

INTERNATIONAL PHONETIC ALPHABET (IPA)

CONSONANTS (PULMONIC)

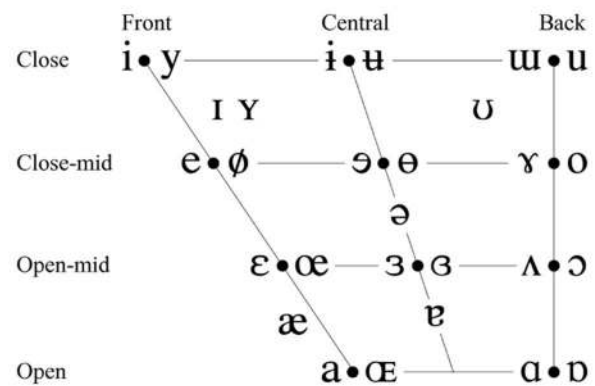
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
⦿ Bilabial	ɓ Bilabial	ʼ Examples:
Dental	ɗ Dental/alveolar	pʼ Bilabial
! (Post)alveolar	ɟ Palatal	tʼ Dental/alveolar
≠ Palatoalveolar	ɠ Velar	kʼ Velar
Alveolar lateral	ɠ Uvular	sʼ Alveolar fricative

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

- ɱ** Voiceless labial-velar fricative
- ɮ** Alveolo-palatal fricatives
- ɰ** Voiced labial-velar approximant
- ɻ** Voiced alveolar lateral flap
- ɰ** Voiced labial-palatal approximant
- ɰ** Simultaneous **ʃ** and **x**
- ħ** Voiceless epiglottal fricative
- Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
- ʕ** Voiced epiglottal fricative
- ʔ** Epiglottal plosive

ts kp

SUPRASEGMENTALS

- ˈ** Primary stress **ˈfounəˈtʃən**
- ˌ** Secondary stress
- ː** Long **eː**
- ˑ** Half-long **eˑ**
- ˚** Extra-short **e˚**
- |** Minor (foot) group
- ||** Major (intonation) group
- Syllable break **.i.ækt**
- ◌◌** Linking (absence of a break)

TONES AND WORD ACCENTS

- | LEVEL | CONTOUR |
|---------------------------------|----------------------------------|
| ẽ or ᷥ Extra high | ẽ or ᷥ Rising |
| é ᷇ High | ẽ ᷇ Falling |
| ē ᷈ Mid | ẽ ᷈ High rising |
| è ᷉ Low | ẽ ᷉ Low rising |
| ě ᷊ Extra low | ẽ ᷊ Rising-falling |
| ↓ Downstep | ↗ Global rise |
| ↑ Upstep | ↘ Global fall |

DIACRITICS

Some diacritics may be placed above a symbol with a descender, e.g. **ɳ̰**

◌̥ Voiceless	ɳ̥ ɳ̥	◌̤ Breathy voiced	ɳ̤ ɳ̤	◌̦ Dental	ɳ̦ ɳ̦
◌̦ Voiced	ɳ̦ ɳ̦	◌̧ Creaky voiced	ɳ̧ ɳ̧	◌̨ Apical	ɳ̨ ɳ̨
h Aspirated	tʰ dʰ	◌̩ Linguolabial	t̩ d̩	◌̪ Laminal	t̪ d̪
◌̜ More rounded	ɔ̜	◌̜ Labialized	tʷ dʷ	◌̜ Nasalized	ẽ̜
◌̝ Less rounded	ɔ̝	◌̞ Palatalized	tʲ dʲ	ɳ̠ Nasal release	d̠
◌̞ Advanced	ɯ̞	◌̠ Velarized	t̠ d̠	ɳ̡ Lateral release	d̡
◌̠ Retracted	ɯ̠	◌̡ Pharyngealized	t̡ d̡	◌̣ No audible release	ḍ
◌̡ Centralized	ẽ̡	◌̣ Velarized or pharyngealized	ṭ		
◌̣ Mid-centralized	ẹ̃	◌̤ Raised	ɛ̤ (ɹ̤ = voiced alveolar fricative)		
◌̤ Syllabic	ɳ̤	◌̥ Lowered	ɛ̥ (β̥ = voiced bilabial approximant)		
◌̥ Non-syllabic	ɛ̥	◌̦ Advanced Tongue Root	ɛ̦		
◌̦ Rhoticity	ɚ̦ ɚ̦	◌̨ Retracted Tongue Root	ɛ̨		