

Getting IPA Symbols

Doug Arnold
(L^AT_EX for Linguists)

May 5, 2009

Assuming you have the TIPA package (by Rei Fukui, Hajime Kobayashi, and Shun Shirakawa) installed at your site, getting IPA (International Phonetic Alphabet) symbols is very easy.

In the preamble put:

```
\usepackage{tipa}
```

(The easiest way to check if you have the package installed is just to try this).

You can now input phonetic characters via their tipa names, as commands, e.g. `\textturna` produces an upside down “a”: ɹ . Similarly `\textschwa` produces a schwa: ə .

However, to produce something complicated like $[\text{ɛksplə'neɪʃən}]$ it is much easier to use the “shortcut” characters, in one of the following ways:

1. in the argument to the command `\texttipa{...}`, e.g. `\texttipa{[Ekspl@"neɪʃən]}`
2. following the declaration `{\tipaencoding ...}` e.g. `{\tipaencoding [Ekspl@"neɪʃən]}`
3. in the IPA environment e.g.

```
\begin{IPA}  
[Ekspl@"neɪʃən]  
\end{IPA}
```

A huge variety of symbols, accents, sub- and super-scripts are available, as well as various font styles. See the full documentation for details, and for the shortcut characters. The following exemplify the shortcut characters, and the font styles:

<i>Input</i>	:	;	"							
<i>Output</i>	:	;	'							
<i>Input</i>	0	1	2	3	4	5	6	7	8	9
<i>Output</i>	ɸ	ɨ	ʌ	ɜ	ɥ	ɐ	ɒ	ɣ	θ	ə
<i>Input</i>	@	A	B	C	D	E	F	G	H	I
<i>Output</i>	ə	ɑ	β	ç	ð	ɛ	ϕ	γ	ɦ	ɪ
<i>Input</i>	J	K	L	M	N	O	P	Q	R	S
<i>Output</i>	j	ɸ	ʌ	ɱ	ɲ	ɔ	ʔ	ʃ	ɹ	ʃ
<i>Input</i>	T	U	V	W	X	Y	Z			
<i>Output</i>	θ	ʊ	ʋ	ʍ	χ	ɣ	ʒ			

<i>Roman</i>	<code>\textipa{f@'nEtIks}</code>	esfə'nɛtɪks
<i>Slanted</i>	<code>\textsl{\textipa{f@'nEtIks}}</code>	fə'nɛtɪks
Bold	<code>\textipa{\textbf{f@'nEtIks}}</code>	fə'nɛtɪks
<i>Sans Serif</i>	<code>\textipa{\textsf{f@'nEtIks}}</code>	fə'nɛtɪks

Notice that the order of commands here does not matter: `\textsf{\textipa{f@'nEtIks}}` is the same as `\textipa{\textsf{f@'nEtIks}}`.

For more details, see the documentation that comes with the package, which is excellent.

See also: Yoshi Fujino's 'LaTeX with TIPA for Phoneticians and Linguists'

The distribution contains a nice IPA vowel table, and Tim Mahrt has written an table of the IPA consonant symbols, which you can get here, as a pdf file, or LaTeX source.

Unfortunately, the TIPA package is not part of the standard distributions, so you may have to install it yourself. It is available in "the usual places", and e.g. at:

<ftp://ftp.tex.ac.uk/tex-archive/fonts/tipa>

Here are some tips based on my experience of installing the package

Here is a small test file you can use for experimentation (you will need to save it, and rename it to something like "test.tex")

Possible Problems

TIPA redefines certain commands facilitate inputting some phonetic symbols. This means these symbols do not have their usual L^AT_EX meanings, which can mess up other macros. (In particular, this is true of the commands `*`, `\i`, `\:`, and `\!`).

You can make sure the original meanings of the symbols are preserved by using the `safe` option when loading the package:

```
\usepackage[safe]{tipa}
```

(Of course, this means you don't have the special meaning of e.g. `\!b` available, and you will have to use `\texthtb` instead).