

## 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 5.0*.

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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-5.0/> for charts showing only the characters added in Unicode 5.0. See <http://www.unicode.org/Public/5.0.0/charts/> for a complete archived file of character code charts for Unicode 5.0.

## Disclaimer

These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 5.0 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, and #34, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available on-line.

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	ɟ 0260	ɥ 0270	ʀ 0280	ʐ 0290	ɸ 02A0
1	ɑ 0251	ɠ 0261	ɱ 0271	ʁ 0281	ʑ 0291	ɹ̥ 02A1
2	ɒ 0252	ɢ 0262	ɲ 0272	ʂ 0282	ʓ 0292	ɸ̥ 02A2
3	ɓ 0253	ɣ 0263	ɳ 0273	ʃ 0283	ʔ 0293	ɸ̥ɹ̥ 02A3
4	ɔ 0254	ɥ̥ 0264	ɴ 0274	ʄ 0284	ʔ̥ 0294	ɸ̥ɹ̥̥ 02A4
5	ɛ̥ 0255	ɥ̥ 0265	ɵ 0275	ɺ 0285	ɸ̥ 0295	ɸ̥ɹ̥̥ 02A5
6	ɸ̥ 0256	ɦ 0266	ɷ 0276	ɸ̥ 0286	ɸ̥ 0296	ɸ̥ɹ̥̥ 02A6
7	ɸ̥ 0257	ɦ̥ 0267	ω̥ 0277	ɸ̥ 0287	ɸ̥ 0297	ɸ̥ɹ̥̥ 02A7
8	ə̥ 0258	ɨ̥ 0268	ϕ̥ 0278	ɸ̥ 0288	⊙ 0298	ɸ̥ɹ̥̥ 02A8
9	ə̥ 0259	ɺ̥ 0269	ɹ̥ 0279	ɸ̥ 0289	ɸ̥ 0299	ɸ̥ɹ̥̥ 02A9
A	ɸ̥ 025A	ɹ̥ 026A	ɹ̥ 027A	ɸ̥ 028A	ɸ̥ 029A	ɸ̥ɹ̥̥ 02AA
B	ɸ̥ 025B	ɸ̥ 026B	ɸ̥ 027B	ɸ̥ 028B	ɸ̥ 029B	ɸ̥ɹ̥̥ 02AB
C	ɸ̥ 025C	ɸ̥ 026C	ɸ̥ 027C	ɸ̥ 028C	ɸ̥ 029C	ɸ̥ɹ̥̥ 02AC
D	ɸ̥ 025D	ɸ̥ 026D	ɸ̥ 027D	ɸ̥ 028D	ɸ̥ 029D	ɸ̥ɹ̥̥ 02AD
E	ɸ̥ 025E	ɸ̥ 026E	ɸ̥ 027E	ɸ̥ 028E	ɸ̥ 029E	ɸ̥ɹ̥̥ 02AE
F	ɸ̥ 025F	ɸ̥ 026F	ɸ̥ 027F	ɸ̥ 028F	ɸ̥ 029F	ɸ̥ɹ̥̥ 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		025E	ɛ	LATIN SMALL LETTER CLOSED REVERSED OPEN E
	→ 00E7 ç	latin small letter c with cedilla				= closed reversed epsilon
	→ 00F0 ð	latin small letter eth				• lower-mid central rounded vowel
	→ 00F8 ø	latin small letter o with stroke		025F	ɟ	LATIN SMALL LETTER DOTLESS J WITH STROKE
	→ 0127 ħ	latin small letter h with stroke				• voiced palatal stop
	→ 014B ŋ	latin small letter eng				• typographically a turned f, but better thought of as a form of j
	→ 0153 œ	latin small ligature oe				• “gy” in Hungarian orthography
	→ 03B2 β	greek small letter beta				• also archaic phonetic for palatoalveolar affricate 02A4 ɟʒ
	→ 03B8 θ	greek small letter theta		0260	ɡ̞	LATIN SMALL LETTER G WITH HOOK
	→ 03BB λ	greek small letter lamda				• implosive velar stop
	→ 03C7 χ	greek small letter chi				→ 0193 Ğ latin capital letter g with hook
0250	ɐ	LATIN SMALL LETTER TURNED A		0261	ɡ̃	LATIN SMALL LETTER SCRIPT G
		• low central unrounded vowel				• voiced velar stop
0251	ɑ̣	LATIN SMALL LETTER ALPHA				→ 0067 ɡ latin small letter g
		= latin small letter script a (1.0)		0262	ɠ	LATIN LETTER SMALL CAPITAL G
		• low back unrounded vowel				• voiced uvular stop
	→ 03B1 α	greek small letter alpha		0263	ɣ	LATIN SMALL LETTER GAMMA
0252	ɒ	LATIN SMALL LETTER TURNED ALPHA				• voiced velar fricative
		• low back rounded vowel				→ 0194 Ƴ latin capital letter gamma
0253	ɓ	LATIN SMALL LETTER B WITH HOOK				→ 03B3 γ greek small letter gamma
		• implosive bilabial stop		0264	ɣ̥	LATIN SMALL LETTER RAMS HORN
		• Pan-Nigerian alphabet				= latin small letter baby gamma (1.0)
	→ 0181 Ɓ latin capital letter b with hook					• upper-mid back unrounded vowel
0254	ɔ̣	LATIN SMALL LETTER OPEN O		0265	ɥ	LATIN SMALL LETTER TURNED H
		• typographically a turned c				• voiced rounded palatal approximant
		• lower-mid back rounded vowel		0266	ɦ	LATIN SMALL LETTER H WITH HOOK
	→ 0186 Ɔ latin capital letter open o					• breathy-voiced glottal fricative
0255	ç	LATIN SMALL LETTER C WITH CURL				→ 02B1 ɦ̣ modifier letter small h with hook
		• voiceless alveolo-palatal laminal fricative		0267	ɦ̣	LATIN SMALL LETTER HENG WITH HOOK
		• used in transcription of Mandarin Chinese				• voiceless coarticulated velar and palatoalveolar fricative
		• sound spelled with 015B ś in Polish				• “tj” or “kj” or “sj” in some Swedish dialects
0256	ɖ	LATIN SMALL LETTER D WITH TAIL		0268	ɨ	LATIN SMALL LETTER I WITH STROKE
		= d retroflex hook				= barred i, i bar
		• voiced retroflex stop				• high central unrounded vowel
	→ 0189 Ɖ latin capital letter african d					• ISO 6438 gives lowercase of 0197 Ʒ as 026A ɨ, not 0268 ɨ
0257	ɖ̥	LATIN SMALL LETTER D WITH HOOK		0269	ɪ	LATIN SMALL LETTER IOTA
		• implosive dental or alveolar stop				• semi-high front unrounded vowel
		• Ewe, Pan-Nigerian alphabet				• obsoleted by IPA in 1989
	→ 018A Ɗ latin capital letter d with hook					• preferred use is 026A ɪ latin letter small capital i
0258	ɘ	LATIN SMALL LETTER REVERSED E				→ 0196 ɪ latin capital letter iota
		• upper-mid central unrounded vowel				→ 03B9 ι greek small letter iota
0259	ə	LATIN SMALL LETTER SCHWA		026A	ɪ	LATIN LETTER SMALL CAPITAL I
		• mid-central unrounded vowel				• semi-high front unrounded vowel
		• variant uppercase form 018E Ǝ is associated with 01DD ə				• preferred IPA alternate for 0269 ɪ
	→ 018F Ǝ latin capital letter schwa					→ 0197 Ʒ latin capital letter i with stroke
	→ 01DD ə latin small letter turned e		026B	ɬ	LATIN SMALL LETTER L WITH MIDDLE TILDE	
	→ 04D9 ə cyrillic small letter schwa					• velarized voiced alveolar lateral approximant
025A	æ̣	LATIN SMALL LETTER SCHWA WITH HOOK				• uppercase is 2C62 Ƨ
		• rhotacized schwa		026C	ɬ̥	LATIN SMALL LETTER L WITH BELT
025B	ɛ̥	LATIN SMALL LETTER OPEN E				• voiceless alveolar lateral fricative
		= epsilon		026D	ɭ	LATIN SMALL LETTER L WITH RETROFLEX HOOK
		• lower-mid front unrounded vowel				• voiced retroflex lateral
	→ 0190 Ǝ latin capital letter open e					LATIN SMALL LETTER LEZH
	→ 03B5 ε greek small letter epsilon		026E	ɮ	LATIN SMALL LETTER LEZH	
025C	ɜ̥	LATIN SMALL LETTER REVERSED OPEN E				• voiced lateral fricative
		• lower-mid central unrounded vowel				• “dhl” in Zulu orthography
025D	ɜ̣	LATIN SMALL LETTER REVERSED OPEN E WITH HOOK		026F	ɯ	LATIN SMALL LETTER TURNED M
		• rhotacized lower-mid central vowel				• high back unrounded vowel
						→ 019C Ʊ latin capital letter turned m

0270	ɰ	LATIN SMALL LETTER TURNED M WITH LONG LEG	0281	ʀ	LATIN LETTER SMALL CAPITAL INVERTED R
		• voiced velar approximant			• voiced uvular fricative or approximant
0271	ɱ	LATIN SMALL LETTER M WITH HOOK	0282	ʂ	LATIN SMALL LETTER S WITH HOOK
		• voiced labiodental nasal			• voiceless retroflex fricative
0272	ɲ	LATIN SMALL LETTER N WITH LEFT HOOK	0283	ʃ	LATIN SMALL LETTER ESH
		• voiced palatal nasal			• voiceless postalveolar fricative
		→ 019D ꝺ latin capital letter n with left hook			→ 01A9 Σ latin capital letter esh
0273	ɳ	LATIN SMALL LETTER N WITH RETROFLEX HOOK			→ 222B ∫ integral
		• voiced retroflex nasal	0284	ɶ	LATIN SMALL LETTER DOTLESS J WITH STROKE AND HOOK
0274	ɸ	LATIN LETTER SMALL CAPITAL N			• implosive palatal stop
		• voiced uvular nasal			• typographically based on 025F ꝶ, not on 0283 ɶ
0275	ɵ	LATIN SMALL LETTER BARRED O	0285	ɷ	LATIN SMALL LETTER SQUAT REVERSED ESH
		= o bar			• apical retroflex vowel
		• rounded mid-central vowel, i.e. rounded schwa			• used by linguists working on Chinese and other Sino-Tibetan languages
		• uppercase is 019F Θ			• IPA spelling - 0290 ɹ 0329 ɸ
		→ 03B8 θ greek small letter theta			• in origin 027F ɹ plus the retroflex hook 0322 ɹ, despite its name
		→ 0473 ɵ cyrillic small letter fita	0286	ɸ	LATIN SMALL LETTER ESH WITH CURL
		→ 04E9 ɵ cyrillic small letter barred o			• palatalized voiceless postalveolar fricative
0276	œ	LATIN LETTER SMALL CAPITAL OE			• suggested spelling - 0283 ɸ 02B2 ɸ
		• low front rounded vowel	0287	ɠ	LATIN SMALL LETTER TURNED T
		→ 0153 œ latin small ligature oe			• dental click (sound of “tsk tsk”)
0277	ɶ	LATIN SMALL LETTER CLOSED OMEGA			→ 01C0 ɠ latin letter dental click
		• semi-high back rounded vowel	0288	ɡ	LATIN SMALL LETTER T WITH RETROFLEX HOOK
		• obsoleted by IPA in 1989			• voiceless retroflex stop
		• preferred use is 028A ɷ latin small letter upsilon			→ 01AE ɡ latin capital letter t with retroflex hook
0278	ɸ	LATIN SMALL LETTER PHI	0289	ɯ	LATIN SMALL LETTER U BAR
		• voiceless bilabial fricative			• high central rounded vowel
		→ 03C6 ϕ greek small letter phi			• uppercase is 0244 ɯ
0279	ɹ	LATIN SMALL LETTER TURNED R	028A	ɷ	LATIN SMALL LETTER UPSILON
		• voiced alveolar approximant			• semi-high back rounded vowel
		→ 02B4 ɹ modifier letter small turned r			• preferred IPA alternate to 0277 ɶ
027A	ɺ	LATIN SMALL LETTER TURNED R WITH LONG LEG			→ 01B1 ɷ latin capital letter upsilon
		• voiced lateral flap			→ 03C5 ɷ greek small letter upsilon
027B	ɻ	LATIN SMALL LETTER TURNED R WITH HOOK	028B	ɸ	LATIN SMALL LETTER V WITH HOOK
		• voiced retroflex approximant			= latin small letter script v (1.0)
		→ 02B5 ɻ modifier letter small turned r with hook			• voiced labiodental approximant
027C	ɽ	LATIN SMALL LETTER R WITH LONG LEG			→ 01B2 ɸ latin capital letter v with hook
		• voiced strident apico-alveolar trill			→ 03C5 ɸ greek small letter upsilon
		• obsoleted by IPA in 1989	028C	˘	LATIN SMALL LETTER TURNED V
		• sound spelled with 0159 ř in Czech			= caret, wedge
		• preferred phonetic representation for Czech is 0072 ɽ 031D ɸ			• lower-mid back unrounded vowel
		• in current use in Gaelic types (as glyph variant of 0072 ɽ)			• uppercase is 0245 ˘
027D	ɿ	LATIN SMALL LETTER R WITH TAIL			→ 039B ˘ greek capital letter lamda
		• voiced retroflex flap			→ 2038 ˘ caret
		• uppercase is 2C64 ɿ			→ 2227 ˘ logical and
027E	ɺ	LATIN SMALL LETTER R WITH FISHHOOK	028D	ʁ	LATIN SMALL LETTER TURNED W
		• voiced alveolar flap or tap			• voiceless rounded labiovelar approximant
027F	ɻ	LATIN SMALL LETTER REVERSED R WITH FISHHOOK	028E	ɻ	LATIN SMALL LETTER TURNED Y
		= long leg turned iota (a misnomer)			• voiced lateral approximant
		• apical dental vowel	028F	ɹ	LATIN LETTER SMALL CAPITAL Y
		• used by linguists working on Chinese and other Sino-Tibetan languages			• semi-high front rounded vowel
		• IPA spelling - 007A ɻ 0329 ɸ	0290	ɹ	LATIN SMALL LETTER Z WITH RETROFLEX HOOK
0280	ʀ	LATIN LETTER SMALL CAPITAL R			• voiced retroflex fricative
		• voiced uvular trill	0291	ɻ	LATIN SMALL LETTER Z WITH CURL
		• Germanic, Old Norse			• voiced alveolo-palatal laminal fricative
		• uppercase is 01A6 ʀ			• sound spelled with 017A ɻ in Polish

0292	ɜ	LATIN SMALL LETTER EZH = dram • voiced postalveolar fricative • mistakenly named yogh in Unicode 1.0 • uppercase is 01B7 Ʒ • Skolt Sami → 021D ɝ latin small letter yogh → 04E1 ɜ cyrillic small letter abkhasian dze → 2125 ɜ ounce sign
0293	ʒ	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	ɸ	LATIN LETTER INVERTED GLOTTAL STOP • lateral click → 01C1 ɸ latin letter lateral click
0297	ɕ	LATIN LETTER STRETCHED C • palatal (or alveolar) click → 01C3 ! latin letter retroflex click → 2201 ɕ complement
0298	⦿	LATIN LETTER BILABIAL CLICK = bullseye → 2299 ⦿ circled dot operator
0299	ɸ	LATIN LETTER SMALL CAPITAL B • bilabial trill
029A	ɶ	LATIN SMALL LETTER CLOSED OPEN E = closed epsilon • lower-mid front rounded vowel • non-IPA alternate for the preferred 0153 œ
029B	ɸ	LATIN LETTER SMALL CAPITAL G WITH HOOK • voiced uvular implosive
029C	ħ	LATIN LETTER SMALL CAPITAL H • voiceless epiglottal fricative
029D	ɶ	LATIN SMALL LETTER J WITH CROSSED-TAIL • voiced palatal fricative
029E	ɸ	LATIN SMALL LETTER TURNED K • proposed for velar click • withdrawn by IPA in 1970
029F	ɸ	LATIN LETTER SMALL CAPITAL L • velar lateral approximant
02A0	ɸ	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	ɸ	LATIN SMALL LETTER DZ DIGRAPH • voiced dental affricate
02A4	ɸ	LATIN SMALL LETTER DEZH DIGRAPH • voiced postalveolar affricate
02A5	ɸ	LATIN SMALL LETTER DZ DIGRAPH WITH CURL • voiced alveolo-palatal affricate

02A6	ts	LATIN SMALL LETTER TS DIGRAPH • voiceless dental affricate
02A7	tʃ	LATIN SMALL LETTER TESH DIGRAPH • voiceless postalveolar affricate
02A8	tc	LATIN SMALL LETTER TC DIGRAPH WITH CURL • voiceless alveolo-palatal affricate

### IPA characters for disordered speech

02A9	fj	LATIN SMALL LETTER FENG DIGRAPH • velopharyngeal fricative
02AA	ls	LATIN SMALL LETTER LS DIGRAPH • lateral alveolar fricative (lisp)
02AB	lz	LATIN SMALL LETTER LZ DIGRAPH • voiced lateral alveolar fricative
02AC	ɸ	LATIN LETTER BILABIAL PERCUSSIVE • audible lip smack
02AD	ɸ	LATIN LETTER BIDENTAL PERCUSSIVE • audible teeth gnashing

### Additions for Sinology

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