Parte superior do formulário

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| [UCL PSYCHOLOGY & LANGUAGE SCIENCES](http://www.ucl.ac.uk/pals/) [Faculty of Brain Sciences](http://www.ucl.ac.uk/brain-sciences/) |  |
| [UCL](http://www.ucl.ac.uk/)  »  [Psychology & Language Sciences](http://www.ucl.ac.uk/pals/)  »  [Resources in Speech, Hearing & Phonetic Sciences](http://www.phon.ucl.ac.uk/) | |

Parte inferior do formulário

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| [SH&PS Home](http://www.ucl.ac.uk/pals/research/shaps/)  [Resources & Tools](http://www.phon.ucl.ac.uk/resource/)  [Educational](http://www.phon.ucl.ac.uk/resource/educational.php)  [Phonetic Symbols](http://www.phon.ucl.ac.uk/resource/phonetics.php)  [Software](http://www.phon.ucl.ac.uk/resource/software.php)  [Speech Audio](http://www.phon.ucl.ac.uk/resource/speech.php)  [Web Shop](http://www.phon.ucl.ac.uk/shop/) | Look at this: [ə].  Do you see a phonetic symbol between the square brackets? (You should see a schwa.) The International Phonetic Alphabet in Unicode  |  |  |  |  |  | | --- | --- | --- | --- | --- | | [Displaying IPA symbols](" \l "display) |  | [Inserting IPA symbols in web documents](" \l "insert) |  | [Unicode decimal numbers for IPA symbols](" \l "numbers) |  Displaying IPA symbols For you to be able to display Unicode phonetic symbols correctly on your web browser,   * the browser must be **Unicode-compliant** (all current browsers are) * you must be running Windows 95 or later, or, on a Macintosh, OSX; (otherwise, and for Unix or Linux, see advice from the [Unicode](http://www.unicode.org/help/display_problems.html) site) * you must have **installed** a Unicode font that includes the IPA symbols  The list of such Windows TrueType/OpenType fonts currently available and that I recommend is as follows.   + **Arial** with Windows Vista; not previous versions   + **Arial Unicode MS**   + **Charis SIL** ([download](http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=SILFontList)) — an excellent font from SIL   + **Courier New** with Windows Vista; not previous versions   + **Doulos SIL** ([download](http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=DoulosSILfont)) - the familiar SIL Doulos font, now in comprehensive Unicode version   + **Gentium** ([download](http://www.sil.org/~gaultney/gentium))   + **Lucida Grande** with Mac OS X/Safari and later   + **Lucida Sans Unicode**, ([download](file:///C:\Users\Aline\Google%20Drive\Edição%20de%20ebooks\lsansuni.ttf)) — blocky, but widely available (supplied with many versions of Windows)   + **Microsoft Sans Serif** with Windows Vista and later; not previous versions   + **Segoe UI** with Windows Vista and later   + **Tahoma** with Windows Vista and later; not previous versions   + **Times New Roman** with Windows Vista and later; not previous versions   and   * the web document you are displaying must specify this font with either a style sheet {font-family} tag or an in-line <font face> tag.   The style sheet in the head of **this document** specifies the font Arial MS Unicode, or failing that Lucida Sans Unicode. There is also [another version](file:///C:\Users\Aline\Google%20Drive\Edição%20de%20ebooks\ipa-unicode-test.htm), with no font specified, that you can use to test fonts. Inserting IPA symbols in web documents There are several ways to insert Unicode IPA symbols into your HTML files: by using MS Word (97 and later), or by using a numeric code.   * + In **Word**, with a Unicode font selected, use Insert | Symbol (normal text) and scroll down the box until you find the character you want. Select it, and Insert.   + With **Word 2003** and later, you can alternatively type in the Unicode hex number (see below), select it, and do Alt-X. The character will appear.   + If you are going to use the character frequently, it might be worthwhile assigning a Shortcut Key (macro) for it.   + You can also use the program Character Map to find your character, then select, copy and paste it.   + Or you can use a keyboard facility such as [this](http://www.phon.ucl.ac.uk/resource/phonetics/).   + Afterwards, save the document using File | **Save as HTML**. Word will automatically convert the character into the corresponding numeric entity (see next para) or the corresponding UTF-8 encoding. * Alternatively, write direct HTML, referencing each IPA symbol using the code numbers listed below. You can do this using either **decimal** or **hex** numbers. To create such a "**numeric entity**", you put ampersand (&), number sign (#), the Unicode number for the symbol, and semicolon. If using hex numbers, you must place an x between the number sign and the number. For example, to include the velar nasal symbol, ŋ, which has the Unicode decimal number 331, write &#331;, or, since its hex number is 014B, you can alternatively write &#x014B;. To transcribe the English word *thing*, θɪŋ, write &#952;&#618;&#331; or, alternatively, &#x03B8;&#x026A;&#x014B;. The browser will render these with the correct IPA symbols, always provided an appropriate font is available. * Force the use of an appropriate font by including a font tag as mentioned above, for example   + in your cascading style sheet, p {font-family:"lucida sans unicode";}, or   + in the text, an in-line tag <font face="Lucida Sans Unicode">.  Unicode *decimal* and *hex* numbers for IPA symbols The [Unicode manual](http://www.unicode.org/) lists code numbers only in hexadecimal. Here they are listed with their decimal numbers as well.  [Alphabetic](#alfa) | [Spacing diacritics](#spac) | [Non-spacing diacritics](#nonspac) | [Arrows](#arrows) Alphabetic (excluding the standard characters a-z)   |  |  |  |  | | --- | --- | --- | --- | | **Symbol** | **decimal** | **hex** | **value** | | ɑ | 593 | 0251 | open back unrounded | | ɐ | 592 | 0250 | open-mid schwa | | ɒ | 594 | 0252 | open back rounded | | æ | 230 | 00E6 | raised open front unrounded | | ɓ | 595 | 0253 | vd bilabial implosive | | ʙ | 665 | 0299 | vd bilabial trill | | β | 946 | 03B2 | vd bilabial fricative | | ɔ | 596 | 0254 | open-mid back rounded | | ɕ | 597 | 0255 | vl alveolopalatal fricative | | ç | 231 | 00E7 | vl palatal fricative | | ɗ | 599 | 0257 | vd alveolar implosive | | ɖ | 598 | 0256 | vd retroflex plosive | | ð | 240 | 00F0 | vd dental fricative | | ʤ | 676 | 02A4 | vd postalveolar affricate | | ə | 601 | 0259 | schwa | | ɘ | 600 | 0258 | close-mid schwa | | ɚ | 602 | 025A | rhotacized schwa | | ɛ | 603 | 025B | open-mid front unrounded | | ɜ | 604 | 025C | open-mid central | | ɝ | 605 | 025D | rhotacized open-mid central | | ɞ | 606 | 025E | open-mid central rounded | | ɟ | 607 | 025F | vd palatal plosive | | ʄ | 644 | 0284 | vd palatal implosive | | ɡ | 609 | 0261 | vd velar plosive (but the IPA has ruled that an ordinary g is also acceptable) | | ɠ | 608 | 0260 | vd velar implosive | | ɢ | 610 | 0262 | vd uvular plosive | | ʛ | 667 | 029B | vd uvular implosive | | ɦ | 614 | 0266 | vd glottal fricative | | ɧ | 615 | 0267 | vl multiple-place fricative | | ħ | 295 | 0127 | vl pharyngeal fricative | | ɥ | 613 | 0265 | labial-palatal approximant | | ʜ | 668 | 029C | vl epiglottal fricative | | ɨ | 616 | 0268 | close central unrounded | | ɪ | 618 | 026A | lax close front unrounded | | ʝ | 669 | 029D | vd palatal fricative | | ɭ | 621 | 026D | vd retroflex lateral | | ɬ | 620 | 026C | vl alveolar lateral fricative | | ɫ | 619 | 026B | velarized vd alveolar lateral | | ɮ | 622 | 026E | vd alveolar lateral fricative | | ʟ | 671 | 029F | vd velar lateral | | ɱ | 625 | 0271 | vd labiodental nasal | | ɯ | 623 | 026F | close back unrounded | | ɰ | 624 | 0270 | velar approximant | | ŋ | 331 | 014B | vd velar nasal | | ɳ | 627 | 0273 | vd retroflex nasal | | ɲ | 626 | 0272 | vd palatal nasal | | ɴ | 628 | 0274 | vd uvular nasal | | ø | 248 | 00F8 | front close-mid rounded | | ɵ | 629 | 0275 | rounded schwa | | ɸ | 632 | 0278 | vl bilabial fricative | | θ | 952 | 03B8 | vl dental fricative | | œ | 339 | 0153 | front open-mid rounded | | ɶ | 630 | 0276 | front open rounded | | ʘ | 664 | 0298 | bilabial click | | ɹ | 633 | 0279 | vd (post)alveolar approximant | | ɺ | 634 | 027A | vd alveolar lateral flap | | ɾ | 638 | 027E | vd alveolar tap | | ɻ | 635 | 027B | vd retroflex approximant | | ʀ | 640 | 0280 | vd uvular trill | | ʁ | 641 | 0281 | vd uvular fricative | | ɽ | 637 | 027D | vd retroflex flap | | ʂ | 642 | 0282 | vl retroflex fricative | | ʃ | 643 | 0283 | vl postalveolar fricative | | ʈ | 648 | 0288 | vl retroflex plosive | | ʧ | 679 | 02A7 | vl postalveolar affricate | | ʉ | 649 | 0289 | close central rounded | | ʊ | 650 | 028A | lax close back rounded | | ʋ | 651 | 028B | vd labiodental approximant | | ⱱ | 11377 | 2C71 | voiced labiodental flap | | ʌ | 652 | 028C | open-mid back unrounded | | ɣ | 611 | 0263 | vd velar fricative | | ɤ | 612 | 0264 | close-mid back unrounded | | ʍ | 653 | 028D | vl labial-velar fricative | | χ | 967 | 03C7 | vl uvular fricative | | ʎ | 654 | 028E | vd palatal lateral | | ʏ | 655 | 028F | lax close front rounded | | ʑ | 657 | 0291 | vd alveolopalatal fricative | | ʐ | 656 | 0290 | vd retroflex fricative | | ʒ | 658 | 0292 | vd postalveolar fricative | | ʔ | 660 | 0294 | glottal plosive | | ʡ | 673 | 02A1 | vd epiglottal plosive | | ʕ | 661 | 0295 | vd pharyngeal fricative | | ʢ | 674 | 02A2 | vd epiglottal fricative | | ǀ | 448 | 01C0 | dental click | | ǁ | 449 | 01C1 | alveolar lateral click | | ǂ | 450 | 01C2 | alveolar click | | ǃ | 451 | 01C3 | retroflex click |   [Top of lists](#numbers) Spacing diacritics and suprasegmentals  To study these, you may find it helpful to set your browser text size to **Largest**.   |  |  |  |  | | --- | --- | --- | --- | | **Symbol** | **decimal** | **hex** | **value** | | ˈ | 712 | 02C8 | (primary) stress mark | | ˌ | 716 | 02CC | secondary stress | | ː | 720 | 02D0 | length mark NB: there is a bug in some versions of MS IExplorer that causes this character not to display. It is probably best to use a simple colon instead. | | ˑ | 721 | 02D1 | half-length | | ʼ | 700 | 02BC | ejective | | ʴ | 692 | 02B4 | rhotacized | | ʰ | 688 | 02B0 | aspirated | | ʱ | 689 | 02B1 | breathy-voice-aspirated | | ʲ | 690 | 02B2 | palatalized | | ʷ | 695 | 02B7 | labialized | | ˠ | 736 | 02E0 | velarized | | ˤ | 740 | 02E4 | pharyngealized | | ˞ | 734 | 02DE | rhotacized |    Note the ready-made characters ɚ 602 025A (combining ə 601 0259 and ˞ 734 02DE) and ɝ 605 025D (combining ɜ 604 025C and ˞ 734 02DE).  [Top of lists](#numbers) Non-spacing diacritics and suprasegmentals  As you can see, several of these are unsatisfactory, particularly in smaller sizes. They are shown here with an appropriate supporting base character. When composing a text in HTML, enter the diacritic **after** the base character, thus (voiceless n, n̥) n&#805;. The browser automatically backspaces the diacritic, but by a constant amount, which may or may not produce a satisfactory result.   |  |  |  |  | | --- | --- | --- | --- | | **Symbol** | **decimal** | **hex** | **value** | | n̥ d̥ | 805 | 0325 | voiceless | | ŋ̊ | 778 | 030A | voiceless (use if character has descender) | | b̤ a̤ | 804 | 0324 | breathy voiced | | t̪ d̪ | 810 | 032A | dental | | s̬ t̬ | 812 | 032C | voiced | | b̰ a̰ | 816 | 0330 | creaky voiced | | t̺ d̺ | 826 | 033A | apical | | t̼ d̼ | 828 | 033C | linguolabial | | t̻ d̻ | 827 | 033B | laminal | | t̚ | 794 | 031A | not audibly released | | ɔ̹ | 825 | 0339 | more rounded | | ẽ | 771 | 0303 | nasalized | | ɔ̜ | 796 | 031C | less rounded | | u̟ | 799 | 031F | advanced | | e̠ | 800 | 0320 | retracted | | ë | 776 | 0308 | centralized | | l̴ n̴ | 820 | 0334 | velarized or pharyngealized | | ɫ | 619 | 026B | (ready-made combination, dark l) | | e̽ | 829 | 033D | mid-centralized | | e̝ ɹ̝ | 797 | 031D | raised | | m̩ n̩ l̩ | 809 | 0329 | syllabic | | e̞ β̞ | 798 | 031E | lowered | | e̯ | 815 | 032F | non-syllabic | | e̘ | 792 | 0318 | advanced tongue root | | e̙ | 793 | 0319 | retracted tongue root | | ĕ | 774 | 0306 | extra-short | | e̋ | 779 | 030B | extra high tone | | é | 769 | 0301 | high tone | | ē | 772 | 0304 | mid tone | | è | 768 | 0300 | low tone | | ȅ | 783 | 030F | extra low tone | | x͜x | 860 | 035C | tie bar below | | x͡x | 865 | 0361 | tie bar above |  Arrows  |  |  |  |  | | --- | --- | --- | --- | | **Symbol** | **decimal** | **hex** | **value** | | ↓ | 8595 | 2193 | downstep | | ↑ | 8593 | 2191 | upstep | | → | 8594 | 2192 | (becomes, is realized as — not recognized by the IPA) | | ↗ | 8599 | 2197 | global rise | | ↘ | 8600 | 2198 | global fall |   [Top of lists](#numbers) [Top of document](#top)  For a much more thorough discussion of displaying and using Unicode characters, see [Alan Wood's Unicode resources](http://www.alanwood.net/unicode/).  Page authored by John Wells,  My [home page](file:///C:\Users\Aline\Google%20Drive\Edição%20de%20ebooks\index.html)  Last revised 2012 06 04 |

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