

## IPA Extensions

### Range: 0250–02AF

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 5.1*.

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See <http://www.unicode.org/charts/> for access to a complete list of the latest character code charts. See <http://www.unicode.org/charts/PDF/Unicode-5.1/> for charts showing only the characters added in Unicode 5.1. See <http://www.unicode.org/Public/5.1.0/charts/> for a complete archived file of character code charts for Unicode 5.1.

## Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 5.1 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this file, please consult the appropriate sections of *The Unicode Standard, Version 5.0* (ISBN 0-321-48091-0), online at <http://www.unicode.org/versions/Unicode5.0.0/>, as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, and #44, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

See <http://www.unicode.org/ucd/> and <http://www.unicode.org/reports/>

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

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	025	026	027	028	029	02A
0	ɐ 0250	ɡ 0260	ɥ 0270	ʀ 0280	ʐ 0290	ɸ 02A0
1	ɑ 0251	ɠ 0261	ɱ 0271	ʙ 0281	ʑ 0291	ʒ̥ 02A1
2	ɒ 0252	ɢ 0262	ɲ 0272	ʂ 0282	ʐ̥ 0292	ɸ̥ 02A2
3	ɓ 0253	ɣ 0263	ɳ 0273	ʃ 0283	ʑ̥ 0293	ɸ̥ 02A3
4	ɔ̥ 0254	ɥ̥ 0264	ɴ 0274	ʃ̥ 0284	ʑ̥̥ 0294	ɸ̥̥ 02A4
5	ɛ̥ 0255	ɥ̥ 0265	ɵ 0275	ɹ 0285	ɸ̥ 0295	ɸ̥̥ 02A5
6	ɖ 0256	ɦ 0266	æ 0276	ʃ̥ 0286	ɸ̥ 0296	ɸ̥̥ 02A6
7	ɸ̥ 0257	ɦ̥ 0267	ω 0277	ɹ̥ 0287	ɸ̥̥ 0297	ɸ̥̥̥ 02A7
8	ə̥ 0258	ɨ̥ 0268	ϕ 0278	ɹ̥ 0288	⊙ 0298	ɸ̥̥̥ 02A8
9	ə̥̥ 0259	ɹ̥ 0269	ɹ̥ 0279	ɸ̥̥ 0289	ɸ̥̥̥ 0299	ɸ̥̥̥̥ 02A9
A	ɹ̥̥ 025A	ɹ̥̥ 026A	ɹ̥̥ 027A	ɸ̥̥̥ 028A	ɸ̥̥̥̥ 029A	ɸ̥̥̥̥̥ 02AA
B	ɸ̥̥̥ 025B	ɸ̥̥̥̥ 026B	ɸ̥̥̥̥̥ 027B	ɸ̥̥̥̥̥̥ 028B	ɸ̥̥̥̥̥̥̥ 029B	ɸ̥̥̥̥̥̥̥̥ 02AB
C	ɸ̥̥̥̥ 025C	ɸ̥̥̥̥̥ 026C	ɸ̥̥̥̥̥̥ 027C	ɸ̥̥̥̥̥̥̥ 028C	ɸ̥̥̥̥̥̥̥̥ 029C	ɸ̥̥̥̥̥̥̥̥̥ 02AC
D	ɸ̥̥̥̥̥ 025D	ɸ̥̥̥̥̥̥ 026D	ɸ̥̥̥̥̥̥̥ 027D	ɸ̥̥̥̥̥̥̥̥ 028D	ɸ̥̥̥̥̥̥̥̥̥ 029D	ɸ̥̥̥̥̥̥̥̥̥̥ 02AD
E	ɸ̥̥̥̥̥̥ 025E	ɸ̥̥̥̥̥̥̥ 026E	ɸ̥̥̥̥̥̥̥̥ 027E	ɸ̥̥̥̥̥̥̥̥̥ 028E	ɸ̥̥̥̥̥̥̥̥̥̥ 029E	ɸ̥̥̥̥̥̥̥̥̥̥̥ 02AE
F	ɸ̥̥̥̥̥̥̥ 025F	ɸ̥̥̥̥̥̥̥̥ 026F	ɸ̥̥̥̥̥̥̥̥̥ 027F	ɸ̥̥̥̥̥̥̥̥̥̥ 028F	ɸ̥̥̥̥̥̥̥̥̥̥̥ 029F	ɸ̥̥̥̥̥̥̥̥̥̥̥̥ 02AF

## IPA extensions

IPA includes basic Latin letters and a number of Latin or Greek letters from other blocks.

		→ 00E6 æ latin small letter ae			
		→ 00E7 ç latin small letter c with cedilla			
		→ 00F0 ð latin small letter eth			
		→ 00F8 ø latin small letter o with stroke			
		→ 0127 ħ latin small letter h with stroke			
		→ 014B η latin small letter eng			
		→ 0153 œ latin small ligature oe			
		→ 03B2 β greek small letter beta			
		→ 03B8 θ greek small letter theta			
		→ 03BB λ greek small letter lamda			
		→ 03C7 χ greek small letter chi	025B	ε	LATIN SMALL LETTER OPEN E = epsilon • lower-mid front unrounded vowel → 0190 Ε latin capital letter open e → 03B5 ε greek small letter epsilon
0250	ɞ	LATIN SMALL LETTER TURNED A • low central unrounded vowel • uppercase is 2C6F Ƶ	025C	ɜ	LATIN SMALL LETTER REVERSED OPEN E • lower-mid central unrounded vowel
0251	ɑ	LATIN SMALL LETTER ALPHA = latin small letter script a (1.0) • low back unrounded vowel • uppercase is 2C6D Ȧ	025D	ɝ	LATIN SMALL LETTER REVERSED OPEN E WITH HOOK • rhotacized lower-mid central vowel
		→ 03B1 α greek small letter alpha	025E	ɛ	LATIN SMALL LETTER CLOSED REVERSED OPEN E = closed reversed epsilon • lower-mid central rounded vowel
0252	ɔ	LATIN SMALL LETTER TURNED ALPHA • low back rounded vowel	025F	ɶ	LATIN SMALL LETTER DOTLESS J WITH STROKE • voiced palatal stop • typographically a turned f, but better thought of as a form of j • “gy” in Hungarian orthography • also archaic phonetic for palatoalveolar affricate 02A4 ɟʝ
0253	ɓ	LATIN SMALL LETTER B WITH HOOK • implosive bilabial stop • Pan-Nigerian alphabet → 0181 Ɓ latin capital letter b with hook	0260	ɟ	LATIN SMALL LETTER G WITH HOOK • implosive velar stop → 0193 Ğ latin capital letter g with hook
0254	ɔ̥	LATIN SMALL LETTER OPEN O • typographically a turned c • lower-mid back rounded vowel → 0186 Ɔ latin capital letter open o	0261	ɡ	LATIN SMALL LETTER SCRIPT G • voiced velar stop → 0067 ɡ latin small letter g
0255	ç	LATIN SMALL LETTER C WITH CURL • voiceless alveolo-palatal laminal fricative • used in transcription of Mandarin Chinese • sound spelled with 015B ś in Polish	0262	ɠ	LATIN LETTER SMALL CAPITAL G • voiced uvular stop
0256	ɖ	LATIN SMALL LETTER D WITH TAIL = d retroflex hook • voiced retroflex stop → 0189 Ɗ latin capital letter african d	0263	ɣ	LATIN SMALL LETTER GAMMA • voiced velar fricative → 0194 Ƴ latin capital letter gamma → 03B3 γ greek small letter gamma
0257	ɗ	LATIN SMALL LETTER D WITH HOOK • implosive dental or alveolar stop • Ewe, Pan-Nigerian alphabet → 018A Ɗ latin capital letter d with hook	0264	ɤ	LATIN SMALL LETTER RAMS HORN = latin small letter baby gamma (1.0) • upper-mid back unrounded vowel
0258	ɘ	LATIN SMALL LETTER REVERSED E • upper-mid central unrounded vowel	0265	ɥ	LATIN SMALL LETTER TURNED H • voiced rounded palatal approximant
0259	ə̘	LATIN SMALL LETTER SCHWA • mid-central unrounded vowel • variant uppercase form 018E Ǝ is associated with 01DD ə̘ → 018F Ɛ latin capital letter schwa → 01DD ə latin small letter turned e → 04D9 ə cyrillic small letter schwa	0266	ɦ	LATIN SMALL LETTER H WITH HOOK • breathy-voiced glottal fricative → 02B1 ɦ modifier letter small h with hook
025A	ɚ	LATIN SMALL LETTER SCHWA WITH HOOK • rhotacized schwa	0267	ɦ̥	LATIN SMALL LETTER HENG WITH HOOK • voiceless coarticulated velar and palatoalveolar fricative • “tj” or “kj” or “sj” in some Swedish dialects
			0268	ı̇	LATIN SMALL LETTER I WITH STROKE = barred i, i bar • high central unrounded vowel • ISO 6438 gives lowercase of 0197 İ as 026A ı̇, not 0268 ı̇
			0269	ɪ̥	LATIN SMALL LETTER IOTA • semi-high front unrounded vowel • obsoleted by IPA in 1989 • preferred use is 026A ı̇ latin letter small capital i̇ → 0196 ı̇ latin capital letter iota → 03B9 ι greek small letter iota
			026A	ɪ̇	LATIN LETTER SMALL CAPITAL I • semi-high front unrounded vowel • preferred IPA alternate for 0269 ɪ̥ → 0197 İ latin capital letter i with stroke

026B	ɫ	LATIN SMALL LETTER L WITH MIDDLE TILDE	027C	ɽ	LATIN SMALL LETTER R WITH LONG LEG
		• velarized voiced alveolar lateral approximant			• voiced strident apico-alveolar trill
		• uppercase is 2C62 Ľ			• obsoleted by IPA in 1989
026C	ɬ	LATIN SMALL LETTER L WITH BELT			• sound spelled with 0159 ř in Czech
		• voiceless alveolar lateral fricative			• preferred phonetic representation for Czech is 0072 r 031D ɽ
026D	ɭ	LATIN SMALL LETTER L WITH RETROFLEX HOOK			• in current use in Gaelic types (as glyph variant of 0072 r)
		• voiced retroflex lateral	027D	ɽ	LATIN SMALL LETTER R WITH TAIL
026E	ɮ	LATIN SMALL LETTER LEZH			• voiced retroflex flap
		• voiced lateral fricative			• uppercase is 2C64 ɽ
		• “dhl” in Zulu orthography	027E	ɽ	LATIN SMALL LETTER R WITH FISHHOOK
026F	ɰ	LATIN SMALL LETTER TURNED M			• voiced alveolar flap or tap
		• high back unrounded vowel	027F	ɽ	LATIN SMALL LETTER REVERSED R WITH FISHHOOK
		→ 019C Ʊ latin capital letter turned m			= long leg turned iota (a misnomer)
0270	ɰ	LATIN SMALL LETTER TURNED M WITH LONG LEG			• apical dental vowel
		• voiced velar approximant			• used by linguists working on Chinese and other Sino-Tibetan languages
0271	ɱ	LATIN SMALL LETTER M WITH HOOK			• IPA spelling - 007A z 0329 ɽ
		• voiced labiodental nasal			• preferred presentation is with a descender
		• uppercase is 2C6E ɱ	0280	ɽ	LATIN LETTER SMALL CAPITAL R
0272	ɲ	LATIN SMALL LETTER N WITH LEFT HOOK			• voiced uvular trill
		• voiced palatal nasal			• Germanic, Old Norse
		→ 019D Ɲ latin capital letter n with left hook			• uppercase is 01A6 ɽ
0273	ɳ	LATIN SMALL LETTER N WITH RETROFLEX HOOK	0281	ɽ	LATIN LETTER SMALL CAPITAL INVERTED R
		• voiced retroflex nasal			• voiced uvular fricative or approximant
0274	ɺ	LATIN LETTER SMALL CAPITAL N			→ 02B6 ɽ modifier letter small capital inverted r
		• voiced uvular nasal	0282	ɽ	LATIN SMALL LETTER S WITH HOOK
0275	ɵ	LATIN SMALL LETTER BARRED O			• voiceless retroflex fricative
		= o bar			• voiceless postalveolar fricative
		• rounded mid-central vowel, i.e. rounded schwa			→ 01A9 Σ latin capital letter esh
		• uppercase is 019F Ө			→ 222B ∫ integral
		→ 03B8 θ greek small letter theta	0283	ɽ	LATIN SMALL LETTER ESH
		→ 0473 ҅ cyrillic small letter fita			• voiceless postalveolar fricative
		→ 04E9 ҆ cyrillic small letter barred o			→ 01A9 Σ latin capital letter esh
0276	œ	LATIN LETTER SMALL CAPITAL OE			→ 222B ∫ integral
		• low front rounded vowel	0284	ɽ	LATIN SMALL LETTER DOTLESS J WITH STROKE AND HOOK
		→ 0153 œ latin small ligature oe			• implosive palatal stop
0277	ɷ	LATIN SMALL LETTER CLOSED OMEGA			• typographically based on 025F ɽ, not on 0283 ɽ
		• semi-high back rounded vowel	0285	ɽ	LATIN SMALL LETTER SQUAT REVERSED ESH
		• obsoleted by IPA in 1989			• apical retroflex vowel
		• preferred use is 028A ɯ latin small letter upsilon			• used by linguists working on Chinese and other Sino-Tibetan languages
0278	ɸ	LATIN SMALL LETTER PHI			• IPA spelling - 0290 z 0329 ɽ
		• voiceless bilabial fricative			• in origin 027F ɽ plus the retroflex hook 0322 ɽ, despite its name
		→ 03C6 ϕ greek small letter phi			• preferred presentation is with a descender
0279	ɹ	LATIN SMALL LETTER TURNED R	0286	ɽ	LATIN SMALL LETTER ESH WITH CURL
		• voiced alveolar approximant			• palatalized voiceless postalveolar fricative
		→ 02B4 ɹ modifier letter small turned r			• suggested spelling - 0283 ɽ 02B2 ɽ
027A	ɹ	LATIN SMALL LETTER TURNED R WITH LONG LEG	0287	ɽ	LATIN SMALL LETTER TURNED T
		• voiced lateral flap			• dental click (sound of “tsk tsk”)
027B	ɹ	LATIN SMALL LETTER TURNED R WITH HOOK			→ 01C0 ɽ latin letter dental click
		• voiced retroflex approximant	0288	ɽ	LATIN SMALL LETTER T WITH RETROFLEX HOOK
		→ 02B5 ɹ modifier letter small turned r with hook			• voiceless retroflex stop
					→ 01AE Ƨ latin capital letter t with retroflex hook
			0289	ɽ	LATIN SMALL LETTER U BAR
					• high central rounded vowel
					• uppercase is 0244 Ƨ

028A	ʊ	LATIN SMALL LETTER UPSILON • semi-high back rounded vowel • preferred IPA alternate to 0277 ɔ → 01B1 Ū latin capital letter upsilon → 03C5 υ greek small letter upsilon
028B	ʋ	LATIN SMALL LETTER V WITH HOOK = latin small letter script v (1.0) • voiced labiodental approximant → 01B2 Ū latin capital letter v with hook → 03C5 υ greek small letter upsilon
028C	ʌ	LATIN SMALL LETTER TURNED V = caret, wedge • lower-mid back unrounded vowel • uppercase is 0245 Λ → 039B Λ greek capital letter lamda → 2038 ˆ caret → 2227 ˆ logical and
028D	ʍ	LATIN SMALL LETTER TURNED W • voiceless rounded labiovelar approximant
028E	ʎ	LATIN SMALL LETTER TURNED Y • voiced lateral approximant
028F	ʏ	LATIN LETTER SMALL CAPITAL Y • semi-high front rounded vowel
0290	ʐ	LATIN SMALL LETTER Z WITH RETROFLEX HOOK • voiced retroflex fricative
0291	ʑ	LATIN SMALL LETTER Z WITH CURL • voiced alveolo-palatal laminal fricative • sound spelled with 017A ź in Polish
0292	ʒ	LATIN SMALL LETTER EZH = dram • voiced postalveolar fricative • mistakenly named yogh in Unicode 1.0 • uppercase is 01B7 Ʒ • Skolt Sami → 021D ʒ latin small letter yogh → 04E1 ʒ cyrillic small letter abkhasian dze → 2125 ʒ ounce sign
0293	ʓ	LATIN SMALL LETTER EZH WITH CURL • palatalized voiced postalveolar fricative
0294	ʔ	LATIN LETTER GLOTTAL STOP • this is a caseless letter • used in IPA, other phonetic notations, and those orthographies which use a caseless glottal stop → 0241 ʔ latin capital letter glottal stop → 02C0 ʔ modifier letter glottal stop
0295	ʕ	LATIN LETTER PHARYNGEAL VOICED FRICATIVE = reversed glottal stop • voiced pharyngeal fricative • ain → 01B9 ʕ latin small letter ezh reversed → 02C1 ʕ modifier letter reversed glottal stop
0296	ʖ	LATIN LETTER INVERTED GLOTTAL STOP • lateral click → 01C1 ʖ latin letter lateral click
0297	ʗ	LATIN LETTER STRETCHED C • palatal (or alveolar) click → 01C3 ʗ latin letter retroflex click → 2201 ʗ complement

0298	⊙	LATIN LETTER BILABIAL CLICK = bullseye → 2299 ⊙ circled dot operator
0299	ɸ	LATIN LETTER SMALL CAPITAL B • bilabial trill
029A	ɛ̥	LATIN SMALL LETTER CLOSED OPEN E = closed epsilon • lower-mid front rounded vowel • non-IPA alternate for the preferred 0153 œ
029B	ɢ	LATIN LETTER SMALL CAPITAL G WITH HOOK • voiced uvular implosive
029C	ħ	LATIN LETTER SMALL CAPITAL H • voiceless epiglottal fricative
029D	ɟ	LATIN SMALL LETTER J WITH CROSSED-TAIL • voiced palatal fricative
029E	ɥ	LATIN SMALL LETTER TURNED K • proposed for velar click • withdrawn by IPA in 1970
029F	ʟ	LATIN LETTER SMALL CAPITAL L • velar lateral approximant
02A0	ɥ̥	LATIN SMALL LETTER Q WITH HOOK • voiceless uvular implosive
02A1	ʔ̥	LATIN LETTER GLOTTAL STOP WITH STROKE • voiced epiglottal stop
02A2	ʕ̥	LATIN LETTER REVERSED GLOTTAL STOP WITH STROKE • voiced epiglottal fricative
02A3	ɗ	LATIN SMALL LETTER DZ DIGRAPH • voiced dental affricate
02A4	ɗ͡ʒ	LATIN SMALL LETTER DEZH DIGRAPH • voiced postalveolar affricate
02A5	ɗ͡ʒ͡	LATIN SMALL LETTER DZ DIGRAPH WITH CURL • voiced alveolo-palatal affricate
02A6	ɗ͡ʒ͡͡	LATIN SMALL LETTER TS DIGRAPH • voiceless dental affricate
02A7	ɗ͡ʒ͡͡͡	LATIN SMALL LETTER TESH DIGRAPH • voiceless postalveolar affricate
02A8	ɗ͡ʒ͡͡͡͡	LATIN SMALL LETTER TC DIGRAPH WITH CURL • voiceless alveolo-palatal affricate

### IPA characters for disordered speech

02A9	ɸ̥	LATIN SMALL LETTER FENG DIGRAPH • velopharyngeal fricative
02AA	ɸ̥͡	LATIN SMALL LETTER LS DIGRAPH • lateral alveolar fricative (lisp)
02AB	ɸ̥͡͡	LATIN SMALL LETTER LZ DIGRAPH • voiced lateral alveolar fricative
02AC	ɸ̥͡͡͡	LATIN LETTER BILABIAL PERCUSSIVE • audible lip smack
02AD	ɸ̥͡͡͡͡	LATIN LETTER BIDENTAL PERCUSSIVE • audible teeth gnashing

### Additions for Sinology

02AE	ɸ̥͡͡͡͡͡	LATIN SMALL LETTER TURNED H WITH FISHHOOK
02AF	ɸ̥͡͡͡͡͡͡	LATIN SMALL LETTER TURNED H WITH FISHHOOK AND TAIL