^H |
| Y | #Y |
| h | #h |
| i | ^i |

| | |
|---|----|
| i | ^I |
| i | #i |
| j | ^j |
| i | ^J |
| J | #j |
| k | ^k |
| l | ^l |
| L | ^L |
| l | #l |
| ^ | #Y |
| m | ^m |
| m | ^M |
| n | ^n |
| N | ^N |
| J | #J |
| o | #n |
| n | #N |
| o | ^o |
| o | ^O |
| o | #o |
| o | #O |
| o | #d |
| o | #D |
| o | #C |
| p | ^p |
| r | ^r |
| R | ^R |
| r | #r |
| l | #R |
| s | ^s |
| S | ^S |
| f | #s |
| t | ^t |

| | |
|---|----|
| θ | #t |
| u | ^u |
| υ | ^U |
| ϖ | #u |
| ν | ^ν |
| ^ | ^V |
| υ | #v |
| w | ^W |
| ω | ^W |
| ω | #m |
| x | ^x |
| ϣ | ^X |
| y | ^y |
| ϣ | ^Y |
| z | ^z |
| z | ^Z |
| z | #z |
| z | #Z |
| ? | ^? |
| ? | #? |

Retroflex

| | |
|---|----|
| ᳚ | &a |
| ᳚ | &A |
| ᳚ | &d |
| ᳚ | &e |
| ᳚ | &E |
| ᳚ | &b |
| ᳚ | &B |
| ᳚ | &i |
| ᳚ | &o |
| ᳚ | &s |
| ᳚ | &u |
| ᳚ | &z |

Palatal

| | |
|---|----|
| ɸ | @b |
| ɸ | @d |
| ɸ | @f |
| ɸ | @g |
| ɸ | @k |
| ɸ | @l |
| ɸ | @m |
| ɸ | @n |
| ɸ | @p |
| ɸ | @r |
| ɸ | @s |
| ɸ | @S |
| ɸ | @v |
| ɸ | @x |
| ɸ | @z |

Velarized (or pharyngealized)

| | |
|---|----|
| ɸ | ~b |
| ɸ | ~d |
| ɸ | ~f |
| ɸ | ~l |
| ɸ | ~m |
| ɸ | ~n |
| ɸ | ~p |
| ɸ | ~r |
| ɸ | ~R |
| ɸ | ~s |
| ɸ | ~t |
| ɸ | ~z |