

# THE INTERNATIONAL PHONETIC ALPHABET (2005)

## CONSONANTS (PULMONIC)

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

Where symbols appear in pairs, the one to the right represents a modally voiced consonant, except for murmured ɦ. Shaded areas denote articulations judged to be impossible. Light grey letters are unofficial extensions of the IPA.

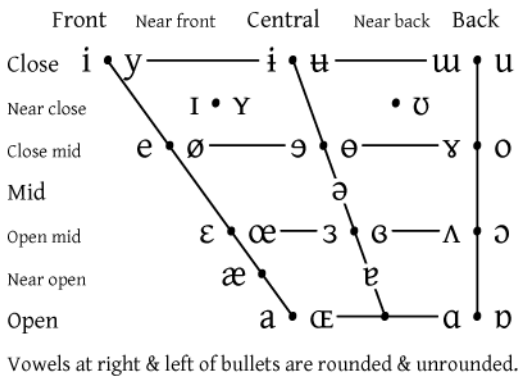
## CONSONANTS (NON-PULMONIC)

Anterior click releases (require posterior stops)	Voiced implosives	Ejectives
⦿ Bilabial fricated	ɓ Bilabial	ʼ Examples:
Laminar alveolar fricated ("dental")	ɗ Dental or alveolar	ɓ' Bilabial
! Apical (post)alveolar abrupt ("retroflex")	ɟ Palatal	ɗ' Dental or alveolar
‡ Laminar postalveolar abrupt ("palatal")	ɠ Velar	ɠ' Velar
Lateral alveolar fricated ("lateral")	ɣ Uvular	ɣ' Alveolar fricative

## CONSONANTS (CO-ARTICULATED)

- ɱ Voiceless labialized velar approximant
- ʋ Voiced labialized velar approximant
- ɰ Voiced labialized palatal approximant
- ɸ Voiceless palatalized postalveolar (alveolo-palatal) fricative
- β Voiced palatalized postalveolar (alveolo-palatal) fricative
- ɧ Simultaneous x and ʃ (disputed)
- kp̚ ts̚ Affricates and double articulations may be joined by a tie bar

## VOWELS



## SUPRASEGMENTALS

- ˈ Primary stress
- ˌ Secondary stress [ˌfoʊnəˈtʃən]
- eː Long
- e Short
- Syllable break
- INTONATION
- | Minor (foot) break
- || Major (intonation) break
- ↗ Global rise
- ↘ Global fall

## TONE

- Level tones
- ˥ Top
- ˦ High
- ˧ Mid
- ˨ Low
- ˩ Bottom
- Tone terracing
- ˥˥ Upstep
- ˥˩ Downstep
- Contour-tone examples:
- ˥˩˥ Rising
- ˥˩˨ Falling
- ˥˩˥˩ High rising
- ˥˩˥˩ Low rising
- ˥˩˥˩ High falling
- ˥˩˥˩ Low falling
- ˥˩˥˩ Peaking
- ˥˩˥˩ Dipping

## DIACRITICS

Diacritics may be placed above a symbol with a descender, as ɲ̣. Other IPA symbols may appear as diacritics to represent phonetic detail: t̚ (fricative release), bʰ (breathy voice), ʔ̚ (glottal onset), ə̚ (epenthetic schwa), o̚ (diphthongization).

SYLLABICITY & RELEASES	PHONATION	PRIMARY ARTICULATION	SECONDARY ARTICULATION
ɲ̚ ɲ̚	Syllabic	ɲ̚ ɲ̚	ɲ̚ ɲ̚
ɲ̚ ɲ̚	Non-syllabic	ɲ̚ ɲ̚	ɲ̚ ɲ̚
t̚ h̚	(Pre)aspirated	t̚ ɲ̚	t̚ ɲ̚
d̚	Nasal release	ɲ̚ ɲ̚	ɲ̚ ɲ̚
d̚	Lateral release	ɲ̚ ɲ̚	ɲ̚ ɲ̚
t̚	No audible release	ɲ̚ ɲ̚	ɲ̚ ɲ̚
e̚ β̚	Lowered (β̚ is a bilabial approximant)	e̚ ɲ̚	e̚ ɲ̚