

# THE IPA NUMBER CHART (revised to 2016)

## CONSONANTS (PULMONIC)

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	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	101 102		103 104			105 106	107 108	109 110	111 112		113
Nasal	114	115	116			117	118	119	120		
Trill	121		122						123		
Tap or Flap		184	124			125					
Fricative	126 127	128 129	130 131	132 133	134 135	136 137	138 139	140 141	142 143	144 145	146 147
Lateral fricative			148 149								
Approximant		150	151			152	153	154			
Lateral approximant			155			156	157	158			

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
176 Bilabial	160 Bilabial	401 Examples:
177 Dental	162 Dental/alveolar	+ <sup>101</sup> <sub>401</sub> Bilabial
178 (Post)alveolar	164 Palatal	+ <sup>103</sup> <sub>401</sub> Dental/alveolar
179 Palatoalveolar	166 Velar	+ <sup>109</sup> <sub>401</sub> Velar
180 Alveolar lateral	168 Uvular	+ <sup>132</sup> <sub>401</sub> Alveolar fricative

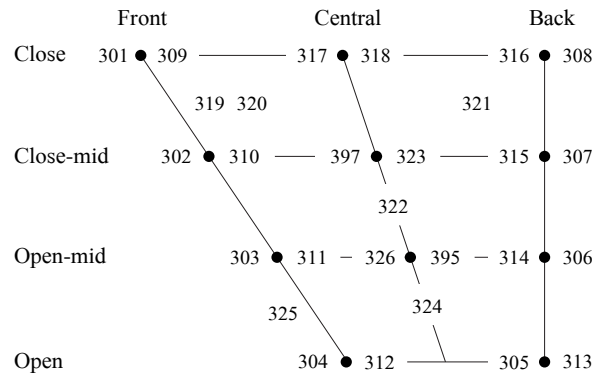
## OTHER SYMBOLS

- 169 Voiceless labial-velar fricative      182 183 Alveolo-palatal fricatives  
 170 Voiced labial-velar approximant      181 Voiced alveolar lateral flap  
 171 Voiced labial-palatal approximant      175 Simultaneous 134 and 140  
 172 Voiceless epiglottal fricative  
 174 Voiced epiglottal fricative      Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary. (509) 433  
 173 Epiglottal plosive

DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. 119+402B

402A Voiceless	$\underset{\text{◌}}{\text{n}} \underset{\text{◌}}{\text{d}}$	405 Breathy voiced	$\underset{\text{◌}}{\text{b}} \underset{\text{◌}}{\text{a}}$	408 Dental	$\underset{\text{◌}}{\text{t}} \underset{\text{◌}}{\text{d}}$
403 Voiced	$\underset{\text{◌}}{\text{s}} \underset{\text{◌}}{\text{z}}$	406 Creaky voiced	$\underset{\text{◌}}{\text{b}} \underset{\text{◌}}{\text{a}}$	409 Apical	$\underset{\text{◌}}{\text{t}} \underset{\text{◌}}{\text{d}}$
404 Aspirated	$\text{t}^{\text{h}} \text{d}^{\text{h}}$	407 Linguolabial	$\underset{\text{◌}}{\text{t}} \underset{\text{◌}}{\text{d}}$	410 Laminal	$\underset{\text{◌}}{\text{t}} \underset{\text{◌}}{\text{d}}$
411 More rounded	$\underset{\text{◌}}{\text{ɔ}}$	420 Labialized	$\text{t}^{\text{w}} \text{d}^{\text{w}}$	424 Nasalized	$\tilde{\text{e}}$
412 Less rounded	$\underset{\text{◌}}{\text{ɔ}}$	421 Palatalized	$\text{t}^{\text{j}} \text{d}^{\text{j}}$	425 Nasal release	$\text{d}^{\text{n}}$
413 Advanced	$\underset{\text{◌}}{\text{u}}$	422 Velarized	$\text{t}^{\text{v}} \text{d}^{\text{v}}$	426 Lateral release	$\text{d}^{\text{l}}$
414 Retracted	$\underset{\text{◌}}{\text{e}}$	423 Pharyngealized	$\text{t}^{\text{r}} \text{d}^{\text{r}}$	427 No audible release	$\text{d}^{\text{r}}$
415 Centralized	$\underset{\text{◌}}{\text{e}}$	428 Velarized or pharyngealized	209		
416 Mid-centralized	$\underset{\text{◌}}{\text{e}}$	429 Raised	$\underset{\text{◌}}{\text{e}}$ ( $\underset{\text{◌}}{\text{I}}$ = voiced alveolar fricative)		
431 Syllabic	$\underset{\text{◌}}{\text{n}}$	430 Lowered	$\underset{\text{◌}}{\text{e}}$ ( $\underset{\text{◌}}{\text{β}}$ = voiced bilabial approximant)		
432 Non-syllabic	$\underset{\text{◌}}{\text{e}}$	417 Advanced Tongue Root	$\underset{\text{◌}}{\text{e}}$		
419 Rhoticity	327 $\underset{\text{◌}}{\text{a}}$	418 Retracted Tongue Root	$\underset{\text{◌}}{\text{e}}$		

## VOWELS



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

## SUPRASEGMENTALS

- 501 Primary stress       $\underset{\text{◌}}{\text{f}}\text{oun}\underset{\text{◌}}{\text{ə}}\underset{\text{◌}}{\text{t}}\underset{\text{◌}}{\text{s}}\underset{\text{◌}}{\text{ə}}\text{n}$   
 502 Secondary stress  
 503 Long       $\text{e}:$   
 504 Half-long       $\text{e}'$   
 505 Extra-short       $\text{e}^{\text{̥}}$   
 507 Minor (foot) group  
 508 Major (intonation) group  
 506 Syllable break       $\text{.i.ækt}$   
 509 Linking (absence of a break)

## TONES AND WORD ACCENTS

- | LEVEL                 | CONTOUR                |
|-----------------------|------------------------|
| 512 or 519 Extra high | 524 or 529 Rising      |
| 513 520 High          | 525 530 Falling        |
| 514 521 Mid           | 526 531 High rising    |
| 515 522 Low           | 527 532 Low rising     |
| 516 523 Extra low     | 528 533 Rising-falling |
| 517 Downstep          | 510 Global rise        |
| 518 Upstep            | 511 Global fall        |